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FABRIC DESIGN



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Fabric Design

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FORWARD

The Fabric Design Handbook contains basic information and fundamental data useful in the design and development of Army material and systems. This handbook is of practical information and quantitative facts helpful in the design and development of Army material so it will meet the tactical and technical needs of the Armed Forces.

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FABRIC DESIGN

TABLES OF SOLUTIONS OF EQUATIONS FOR MAXIMUM WEAVABILITY FABRICS MADE FROM SINGLE FIBER SPECIES AND BLENDS

1-1 PURPOSE AND SCOPE

1-1.1 PURPOSE

The tables in this handbook are presented to facilitate the designing of high-texture or maximum-weavable fabrics. Maximum-weavable fabrics are the largest class of functional fabrics used by industry and the military. Among many weaves they include ducks, poplins, wind-resistant twills and sateens, airplane and balloon cloths, and linings. In designing maximum-weavable fabrics it is always of concern to the designer to know whether his fabric is practical in terms of the capacity of the loom to put in the necessary picks.

The purpose of these tables is to eliminate the need for direct computation or for graphical techniques previously used for obtaining the solution of maximum weavability problems. For the first time, the tables provide the solutions to the maximum weavability equations for fabrics made from *any* type of fiber or from blends. These tables augment those published in Ref. 1* which can be used only for cotton fabrics.

1-1.2 SCOPE

This handbook contains in tabular form the solution of the equations for maximum weavability fabrics for the plain, Oxford, 3- and 4-harness twills, and 5-harness sateen for yarn bulk densities equivalent to polyethylene on the low side and to stainless steel on the high side and including all the commercial textile fibers and blends of the most common textile fibers in increments of 5% blend composition.

*References are listed following par. 1-7.

The maximum weavability tables (Table 1-3) in this handbook provide solutions over a warp cover factor range of from 8 to 62 inclusive (on a sliding scale depending upon yarn bulk density), at intervals of 1, and over a Beta factor range of from 0.5 to 2.0 at intervals of 0.1. Where design data are given in terms of yarns per inch and warp or filling yarn number, cover factors and Beta factors may be obtained from tables in Ref. 1 or computed from Eqs. 1-4, 1-5, or 1-6.

In addition, two tables are presented which provide a means of obtaining the yarn bulk density when this information is not otherwise available. One of these tables (Table 1-1) gives the standard fiber density for every commercial textile fiber and the equivalent yarn bulk densities computed on the assumption of packing factors of 0.59 and 0.67. In the absence of experimental information on the exact packing factor the value of 0.59 should be used. Table 1-1 may also be used for any experimental fiber having a fiber density equivalent to that of a given commercial fiber. The second of these tables (Table 1-2) gives the yarn bulk densities of blends of the most important of the commercial fibers. The blends are tabled in 5% increments from 0% to 100% blend composition.

1-2 THEORETICAL BACKGROUND AND PREVIOUS TECHNIQUES

The findings of Peirce have been considered basic in the design and development of fabric structures. The equations of Peirce (Ref. 2) for the plain weave were published in graphical form by Painter (Ref. 3), and also in nomographic form, by Backer, Adams, and Schwarz (Ref. 4). Finally, Love (Ref. 5) extended Peirce's equations to weaves other

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than the plain, and developed a series of graphs to simplify the prediction of construction parameters of maximum weavability fabrics. Weiner and Johnston (Ref. 1) solved and tabled the Love equations for a range of cover factors from 10 to 32 and over a Beta factor range from 0.5 to 2.0.

1.3 COMPUTATION AND ORGANIZATION OF THE TABLES

1.3.1 YARN BULK DENSITY TABLE FOR FIBERS (TABLE 1-1)

Ideally, it would be desirable to know the exact bulk density of yarns comprising textile fabrics in order to obtain the maximum design accuracy from the maximum weavability tables in this handbook. It is difficult, but not impossible, to obtain a fair approximation of yarn bulk density. The weight of a given length of yarn may be obtained with considerable precision, as can the length of yarn itself. However, because of the inherent compressibility and "hairiness" of many yarns, it is difficult to obtain a realistic measurement of yarn diameter (or yarn area) which is needed to compute the bulk density. Despite the difficulties, many methods have been used with reasonable success to obtain such measurements, including microscopic, scriplane, thickness gage, and Peirce's roving twist technique.

Most workers (Refs. 5, 6) conventionally follow Peirce's recommendations for cotton fabrics of 0.909 g/cm^3 as a standard yarn bulk density for design work.

Since the density of the cellulose in the cotton fiber is 1.54 g/cm^3 , the degree of "packing" was considered to be the ratio of the yarn bulk density to the fiber density, or

$$\frac{0.909}{1.54} = 0.59$$

This value of 0.59, which is called the *packing factor PF* or *packing coefficient*, had been standardized (Ref. 6) for fibers other

than cotton and had been used to compute the yarn bulk density from the fiber density of any fiber. Work done at the Shirley Institute in which the volume of the lumen of the cotton fiber is taken into consideration, indicates that the density of the cotton fiber for geometrical calculations should be 1.35. By use of this revised value, the computation for packing factor becomes

$$PF = \frac{0.909}{1.35} = 0.673 \text{ (approximately 0.67)}$$

Despite these findings, past experience in the use of these tables has indicated that the packing factor value of 0.59 provides the most reasonable estimates for fabric design. In short float weaves, using the packing factor of 0.59 appears to yield a fairly absolute maximum in tightness. For the longer float weaves, the 0.59 packing factor sometimes yields designs that may be just below the maximum. However, for all practical purposes, with the state of technology of loom design as it exists today, the best results in using these tables can be obtained in assuming a 0.59 packing factor. Supplementary tables for the 0.67 packing factor are included for reference purposes and in the event that future developments may lead to tighter fabric constructions than are practical today in weaving technology.

Yarn bulk densities D_{c_j} for different fiber types may be computed as the product of the fiber density D_{c_f} by the packing factor

$$D_{c_j} = D_{c_f} \times PF \quad (1-1)$$

For nylon (D_{c_f} of 1.14), for example, if we assume a *PF* of 0.59 we get as the yarn bulk density

$$1.14 \times 0.59 = 0.67$$

The yarn bulk density table was prepared in this manner. Thus, the first step to take in designing a maximum weavable fabric—from say, Acrilan—in the absence of experimental data on yarn bulk density would be to refer to Table 1-1 for its bulk density.

1.3.2 YARN BULK DENSITY TABLE FOR BLENDS (TABLE 1-2)

Table 1-2 provides, for blends of the most common fibers, the same information contained in Table 1-1 for single fiber yarns. Blend proportions are from 0% to 100% in 5% increments.

The values in Table 1-2 were obtained from the solution of Eq. 1-2:

$$De_y = \frac{0.59}{\frac{A}{De_{f1}} + \frac{(1-A)}{De_{f2}}} \quad \text{(Yarn bulk density of blends for computing Table 1-2)} \quad (1-2)$$

where De_y = bulk density of the blended yarn

De_{f1} = fiber density of fiber #1

De_{f2} = fiber density of fiber #2

A = percentage of blended fiber #1 expressed as a decimal

A sample calculation for a blend of 25% nylon and 75% cotton is

$$De_y = \frac{0.59}{\frac{0.25}{1.14} + \frac{(1-0.25)}{1.54}} = 0.84$$

In Table 1-2 the fiber density of one of the component fibers is given at the head of the first column with the percentage of that fiber (from 0% to 100%) given below it. The headings of the following eight columns give the fiber densities of the other component fibers, and the values in the body of the table are yarn bulk densities. For the problem solved by Eq. 1-2 turn to the 0.59 section of Table 1-2 showing fiber density of 1.14 (for nylon) in first column, drop down to 25 (the percentage of nylon in blend) in first column, go across this row (25) to value under column headed 1.54 (fiber density of cotton) this will give bulk density of 0.84.

If necessary, linear interpolation may be used for other blend percentages or fiber densities.

1.3.3 MAXIMUM WEAVABILITY TABLE (TABLE 1-3)

Table 1-3, "Maximum Value of Filling Cover Factor K_2 in Terms of Warp Cover Factor, Beta Factor, and Yarn Bulk Density", shows the maximum filling cover factor K_2 that is theoretically obtainable for a given combination of warp cover factor and Beta factor. The filling cover factors for the various yarn bulk densities and weaves were obtained by the solutions of Eqs. 1-3, the derivation of which is given in Appendix A.

[Equations solved in setting up Table 1-3]

PLAIN WEAVE, $M = 1$

$$\sqrt{1 - \left[\frac{29.2 \sqrt{De}}{(1+\beta) K_1} \right]^2} + \sqrt{1 - \left[\frac{29.2 \sqrt{De} \beta}{(1+\beta) K_2} \right]^2} = 1$$

THREE-HARNESS WEAVES, $M = 1.5$

$$\sqrt{1 - \left[\frac{M \left(\frac{31.4 \sqrt{De}}{K_1} - 1 \right) + 1.08}{1.08 (1+\beta)} \right]^2} + \sqrt{1 - \left[\frac{M \left(\frac{31.4 \sqrt{De}}{K_2} - 1 \right) + 1.08}{1.08 (1+\beta)} \beta \right]^2} = 1 \quad (1-3)$$

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FOUR-HARNESS WEAVES, $M = 2.0$

$$\sqrt{1 - \left[\frac{M \left(\frac{32.7 \sqrt{Dc}}{K_1} - 1 \right) + 1.12}{1.12(1 + \beta)} \right]^2} + \sqrt{1 - \left[\frac{M \left(\frac{32.7 \sqrt{Dc}}{K_2} - 1 \right) + 1.12}{1.12(1 + \beta)} \right]^2 \beta} = 1 \quad (1-3)$$

FIVE-HARNESS WEAVES, $M = 2.5$

$$\sqrt{1 - \left[\frac{M \left(\frac{33.6 \sqrt{Dc}}{K_1} - 1 \right) + 1.15}{1.15(1 + \beta)} \right]^2} + \sqrt{1 - \left[\frac{M \left(\frac{33.6 \sqrt{Dc}}{K_2} - 1 \right) + 1.15}{1.15(1 + \beta)} \right]^2 \beta} = 1$$

OXFORD WEAVE, $M_1 = 2.0, M_2 = 1.0$

$$\sqrt{1 - \left[\frac{M_1 \left(\frac{32.7 \sqrt{Dc}}{K_1} - 1 \right) + 1.12}{1.12(1 + \beta)} \right]^2} + \sqrt{1 - \left[\frac{29.2 \sqrt{Dc} \beta}{(1 + \beta) K_2} \right]^2} = 1$$

where $M = \frac{\text{number of yarns per repeat of weave}}{\text{number of interlacings per repeat of weave}}$

Cover factors* or Beta factor may be computed from Eqs. 1-4, 1-5, or 1-6

$$K_1 = \frac{n_1}{\sqrt{N_1}} \quad (\text{Warp cover factor equation}) \quad (1-4)$$

where K_1 = warp cover factor

n_1 = warp texture or yarns per in

N_1 = warp yarn number or "count"

$$K_2 = \frac{n_2}{\sqrt{N_2}} \quad (\text{Filling cover factor equation}) \quad (1-5)$$

where K_2 = filling cover factor

n_2 = filling texture or yarns per in

N_2 = filling yarn number or "count"

$$\beta = \sqrt{\frac{N_1}{N_2}} \quad (\text{Beta factor equation}) \quad (1-6)$$

*Throughout this handbook subscript 1 refers to warp and subscript 2 refers to filling.

where β = Beta factor or yarn balance

N_1 = warp yarn number

N_2 = filling yarn number

If yarns are numbered in systems other than the "cotton" system, they should be converted to the cotton system in order to use Table 1-3.

In Table 1-3 warp cover factors range from 8 to 62 (depending on yarn density), and Beta factors from 0.5 to 2.0. In order to simplify the programming and print-out, *nonvalid values* (because of K_1 being too low) are indicated by zeros ("0") in the table. This does not mean that the numerical value of K_2 is zero. The zero should be read as a blank space.

For each of the yarn bulk densities, ranging from 0.54 to 4.6, there is a section for each of the five weave types. The maximum filling cover factor values are given to one decimal place, which is quite adequate precision for textile design work. Interpolation may be

used for fractional values of warp cover factor

1-4 USE OF TABLES 1-1 AND 1-2

Tables 1-1 and 1-2 merely provide the essential value of yarn bulk density which indicates the correct location in Table 1-3 to enter (each page of Table 1-3 has yarn bulk density at the top) to obtain the solution appropriate to the fiber type or blend of which the fabric is composed

1-5 HOW TO USE TABLE 1-3

Table 1-3 is the one from which the usefulness of this report derives. Table 1-3 is presented primarily as the solution of the equation for filling cover factor (see Eq. 1-5) when warp cover factor, Beta factor, and yarn bulk density are known. (It can also be read for a solution when any three elements are given or required, to find the fourth.)

Perhaps the easiest way to visualize the relationship of these four elements of Table 1-3 and how they are obtained is by considering the following tabulation:

Knowledge of any three of the four "elements" listed will provide the necessary information for obtaining the fourth from Table 1-3. However, in the conventional design of fabrics the yarn bulk density, warp cover factor, and Beta factor are usually known first or computed and the *filling cover factor* is the unknown factor which is usually sought.

Element of Table 1-3	Obtainable from	If you have
Yarn Bulk Density D_c	1 Actual physical measurement	
	or	
	2 Table 1-1 (for single fiber)	Fiber name or fiber density
	or	

Element of Table 1-3	Obtainable from	If you have
	3 Table 1-2 (for blends)	Blend composition
Warp Cover Factor K_1	1 Equation 1-4 ($n_1/\sqrt{N_1}$)	W yarn number and W texture
	or	
	2 Ref. 1 (Table 1-1)*	
Filling Cover Factor K_2	1 Equation 1-5 ($n_2/\sqrt{N_2}$)	I yarn number and I texture
	or	
	2 Ref. 1 (Table 1-1)*	
Beta Factor β	1 Equation 1-6 ($\sqrt{N_1/N_2}$)	W yarn number and I yarn number
	or	
	2 Ref. 1 (Table 1-2)*	

*Ref. 1 provides the solution of the cover factor equations (Eqs. 1-4 and 1-5) and the Beta factor equation (Eq. 1-6) for a wide range of yarn numbers and textures.

The textile designer normally has access to the information in the far right column above, this enables him to make the preliminary calculations or to check in Tables 1-1 and 1-2 to obtain the yarn bulk density to enter Table 1-3. Thus if he is looking for the greatest number of filling yarns of a given size which can be used for a given weave type, he will know:

(1) the fiber density or blend composition which will then give him the *yarn bulk density* D_c

(2) the warp yarn number N_1 and warp texture n_1 which will provide the *warp cover factor* K_1

(3) the filling yarn number N_2 that, with the warp yarn number N_1 , will provide the *Beta factor*

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Using the above three items, he can secure from Table 1-3 the *maximum filling cover factor* K_2

The *maximum filling texture* can be obtained by solution of Eq 1-7

$$n_2 = K_2 \sqrt{N_2} \quad (\text{Maximum filling texture equation}) \quad (1-7)$$

where n_2 = filling texture, or yarns per in

K_2 = filling cover factor

N_2 = filling yarn number

Maximum filling texture can also be obtained from Ref 1

In addition to thus obtaining the requirements for maximum weavable constructions, it is possible to find what *percentage* of maximum weavability any construction is, i.e., divide the actual filling cover factor by the theoretical filling cover factor. This percentage may be expressed on the basis of either filling cover factor or filling texture

Also, given a particular construction, the textile designer can determine its *practicability*. i.e. he can determine from the table whether or not it is weavable, without trial weavings

Given a particular construction, the fabric designer can, by using Table 1-3 determine whether it can be *tightened* to any extent

Finally given certain filling parameters, such as yarn size and texture, it is possible to project certain *combinations* of warp sizes and textures

1-6 EXAMPLES OF USE OF TABLES

Since Tables 1-1 and 1-2 are incidental to the use of Table 1-3, they will not be discussed separately but as an integral part of the discussion of each problem presented in this paragraph. However, it may be well to provide some general information on the role of yarn bulk density before proceeding with specific examples

Ideally, it would be desirable to know the exact yarn bulk density of the yarns going into the fabric, by means of microscopic or some other type of objective measurement rather than using the approximations of Tables 1-1 and 1-2. Where a given yarn is used in many different constructions, it may be advisable to go through the mechanics of measuring the actual yarn density. It is recognized that *measuring* errors may in some instances be as large as *estimating* errors because of the difficulty in getting a realistic indication of yarn diameter. However, it is important to be aware of differences, if they do exist, in the event that actual loom experience yields results that differ somewhat from the predictions of Table 1-3

Despite the advantages that may accrue from actual yarn density measurements, the busy designer will probably rely more on Tables 1-1 and 1-2 to obtain the necessary values for entering Table 1-3, the problems which follow will be based upon this assumption

1-6.1 DESIGN OF FABRICS MADE FROM ONE TYPE OF FIBER ONLY

Problems of this type involve the design of a maximum weavable fabric that is made wholly from one type of fiber, such as Arnel or Orlon

Given fiber type, filling yarn number, warp yarn number, texture and weave

To find number of picks for maximum weavable construction

Problem What are the maximum number of picks of filling yarn number 19/1 ($N_2 = 19$) cotton count Orlon that can be woven into a poplin having 106 ends ($n_1 = 106$) of 40/2 ($N_1 = 20$) Orlon

Solution

Step 1 Determine the yarn bulk density of Orlon from Table 1-1 it is

0.67 for a PF of 0.59 and 0.77 for a PF of 0.67

Step 2 Compute warp cover factor Λ_1 for the 106 ends of 40/2 yarn but first convert 40/2 to 20/1 (cover factor computation is based upon singles equivalents) using Eq 1-4 where $K_1 = n_1 / \sqrt{N_1}$, substituting $106 / \sqrt{20} = 23.702$, or refer to page 94 of Ref 1

Step 3 Compute Beta factor for yarns, using Eq 1-6, $\beta = \sqrt{N_1/N_2} = \sqrt{20/19} = 1.026$, or refer to page 138 of Ref 1

Step 4 Determine maximum filling cover factor. Refer to Table 1-3 for plain weave fabrics (poplin is a plain weave) and yarn bulk densities of 0.67 and 0.77. For 0.67 the intersection of "Beta factor" (top column) of 1.0 (closest value to 1.026) and row 24 "warp cover factor K_1 " (far left) gives "maximum value of filling cover factor Λ_2 " of 12.1*. For 0.77 the same intersection gives a "maximum value of filling cover factor Λ_2 " of 13.0

Step 5 Compute maximum filling texture using Eq 1-7 $n_2 = K_2 \sqrt{N_2}$ substituting $12.1 \sqrt{19} = 53$ or $13.0 \sqrt{19} = 57$, or refer to page 95 of Ref 1

As mentioned previously, although theoretically it would be more appropriate to use the

*If it is desired to obtain increased precision interpolation may be used with the fractional Beta factor and the fractional cover factor obtained from the computations in Steps 2 and 3, respectively. In this particular problem, the interpolation would be of no value with respect to warp cover factor, since the equivalent filling cover factor is identical for warp cover factors of 23 and 24. Interpolation for the Beta value of 1.026 would increase the maximum filling cover factor to 12.23 or 12.2 in three significant figures. Accordingly it is suggested that interpolation be ignored for first approximations.

yarn bulk density of 0.77 corresponding to a packing factor of 0.67, practical considerations based upon past experience indicate that for this fabric the results obtained from using a yarn bulk density of 0.67 corresponding to a packing factor of 0.59 would be more correct. Accordingly, all of the other illustrations in this paragraph will be based upon the packing factor of 0.59. In the longer float weaves (4- and 5-harness) it is sometimes possible to obtain slightly higher filling cover factors than would be indicated by the packing factor of 0.59. Experience provides a basis for making the slight adjustments that may be necessary in these cases.

1-6.2 DESIGN OF FABRICS MADE FROM A BLEND OF TWO FIBERS

This problem concerns the design of maximum weavable fabrics made from an intimate blend of two fibers such as nylon and cotton or polyester and cotton.

Given fiber types, blend composition, filling yarn number, warp yarn number, warp texture and weave

To find number of picks for maximum weavable construction

Problem How many picks/inch must be used in a fabric having 150 ends ($n_1 = 150$) of 36^s ($N_1 = 36$) yarn to obtain maximum weavability. Solve for both 36^s ($\Lambda_2 = 36$) and 25^s ($N_2 = 25$) filling yarns, and for plain and 3-harness weaves. Assume yarns are blended and contain 25% of nylon and 75% of cotton.

Solution

Step 1 Determine density of blended yarn from Table 1-2. Go down column one (headed "FIB DEN = 1.14," i.e., fiber density of nylon) to row 25 (% of nylon

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in yarn) Move across row to value under column headed 1.54 (density of cotton), this gives 0.84. Thus, the yarn density of the blended yarn is 0.84.

Step 2 Compute cover factor of warp, using Eq. 1-4

$$K_1 = n_1 / \sqrt{N_1} = 150 / \sqrt{36} = 25$$

or refer to Ref. 1

Step 3 Compute Beta factor for both yarn combinations, using Eq. 1-6

$$\beta = \sqrt{N_1/N_2} = \sqrt{36/25} = 1$$

$$= \sqrt{36/25} = 1.2$$

or refer to Ref. 1

Step 4 Refer to section of Table 1-3 covering *plain weaves* and yarn bulk density of 0.84

a. For warp cover factor K_1 of 25 and Beta of 1, the maximum filling cover factor K_2 is 13.5

b. For warp cover factor K_1 of 25 and Beta of 1.2, the maximum filling cover factor K_2 is 14.7

Step 5 Refer to section of Table 1-3 covering *3-harness weaves* and yarn bulk density of 0.84

a. For warp cover factor K_1 of 25 and Beta of 1, the maximum filling cover factor K_2 is 17.0

b. For warp cover factor K_1 of 25 and Beta of 1.2, the maximum filling cover factor K_2 is 18.2

Step 6 Compute maximum filling texture (picks per inch) n_2 from cover factor K_2 , using Eq. 1-7
 $n_2 = K_2 \sqrt{N_2}$, or refer to Ref. 1

Values of n_2 are given in the following tabulation

	<i>Plain Weave</i>	<i>3-Harness Weave</i>
36 ^s	$n_2 = 13.5 \sqrt{36}$ = 81	$n_2 = 17.0 \sqrt{36}$ = 102
25 ^s	$n_2 = 14.7 \sqrt{25}$ = 74	$n_2 = 18.2 \sqrt{25}$ = 91

Thus, for the plain weave, as we go to the coarser filling yarn (36^s to 25^s) there are fewer picks that can be woven into the fabric for maximum weavability (81 vs 74). The same holds true for the 3-harness weave. We can weave 102 picks of the 36^s yarn but only 91 of the 25^s yarn.

However, in going from the plain weave to the 3-harness weave it takes more picks to fill the weave. Thus for the 36^s yarn we must increase the number of picks from 81 to 102, and for the 25^s yarn we must increase the number of picks from 74 to 91.

1-6.3 TO DETERMINE PERCENTAGE OF MAXIMUM WEAVABILITY

Problem

(1) A Type III wind-resistant *all-cotton* Oxford has a specified texture of 136 by 46. If a 40/2 warp yarn is available, what percent of maximum weavability will be obtained if we use a 12/1 filling?

(2) If we use the same "size" warp and filling yarns but made of a *blend* of 50% Dacron and 50% cotton, what will be the percent of maximum weavability?

Solution 1 For all-cotton fabric

First convert 40/2 to 20/1

- Step 1** Determine yarn bulk density of cotton from Table 1-1 as 0.91
- Step 2** Compute warp cover factor by using Eq 1-4 or from Ref 1, it is 30.4
- Step 3** Compute filling cover factor by using Eq 1-5 or from Ref 1, it is 13.3
- Step 4** Compute Beta factor, using Eq 1-6 or from Ref 1, it is 1.3
- Step 5** Determine maximum possible filling cover factor from Table 1-3 for Oxford weaves and yarn bulk densities of 0.91. This value is 15.9
- Step 6** To obtain percent maximum weavability

Divide *actual* filling cover factor (13.3) by computed *maximum* filling cover factor (15.9) to obtain 83.6 as percent of maximum weavability

Solution 2 For Dacron-cotton blend

- Step 1** Determine yarn bulk density of a 50% Dacron-50% cotton blend from Table 1-2 as 0.86
- Step 2** Compute warp cover factor of 30.4 as in Solution 1
- Step 3** Compute filling cover factor of 13.3 as in Solution 1
- Step 4** Compute Beta factor of 1.3 as in Solution 1
- Step 5** Determine maximum possible filling cover factor from Table 1-3 for Oxford weaves and yarn

bulk densities of 0.86. This value is 15.4

- Step 6** To obtain percent maximum weavability

Divide *actual* filling cover factor (13.3) by computed *maximum* filling cover factor (15.4) to obtain 86.4 as percent of maximum weavability

Thus, even though the cotton yarns and the Dacron/cotton blended yarns used in this example were both the same "size" in terms of yarn number (which is a measure of linear density), actually the blended yarn has a larger diameter because of the lower density of the Dacron constituent. Thus, keeping yarn numbers and textures constant, the blended yarns will produce a fabric with a higher percentage of maximum weavability.

1-6.4 TO DETERMINE WEAVABILITY OR PRACTICALITY OF A GIVEN LOOM CONSTRUCTION

Problem Is a sateen fabric weavable if it has 129 ends of 31/1 polypropylene yarn in the warp and 94 picks of 14/1 polypropylene yarn in the filling?

Solution

- Step 1** Compute warp and filling cover factors 23.2 and 25.1 respectively
- Step 2** Compute Beta factor 1.5
- Step 3** Determine maximum filling cover factor from section of Table 1-3 for 5-harness weaves and for polypropylene yarn bulk density of 0.54. This is 19.0

Since the cover factor desired (25) is *larger* than the theoretical maximum (19) this fabric would not be weavable. It is interesting

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to note that a fabric with the same construction characteristics as this could be woven from cotton yarns. Thus, it is erroneous to anticipate that the fiber composition of a fabric can always be changed without also changing the texture and/or the yarn sizes.

17 BASIC ASSUMPTIONS AND LIMITATIONS OF THE TABLES

Three assumptions were made in developing the equations that led to the formulation of these tables.

a The yarn compression in a fabric woven to maximum tightness produces a change in the shape of the yarn section but does not alter the fiber packing density.

b Complete flattening takes place in that half of the yarn that is in contact with a neighboring yarn under a single float (see Appendix A).

c The packing factor of yarns made from all fibers and blends is 0.59.

If yarns are numbered in systems other than the "cotton" system, they should be converted to the cotton system in order to use these tables.

For all practical purposes, these assumptions produce only minimal errors and thus the tables are suitable for first-order approximations in fabric design. For designers who work with a few types of fibers or blends it might be useful to check the yarn bulk densities of the yarns they work with, since twist and other factors may alter the yarn bulk density values given in Tables 1-1 and 1-2. If actual yarn bulk density values are available, then the only important limitations on the validity of these tables and the equations from which they were derived are the first two assumptions (a and b) listed previously.

REFERENCES

- 1 L. I. Weiner and J. E. Johnston Jr. *Design Tables for Cotton Fabrics. Tables of Solutions of Equations for Cover Factor, Beta Factor, and Maximum Weavability for Cotton Fabrics*. Textile Series Report 128. U. S. Army Natick Laboratories, Natick, Mass. August 1964.
- 2 F. T. Peirce. "The Geometry of Cloth Structure." *J. Textile Institute* 28: T45 (1937).
- 3 E. V. Painter. "Graphical Analysis of Fabric Geometry," Part VIII of "Mechanics of Elastic Performance of Textile Materials." *Textile Research Journal*, 22: 556 (1952).
- 4 D. P. Adams, E. R. Schwarz, and S. Backer. "Nomographic Solution of the Geometric Relationships in Cloth Geometry", Part VI of *The Relationship Between the Structural Geometry of a Textile Fabric and Its Physical Properties*, Textile Series Report 93, QM R&D Command, Natick, Mass., February 1957.
- 5 L. Love. *Graphical Relationships in Cloth Geometry for Plain, Twill and Sateen Weaves*, Textile Series Report No. 90, QM R&D Command, Natick, Mass., September 1955.
- 6 J. F. Dickson. "Practical Loom Experience on Weavability Limits", *Textile Research Journal*, 24, 1083 (1954).

APPENDIX A*

DERIVATION OF THE GENERAL MAXIMUM WEAVABILITY EQUATIONS
FOR THE PLAIN, TWILL, AND SATEEN WEAVES FOR YARNS OF
VARYING BULK DENSITIES

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Natick Laboratories, Natick, Mass. 01760

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A 1 INTRODUCTION

The steps leading to the derivation of the general maximum weavability equations are presented in five paragraphs of this Appendix titled as follows

- A-2 Derivation of K_o (procedure of Ball Ref 1*)
- A-3 Derivation of the Maximum Weavability Equation for the Plain Weave (procedure of Peirce Ref 2)
- A-4 Derivation of the Equations for Local Spacing in Twills and Sateens
- A-5 Derivation of K_o (max) and Maximum Weavability Equations for Other Weave Types (procedure of Love Ref 3)
- A-6 Derivation of the Generalized Maximum Weavability Equations for all Fiber Species and Blends

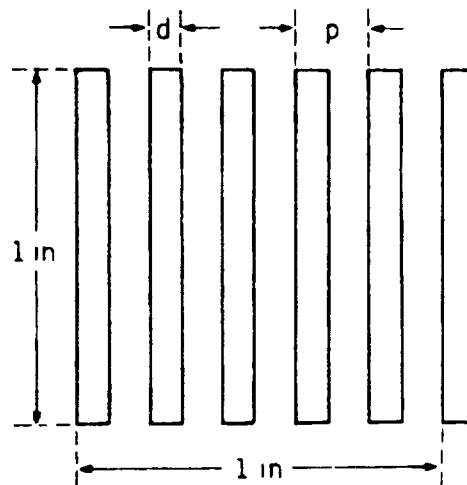
A 2 DERIVATION OF K_o **

It is customary for textile designers to express the "cover" of a woven textile fabric by means of a computed "cover factor" which is designated by the letter K . K is derived from fractional coverage

A 2.1 FRACTIONAL COVERAGE d/p

The cover of a fabric can be expressed as "fractional coverage" which is the ratio of the area "covered" by yarns to the total area of the fabric. For a given fabric direction (warp or filling) fractional coverage may be visual-

ized as the projected area divided by the total area as shown below



d = diameter of each yarn in

p = in/yarn (this is called the spacing and includes a "space" and a "yarn diameter")

n = number of yarns/in

For 1 in² of fabric the fractional coverage of either the warp or filling is

fractional coverage =

$$\frac{n \text{ (number of yarns/in)} \times d \text{ (in)} \times 1 \text{ in}}{1 \text{ in}^2}$$

$$= \frac{nd \times 1}{1}$$

$$\left. \begin{array}{l} \text{numeric } d \\ \text{fractional} \\ \text{coverage} \end{array} \right\} = \begin{array}{l} \text{(number of yarns/in)} \\ \times \text{(diameter of each yarn in in)} \\ = nd \end{array}$$

Obviously

$$\text{yarns/in} = \frac{1}{\text{in/yarn}} \text{ or } n = \frac{1}{p} \quad (\text{A-1})$$

therefore

$$nd = \frac{d}{p} \quad (\text{A-2})$$

*References are listed following par. A-6

**Throughout this paragraph the derivations are predicated on the assumption that cotton fiber has a density of 1.54 and that the yarn bulk density is 0.909 based upon a packing factor of 0.59. Exactly the same results would be obtained if the cotton fiber density of 1.35 were used with packing factor of 0.67, which would still yield a yarn bulk density value of 0.909, which is the important parameter used in these calculations.

The conventional expression for fractional coverage is $\frac{d}{p}$ which is dimensionless (A-3)

Because of the difficulties encountered in measuring the diameter of yarns it has become customary for textile technologists to use yarn number N^* , which is easily calculable, in expressions where yarn diameter d is normally required

A-2.2 COVER FACTOR K

Yarn diameter d varies as the reciprocal of the square root of yarn number N for the indirect system (which is the system used almost exclusively in this country for staple yarns). Thus

$$d \propto \frac{1}{\sqrt{N}} \quad (\text{A-4})$$

therefore

$$\frac{d}{p} \propto \frac{1}{\sqrt{N}} \quad (\text{A-5})$$

From Eq. A-1

$$p = \frac{1}{n} \quad \text{where } n = \text{yarns/in}$$

therefore

$$\text{fractional coverage} = \frac{Cn}{\sqrt{N}} \quad (\text{A-6})$$

where C is the constant of proportionality

$$\text{and } \frac{\text{fractional coverage}}{C} = \frac{n}{\sqrt{N}} \quad (\text{A-7})$$

The ratio on the left in Eq. A-7 is designated as cover factor or K and thus

$$*N = \text{number of 840 yard hanks per lb or } N = \frac{1}{840w}$$

where l is d and w is lb

$$K = \frac{n}{\sqrt{N}} \quad (\text{A-8})$$

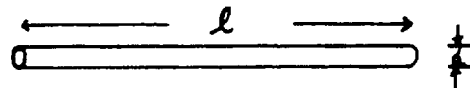
The maximum value of K (designated as K_0) is obtained when $d/p = 1$, in other words when the projected area of the yarns in the fabric equals the total area. However, as will be seen later in the derivation of the equations for maximum weavability, when compression of the yarns under the float takes place in tightly woven structures, it is possible to get values of K exceeding K_0 . The development of the maximum weavability equations is based on values of K which exceed K_0 . The larger value is designated as K_0 (max). At this stage of our development, however, K_0 can be considered to be the maximum practical cover factor and much valuable design and development work is done utilizing K_0 as a threshold value against which a computed K may be compared

A-2.3 YARN DIAMETER d

The value of K_0 will vary depending upon the specific volume or density of the yarns for which it is used. Therefore, it is necessary to derive the relationship between diameter d and yarn number N as a basis of computing a range of K_0 values. An assumption that has been made in working with this relationship is that cotton yarns have a specific volume of 1.1. If this assumption is accepted, then values of K_0 for a wide variety of fiber types and blends may be computed, if the packing factor or packing coefficient for yarns made from these fibers is considered as identical to that of cotton yarn. More will be said about this later.

The relationship between diameter and yarn number may be deduced as follows:

Consider a textile yarn as an incompressible cylinder of length l and diameter d



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$$\text{The volume of this cylinder} = \frac{\pi d^2 \ell}{4} \quad (\text{A-9})$$

$$\text{The weight of the cylinder} = \frac{\pi d^2 \ell D_c}{4} \quad (\text{A-10})$$

where D_c is density of yarn

In the metric system the weight W in grams of yarn would be

$$W = \frac{\pi d^2 \ell D_c}{4} \quad (\text{A-11})$$

where ℓ has units of cm and D_c has units of g/cm³

Keeping D_c in the metric system which is conventional but converting W , ℓ , and d to lb yd and in respectively which are conventional for textile yarns the following results

$$g = \frac{\pi (\text{cm}^2) (\text{cm}) D_c}{4}$$

$$g = 0.785 (\text{cm}^2) (\text{cm}) D_c$$

Using the dimensional conversion factors

$$\text{lb} \times 454.6 = g$$

$$\text{in}^2 \times (2.54)^2 = \text{cm}^2$$

$$\text{yd} \times 36 \times 2.54 = \text{cm}$$

we obtain

$$\begin{aligned} \text{lb} \times 454.6 &= 0.785 (\text{in}^2 \times 2.54^2) \\ &\times (\text{yd} \times 36 \times 2.54) D_c \end{aligned} \quad (\text{A-12})$$

$$W = \frac{0.785 \times 2.54^3 \times 36 \times d^2 \ell D_c}{454.6} \quad \text{lb} \quad (\text{A-13})$$

$$d^2 = \text{in}^2$$

$$\ell = \text{yd}$$

$$D_c = g/\text{cm}^3$$

$$W = 1.0189 d^2 \ell D_c \quad (\text{A-14})$$

$$d^2 = \frac{W}{1.0189 \ell D_c} \quad (\text{A-15})$$

$$d = \sqrt{\frac{W}{1.0189 \ell D_c}} \quad (\text{A-16})$$

Divide top and bottom of fraction by W

$$d = \sqrt{\frac{1}{1.0189 (\ell/W) D_c}} \quad (\text{A-17})$$

By definition in the cotton numbering system where ℓ is in yd, W in lb, and N = yarn number

$$\ell/W = 840 N \quad (\text{A-18})$$

$$d = \sqrt{\frac{1}{840 \times 1.0189 N D_c}} \quad (\text{A-19})$$

$$d = \sqrt{\frac{0.0011684}{N D_c}} \quad (\text{A-20})$$

$$d = \frac{0.0342}{\sqrt{N D_c}} \quad (\text{A-21})$$

A 2.4 RELATIONSHIP BETWEEN K AND d/p

If we find the general relationship between K and d/p , then K_o can be determined as the value of K when $d/p = 1$ in other words when the fractional coverage is unity or the projected area of the yarns equals the total fabric area

Recall from Eq. A-8 that

$$K = \frac{n}{\sqrt{N}}$$

and from Eq. A-1 that

$$n = \frac{1}{p'}$$

therefore

$$K = \frac{1}{p \sqrt{N}} \quad (\text{A-22})$$

and

$$p = \frac{1}{K \sqrt{N}} \quad (\text{A-23})$$

From Eq A-21

$$d = \frac{0.0342}{\sqrt{N D_c}}$$

therefore

$$\frac{d}{p} = \frac{\frac{0.0342}{\sqrt{N D_c}}}{\frac{1}{K \sqrt{N}}} \quad (\text{A-24})$$

thus

$$\frac{d}{p} = \frac{0.0342 K}{\sqrt{D_c}} \quad (\text{A-25})$$

A-2.5 CALCULATION OF K_o

By definition when $d/p = 1$

$$K = K_o \text{ or } \frac{d/p}{1} = \frac{K}{K_o} \quad (\text{A-26})$$

therefore

$$1 = \frac{0.0342 K_o}{\sqrt{D_c}} \quad (\text{A-27})$$

$$K_o = \frac{\sqrt{D_c}}{0.0342} \text{ or } K_o = 29.2 \sqrt{D_c} \quad (\text{A-28})$$

Thus for any yarn, regardless of fiber composition or structure if we know the yarn density (bulk density) we can compute K_o , i.e. the "maximum" cover factor corresponding to $d/p = 1$. The problem of determining yarn density is a difficult one and much fabric

design as practiced today for cotton fabrics is based upon Peirce's selection of 0.909 as the bulk density D_c of cotton yarn (0.909 is the reciprocal of the specific volume value of 1.1).

For cotton then

$$K_o = 29.2 \sqrt{0.909} = 27.8 \quad (\text{A-29})$$

Some workers round this figure off to 28.0

A-2.6 PACKING FACTOR PF

It is convenient to relate the density of cotton yarn to the density of cotton fiber. This relationship, expressed as a ratio, is termed the packing coefficient or packing factor.

$$PF = \frac{D_c (\text{yarn})}{D_c (\text{fiber})} \quad (\text{A-30})$$

For cotton

$$PF = \frac{0.909}{1.54} = 0.59 \quad (\text{A-31})$$

It has become conventional for designers working with fibers other than cotton to assume that the packing factor of yarns made from these other fibers is constant at 0.59. With this assumption it becomes simple to compute the densities of yarns, made from a wide variety of fibers using Eq A-30.

$$D_c (\text{yarn}) = PF \times D_c (\text{fiber}) \quad (\text{A-32})$$

$$= 0.59 \times D_c (\text{fiber}) \quad (\text{A-33})$$

Substituting this relationship in Eq A-28, the following equations are obtained

$$K_o = 29.2 \sqrt{D_c (\text{yarn})} \quad (\text{A-34})$$

$$K_o = 29.2 \sqrt{PF \times D_c (\text{fiber})} \quad (\text{A-35})$$

$$K_o = 29.2 \sqrt{0.59 D_c (\text{fiber})} \quad (\text{A-36})$$

$$K_o = 22.4 \sqrt{D_c (\text{fiber})} \quad (\text{A-37})$$

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K_o values for some typical fiber species are given in the following tabulation

Fiber	Density of fiber	$\sqrt{De \text{ (fiber)}}$	K_o
Nylon	1.14	1.067	24.0
Wool	1.32	1.149	25.8
Dacron	1.37	1.170	26.3
Cotton	1.54	1.241	27.8
Glass	2.54	1.594	35.8

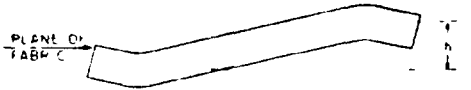
A3 DERIVATION OF THE MAXIMUM WEAVABILITY EQUATION FOR THE PLAIN WEAVE

In order to reduce the number of variables required in the solution of the geometry of the plain weave, Peirce introduced the parameter D which is the sum of the diameters of the warp and filling yarns. Thus

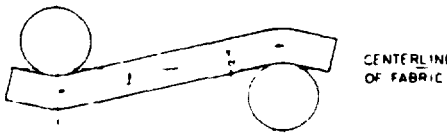
$D = d_1 + d_2$ (A-38)

where subscripts 1 and 2 apply to warp and filling respectively. Other symbols used by Peirce are:

h = maximum displacement of yarn axis measured normal to the cloth as follows



k = length of yarn in a unit cell



θ = angle between yarn axis and plane of cloth p, n , and d are as used previously in this handbook

In tight fabric constructions the yarn systems are considered to be jammed. When the warp yarn is jammed, for example, there is no straight portion in the warp yarn and a line joining the centers of the filling yarns is perpendicular to the warp yarn axis at the point of intersection. When this condition prevails, as shown hereafter, both the filling yarn spacing p_2 and the filling yarn displacement h_2 are functions of the angle θ between the warp yarn axis and the plane of the cloth*.

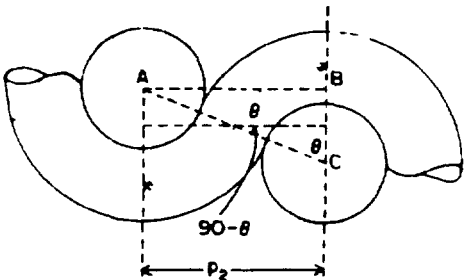


Figure A-1 Construction for Filling Yarn Spacing

p_2 is the spacing of the filling yarns and thus is equal to the distance AB between the vertical lines in Fig. A-1.

D is the sum of the diameters of the warp and filling yarns, which is the length of the diagonal line AC in Fig. A-1.

From the geometry of the triangle ABC

$\sin \theta = \frac{AB}{AC} = \frac{p_2}{D}$ (A-39)

and $p_2 = D \sin \theta$ (A-40)

*No yarn compression is assumed in these preliminary derivations.

A 3.1 FOR FILLING YARN DISPLACEMENT

h_2 is the displacement of the filling yarns, which is the distance BC in Fig A-2

D is the sum of the diameters AC in Fig A-2

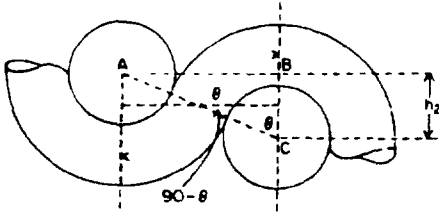


Figure A-2 Construction for Filling Yarn Displacement

From the geometry of the triangle ABC in Fig A-2

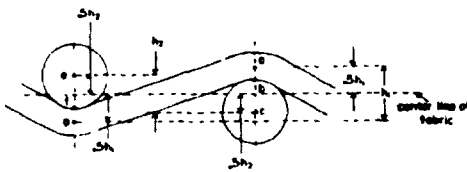
$$\cos \theta = \frac{BC}{AC} = \frac{h_2}{D} \quad (\text{A-41})$$

$$\text{and } h_2 = D \cos \theta \quad (\text{A-42})$$

It can also be shown that for any yarn configuration

$$h_1 + h_2 = D \quad (\text{A-43})$$

The proof follows.



$$0.5h_1 + 0.5h_2 = fg + ef$$

$$0.5h_1 + 0.5h_2 = ab + bc$$

$$h_1 + h_2 = ab + bc + ef + fg$$

$$ab = r_1 \text{ (radius of warp yarn)}$$

$$bc = r_2 \text{ (radius of filling yarn)}$$

$$ef = r_2$$

$$fg = r_1$$

$$h_1 + h_2 = r_1 + r_2 + r_1 + r_2$$

$$h_1 + h_2 = 2(r_1 + r_2) = d_1 + d_2 = D$$

$$\text{therefore } h_1 + h_2 = D$$

Summarizing When the warp is jammed, then from Eq A-42

$$h_2 = D \cos \theta_1 \quad (\text{A-44a})$$

and when the filling yarn is jammed, it can be shown in an analogous fashion that

$$h_1 = D \cos \theta_2 \quad (\text{A-44b})$$

Since

$$h_1 + h_2 = D \quad (\text{A-45})$$

then

$$D \cos \theta_1 + D \cos \theta_2 = D \quad (\text{A-46})$$

and

$$\cos \theta_1 + \cos \theta_2 = 1 \quad (\text{A-47})$$

Since

$$\cos^2 \theta + \sin^2 \theta = 1 \quad (\text{A-48})$$

$$\cos \theta_1 = \sqrt{1 - \sin^2 \theta_1} \quad (\text{A-49})$$

and

$$\cos \theta_2 = \sqrt{1 - \sin^2 \theta_2} \quad (\text{A-50})$$

Therefore

$$\sqrt{1 - \sin^2 \theta_1} + \sqrt{1 - \sin^2 \theta_2} = 1 \quad (\text{A-51})$$

Recall from Eq A-40 that

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$$p_2 = D \sin \theta_1$$

therefore

$$\sin \theta_1 = \frac{p_2}{D} \quad (\text{A-52})$$

Analogously, since $p_1 = D \sin \theta_2$

$$\sin \theta_2 = \frac{p_1}{D} \quad (\text{A-53})$$

therefore

$$\sqrt{1 - \left(\frac{p_2}{D}\right)^2} + \sqrt{1 - \left(\frac{p_1}{D}\right)^2} = 1 \quad (\text{A-54})$$

Eq A-54 is the basis of the widely used equations for maximum weavable fabrics. To make it more generally applicable to the design problems of the textile engineer, it has been customary to introduce the cover factor K into the relationship and also to use the Beta factor β instead of D .

Beta β is defined as the ratio of the filling yarn diameter d_2 to the warp yarn diameter d_1 . It is also numerically equal to the ratio of the square root of the warp yarn number N_1 to the square root of the filling yarn number N_2 , for the indirect yarn numbering system. Thus

$$\beta = \frac{d_2}{d_1} \text{ and } d_2 = \beta d_1 \quad (\text{A-55})$$

or

$$\beta = \sqrt{\frac{N_1}{N_2}} \quad (\text{A-56})$$

Since $D = d_1 + d_2$, it follows from Eq A-55 that

$$D = d_1 + \beta d_1 = d_1 (1 + \beta) \quad (\text{A-57})$$

also

$$D = \frac{d_2}{\beta} + d_2 = \frac{d_2 (1 + \beta)}{\beta} \quad (\text{A-58})$$

Therefore

$$\frac{p_1}{D} = \frac{p_1}{d_1 (1 + \beta)} \quad (\text{A-59})$$

$$\frac{p_2}{D} = \frac{p_2 \beta}{d_2 (1 + \beta)} \quad (\text{A-60})$$

Recall from Eq A-26 that

$$\frac{d}{p} = \frac{K}{K_o} \quad (\text{A-61})$$

Also from Eq A-29 for yarns numbered in the cotton system and having a bulk density of 0.909 (the value selected by Perce)

$$K_o = 27.8 \quad (\text{A-62})$$

then

$$\frac{d}{p} = \frac{K}{27.8} \text{ or } \frac{p}{d} = \frac{27.8}{K} \quad (\text{A-63})$$

Thus, substituting d_1 from Eq A-57 into Eq A-63

$$\frac{p_1}{D} = \frac{27.8}{K_1 (1 + \beta)} \quad (\text{A-64})$$

and d_2 from Eq A-58

$$\frac{p_2}{D} = \frac{27.8 \beta}{K_2 (1 + \beta)} \quad (\text{A-65})$$

Therefore, from Eq A-54

$$\sqrt{1 - \left(\frac{27.8}{K_1 (1 + \beta)}\right)^2} + \sqrt{1 - \left(\frac{27.8 \beta}{K_2 (1 + \beta)}\right)^2} = 1 \quad (\text{A-66})$$

This is the equation for the plain weave, from which the supplementary equations for the twill and sateen weaves have been derived. Before going into the derivation of these other equations it might be well to review briefly the manner in which Eq A-66 is used.

Observe that there are variables K_1 , K_2 , and β . These three are not completely independent. The warp yarn number N_1 is a component of K_1 , the filling yarn number N_2 is a component of K_2 and the ratio of these two yarn numbers determines β . For a given β and K_1 , however, it is possible to obtain the corresponding K_2 required to make the fabric a maximum weavable construction and conversely for a given β and K_2 , it is possible to obtain the corresponding K_1 required to make a maximum weavable construction. In Ref. 4, this equation was solved for a wide range of cover factors K and Beta factors β . For example, on page 149 of Ref. 4 it may be observed that for a fabric having a warp cover factor K_1 of 20 and a Beta factor of 1.4 the maximum possible filling cover factor K_2 is 16.6.

From the practical point of view, the textile designer would tentatively select a warp texture n and a warp yarn number N to obtain the warp cover factor. Then for a given filling yarn number, which would provide the Beta β , he would obtain the maximum possible filling cover factor and, finally, for the given filling yarn number he would find from the tables in Ref. 4 the maximum number of filling yarns n that could be woven into the given structure. Depending upon which constructional factors are known, a spectrum of the unknowns in the design of the plain weave fabric can thus be obtained.

A-4 DERIVATION OF THE EQUATIONS FOR LOCAL SPACING IN TWILLS AND SATEENS

Pearce did not extend his geometry of jammed plain weave fabrics to other weave types. This was done by Love in 1955 (Ref. 3). Two additional assumptions must be made regarding the geometry of the yarns in long float weaves such as the twills and the sateens, before a model can be formulated from analysis. The first assumption is that the yarns under a long float move toward each other under the stress of weaving until they touch. The second assumption goes beyond the touch stage and postulates that complete

flattening takes place in that half of the yarn which contacts a neighboring yarn under the float, i.e., that the original semicircle of the yarn half section becomes a rectangle after compression, and that this compression does not alter the fiber packing density (packing factor). Actual observation of yarns in many tight constructions confirms the fact that these assumptions have a valid basis.

In this paragraph two equations are derived which provide solutions for local spacing p in terms of weave factor M , average spacing p_a and either original average yarn diameter d_{oa} which pertains to the situation where the yarns move toward and touch each other but are not compressed (designated as Aspect I) or M , p_a , d_{oa} , and compressed average yarn diameter d_{ca} which pertains to the situation where compression of the yarns takes place in that half of the yarn which contacts a neighboring yarn under the float (designated as Aspect II).

The following terms are defined:

$$M = \text{weave factor} = \frac{\text{number of yarns per repeat of weave}}{\text{number of interlacings per repeat of weave}}$$

$$p = \text{local spacing} = \text{distance between yarn centers of warp or filling at interlacings}$$

$$p_a = \text{average spacing} = \text{numerical average of "local spacings" and spacing at points of no interlacing}$$

$$d_{oa} = \text{original average lateral diameter} = \text{numerical average of the yarn diameters assuming no compression has taken place (Aspect I)}$$

$$d_o = \text{original lateral diameter} = \text{same value as } d_{oa} \text{ for an individual yarn}$$

$$d_{ca} = \text{compressed average lateral diameter} = \text{numerical average of the compressed and uncompressed lateral diameters of the yarns (Aspect II)}$$

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d_c = compressed lateral diameter = lateral diameter of compressed yarn only

l = subscript l - as p_l , p_{al} , d_{ol} , etc - indicates warp yarn

A-4.1 ASPECT I

First examine the situation of Aspect I where the yarns under the floats are assumed to be in contact but not compressed. This can be illustrated diagrammatically as in Fig. A-3 for a 3-, 4-, and 5-harness weave

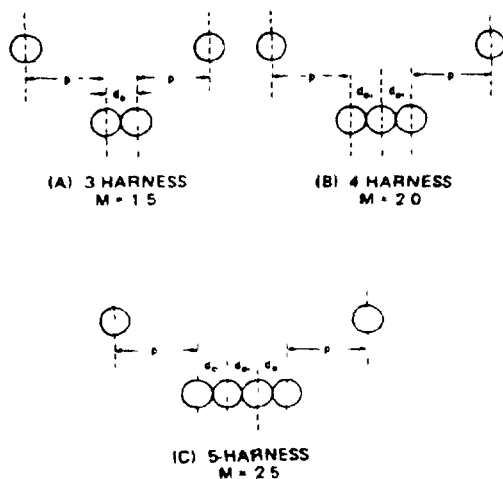


Figure A-3 Warp Yarn Arrangement in Twill Weaves (No Compression)

As shown in Fig. A-3, p_l is the local spacing, which is defined as the distance between centers of the warp yarns (for this case) at the interlacing, and d_{ol} is the uncompressed diameter of the warp yarn. In Fig. A-3 d_{ol} also represents the spacing at points of no interlacing under the floats.

Now the average warp spacing p_{al} for each of the three weaves is

$$\text{3-harness } p_{a1} = \frac{2p_l + d_{ol}}{3}$$

$$\text{4-harness } p_{a1} = \frac{2p_l + 2d_{ol}}{4}$$

$$\text{5-harness } p_{a1} = \frac{2p_l + 3d_{ol}}{5}$$

Solving each of the preceding equations for p_l we obtain

$$\text{3-harness } 3p_{a1} = 2p_l + d_{ol}$$

$$p_l = (3/2)p_{a1} - (1/2)d_{ol}$$

$$\text{4-harness } 4p_{a1} = 2p_l + 2d_{ol}$$

$$p_l = (4/2)p_{a1} - (2/2)d_{ol}$$

$$\text{5-harness } 5p_{a1} = 2p_l + 3d_{ol}$$

$$p_l = (5/2)p_{a1} - (3/2)d_{ol}$$

Note that for all of these simple weaves the number of interlacings is two and the number of yarns per repeat is equal to the number of harnesses of the weave. Thus, the weave factor is numerically equal to half the number of harnesses. In the preceding equations the coefficient of p_{a1} is always equal to the number of harnesses divided by the number of interlacings - which is the weave factor M . Likewise, the coefficient of d_{ol} is equal to the weave factor less one or $M - 1$.

Thus for uncompressed yarns

$$p_l = Mp_{a1} - (M - 1)d_{ol}$$

Since for uncompressed yarns $d_{ol} = d_{ool}$

then

$$p_l = Mp_{a1} - (M - 1)d_{ool} \quad \text{Aspect I (A-67)}$$

A-4.2 ASPECT II

Now examine Aspect II in which compression takes place in the warp yarns under the float. Recall that compression occurs in that half of the yarn which contacts a neighboring yarn under the float. For the three weaves this may be represented as shown in Fig. A-4

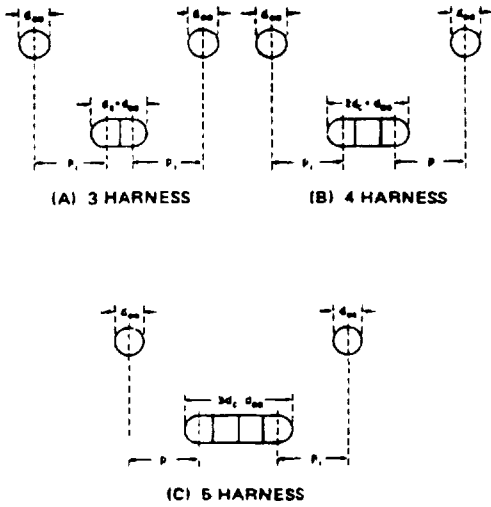


Figure A-4 Warp Yarn Arrangement in Twill Weaves (Compressed Situation)

The average compressed and average yarn diameter d_{ca1} and the compressed yarn diameter d_{c1} for the three weaves are

$$\text{3-harness } d_{ca1} = \frac{2d_{oa1} + d_{c1}}{3}$$

$$3d_{ca1} = 2d_{oa1} + d_{c1}$$

$$d_{c1} = 3d_{ca1} - 2d_{oa1}$$

$$\text{4-harness } d_{ca1} = \frac{2d_{oa1} + 2d_{c1}}{4}$$

$$4d_{ca1} = 2d_{oa1} + 2d_{c1}$$

$$d_{c1} = \frac{4d_{ca1} - 2d_{oa1}}{2}$$

$$\text{5-harness } d_{ca1} = \frac{2d_{oa1} + 3d_{c1}}{5}$$

$$5d_{ca1} = 2d_{oa1} + 3d_{c1}$$

$$d_{c1} = \frac{5d_{ca1} - 2d_{oa1}}{3}$$

The average spacing p_{a1} for each of the three weaves is

$$\begin{aligned} \text{3-harness } p_{a1} &= \frac{2p_1 + d_{c1}}{3} \\ &= \frac{2p_1 + 3d_{ca1} - 2d_{oa1}}{3} \end{aligned}$$

$$\begin{aligned} \text{4-harness } p_{a1} &= \frac{2p_1 + 2d_{c1}}{4} \\ &= \frac{2p_1 + 2\left(\frac{4d_{ca1} - 2d_{oa1}}{2}\right)}{4} \end{aligned}$$

$$\begin{aligned} \text{5-harness } p_{a1} &= \frac{2p_1 + 3d_{c1}}{5} \\ &= \frac{2p_1 + 3\left(\frac{5d_{ca1} - 2d_{oa1}}{3}\right)}{5} \end{aligned}$$

Solving each of the preceding equations for p_1 we obtain

$$\begin{aligned} \text{3-harness } 3p_{a1} &= 2p_1 + 3d_{ca1} - 2d_{oa1} \\ p_1 &= (3/2)p_{a1} - (3/2)d_{ca1} \\ &\quad + d_{oa1} \\ &= (3/2)(p_{a1} - d_{ca1}) + d_{oa1} \end{aligned}$$

$$\begin{aligned} \text{4-harness } 4p_{a1} &= 2p_1 + 4d_{ca1} - 2d_{oa1} \\ p_1 &= (4/2)p_{a1} - (4/2)d_{ca1} \\ &\quad + d_{oa1} \\ &= (4/2)(p_{a1} - d_{ca1}) + d_{oa1} \end{aligned}$$

$$\begin{aligned} \text{5-harness } 5p_{a1} &= 2p_1 + 5d_{ca1} - 2d_{oa1} \\ p_1 &= (5/2)p_{a1} - (5/2)d_{ca1} \\ &\quad + d_{oa1} \\ &= (5/2)(p_{a1} - d_{ca1}) + d_{oa1} \end{aligned}$$

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Here, the coefficient of $(p_{a1} - d_{ca1}) = M$ for each of the weaves. Thus for compressed yarns

$$p_1 = M(p_{a1} - d_{ca1}) + d_{ca1} \text{ Aspect II (A-68)}$$

A-5 DERIVATION OF K_s (max) AND MAXIMUM WEAVABILITY EQUATIONS FOR OTHER WEAVE TYPES

A-5.1 DEVELOPMENT OF RELATIONSHIP BETWEEN d_{ca} AND d_{ca}

Eq A-68 provides a means of determining the local spacing p in the warp and filling directions for twill and sateen fabrics in which the assumed movement and compression of the yarns under the float takes place. This provides the numerator of the ratio p/D which is the essential expression in the formulation of the equation for maximum weavability. Now we must find the appropriate value of D (sum of diameters of warp and filling yarns) which will take into consideration the assumed yarn movement and compression. It is understood that compression takes place only in the plane of the fabric and that accordingly the vertical dimension of the yarn (that direction perpendicular to the plane of the fabric) does not change during compression. In addition, fiber packing density does not change.

We can now visualize the dimensional arrangement (Fig A-5) of the yarns in situations where there are 2, 3, and 4 yarns under the float — representing 3-, 4-, and 5-harness weaves—and can compute the average compressed diameter d_{ca} of the yarns.

We assumed that complete flattening takes place in the half of the yarn which contacts a neighboring yarn under the float and that the original semicircle of the yarn half section became a rectangle after compression. Since the vertical dimension of this compressed half section does not change from the original uncompressed yarn, all of the compression must take place in the horizontal direction. But since the fiber packing density remains constant, the area of the compressed half

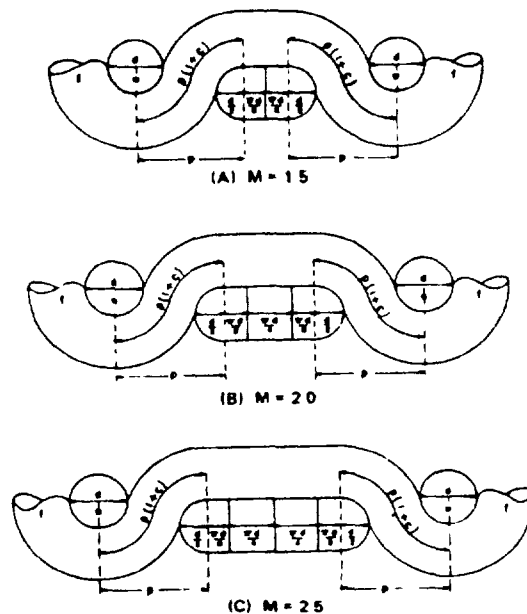


Figure A-5 Yarn Compression Between The Float

section must equal that of the uncompressed half section. This means that the product of the compressed horizontal dimension (width) multiplied by the uncompressed vertical dimension (height) must equal the area of the uncompressed semi-circular yarn section, i.e.,

$$\frac{\pi d^2}{8} = d \times (\text{compressed width}) \quad (\text{A-69})$$

$$\text{compressed width} = \frac{\pi d}{8} \quad (\text{A-70})$$

$$\text{compressed width} = 0.3927 d \quad (\text{of half-section}) \quad (\text{A-71})$$

$$2 \text{ compressed widths} = 0.7854 d \quad (\text{full-section}) \quad (\text{A-72})$$

In the situation shown in Fig A-5(A) for $M = 1.5$ (where three yarns constitute a repeat of weave), the original (before compression) lateral diameter of the three yarns in the repeat is

$$d \times 3 = 3d \quad (\text{A-73})$$

After compression has taken place the lateral diameters of the three yarns in the repeat is

$$d + d + 0.79d = 2.79d \quad (\text{A-74})$$

The compressed average lateral diameter d_{ca} is then

$$d_{ca} = \frac{2.79d}{3} \quad (\text{A-75})$$

Or putting this in terms of the standard symbols

$$d_{ca} = 0.93 d_{oa} \quad \left[\text{for } M = 1.5, \quad (\text{A-76}) \right. \\ \left. \text{Fig. A-5(A)} \right]$$

By following the same reasoning we find that the relationships between d_{ca} and d_{oa} for the weaves with $M = 2.0$ and $M = 2.5$ are

$$d_{ca} = 0.89 d_{oa} \quad \left[\text{for } M = 2.0, \quad (\text{A-77}) \right. \\ \left. \text{Fig. A-5(B)} \right]$$

$$d_{ca} = 0.87 d_{oa} \quad \left[\text{for } M = 2.5, \quad (\text{A-78}) \right. \\ \left. \text{Fig. A-5(C)} \right]$$

A 5.2 COMPUTATION OF K_a (max) AND MAXIMUM WEAVABILITY EQUATIONS

Since the average compressed lateral diameters of the yarns are less than the average original lateral diameters of the yarns, it is obvious that more compressed yarns can be squeezed into the same space than would be predicted from the value of K_o which was previously computed, since K_o represents the maximum cover factor for yarns assumed to be completely cylindrical. Therefore, in dealing with the 3-, 4-, and 5-harness weaves where migration and compression of the yarns under the float take place, it is necessary to develop a new K_o to take into consideration the additional number of yarns it is possible to squeeze into the structure. This new K_o is designated as K_a (max).

Recall from Eq. A-25 that

$$\frac{d}{p} = \frac{0.0342 K}{\sqrt{De}} \quad (\text{A-77})$$

Since for cotton $De = 0.909$, then

$$\frac{d}{p} = 0.0359 K \quad (\text{A-78})$$

or

$$\frac{d}{p} = \frac{K}{27.8} \quad (\text{A-79})$$

and

$$K = \frac{27.8 d}{p} \quad (\text{A-80})$$

The maximum cover factor or K_a (max) will occur when adjacent yarns are in contact. When this situation prevails the average spacing p_a equals the average compressed diameters d_{ca} or

$$p_a = d_{ca} \quad (\text{A-81})$$

therefore

$$K_a (\text{max}) = \frac{27.8 d_{oa}}{d_{ca}} \quad (\text{A-82})$$

And since from Eq. A-76 for $M = 1.5$

$$d_{ca} = 0.93 d_{oa} \quad (\text{A-83})$$

we have

$$K_a (\text{max}) = \frac{27.8 d_{oa}}{0.93 d_{oa}} = 29.9 \quad (\text{A-84})$$

The factor 28.0 has been used in the past in lieu of 27.8. In this case for 28.0 we have

$$K_a (\text{max}) = \frac{28.0 d_{oa}}{0.93 d_{oa}} = 30.2 \quad (\text{A-85})$$

Now express d_{oa} in terms of D using Eqs. A-55 to A-58

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$$\left. \begin{aligned} D &= d_{oa1} + d_{oa2} \\ \beta &= \frac{d_{oa2}}{d_{oa1}} \\ D &= d_{oa1} + d_{oa1} \beta \end{aligned} \right\} \quad (A-86)$$

therefore

$$D = d_{oa1} (1 + \beta) \quad (A-87)$$

Since from Eq A-76 $d_{ca1} = 0.93 d_{oa1}$ (A-88)

$$d_{oa1} = 1.08 d_{ca1} \quad (A-89)$$

therefore

$$D = 1.08 d_{ca1} (1 + \beta) \quad (A-90)$$

and using Eq A-68 for local spacing

$$p_1 = M(p_{a1} - d_{ca1}) + d_{oa1} \quad (A-91)$$

we obtain

$$\frac{p_1}{D} = \frac{M(p_{a1} - d_{ca1}) + d_{oa1}}{1.08 d_{ca1} (1 + \beta)} \quad (A-92)$$

From Eq A-80, using the value 28.0, we get

$$K_{a1} = \frac{28 d_{oa1}}{p_{a1}} = \frac{30.2 d_{ca1}}{p_{a1}} \quad (A-93)$$

and

$$p_{a1} = \frac{30.2 d_{ca1}}{K_{a1}} \quad (A-94)$$

therefore, using Eq A-92 and substituting $M = 1.5$

$$\frac{p_1}{D} = \frac{1.5 \left(\frac{30.2 d_{ca1}}{K_{a1}} - d_{ca1} \right) + d_{oa1}}{1.08 d_{ca1} (1 + \beta)} \quad (A-95)$$

*Subscripts 1 and 2 refer to warp and filling respectively

$$\frac{p_1}{D} = \frac{1.5 d_{ca1} \left(\frac{30.2}{K_{a1}} - 1 \right) + d_{oa1}}{1.08 d_{ca1} (1 + \beta)} \quad (A-96)$$

Now make the substitution for d_{oa1} from Eq A-89

$$\frac{p_1}{D} = \frac{1.5 d_{ca1} \left(\frac{30.2}{K_{a1}} - 1 \right) + 1.08 d_{ca1}}{1.08 d_{ca1} (1 + \beta)} \quad (A-97)$$

$$\frac{p_1}{D} = \frac{1.5 \left(\frac{30.2}{K_{a1}} - 1 \right) + 1.08}{1.08 (1 + \beta)} \quad (A-98)$$

Recall from Eq A-55 that

$$\beta = \frac{d_{oa2}}{d_{oa1}} \text{ or } d_{oa1} = \frac{d_{oa2}}{\beta} \quad (A-99)$$

and since

$$D = d_{oa1} + d_{oa2} \quad (A-100)$$

therefore

$$D = \frac{d_{oa2}}{\beta} + d_{oa2} \quad (A-101)$$

$$D = \frac{d_{oa2} + d_{oa2} \beta}{\beta} \quad (A-102)$$

$$D = \frac{d_{oa2} (1 + \beta)}{\beta} \quad (A-103)$$

$$\text{From Eq A-89 } d_{oa2} = 1.08 d_{ca2} \quad (A-104)$$

therefore, using Eq A-103

$$D = \frac{1.08 d_{ca2} (1 + \beta)}{\beta} \text{ (for } M = 1.5 \text{)} \quad (A-105)$$

From Eq A-68 for local spacing

$$p_2 = M(p_{a2} - d_{ca2}) + d_{oa2} \quad (A-106)$$

therefore, dividing by Eq A-105

$$\frac{p_2}{D} = \frac{M(p_{a2} - d_{ca2}) + d_{oa2}}{\left[\frac{1.08 d_{ca2} (1 + \beta)}{\beta} \right]} \quad (\text{A-107})^*$$

and

$$\frac{p_2}{D} = \frac{[M(p_{a2} - d_{ca2}) + d_{oa2}] \beta}{1.08 d_{ca2} (1 + \beta)} \quad (\text{A-108})^*$$

From Eq A-94

$$p_{a2} = \frac{30.2 d_{ca2}}{K_{a2}} \quad (\text{A-109})^*$$

therefore

$$\frac{p_2}{D} = \frac{\left[M \left(\frac{30.2 d_{ca2}}{K_{a2}} - d_{ca2} \right) + d_{oa2} \right] \beta}{1.08 d_{ca2} (1 + \beta)} \quad (\text{A-110})^*$$

$$\frac{p_2}{D} = \frac{\left[M d_{ca2} \left(\frac{30.2}{K_{a2}} - 1 \right) + d_{oa2} \right] \beta}{1.08 d_{ca2} (1 + \beta)} \quad (\text{A-111})^*$$

Now make the substitution for d_{oa2} from Eq A-104

$$\frac{p_2}{D} = \frac{\left[M d_{ca2} \left(\frac{30.2}{K_{a2}} - 1 \right) + 1.08 d_{ca2} \right] \beta}{1.08 d_{ca2} (1 + \beta)} \quad (\text{A-112})^*$$

$$\frac{p_2}{D} = \frac{\left[M \left(\frac{30.2}{K_{a2}} - 1 \right) + 1.08 \right] \beta}{1.08 (1 + \beta)} \quad (\text{A-113})^*$$

Since from Eq A-54

$$\sqrt{1 - \left(\frac{p_1}{D} \right)^2} + \sqrt{1 - \left(\frac{p_2}{D} \right)^2} = 1 \quad (\text{A-114})^*$$

We have

$$\sqrt{1 - \left[\frac{M \left(\frac{30.2}{K_{a1}} - 1 \right) + 1.08}{1.08 (1 + \beta)} \right]^2} + \quad (\text{A-115})^*$$

*M = 1.5 for Eqs. A-107 to A-115

$$\sqrt{1 - \left[\frac{M \left(\frac{30.2}{K_{a2}} - 1 \right) + 1.08}{1.08 (1 + \beta)} \right]^2} = 1$$

This is the specific maximum weavability equation of a 3-harness weave for cotton fabrics numbered in the cotton system and using a K_o of 28.0

A-6 DERIVATION OF THE GENERALIZED MAXIMUM WEAVABILITY EQUATIONS FOR ALL FIBER SPECIES AND BLENDS

We shall now derive the general equation for a 3-harness weave made from any type of fiber but also numbered in the cotton system

Recall from Eq A-77 that

$$\frac{d}{p} = \frac{0.0342 K}{\sqrt{De}} \quad (\text{A-116})$$

where De is the bulk density of the yarn and

$$\frac{d}{p} = \frac{K}{29.2 \sqrt{De}} \quad (\text{A-117})$$

Thus, recalling Eq A-79, whenever we use the factors 27.8 or 28.0 in the derivation of Eq. A-115, we may now substitute $29.2 \sqrt{De}$

For example, for the 3-harness weave, Eq A-85

$$\begin{aligned} K_s (\max) &= \frac{29.2 \sqrt{De} d_{oa}}{0.93 d_{oa}} \\ &= 31.4 \sqrt{De} \end{aligned} \quad (\text{A-118})$$

Thus, the general equation for the 3-harness weave is

$$\begin{aligned} &\sqrt{1 - \left[\frac{1.5 \left(\frac{31.4 \sqrt{De}}{K_{a1}} - 1 \right) + 1.08}{1.08 (1 + \beta)} \right]^2} + \\ &\sqrt{1 - \left[\frac{1.5 \left(\frac{31.4 \sqrt{De}}{K_{a2}} - 1 \right) + 1.08}{1.08 (1 + \beta)} \right]^2} \\ &= 1 \end{aligned} \quad (\text{A-119})$$

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For the 4-harness weave ($M = 2.0$)

$$d_{ca1} = \frac{3.57}{4} d_{oa1} = 0.89 d_{oa1} \quad (\text{A-120})$$

and

$$d_{oa1} = 1.12 d_{ca1} \quad (\text{A-121})$$

Using Eq A-93

$$\begin{aligned} K_{a1} &= \frac{28 d_{oa1}}{p_{a1}} = \frac{28 \times 1.12 d_{ca1}}{p_{a1}} \\ &= \frac{31.4 d_{ca1}}{p_{a1}} \quad (\text{A-122}) \end{aligned}$$

For the general case of the 4-harness weave, we use

$$\begin{aligned} K_{a1} &= \frac{29.2 \sqrt{De} \times 1.12 d_{ca1}}{p_{a1}} \\ &= \frac{32.7 \sqrt{De} d_{ca1}}{p_{a1}} \quad (\text{A-123}) \end{aligned}$$

And the general equation for the 4-harness weave is

$$\begin{aligned} &\sqrt{1 - \left[\frac{2 \left(\frac{32.7 \sqrt{De}}{K_{a1}} - 1 \right) + 1.12}{1.12 (1 + \beta)} \right]^2} + \\ &\sqrt{1 - \left[\frac{\left[2 \left(\frac{32.7 \sqrt{De}}{K_{a2}} - 1 \right) + 1.12 \right] \beta}{1.12 (1 + \beta)} \right]^2} \\ &= 1 \quad (\text{A-124}) \end{aligned}$$

For the 5-harness weave ($M = 2.5$)

$$d_{ca1} = 0.87 d_{oa1} \quad (\text{A-125})$$

and

$$d_{oa1} = 1.15 d_{ca1} \quad (\text{A-126})$$

For the general case of the 5-harness weave – employing the previous mathematical techniques – we use

$$\begin{aligned} K_{a1} &= \frac{29.2 \sqrt{De} (1.15) d_{ca1}}{p_{a1}} \\ &= \frac{33.6 \sqrt{De} d_{ca1}}{p_{a1}} \quad (\text{A-127}) \end{aligned}$$

Thus the general equation for the 5-harness weave is

$$\begin{aligned} &\sqrt{1 - \left[\frac{2.5 \left(\frac{33.6 \sqrt{De}}{K_{a1}} - 1 \right) + 1.15}{1.15 (1 + \beta)} \right]^2} + \\ &\sqrt{1 - \left[\frac{\left[2.5 \left(\frac{33.6 \sqrt{De}}{K_{a2}} - 1 \right) + 1.15 \right] \beta}{1.15 (1 + \beta)} \right]^2} \\ &= 1 \quad (\text{A-128}) \end{aligned}$$

For the Oxford weave the warp portion of the equation is identical to that for the 4-harness weave ($M = 2.0$) and the filling portion of the equation is identical to that for the plain (2-harness weave)

The general equation for the Oxford is therefore

$$\begin{aligned} &\sqrt{1 - \left[\frac{2.0 \left(\frac{32.7 \sqrt{De}}{K_{a1}} - 1 \right) + 1.12}{1.12 (1 + \beta)} \right]^2} + \\ &\sqrt{1 - \left[\frac{29.2 \sqrt{De} \beta}{(1 + \beta) K_{a2}} \right]^2} = 1 \quad (\text{A-129}) \end{aligned}$$

These general equations are now in practically the same form as the original equations for cotton which were derived in Ref 3, and solved and tabled in Ref 4. One new variable appears, namely, De the bulk density of the yarn. In the tabulations that appear in Ref 4,

one table is required to encompass the solutions of the maximum weavability equation for each weave type, or a total of five tables are necessary for the five basic weave types: the plain, 3-harness, 4-harness, 5-harness, and

Oxford. To establish a series of tables of solutions for the new general equations, it will be necessary to have a group of five tables (representing the five weaves) for each of the yarn bulk densities that are selected.

REFERENCES

- 1 H. J. Ball, *Engineering Design of Textile Structures*, Lowell Tech. Inst., Lowell, Mass., 1961.
- Weaves, Textile Series Report No. 90, US Army Natick Laboratories, Natick, Mass. (September 1955).
- 2 F. T. Pearce, "The Geometry of Cloth Structure," *Textile Inst.* 28, T 45 (1937).
- 4 L. I. Weiner, and J. E. Johnston, *Design Tables for Cotton Fabrics*, Textile Series Report No. 128, US Army Natick Laboratories, Natick, Mass. (August 1964).
- 3 L. Love, *Graphical Relationships in Cloth Geometry for Plain, Twill, and Sateen*

TABLE 1-1
BULK DENSITIES OF YARNS, COMPUTED FROM FIBER DENSITIES

This table lists the fiber densities of the natural and man-made fibers in use today. Corresponding to each fiber density, the yarn bulk density of a theoretical yarn spun from this fiber is given, assuming that the packing factors (coefficients) PF of the yarn are 0.59 or 0.67. The range of densities includes fibers as light as polypropylene and as heavy as stainless steel. The additional fiber densities provide for the development of fibers that differ in density from existing fiber species.

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TABLE 1-1
BULK DENSITIES OF YARNS, COMPUTED FROM FIBER DENSITIES
 (Listed in order of fiber density)

Fiber Designation	Fiber Density D_{ef} , g/cm ³	Yarn Bulk Density D_{ey} , g/cm ³	
		$PF = 0.59$	$PF = 0.67$
Polypropylene	0.91	0.54	0.61
Polyethylene (Low Density)	0.92	0.54	0.62
Polyethylene (High Density)	0.95	0.56	0.64
	0.98	0.58	0.66
	1.10	0.65	0.74
	1.12	0.66	0.75
Nylon	1.14	0.67	0.77
Orlon	1.14	0.67	0.77
	1.15	0.68	0.77
Acrlan	1.17	0.69	0.79
Creslan	1.18	0.70	0.79
Nytril	1.18	0.70	0.79
Zefran	1.19	0.70	0.80
	1.20	0.71	0.81
Kodel	1.22	0.72	0.82
	1.24	0.73	0.83
Silk (Boiled-off)	1.25	0.74	0.84
Azlon	1.25	0.74	0.84
Vinal	1.26	0.74	0.85
	1.27	0.75	0.85
	1.29	0.76	0.87
Dynel	1.30	0.77	0.87
Arnel	1.30	0.77	0.87
Ardil	1.30	0.77	0.87
Wool	1.32	0.78	0.89
Mohair	1.32	0.78	0.89
Acetate	1.32	0.78	0.89
	1.34	0.79	0.90
Vinyon	1.35	0.80	0.91
Vycron	1.36	0.80	0.92
Verel	1.37	0.81	0.92
Dacron	1.38	0.81	0.93
Fortrel	1.38	0.81	0.93
	1.39	0.82	0.94
	1.41	0.83	0.95
	1.42	0.84	0.96
	1.44	0.85	0.97
	1.46	0.86	0.98
Hemp	1.48	0.87	1.00
Jute	1.48	0.87	1.00
	1.49	0.88	1.00
Avril	1.50	0.89	1.01
Flax (Linen)	1.50	0.89	1.01
Ramie	1.51	0.89	1.02

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TABLE 1-1 (Cont'd)
BULK DENSITIES OF YARNS, COMPUTED FROM FIBER DENSITIES
(Listed in order of fiber density)

Fiber Density	Fiber Density D_{ef} , g/cm ³	Yarn Bulk Density D_{ey} , g/cm ³	
		$PF = 0.69$	$PF = 0.67$
Zantrel	1.51	0.89	1.02
Viscose Rayon	1.52	0.90	1.02
Cuprammonium	1.52	0.90	1.02
Fortisan	1.52	0.90	1.02
Cotton	1.54 (1.35)	0.91	(0.91)
	1.56	0.92	1.05
	1.58	0.93	1.06
	1.60	0.94	1.07
Saran	1.70	1.00	1.14
Alginate	1.70	1.00	1.14
Teflon	2.30	1.36	1.55
Asbestos	2.50	1.48	1.68
Fiberglass	2.54	1.50	1.71
	3.00	1.77	2.02
	4.00	2.36	2.69
	5.00	2.95	3.37
	6.00	3.54	4.04
	7.00	4.13	4.71
Stainless Steel	7.80	4.60	5.25

TABLE 1-2
YARN BULK DENSITIES OF BLENDS OF THE
IMPORTANT COMMERCIAL FIBERS

<u>Fiber Density D_{ef}, g/cm³</u>	<u>Fiber Designation</u>
1.14	Nylon, Orlon
1.17	Acrlan
1.22	Kodel
1.30	Dynel, Arnel
1.32	Wool, Mohair, Acetate
1.35	Vinyon
1.38	Decron, Fortrel
1.52	Viscose Rayon, Cuprammonium, Fortisan
1.54	Cotton

The fiber density of *one* of the component fibers is given at the top of the first column, with the *percentage* of that fiber (from 0% to 100%) given below it

The *headings* of the following eight columns give the fiber densities of the *other* component fibers, and the values in the body of the table are *yarn bulk densities D_{ey}* .

For example Given a blend of 25% nylon, 75% cotton. Turn to page of table with "FIB. DEN. = 1.14" above first column (fiber density of nylon is 1.14). Drop down to 25 in this column (the percentage of nylon in the blend). Go across this row (25) to the column headed 1.54 (this is the fiber density of cotton). This will give the *bulk density* of a blend of 25% nylon and 75% cotton as 0.84

TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.14)	1.17	1.22	1.30	1.32	1.35	1.38	1.52	1.54
PER CFMT	PACKING FACTOR = 0.59							
0	0.69	0.72	0.77	0.78	0.80	0.81	0.90	0.91
5	0.69	0.72	0.76	0.77	0.79	0.81	0.88	0.89
10	0.69	0.71	0.76	0.77	0.78	0.80	0.87	0.88
15	0.69	0.71	0.75	0.76	0.78	0.79	0.85	0.86
20	0.69	0.71	0.75	0.75	0.77	0.78	0.84	0.85
25	0.69	0.71	0.74	0.75	0.76	0.77	0.83	0.84
30	0.68	0.70	0.74	0.74	0.75	0.77	0.82	0.82
35	0.68	0.70	0.73	0.74	0.75	0.76	0.80	0.81
40	0.68	0.70	0.73	0.73	0.74	0.75	0.79	0.80
45	0.68	0.70	0.72	0.73	0.74	0.74	0.78	0.78
50	0.68	0.70	0.72	0.72	0.73	0.74	0.77	0.77
55	0.68	0.69	0.71	0.72	0.72	0.73	0.76	0.76
60	0.68	0.69	0.71	0.71	0.72	0.72	0.75	0.75
65	0.68	0.69	0.70	0.71	0.71	0.72	0.74	0.74
70	0.68	0.69	0.70	0.70	0.71	0.71	0.73	0.73
75	0.68	0.68	0.69	0.70	0.70	0.70	0.72	0.72
80	0.68	0.68	0.69	0.69	0.69	0.70	0.71	0.71
85	0.68	0.68	0.69	0.69	0.69	0.69	0.70	0.70
90	0.67	0.69	0.68	0.68	0.68	0.68	0.69	0.69
95	0.67	0.67	0.68	0.68	0.68	0.68	0.68	0.68
100	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
PER CFMT	PACKING FACTOR = 0.67							
0	0.79	0.82	0.87	0.84	0.91	0.93	1.02	1.04
5	0.79	0.82	0.87	0.88	0.90	0.92	1.01	1.02
10	0.79	0.82	0.86	0.87	0.89	0.91	0.99	1.00
15	0.78	0.81	0.86	0.87	0.88	0.90	0.97	0.98
20	0.78	0.81	0.85	0.86	0.88	0.89	0.96	0.97
25	0.78	0.81	0.85	0.85	0.87	0.88	0.94	0.95
30	0.78	0.80	0.84	0.85	0.86	0.87	0.93	0.94
35	0.78	0.80	0.83	0.84	0.85	0.87	0.92	0.92
40	0.78	0.80	0.83	0.84	0.85	0.86	0.90	0.91
45	0.78	0.80	0.82	0.83	0.84	0.85	0.89	0.90
50	0.78	0.79	0.82	0.82	0.83	0.84	0.88	0.88
55	0.78	0.79	0.81	0.82	0.82	0.83	0.86	0.87
60	0.78	0.79	0.81	0.81	0.82	0.82	0.85	0.86
65	0.77	0.79	0.80	0.81	0.81	0.82	0.84	0.84
70	0.77	0.78	0.80	0.80	0.80	0.81	0.83	0.83
75	0.77	0.78	0.79	0.79	0.80	0.80	0.82	0.82
80	0.77	0.78	0.79	0.79	0.79	0.79	0.81	0.81
85	0.77	0.77	0.78	0.78	0.79	0.79	0.80	0.80
90	0.77	0.77	0.78	0.78	0.78	0.78	0.79	0.79
95	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.78
100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77

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TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

FIBER DEN = 1.171	1.14	1.22	1.30	1.32	1.35	1.38	1.52	1.54
PFR CFMT	PACKING FACTOR = 0.59							
0	0.67	0.72	0.77	0.78	0.80	0.81	0.90	0.91
5	0.67	0.72	0.76	0.77	0.79	0.81	0.88	0.89
10	0.67	0.72	0.76	0.77	0.78	0.80	0.87	0.88
15	0.68	0.72	0.75	0.76	0.78	0.79	0.86	0.87
20	0.68	0.71	0.75	0.76	0.77	0.79	0.85	0.85
25	0.68	0.71	0.75	0.75	0.77	0.78	0.83	0.84
30	0.68	0.71	0.74	0.75	0.76	0.77	0.82	0.83
35	0.68	0.71	0.74	0.75	0.76	0.77	0.81	0.82
40	0.68	0.71	0.73	0.74	0.75	0.76	0.80	0.81
45	0.68	0.71	0.73	0.74	0.74	0.75	0.79	0.80
50	0.68	0.70	0.73	0.73	0.74	0.75	0.78	0.78
55	0.68	0.70	0.72	0.73	0.73	0.74	0.77	0.77
60	0.68	0.70	0.72	0.72	0.73	0.74	0.76	0.76
65	0.68	0.70	0.72	0.72	0.72	0.73	0.75	0.75
70	0.68	0.70	0.71	0.71	0.72	0.72	0.74	0.74
75	0.68	0.70	0.71	0.71	0.71	0.72	0.73	0.73
80	0.69	0.70	0.70	0.71	0.71	0.71	0.72	0.73
85	0.69	0.69	0.70	0.70	0.70	0.71	0.71	0.72
90	0.69	0.69	0.70	0.70	0.70	0.70	0.71	0.71
95	0.69	0.69	0.69	0.69	0.69	0.70	0.70	0.70
100	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PFR CFMT	PACKING FACTOR = 0.67							
0	0.77	0.82	0.87	0.89	0.91	0.93	1.02	1.04
5	0.77	0.82	0.87	0.88	0.90	0.92	1.01	1.02
10	0.77	0.82	0.87	0.88	0.89	0.91	0.99	1.00
15	0.77	0.82	0.86	0.87	0.89	0.90	0.98	0.99
20	0.77	0.81	0.86	0.87	0.88	0.90	0.97	0.97
25	0.77	0.81	0.85	0.86	0.87	0.89	0.95	0.96
30	0.77	0.81	0.85	0.86	0.87	0.88	0.94	0.95
35	0.77	0.81	0.84	0.85	0.86	0.87	0.93	0.93
40	0.78	0.81	0.84	0.85	0.86	0.87	0.91	0.92
45	0.78	0.81	0.83	0.84	0.85	0.86	0.90	0.91
50	0.78	0.80	0.83	0.83	0.84	0.85	0.89	0.89
55	0.78	0.80	0.82	0.83	0.84	0.85	0.88	0.88
60	0.78	0.80	0.82	0.82	0.83	0.84	0.87	0.87
65	0.78	0.80	0.82	0.82	0.83	0.83	0.86	0.86
70	0.78	0.80	0.81	0.82	0.82	0.83	0.85	0.85
75	0.78	0.80	0.81	0.81	0.81	0.82	0.84	0.84
80	0.78	0.79	0.80	0.81	0.81	0.81	0.83	0.83
85	0.78	0.79	0.80	0.80	0.80	0.81	0.82	0.82
90	0.79	0.79	0.80	0.80	0.80	0.80	0.81	0.81
95	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.80
100	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79

TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.22)	1.14	1.17	1.30	1.32	1.35	1.38	1.52	1.54
PER CFMT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.77	0.78	0.80	0.81	0.90	0.91
5	0.67	0.69	0.76	0.78	0.79	0.81	0.89	0.90
10	0.68	0.69	0.76	0.77	0.79	0.80	0.88	0.89
15	0.68	0.69	0.76	0.77	0.78	0.80	0.86	0.87
20	0.68	0.70	0.76	0.77	0.78	0.79	0.85	0.86
25	0.68	0.70	0.75	0.76	0.78	0.79	0.84	0.85
30	0.69	0.70	0.75	0.76	0.77	0.78	0.84	0.84
35	0.69	0.70	0.75	0.76	0.77	0.78	0.83	0.83
40	0.69	0.70	0.75	0.75	0.76	0.77	0.82	0.82
45	0.69	0.70	0.75	0.75	0.76	0.77	0.81	0.81
50	0.70	0.70	0.74	0.75	0.76	0.76	0.80	0.80
55	0.70	0.71	0.74	0.75	0.75	0.76	0.79	0.79
60	0.70	0.71	0.74	0.74	0.75	0.75	0.78	0.79
65	0.70	0.71	0.74	0.74	0.74	0.75	0.77	0.78
70	0.70	0.71	0.73	0.74	0.74	0.75	0.77	0.77
75	0.71	0.71	0.73	0.73	0.74	0.74	0.76	0.76
80	0.71	0.71	0.73	0.73	0.73	0.74	0.75	0.75
85	0.71	0.72	0.73	0.73	0.73	0.73	0.74	0.74
90	0.71	0.72	0.72	0.73	0.73	0.73	0.73	0.74
95	0.72	0.72	0.72	0.72	0.72	0.72	0.73	0.73
100	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
PER CFMT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.87	0.89	0.91	0.93	1.02	1.04
5	0.77	0.79	0.87	0.88	0.90	0.92	1.01	1.02
10	0.77	0.79	0.87	0.88	0.90	0.92	1.00	1.01
15	0.77	0.79	0.87	0.88	0.89	0.91	0.99	1.00
20	0.78	0.79	0.86	0.87	0.89	0.91	0.98	0.98
25	0.78	0.80	0.86	0.87	0.88	0.90	0.96	0.97
30	0.78	0.80	0.86	0.87	0.88	0.89	0.95	0.96
35	0.79	0.80	0.86	0.86	0.88	0.89	0.94	0.95
40	0.79	0.80	0.85	0.86	0.87	0.88	0.93	0.94
45	0.79	0.80	0.85	0.86	0.87	0.88	0.92	0.93
50	0.79	0.80	0.85	0.85	0.86	0.87	0.91	0.92
55	0.80	0.81	0.84	0.85	0.86	0.87	0.90	0.91
60	0.80	0.81	0.84	0.85	0.85	0.86	0.89	0.90
65	0.80	0.81	0.84	0.84	0.85	0.86	0.88	0.89
70	0.80	0.81	0.84	0.84	0.85	0.85	0.87	0.88
75	0.81	0.81	0.83	0.84	0.84	0.85	0.86	0.87
80	0.81	0.81	0.83	0.83	0.84	0.84	0.85	0.86
85	0.81	0.82	0.83	0.83	0.83	0.84	0.85	0.85
90	0.82	0.82	0.83	0.83	0.83	0.83	0.84	0.84
95	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.83
100	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82

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TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB. DEN. = 1.33)	1.14	1.17	1.22	1.32	1.35	1.38	1.52	1.54
PER CFNT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.78	0.80	0.81	0.90	0.91
5	0.68	0.69	0.72	0.78	0.79	0.81	0.89	0.90
10	0.68	0.70	0.72	0.78	0.79	0.81	0.88	0.89
15	0.69	0.70	0.73	0.78	0.79	0.81	0.87	0.88
20	0.69	0.70	0.73	0.78	0.79	0.80	0.87	0.88
25	0.69	0.71	0.73	0.78	0.79	0.80	0.86	0.87
30	0.70	0.71	0.73	0.78	0.79	0.80	0.85	0.86
35	0.70	0.72	0.74	0.77	0.79	0.80	0.85	0.85
40	0.71	0.72	0.74	0.77	0.78	0.79	0.84	0.85
45	0.71	0.72	0.74	0.77	0.78	0.79	0.83	0.84
50	0.72	0.73	0.74	0.77	0.78	0.79	0.83	0.83
55	0.72	0.73	0.75	0.77	0.78	0.79	0.82	0.82
60	0.73	0.73	0.75	0.77	0.78	0.79	0.81	0.82
65	0.73	0.74	0.75	0.77	0.78	0.78	0.81	0.81
70	0.74	0.74	0.75	0.77	0.78	0.78	0.80	0.80
75	0.74	0.75	0.75	0.77	0.77	0.78	0.80	0.80
80	0.75	0.75	0.76	0.77	0.77	0.78	0.79	0.79
85	0.75	0.75	0.76	0.77	0.77	0.77	0.78	0.79
90	0.76	0.76	0.76	0.77	0.77	0.77	0.78	0.78
95	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77
100	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
PER CFNT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.89	0.91	0.93	1.02	1.04
5	0.77	0.79	0.82	0.89	0.91	0.93	1.01	1.03
10	0.78	0.80	0.83	0.89	0.91	0.92	1.01	1.02
15	0.78	0.80	0.83	0.89	0.90	0.92	1.00	1.01
20	0.79	0.80	0.83	0.89	0.90	0.92	0.99	1.00
25	0.79	0.81	0.83	0.88	0.90	0.91	0.98	0.99
30	0.80	0.81	0.84	0.88	0.90	0.91	0.97	0.98
35	0.80	0.82	0.84	0.88	0.90	0.91	0.97	0.97
40	0.81	0.82	0.84	0.88	0.89	0.91	0.96	0.97
45	0.81	0.82	0.84	0.88	0.89	0.90	0.95	0.96
50	0.82	0.83	0.85	0.88	0.89	0.90	0.94	0.95
55	0.82	0.83	0.85	0.88	0.89	0.90	0.94	0.94
60	0.83	0.84	0.85	0.88	0.89	0.90	0.93	0.93
65	0.83	0.84	0.86	0.88	0.89	0.89	0.92	0.93
70	0.84	0.85	0.86	0.88	0.88	0.89	0.91	0.92
75	0.85	0.85	0.86	0.88	0.88	0.89	0.91	0.91
80	0.85	0.85	0.86	0.88	0.88	0.89	0.90	0.90
85	0.86	0.86	0.87	0.88	0.88	0.88	0.89	0.90
90	0.86	0.86	0.87	0.88	0.88	0.88	0.89	0.89
95	0.87	0.87	0.87	0.88	0.88	0.88	0.88	0.88
100	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87

TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB. DEN. = 1.32)	1.14	1.17	1.22	1.30	1.35	1.38	1.52	1.54
PER CFMT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.77	0.80	0.81	0.90	0.91
5	0.68	0.69	0.72	0.77	0.80	0.81	0.89	0.90
10	0.68	0.70	0.73	0.77	0.79	0.81	0.88	0.89
15	0.69	0.70	0.73	0.77	0.79	0.81	0.88	0.89
20	0.69	0.71	0.73	0.77	0.79	0.81	0.87	0.88
25	0.70	0.71	0.73	0.77	0.79	0.81	0.86	0.87
30	0.70	0.71	0.74	0.77	0.79	0.80	0.86	0.87
35	0.71	0.72	0.74	0.77	0.79	0.80	0.85	0.86
40	0.71	0.72	0.74	0.77	0.79	0.80	0.85	0.85
45	0.72	0.73	0.75	0.77	0.79	0.80	0.84	0.85
50	0.72	0.73	0.75	0.77	0.79	0.80	0.83	0.84
55	0.73	0.74	0.75	0.77	0.79	0.79	0.83	0.83
60	0.73	0.74	0.75	0.77	0.79	0.79	0.82	0.83
65	0.74	0.75	0.76	0.77	0.78	0.79	0.82	0.82
70	0.74	0.75	0.76	0.78	0.78	0.79	0.81	0.81
75	0.75	0.75	0.76	0.78	0.78	0.79	0.81	0.81
80	0.75	0.76	0.77	0.78	0.78	0.79	0.80	0.80
85	0.76	0.76	0.77	0.78	0.78	0.78	0.79	0.80
90	0.77	0.77	0.77	0.78	0.78	0.78	0.79	0.79
95	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.78
100	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PER CFMT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.87	0.91	0.93	1.02	1.04
5	0.77	0.79	0.82	0.88	0.91	0.93	1.02	1.03
10	0.78	0.80	0.83	0.88	0.91	0.92	1.01	1.02
15	0.78	0.80	0.83	0.88	0.91	0.92	1.00	1.01
20	0.79	0.81	0.83	0.88	0.90	0.92	0.99	1.00
25	0.79	0.81	0.84	0.88	0.90	0.92	0.99	0.99
30	0.80	0.82	0.84	0.88	0.90	0.92	0.98	0.99
35	0.81	0.82	0.84	0.88	0.90	0.91	0.97	0.98
40	0.81	0.82	0.85	0.88	0.90	0.91	0.96	0.97
45	0.82	0.83	0.85	0.88	0.90	0.91	0.96	0.96
50	0.82	0.83	0.85	0.88	0.90	0.91	0.95	0.96
55	0.83	0.84	0.86	0.88	0.90	0.91	0.94	0.95
60	0.84	0.85	0.86	0.88	0.90	0.90	0.94	0.94
65	0.84	0.85	0.86	0.88	0.90	0.90	0.93	0.94
70	0.85	0.86	0.87	0.88	0.89	0.90	0.92	0.93
75	0.85	0.86	0.87	0.88	0.89	0.90	0.92	0.92
80	0.86	0.87	0.87	0.89	0.89	0.90	0.91	0.91
85	0.87	0.87	0.88	0.89	0.89	0.89	0.91	0.91
90	0.87	0.88	0.88	0.89	0.89	0.89	0.90	0.90
95	0.88	0.88	0.88	0.89	0.89	0.89	0.89	0.89
100	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89

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TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.35)	1.14	1.17	1.22	1.30	1.32	1.38	1.52	1.54
PER CFMT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.77	0.78	0.81	0.90	0.91
5	0.68	0.69	0.72	0.77	0.78	0.81	0.89	0.90
10	0.68	0.70	0.73	0.77	0.78	0.81	0.89	0.90
15	0.69	0.70	0.73	0.77	0.78	0.81	0.88	0.89
20	0.69	0.71	0.73	0.77	0.78	0.81	0.87	0.88
25	0.70	0.71	0.74	0.77	0.78	0.81	0.87	0.88
30	0.71	0.72	0.74	0.78	0.78	0.81	0.86	0.87
35	0.71	0.72	0.74	0.78	0.78	0.81	0.86	0.87
40	0.72	0.73	0.75	0.78	0.79	0.81	0.85	0.86
45	0.72	0.73	0.75	0.78	0.79	0.81	0.85	0.85
50	0.73	0.74	0.76	0.78	0.79	0.81	0.84	0.85
55	0.74	0.74	0.76	0.78	0.79	0.80	0.84	0.84
60	0.74	0.75	0.76	0.78	0.79	0.80	0.83	0.84
65	0.75	0.76	0.77	0.79	0.79	0.80	0.83	0.83
70	0.75	0.76	0.77	0.79	0.79	0.80	0.82	0.83
75	0.76	0.77	0.78	0.79	0.79	0.80	0.82	0.82
80	0.77	0.77	0.78	0.79	0.79	0.80	0.81	0.82
85	0.78	0.78	0.78	0.79	0.79	0.80	0.81	0.81
90	0.78	0.78	0.79	0.79	0.79	0.80	0.81	0.81
95	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.80
100	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PER CFMT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.87	0.89	0.93	1.02	1.04
5	0.77	0.79	0.83	0.88	0.89	0.93	1.02	1.03
10	0.78	0.80	0.83	0.88	0.89	0.93	1.01	1.02
15	0.79	0.80	0.83	0.88	0.89	0.93	1.00	1.01
20	0.79	0.81	0.84	0.88	0.89	0.92	1.00	1.01
25	0.80	0.81	0.84	0.88	0.89	0.92	0.99	1.00
30	0.80	0.82	0.85	0.88	0.89	0.92	0.99	0.99
35	0.81	0.83	0.85	0.89	0.90	0.92	0.98	0.99
40	0.82	0.83	0.85	0.89	0.90	0.92	0.97	0.98
45	0.82	0.84	0.86	0.89	0.90	0.92	0.97	0.97
50	0.83	0.84	0.86	0.89	0.90	0.92	0.96	0.97
55	0.84	0.85	0.87	0.89	0.90	0.92	0.96	0.96
60	0.85	0.86	0.87	0.89	0.90	0.92	0.95	0.96
65	0.85	0.86	0.88	0.90	0.90	0.92	0.95	0.95
70	0.86	0.87	0.88	0.90	0.90	0.91	0.94	0.94
75	0.87	0.87	0.88	0.90	0.90	0.91	0.93	0.94
80	0.88	0.88	0.89	0.90	0.90	0.91	0.93	0.93
85	0.88	0.89	0.89	0.90	0.91	0.91	0.92	0.93
90	0.89	0.89	0.90	0.91	0.91	0.91	0.92	0.92
95	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.91
100	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91

TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.38)	1.14	1.17	1.22	1.30	1.32	1.35	1.52	1.54
PFR CFMT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.77	0.78	0.80	0.90	0.91
5	0.68	0.70	0.72	0.77	0.78	0.80	0.89	0.90
10	0.68	0.70	0.73	0.77	0.78	0.80	0.89	0.90
15	0.69	0.71	0.73	0.77	0.78	0.80	0.88	0.89
20	0.70	0.71	0.74	0.78	0.79	0.80	0.88	0.89
25	0.70	0.72	0.74	0.78	0.79	0.80	0.87	0.88
30	0.71	0.72	0.75	0.78	0.79	0.80	0.87	0.88
35	0.72	0.73	0.75	0.78	0.79	0.80	0.87	0.87
40	0.72	0.74	0.75	0.79	0.79	0.80	0.86	0.87
45	0.73	0.74	0.76	0.79	0.79	0.80	0.86	0.86
50	0.74	0.75	0.76	0.79	0.80	0.81	0.85	0.86
55	0.74	0.75	0.77	0.79	0.80	0.81	0.85	0.85
60	0.75	0.76	0.77	0.79	0.80	0.81	0.85	0.85
65	0.76	0.77	0.78	0.80	0.80	0.81	0.84	0.84
70	0.77	0.77	0.78	0.80	0.80	0.81	0.84	0.84
75	0.77	0.78	0.79	0.80	0.81	0.81	0.83	0.84
80	0.78	0.79	0.79	0.80	0.81	0.81	0.83	0.83
85	0.79	0.79	0.80	0.81	0.81	0.81	0.83	0.83
90	0.80	0.80	0.80	0.81	0.81	0.81	0.82	0.82
95	0.81	0.81	0.81	0.81	0.81	0.81	0.82	0.82
100	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PFR CFMT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.87	0.89	0.91	1.02	1.04
5	0.77	0.79	0.83	0.88	0.89	0.91	1.02	1.03
10	0.78	0.80	0.83	0.88	0.89	0.91	1.01	1.02
15	0.79	0.81	0.84	0.88	0.89	0.91	1.01	1.02
20	0.79	0.81	0.84	0.89	0.90	0.91	1.00	1.01
25	0.80	0.82	0.85	0.89	0.90	0.91	1.00	1.01
30	0.81	0.83	0.85	0.89	0.90	0.91	0.99	1.00
35	0.82	0.83	0.86	0.89	0.90	0.92	0.99	1.00
40	0.82	0.84	0.86	0.90	0.90	0.92	0.98	0.99
45	0.83	0.85	0.87	0.90	0.91	0.92	0.98	0.99
50	0.84	0.85	0.87	0.90	0.91	0.92	0.97	0.98
55	0.85	0.86	0.88	0.90	0.91	0.92	0.97	0.97
60	0.86	0.87	0.88	0.91	0.91	0.92	0.96	0.97
65	0.87	0.87	0.89	0.91	0.91	0.92	0.96	0.96
70	0.87	0.88	0.89	0.91	0.92	0.92	0.96	0.96
75	0.88	0.89	0.90	0.91	0.92	0.92	0.95	0.95
80	0.89	0.90	0.91	0.92	0.92	0.92	0.95	0.95
85	0.90	0.90	0.91	0.92	0.92	0.93	0.94	0.94
90	0.91	0.91	0.92	0.92	0.92	0.93	0.94	0.94
95	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93
100	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93

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TABLE 12
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.52)	1.14	1.17	1.22	1.30	1.32	1.35	1.38	1.54
PER CENT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.77	0.78	0.80	0.81	0.91
5	0.68	0.70	0.73	0.77	0.78	0.80	0.82	0.91
10	0.69	0.71	0.73	0.78	0.79	0.81	0.82	0.91
15	0.70	0.71	0.74	0.78	0.79	0.81	0.83	0.91
20	0.71	0.72	0.75	0.79	0.80	0.81	0.83	0.91
25	0.72	0.73	0.76	0.80	0.81	0.82	0.83	0.91
30	0.73	0.74	0.77	0.80	0.81	0.82	0.84	0.91
35	0.74	0.75	0.77	0.81	0.82	0.83	0.84	0.90
40	0.75	0.76	0.78	0.81	0.82	0.83	0.85	0.90
45	0.76	0.77	0.79	0.82	0.83	0.84	0.85	0.90
50	0.77	0.78	0.80	0.83	0.83	0.84	0.85	0.90
55	0.78	0.79	0.81	0.83	0.84	0.85	0.86	0.90
60	0.79	0.80	0.82	0.84	0.85	0.85	0.86	0.90
65	0.80	0.81	0.83	0.85	0.85	0.86	0.87	0.90
70	0.82	0.82	0.84	0.85	0.86	0.86	0.87	0.90
75	0.83	0.83	0.84	0.86	0.86	0.87	0.87	0.90
80	0.84	0.85	0.85	0.87	0.87	0.87	0.88	0.90
85	0.85	0.86	0.86	0.87	0.88	0.88	0.88	0.90
90	0.87	0.87	0.88	0.88	0.88	0.89	0.89	0.90
95	0.88	0.88	0.89	0.89	0.89	0.89	0.89	0.90
100	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PER CENT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.87	0.89	0.91	0.93	1.04
5	0.78	0.80	0.83	0.88	0.89	0.91	0.93	1.04
10	0.79	0.81	0.84	0.89	0.90	0.92	0.94	1.04
15	0.80	0.82	0.85	0.89	0.91	0.92	0.94	1.05
20	0.81	0.83	0.85	0.90	0.91	0.93	0.95	1.05
25	0.82	0.84	0.86	0.91	0.92	0.93	0.95	1.05
30	0.83	0.85	0.87	0.91	0.92	0.94	0.96	1.07
35	0.84	0.86	0.88	0.92	0.93	0.95	0.96	1.07
40	0.85	0.87	0.89	0.93	0.94	0.95	0.96	1.07
45	0.86	0.88	0.90	0.94	0.94	0.96	0.97	1.07
50	0.88	0.89	0.91	0.94	0.95	0.96	0.97	1.07
55	0.89	0.90	0.92	0.95	0.96	0.97	0.98	1.07
60	0.90	0.91	0.93	0.96	0.96	0.97	0.98	1.07
65	0.92	0.93	0.94	0.97	0.97	0.98	0.99	1.07
70	0.93	0.94	0.95	0.97	0.98	0.99	0.99	1.07
75	0.94	0.95	0.96	0.98	0.99	0.99	1.00	1.07
80	0.96	0.97	0.98	0.99	0.99	1.00	1.00	1.07
85	0.97	0.98	0.99	1.00	1.00	1.00	1.01	1.07
90	0.99	0.99	1.00	1.01	1.01	1.01	1.01	1.07
95	1.01	1.01	1.01	1.01	1.02	1.02	1.02	1.07
100	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.07

TABLE 1-2
YARN BULK DENSITIES OF THE IMPORTANT COMMERCIAL FIBERS

(FIB.DEN. = 1.54)	1.14	1.17	1.22	1.30	1.32	1.35	1.38	1.52
PER CENT	PACKING FACTOR = 0.59							
0	0.67	0.69	0.72	0.77	0.78	0.80	0.81	0.90
5	0.68	0.70	0.73	0.77	0.78	0.80	0.82	0.90
10	0.69	0.71	0.74	0.78	0.79	0.81	0.82	0.90
15	0.70	0.72	0.74	0.79	0.80	0.81	0.83	0.90
20	0.71	0.73	0.75	0.79	0.80	0.82	0.83	0.90
25	0.72	0.73	0.76	0.80	0.81	0.82	0.84	0.90
30	0.73	0.74	0.77	0.80	0.81	0.83	0.84	0.90
35	0.74	0.75	0.78	0.81	0.82	0.83	0.84	0.90
40	0.75	0.76	0.79	0.82	0.83	0.84	0.85	0.90
45	0.76	0.77	0.79	0.82	0.83	0.84	0.85	0.90
50	0.77	0.78	0.80	0.83	0.84	0.85	0.86	0.90
55	0.78	0.80	0.81	0.84	0.85	0.85	0.86	0.90
60	0.80	0.81	0.82	0.85	0.85	0.86	0.87	0.90
65	0.81	0.82	0.83	0.85	0.86	0.87	0.87	0.90
70	0.82	0.83	0.84	0.86	0.87	0.87	0.88	0.91
75	0.84	0.84	0.85	0.87	0.87	0.88	0.88	0.91
80	0.85	0.85	0.86	0.88	0.88	0.88	0.89	0.91
85	0.86	0.87	0.87	0.88	0.89	0.89	0.89	0.91
90	0.88	0.88	0.89	0.89	0.89	0.90	0.90	0.91
95	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.91
100	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PER CENT	PACKING FACTOR = 0.67							
0	0.77	0.79	0.82	0.87	0.89	0.91	0.93	1.02
5	0.78	0.80	0.83	0.88	0.89	0.91	0.93	1.02
10	0.79	0.81	0.84	0.89	0.90	0.92	0.94	1.02
15	0.80	0.82	0.85	0.90	0.91	0.93	0.94	1.02
20	0.81	0.83	0.86	0.90	0.91	0.93	0.95	1.03
25	0.82	0.84	0.87	0.91	0.92	0.94	0.95	1.03
30	0.83	0.85	0.88	0.92	0.93	0.94	0.96	1.03
35	0.84	0.86	0.89	0.93	0.94	0.95	0.96	1.03
40	0.86	0.87	0.90	0.93	0.94	0.94	0.97	1.03
45	0.87	0.88	0.91	0.94	0.95	0.96	0.97	1.03
50	0.88	0.89	0.92	0.95	0.96	0.97	0.98	1.03
55	0.90	0.91	0.93	0.96	0.96	0.97	0.99	1.03
60	0.91	0.92	0.94	0.97	0.97	0.98	0.99	1.03
65	0.92	0.93	0.95	0.97	0.98	0.99	1.00	1.03
70	0.94	0.95	0.96	0.98	0.99	0.99	1.00	1.03
75	0.95	0.96	0.97	0.99	0.99	1.00	1.01	1.03
80	0.97	0.97	0.98	1.00	1.00	1.01	1.01	1.03
85	0.98	0.99	1.00	1.01	1.01	1.01	1.02	1.03
90	1.00	1.00	1.01	1.02	1.02	1.02	1.02	1.04
95	1.02	1.02	1.02	1.03	1.03	1.03	1.03	1.04
100	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04

TABLE 1-3
MAXIMUM VALUE OF FILLING COVER FACTOR K_1 , IN TERMS OF
WARP COVER FACTOR, BETA FACTOR, AND YARN BULK DENSITY

This table provides solutions for the maximum weavability equations (par 1-3.3) for

- (A) Plain weaves, 2-harness
- (B) Twills, 3-harness
- (C) Twills and crowfoot, 4-harness
- (D) Sateens, 5-harness
- (E) Oxford weave

The overall range of warp cover factors is from 8 to 62. However, depending upon the yarn bulk density and/or the weave type, the range may be less than this.

Beta factors range from 0.5 to 2.0. See body of the text for

- (A) Computation and organization of Table 1-3, par 1-3.3
- (B) How to use Table 1-3, par. 1-5
- (C) Examples of use of Table 1-3, par. 1-6
- (D) Basic assumptions and limitations of tables, par 1-7

In using this table the computer print-out symbols K_1 and K_2 are to be interpreted as K_1 and K_2 , respectively.

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(A) PLAIN WEAVE FABRICS

TABLE 1-3

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND PETA

WARP RILK DENSITY = 0.54

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K _F)	PETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
17	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
11	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
12	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
13	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
14	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
15	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
16	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
17	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
18	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
19	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
20	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
21	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
22	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
23	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
24	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
25	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
26	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
27	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
28	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
29	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
30	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
31	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
32	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY =0.56

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	18.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	17.5	16.6	16.2	16.1	16.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	17.0	15.7	15.3	15.1	15.1	15.2	15.2	15.3
11	0.0	0.0	0.0	0.0	0.0	23.4	15.5	14.5	14.2	14.2	14.3	14.4	14.5	14.7	14.9	15.0
12	0.0	0.0	0.0	0.0	14.8	13.5	13.2	13.3	13.4	13.6	13.8	14.0	14.3	14.5	14.7	14.9
13	0.0	0.0	17.1	12.7	12.2	12.3	12.5	12.7	13.0	13.3	13.6	13.8	14.1	14.3	14.6	14.8
14	0.0	13.1	11.3	11.2	11.5	11.8	12.1	12.5	12.8	13.1	13.4	13.7	14.0	14.3	14.5	14.7
15	11.2	10.1	10.3	10.7	11.1	11.5	11.9	12.3	12.7	13.0	13.3	13.6	13.9	14.2	14.4	14.7
16	9.0	9.3	9.3	10.4	10.9	11.3	11.8	12.2	12.6	13.0	13.3	13.6	13.9	14.2	14.4	14.7
17	9.3	9.0	9.6	10.2	10.7	11.2	11.7	12.1	12.5	12.9	13.2	13.6	13.9	14.1	14.4	14.6
18	8.0	8.7	9.4	10.1	10.6	11.2	11.6	12.1	12.5	12.9	13.2	13.5	13.8	14.1	14.4	14.6
19	7.9	8.6	9.3	10.0	10.6	11.1	11.6	12.1	12.5	12.9	13.2	13.5	13.8	14.1	14.4	14.6
20	7.7	8.5	9.3	9.9	10.5	11.1	11.6	12.0	12.4	12.8	13.2	13.5	13.8	14.1	14.4	14.6
21	7.6	8.4	9.2	9.9	10.5	11.0	11.5	12.0	12.4	12.8	13.2	13.5	13.9	14.1	14.3	14.6
22	7.5	8.4	9.2	9.8	10.5	11.0	11.5	12.0	12.4	12.8	13.2	13.5	13.9	14.1	14.3	14.6
23	7.5	8.4	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6
24	7.4	8.3	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.9	14.1	14.3	14.6
25	7.4	8.3	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.9	14.1	14.3	14.6
26	7.4	8.3	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.9	14.1	14.3	14.6
27	7.4	8.3	9.1	9.8	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6
28	7.4	8.3	9.1	9.8	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6
29	7.4	8.3	9.0	9.8	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6
30	7.3	8.2	9.0	9.7	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6
31	7.3	8.2	9.0	9.7	10.4	10.9	11.5	11.9	12.4	12.8	13.1	13.5	13.9	14.1	14.3	14.6
32	7.3	8.2	9.0	9.7	10.4	10.9	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.58
PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.1	20.8
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	18.9	17.9	16.9	16.6	16.4
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	16.6	15.9	15.6	15.5	15.5	15.6	15.7
11	0.0	0.0	0.0	0.0	0.0	0.0	17.0	15.2	14.7	14.6	14.6	14.7	14.9	15.0	15.2	15.4
12	0.0	0.0	0.0	0.0	16.8	14.2	13.7	13.7	13.8	13.9	14.1	14.3	14.6	14.8	15.0	15.2
13	0.0	0.0	0.0	13.6	12.8	12.7	12.8	13.1	13.3	13.6	13.9	14.1	14.4	14.6	14.8	15.1
14	0.0	17.6	12.0	11.7	11.8	12.1	12.4	12.8	13.1	13.4	13.7	14.0	14.3	14.5	14.8	15.0
15	14.0	10.7	10.7	11.0	11.4	11.9	12.2	12.6	12.9	13.3	13.6	13.9	14.2	14.5	14.7	15.0
16	9.5	9.7	10.1	10.6	11.1	11.6	12.0	12.4	12.8	13.2	13.5	13.9	14.1	14.4	14.7	14.9
17	9.6	9.2	9.8	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.4	14.7	14.9
18	8.2	9.0	9.6	10.3	10.9	11.4	11.9	12.3	12.7	13.1	13.5	13.8	14.1	14.4	14.6	14.9
19	8.0	8.8	9.5	10.2	10.8	11.3	11.8	12.3	12.7	13.1	13.4	13.8	14.1	14.4	14.6	14.9
20	7.8	8.7	9.4	10.1	10.7	11.3	11.8	12.2	12.7	13.1	13.4	13.7	14.1	14.3	14.6	14.9
21	7.7	8.6	9.4	10.1	10.7	11.2	11.8	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.9
22	7.7	8.6	9.3	10.0	10.7	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.9
23	7.6	8.5	9.3	10.0	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
24	7.6	8.5	9.3	10.0	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
25	7.6	8.5	9.3	10.0	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
26	7.5	8.4	9.2	10.0	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
27	7.5	8.4	9.2	9.9	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
28	7.5	8.4	9.2	9.9	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
29	7.5	8.4	9.2	9.9	10.6	11.2	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
30	7.5	8.4	9.2	9.9	10.6	11.1	11.7	12.2	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
31	7.5	8.4	9.2	9.9	10.6	11.1	11.7	12.1	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8
32	7.5	8.4	9.2	9.9	10.6	11.1	11.7	12.1	12.6	13.0	13.4	13.7	14.0	14.3	14.6	14.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.65

PLAIN WFAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	19.8	18.7	18.3
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	18.9	17.7	17.2	17.0	17.0	17.0	17.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	17.2	16.4	16.1	16.1	16.1	16.2	16.3	16.4	16.4
12	0.0	0.0	0.0	0.0	0.0	19.9	16.1	15.3	15.1	15.2	15.3	15.4	15.6	15.8	16.0	16.2	16.2
13	0.0	0.0	0.0	0.0	15.6	14.4	14.2	14.2	14.4	14.6	14.9	15.1	15.3	15.6	15.8	16.0	16.0
14	0.0	0.0	18.6	13.7	13.2	13.2	13.5	13.7	14.0	14.3	14.6	14.9	15.2	15.4	15.7	15.9	15.9
15	0.0	14.9	12.3	12.2	12.4	12.7	13.1	13.5	13.8	14.2	14.5	14.8	15.1	15.4	15.6	15.9	15.9
16	13.2	11.1	11.2	11.6	12.0	12.4	12.9	13.3	13.7	14.0	14.4	14.7	15.0	15.3	15.6	15.8	15.8
17	10.0	10.2	10.7	11.2	11.8	12.3	12.7	13.2	13.6	14.0	14.3	14.7	15.0	15.3	15.5	15.8	15.8
18	9.1	9.7	10.4	11.0	11.6	12.1	12.6	13.1	13.5	13.9	14.3	14.6	14.9	15.2	15.5	15.8	15.8
19	8.7	9.5	10.2	10.9	11.5	12.1	12.6	13.0	13.5	13.9	14.2	14.6	14.9	15.2	15.5	15.8	15.8
20	8.5	9.3	10.1	10.8	11.4	12.0	12.5	13.0	13.4	13.8	14.2	14.6	14.9	15.2	15.5	15.7	15.7
21	8.3	9.2	10.0	10.7	11.4	11.9	12.5	13.0	13.4	13.8	14.2	14.6	14.9	15.2	15.5	15.7	15.7
22	8.2	9.1	9.9	10.7	11.3	11.9	12.5	12.9	13.4	13.8	14.2	14.5	14.9	15.2	15.5	15.7	15.7
23	8.1	9.1	9.9	10.6	11.3	11.9	12.4	12.9	13.4	13.8	14.2	14.5	14.9	15.2	15.5	15.7	15.7
24	8.1	9.0	9.9	10.6	11.3	11.9	12.4	12.9	13.4	13.8	14.2	14.5	14.9	15.2	15.5	15.7	15.7
25	8.0	9.0	9.8	10.6	11.2	11.9	12.4	12.9	13.4	13.8	14.2	14.5	14.9	15.2	15.4	15.7	15.7
26	8.0	9.0	9.8	10.6	11.2	11.8	12.4	12.9	13.3	13.8	14.2	14.5	14.8	15.2	15.4	15.7	15.7
27	8.0	8.9	9.8	10.5	11.2	11.8	12.4	12.9	13.3	13.8	14.2	14.5	14.8	15.2	15.4	15.7	15.7
28	8.0	8.9	9.8	10.5	11.2	11.8	12.4	12.9	13.3	13.8	14.1	14.5	14.8	15.2	15.4	15.7	15.7
29	7.9	8.9	9.8	10.5	11.2	11.8	12.4	12.9	13.3	13.8	14.1	14.5	14.8	15.1	15.4	15.7	15.7
30	7.9	8.9	9.8	10.5	11.2	11.8	12.4	12.9	13.3	13.8	14.1	14.5	14.8	15.1	15.4	15.7	15.7
31	7.9	8.9	9.7	10.5	11.2	11.8	12.4	12.9	13.3	13.8	14.1	14.5	14.8	15.1	15.4	15.7	15.7
32	7.9	8.9	9.7	10.5	11.2	11.8	12.4	12.9	13.3	13.7	14.1	14.5	14.8	15.1	15.4	15.7	15.7

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.66

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.67

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 2.68

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.69

PLAIN WEAVE FABRICS

WARP COVER FACT(K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.70
PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8	20.0	18.8	18.3	18.0	17.9	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	18.2	17.4	17.1	17.0	17.1	17.1	17.2	
12	0.0	0.0	0.0	0.0	0.0	0.0	19.5	17.0	16.3	16.1	16.1	16.2	16.4	16.5	16.7	16.9	
13	0.0	0.0	0.0	0.0	22.2	16.2	15.4	15.2	15.2	15.4	15.6	15.8	16.0	16.3	16.5	16.7	
14	0.0	0.0	0.0	16.6	14.5	14.2	14.3	14.5	14.7	15.0	15.3	15.6	15.8	16.1	16.3	16.6	
15	0.0	0.0	14.4	13.3	13.2	13.5	13.8	14.1	14.4	14.8	15.1	15.4	15.7	16.0	16.3	16.5	
16	0.0	12.8	12.1	12.3	12.7	13.1	13.5	13.9	14.3	14.6	15.0	15.3	15.6	15.9	16.2	16.4	
17	11.6	11.1	11.4	11.8	12.3	12.8	13.3	13.7	14.2	14.5	14.9	15.2	15.6	15.9	16.1	16.4	
18	9.9	10.4	11.0	11.6	12.1	12.7	13.2	13.6	14.1	14.5	14.9	15.2	15.5	15.8	16.1	16.4	
19	9.3	10.0	10.7	11.4	12.0	12.6	13.1	13.6	14.0	14.4	14.8	15.2	15.5	15.8	16.1	16.4	
20	9.0	9.8	10.6	11.3	11.9	12.5	13.0	13.5	14.0	14.4	14.8	15.1	15.5	15.8	16.1	16.3	
21	8.8	9.6	10.5	11.2	11.8	12.4	13.0	13.5	13.9	14.4	14.8	15.1	15.5	15.8	16.1	16.3	
22	8.6	9.5	10.4	11.1	11.8	12.4	12.9	13.5	13.9	14.3	14.7	15.1	15.4	15.8	16.1	16.3	
23	8.5	9.5	10.3	11.1	11.7	12.4	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
24	8.4	9.4	10.3	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
25	8.4	9.4	10.2	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
26	8.3	9.3	10.2	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
27	8.3	9.3	10.2	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
28	8.3	9.3	10.2	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
29	8.3	9.3	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
30	8.3	9.3	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
31	8.2	9.2	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3	
32	8.2	9.2	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.0	15.4	15.7	16.0	16.3	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.71

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.77

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0
14	0.0	0.0	0.0	19.1	15.2	14.7	14.6	14.8	15.0	15.3	15.6	15.8	16.1	16.3	16.6
15	0.0	0.0	15.9	13.8	13.6	13.8	14.0	14.4	14.7	15.0	15.4	15.7	16.0	16.2	16.5
16	0.0	14.0	12.6	12.6	12.9	13.3	13.7	14.1	14.5	14.9	15.2	15.6	15.9	16.2	16.7
17	12.8	11.5	11.7	12.1	12.6	13.1	13.5	14.0	14.4	14.8	15.1	15.5	15.8	16.1	16.4
18	10.3	10.7	11.2	11.8	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.8	16.1	16.6
19	9.6	10.2	10.9	11.6	12.2	12.8	13.3	13.8	14.2	14.6	15.0	15.4	15.7	16.0	16.3
20	9.2	10.0	10.8	11.5	12.1	12.7	13.2	13.7	14.2	14.6	15.0	15.4	15.7	16.0	16.3
21	8.9	9.8	10.6	11.4	12.0	12.6	13.2	13.7	14.1	14.6	15.0	15.3	15.7	16.0	16.3
22	8.8	9.7	10.5	11.3	12.0	12.6	13.1	13.7	14.1	14.6	15.0	15.3	15.7	16.0	16.3
23	8.7	9.6	10.5	11.2	11.9	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.7	16.0	16.3
24	8.6	9.6	10.4	11.2	11.9	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3
25	9.5	9.5	10.4	11.2	11.9	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3
26	8.5	9.5	10.4	11.1	11.8	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3
27	9.4	9.4	10.3	11.1	11.8	12.5	13.0	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3
28	9.4	9.4	10.3	11.1	11.8	12.5	13.0	13.6	14.0	14.5	14.9	15.3	15.6	15.9	16.3
29	8.4	9.4	10.3	11.1	11.8	12.4	13.0	13.6	14.0	14.5	14.9	15.3	15.6	15.9	16.2
30	8.4	9.4	10.3	11.1	11.8	12.4	13.0	13.6	14.0	14.5	14.9	15.3	15.6	15.9	16.2
31	9.4	9.4	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
32	8.3	9.4	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
33	8.3	9.4	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
34	8.3	9.3	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
35	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
36	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
37	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2
39	9.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.73

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	21.7	15.6	14.9	14.8	14.9	15.2	15.4	15.7	16.0	16.2	16.5	16.7	17.0
15	0.0	0.0	0.0	16.9	14.1	13.8	13.9	14.2	14.5	14.8	15.2	15.5	15.8	16.1	16.4	16.9
16	0.0	14.8	12.9	12.8	13.1	13.4	13.8	14.2	14.6	15.0	15.3	15.7	16.0	16.3	16.6	16.8
17	13.7	11.7	11.8	12.2	12.7	13.2	13.6	14.1	14.5	14.9	15.2	15.6	15.9	16.2	16.5	16.8
18	10.6	10.8	11.3	11.9	12.5	13.0	13.5	14.0	14.4	14.8	15.2	15.5	15.9	16.2	16.5	16.7
19	9.7	10.4	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.8	15.1	15.5	15.9	16.1	16.4	16.7
20	9.3	10.1	10.8	11.5	12.2	12.8	13.3	13.8	14.3	14.7	15.1	15.5	15.8	16.1	16.4	16.7
21	9.0	9.9	10.7	11.4	12.1	12.7	13.3	13.8	14.2	14.7	15.1	15.4	15.8	16.1	16.4	16.7
22	8.9	9.8	10.6	11.4	12.1	12.7	13.2	13.7	14.2	14.7	15.1	15.4	15.8	16.1	16.4	16.7
23	8.7	9.7	10.6	11.3	12.0	12.6	13.2	13.7	14.2	14.6	15.0	15.4	15.8	16.1	16.4	16.7
24	9.7	9.6	10.5	11.3	12.0	12.6	13.2	13.7	14.2	14.6	15.0	15.4	15.8	16.1	16.4	16.7
25	8.6	9.6	10.5	11.2	12.0	12.6	13.2	13.7	14.2	14.6	15.0	15.4	15.7	16.1	16.4	16.7
26	9.5	9.5	10.4	11.2	11.9	12.6	13.1	13.7	14.2	14.6	15.0	15.4	15.7	16.1	16.4	16.7
27	8.5	9.5	10.4	11.2	11.9	12.6	13.1	13.7	14.2	14.6	15.0	15.4	15.7	16.1	16.4	16.7
28	8.5	9.5	10.4	11.2	11.9	12.5	13.1	13.7	14.1	14.6	15.0	15.4	15.7	16.1	16.4	16.6
29	8.5	9.5	10.4	11.2	11.9	12.5	13.1	13.7	14.1	14.6	15.0	15.4	15.7	16.1	16.4	16.6
30	8.4	9.5	10.4	11.2	11.9	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.1	16.4	16.6
31	8.4	9.4	10.3	11.2	11.9	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.1	16.4	16.6
32	8.4	9.4	10.3	11.1	11.9	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.1	16.4	16.6
33	8.4	9.4	10.3	11.1	11.9	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6
34	8.4	9.4	10.3	11.1	11.9	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6
35	8.4	9.4	10.3	11.1	11.8	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6
36	8.4	9.4	10.3	11.1	11.8	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6
37	8.4	9.4	10.3	11.1	11.8	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6
38	8.4	9.4	10.3	11.1	11.8	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.7	16.0	16.4	16.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.74

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	28.4	16.0	15.1	15.0	15.1	15.3	15.6	15.8	16.1	16.3	16.6	16.8	17.1
15	0.0	0.0	19.4	14.4	14.0	14.1	14.3	14.6	15.0	15.3	15.6	15.9	16.2	16.5	16.7	17.0
16	0.0	16.0	13.1	13.0	13.2	13.6	14.0	14.4	14.7	15.1	15.5	15.9	16.1	16.4	16.7	16.9
17	14.9	12.0	12.7	12.4	12.8	13.3	13.7	14.2	14.6	15.0	15.4	15.7	16.0	16.3	16.6	16.9
18	10.8	11.0	11.4	12.0	12.6	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3	16.6	16.9
19	9.9	10.5	11.1	11.8	12.4	13.0	13.5	14.0	14.4	14.9	15.2	15.6	15.9	16.3	16.6	16.8
20	9.4	10.2	10.9	11.6	12.3	12.9	13.4	13.9	14.4	14.9	15.2	15.6	15.9	16.2	16.5	16.8
21	9.1	10.0	10.8	11.5	12.2	12.8	13.4	13.9	14.4	14.8	15.2	15.6	15.9	16.2	16.5	16.8
22	8.9	9.9	10.7	11.5	12.1	12.8	13.3	13.8	14.3	14.8	15.2	15.5	15.9	16.2	16.5	16.8
23	8.8	9.8	10.6	11.4	12.1	12.7	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8
24	8.7	9.7	10.6	11.4	12.1	12.7	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8
25	8.7	9.7	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8
26	8.6	9.6	10.5	11.3	12.0	12.7	13.2	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8
27	8.6	9.6	10.5	11.3	12.0	12.6	13.2	13.8	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
28	8.5	9.6	10.5	11.3	12.0	12.6	13.2	13.8	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
29	8.5	9.5	10.4	11.2	12.0	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
30	8.5	9.5	10.4	11.2	12.0	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
31	8.5	9.5	10.4	11.2	12.0	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
32	8.5	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
33	8.5	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
34	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
35	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
36	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
37	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8
38	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.75

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	16.5	15.4	15.2	15.3	15.5	15.7	16.0	16.2	16.5	16.7	17.0
15	0.0	0.0	21.2	14.8	14.2	14.3	14.5	14.8	15.1	15.4	15.7	16.0	16.3	16.6	16.9	17.1
16	0.0	17.7	13.4	13.2	13.4	13.7	14.1	14.5	14.9	15.2	15.6	15.9	16.2	16.5	16.8	17.1
17	17.2	12.2	12.5	12.9	13.4	13.9	14.3	14.7	15.1	15.5	15.8	16.1	16.4	16.7	17.0	
18	11.1	11.1	11.6	12.1	12.7	13.2	13.7	14.2	14.6	15.0	15.4	15.8	16.1	16.4	16.7	17.0
19	10.0	10.6	11.2	11.9	12.5	13.1	13.6	14.1	14.5	15.0	15.4	15.7	16.1	16.4	16.7	17.0
20	9.5	10.3	11.0	11.7	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.0	16.4	16.7	16.9
21	9.2	10.1	10.9	11.6	12.3	12.9	13.5	14.0	14.5	14.9	15.3	15.7	16.0	16.3	16.6	16.9
22	9.0	10.0	10.8	11.5	12.2	12.9	13.4	13.9	14.4	14.9	15.3	15.6	16.0	16.3	16.6	16.9
23	8.9	9.9	10.7	11.5	12.2	12.8	13.4	13.9	14.4	14.8	15.3	15.6	16.0	16.3	16.6	16.9
24	8.8	9.8	10.7	11.4	12.2	12.8	13.4	13.9	14.4	14.8	15.2	15.6	16.0	16.3	16.6	16.9
25	8.7	9.7	10.6	11.4	12.1	12.8	13.3	13.9	14.4	14.8	15.2	15.6	16.0	16.3	16.6	16.9
26	8.7	9.7	10.6	11.4	12.1	12.7	13.3	13.9	14.4	14.8	15.2	15.6	16.0	16.3	16.6	16.9
27	8.6	9.7	10.6	11.4	12.1	12.7	13.3	13.9	14.3	14.8	15.2	15.6	16.0	16.3	16.6	16.9
28	8.6	9.6	10.5	11.3	12.1	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
29	8.6	9.6	10.5	11.3	12.1	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
30	8.6	9.6	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
31	8.5	9.6	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.9	15.2	15.6	15.9	16.3	16.6	16.9
32	8.5	9.6	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
33	8.5	9.6	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
34	8.5	9.5	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
35	8.5	9.5	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
36	8.5	9.5	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
37	8.5	9.5	10.4	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9
38	8.5	9.5	10.4	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.76

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	17.1	15.7	15.4	15.4	15.6	15.8	16.1	16.3	16.6	16.9	17.1	17.3
15	0.0	0.0	31.0	15.2	14.4	14.4	14.6	14.9	15.2	15.5	15.8	16.1	16.4	16.7	17.0	17.2
16	0.0	21.3	13.8	13.4	13.5	13.8	14.2	14.6	15.0	15.3	15.7	16.0	16.3	16.6	16.9	17.2
17	25.1	12.5	12.3	12.6	13.1	13.5	14.0	14.4	14.8	15.2	15.6	15.9	16.3	16.6	16.9	17.1
18	11.4	11.3	11.7	12.2	12.8	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.1
19	10.2	10.7	11.4	12.0	12.6	13.2	13.7	14.2	14.6	15.1	15.5	15.8	16.2	16.5	16.8	17.1
20	9.6	10.4	11.1	11.8	12.5	13.1	13.6	14.1	14.6	15.0	15.4	15.8	16.1	16.5	16.8	17.0
21	9.3	10.2	11.0	11.7	12.4	13.0	13.6	14.1	14.6	15.0	15.4	15.8	16.1	16.4	16.7	17.0
22	9.1	10.0	10.9	11.6	12.3	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.4	16.7	17.0
23	9.0	9.9	10.8	11.6	12.3	12.9	13.5	14.0	14.5	14.9	15.4	15.7	16.1	16.4	16.7	17.0
24	8.9	9.9	10.7	11.5	12.2	12.9	13.5	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0
25	8.8	9.8	10.7	11.5	12.2	12.9	13.4	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0
26	8.7	9.8	10.7	11.5	12.2	12.8	13.4	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0
27	8.7	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.4	14.9	15.3	15.7	16.1	16.4	16.7	17.0
28	8.7	9.7	10.6	11.4	12.1	12.9	13.4	13.9	14.4	14.9	15.3	15.7	16.1	16.4	16.7	17.0
29	8.6	9.7	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.1	16.4	16.7	17.0
30	8.6	9.7	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
31	8.6	9.6	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
32	8.6	9.6	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
33	8.6	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
34	8.6	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
35	8.6	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
36	8.5	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
37	8.5	9.6	10.5	11.3	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0
38	8.5	9.6	10.5	11.3	12.1	12.7	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.77

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	17.8	16.0	15.6	15.6	15.8	16.0	16.2	16.5	16.7	17.0	17.2	17.5
15	0.0	0.0	0.0	15.6	14.7	14.6	14.8	15.0	15.3	15.7	16.0	16.3	16.6	16.8	17.1	17.4
16	0.0	0.0	14.1	13.6	13.7	14.0	14.3	14.7	15.1	15.5	15.8	16.1	16.4	16.7	17.0	17.3
17	0.0	12.9	12.5	12.8	13.2	13.6	14.1	14.5	14.9	15.3	15.7	16.0	16.4	16.7	17.0	17.2
18	11.7	11.4	11.8	12.4	12.9	13.4	13.9	14.4	14.8	15.2	15.6	16.0	16.3	16.6	16.9	17.2
19	10.3	10.8	11.5	12.1	12.7	13.3	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.9	17.2
20	9.7	10.5	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.2
21	9.4	10.3	11.1	11.8	12.5	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.6	16.9	17.1
22	9.2	10.1	11.0	11.7	12.4	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.2	16.5	16.8	17.1
23	9.0	10.0	10.9	11.7	12.4	13.0	13.6	14.1	14.6	15.0	15.5	15.8	16.2	16.5	16.8	17.1
24	8.9	9.9	10.8	11.6	12.3	13.0	13.6	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.8	17.1
25	8.9	9.9	10.8	11.6	12.3	12.9	13.5	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.8	17.1
26	8.8	9.8	10.7	11.5	12.3	12.9	13.5	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.8	17.1
27	8.8	9.8	10.7	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1
28	8.7	9.8	10.7	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1
29	8.7	9.7	10.7	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1
30	8.7	9.7	10.6	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1
31	8.7	9.7	10.6	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1
32	8.6	9.7	10.6	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
33	8.6	9.7	10.6	11.4	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
34	8.6	9.7	10.6	11.4	12.2	12.8	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
35	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
36	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
37	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1
38	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WAPP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.78

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	18.6	16.3	15.8	15.9	15.9	16.1	16.4	16.6	16.9	17.1	17.4	17.6	
15	0.0	0.0	0.0	16.1	14.9	14.8	14.9	15.2	15.5	15.8	16.1	16.4	16.7	17.0	17.2	17.5	
16	0.0	0.0	14.5	13.8	13.8	14.1	14.5	14.8	15.2	15.6	15.9	16.3	16.6	16.9	17.1	17.4	
17	0.0	13.2	12.7	12.9	13.3	13.8	14.2	14.6	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	
18	12.1	11.6	12.0	12.5	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0	17.3	
19	12.5	11.0	11.6	12.2	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.1	16.4	16.7	17.0	17.3	
20	9.9	10.6	11.3	12.0	12.7	13.3	13.8	14.3	14.8	15.2	15.6	16.0	16.4	16.7	17.0	17.3	
21	9.5	10.4	11.2	11.9	12.6	13.2	13.8	14.3	14.8	15.2	15.6	16.0	16.3	16.7	17.0	17.3	
22	9.3	10.2	11.0	11.8	12.5	13.1	13.7	14.2	14.7	15.2	15.6	16.0	16.3	16.6	17.0	17.2	
23	9.1	10.1	11.0	11.7	12.4	13.1	13.7	14.2	14.7	15.1	15.6	15.9	16.3	16.6	16.9	17.2	
24	9.0	10.0	10.9	11.7	12.4	13.1	13.6	14.2	14.7	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
25	8.9	10.0	10.8	11.7	12.4	13.0	13.6	14.2	14.7	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
26	8.9	9.9	10.8	11.6	12.4	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
27	8.8	9.9	10.8	11.6	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
28	8.8	9.8	10.8	11.6	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
29	8.8	9.8	10.7	11.6	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
30	8.7	9.8	10.7	11.5	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
31	8.7	9.8	10.7	11.5	12.3	12.9	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
32	8.7	9.8	10.7	11.5	12.3	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
33	8.7	9.8	10.7	11.5	12.3	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
34	8.7	9.7	10.7	11.5	12.3	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	
35	8.7	9.7	10.7	11.5	12.3	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.6	16.9	17.2	
36	8.7	9.7	10.7	11.5	12.2	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.6	16.9	17.2	
37	8.7	9.7	10.7	11.5	12.2	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.6	16.9	17.2	
38	8.6	9.7	10.7	11.5	12.2	12.9	13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.6	16.9	17.2	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.79

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.80

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	21.1	17.0	16.3	16.1	16.2	16.4	16.6	16.9	17.1	17.4	17.6	17.8
15	0.0	0.0	0.0	17.4	15.5	15.2	15.2	15.5	15.7	16.0	16.3	16.6	16.9	17.2	17.5	17.7
16	0.0	0.0	15.5	14.2	14.4	14.7	15.1	15.5	15.8	16.2	16.5	16.8	17.1	17.4	17.6	
17	0.0	14.1	13.1	13.2	13.6	14.0	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	17.3	17.6
18	13.1	12.0	12.3	12.7	13.2	13.7	14.2	14.7	15.1	15.6	15.9	16.3	16.6	17.0	17.3	17.5
19	10.9	11.2	11.8	12.4	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.2	17.5
20	10.1	10.8	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.6	16.9	17.2	17.5
21	9.7	10.5	11.3	12.1	12.8	13.4	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.9	17.2	17.5
22	9.4	10.4	11.2	12.0	12.7	13.3	13.9	14.4	14.9	15.4	15.8	16.2	16.5	16.9	17.2	17.5
23	9.3	10.3	11.1	11.9	12.6	13.3	13.9	14.4	14.9	15.3	15.8	16.2	16.5	16.9	17.2	17.5
24	9.2	10.2	11.1	11.9	12.6	13.2	13.8	14.4	14.9	15.3	15.7	16.1	16.5	16.8	17.2	17.5
25	9.1	10.1	11.0	11.8	12.5	13.2	13.8	14.3	14.9	15.3	15.7	16.1	16.5	16.8	17.2	17.4
26	9.0	10.0	11.0	11.8	12.5	13.2	13.8	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
27	9.0	10.0	10.9	11.8	12.5	13.2	13.8	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
28	8.9	10.0	10.9	11.7	12.5	13.1	13.8	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
29	8.9	9.9	10.9	11.7	12.5	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
30	8.9	9.9	10.9	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
31	8.8	9.9	10.8	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
32	8.8	9.9	10.8	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
33	8.8	9.9	10.8	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
34	8.8	9.9	10.8	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
35	8.8	9.9	10.8	11.7	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
36	8.8	9.9	10.8	11.6	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
37	8.8	9.8	10.8	11.6	12.4	13.1	13.7	14.3	14.8	15.3	15.7	16.1	16.5	16.8	17.1	17.4
38	8.8	9.8	10.8	11.6	12.4	13.1	13.7	14.3	14.8	15.2	15.7	16.1	16.5	16.8	17.1	17.4

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.91

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	23.3	17.4	16.5	16.3	16.4	16.6	16.8	17.0	17.2	17.5	17.7	18.0
15	0.0	0.0	0.0	18.3	15.8	15.4	15.4	15.6	15.9	16.2	16.5	16.8	17.0	17.3	17.6	17.8
16	0.0	0.0	16.1	14.5	14.3	14.5	14.9	15.2	15.6	15.9	16.3	16.6	16.9	17.2	17.5	17.8
17	0.0	14.7	13.3	13.4	13.7	14.1	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	17.4	17.7
18	13.7	12.2	12.4	12.8	13.3	13.9	14.3	14.8	15.3	15.7	16.1	16.4	16.8	17.1	17.4	17.7
19	11.1	11.4	11.9	12.5	13.1	13.7	14.2	14.7	15.2	15.6	16.0	16.4	16.7	17.0	17.3	17.6
20	10.2	10.9	11.6	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.7	17.0	17.3	17.6
21	9.8	10.6	11.4	12.2	12.8	13.5	14.0	14.6	15.1	15.5	15.9	16.3	16.7	17.0	17.3	17.6
22	9.5	10.5	11.3	12.1	12.8	13.4	14.0	14.5	15.0	15.5	15.9	16.3	16.6	17.0	17.3	17.6
23	9.4	10.3	11.2	12.0	12.7	13.4	13.9	14.5	15.0	15.4	15.9	16.3	16.6	17.0	17.3	17.6
24	9.2	10.2	11.1	11.9	12.7	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.6	16.9	17.3	17.6
25	9.1	10.2	11.1	11.9	12.6	13.3	13.9	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.3	17.6
26	9.1	10.1	11.0	11.9	12.6	13.3	13.9	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.3	17.6
27	9.0	10.1	11.0	11.8	12.6	13.2	13.9	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
28	9.0	10.0	11.0	11.8	12.6	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
29	8.9	10.0	11.0	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
30	8.9	10.0	10.9	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
31	8.9	10.0	10.9	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
32	8.9	10.0	10.9	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
33	8.9	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
34	8.9	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5
35	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5
36	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5
37	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5
38	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.82

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	27.6	17.8	16.8	16.5	16.5	16.7	16.9	17.1	17.4	17.6	17.9	19.1
15	0.0	0.0	0.0	19.5	16.1	15.6	15.6	15.7	16.0	16.3	16.6	16.9	17.2	17.4	17.7	18.0
16	0.0	0.0	16.9	14.7	14.5	14.7	15.0	15.3	15.7	16.0	16.4	16.7	17.0	17.3	17.6	17.9
17	0.0	15.4	13.6	13.5	13.8	14.2	14.7	15.1	15.5	15.9	16.3	16.6	16.9	17.2	17.5	17.8
18	14.6	12.4	12.5	13.0	13.5	14.0	14.5	14.9	15.4	15.8	16.2	16.5	16.9	17.2	17.5	17.8
19	11.3	11.5	12.0	12.6	13.2	13.8	14.3	14.8	15.3	15.7	16.1	16.5	16.9	17.1	17.5	17.7
20	10.4	11.0	11.7	12.4	13.1	13.7	14.2	14.7	15.2	15.6	16.0	16.4	16.8	17.1	17.4	17.7
21	9.9	10.7	11.5	12.3	12.9	13.6	14.1	14.7	15.1	15.6	16.0	16.4	16.8	17.1	17.4	17.7
22	9.6	10.5	11.4	12.2	12.9	13.5	14.1	14.6	15.1	15.6	16.0	16.4	16.7	17.1	17.4	17.7
23	9.4	10.4	11.3	12.1	12.8	13.4	14.0	14.6	15.1	15.5	16.0	16.4	16.7	17.1	17.4	17.7
24	9.3	10.3	11.2	12.0	12.7	13.4	14.0	14.6	15.1	15.5	15.9	16.3	16.7	17.1	17.4	17.7
25	9.2	10.2	11.2	12.0	12.7	13.4	14.0	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.4	17.7
26	9.1	10.2	11.1	11.9	12.7	13.4	14.0	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.4	17.7
27	9.1	10.1	11.1	11.9	12.7	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.4	17.7
28	9.0	10.1	11.0	11.9	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.7
29	9.0	10.1	11.0	11.9	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
30	9.0	10.1	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
31	9.0	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
32	9.0	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
33	8.9	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
34	8.9	10.0	11.0	11.9	12.6	13.3	13.9	14.5	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
35	8.9	10.0	10.9	11.8	12.6	13.3	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
36	8.9	10.0	10.9	11.8	12.6	13.3	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
37	8.9	10.0	10.9	11.8	12.6	13.2	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
38	8.9	10.0	10.9	11.8	12.6	13.2	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.83

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	18.3	17.0	16.7	16.7	16.8	17.0	17.3	17.5	17.7	18.0	18.2
15	0.0	0.0	0.0	21.1	16.4	15.8	15.7	15.9	16.1	16.4	16.7	17.0	17.3	17.6	17.8	18.1	
16	0.0	0.0	17.9	15.0	14.7	14.8	15.1	15.5	15.8	16.2	16.5	16.9	17.1	17.4	17.7	18.0	
17	0.0	16.3	13.8	13.7	14.0	14.4	14.8	15.2	15.6	16.0	16.4	16.7	17.0	17.4	17.7	17.9	
18	15.9	12.7	13.1	13.6	14.1	14.6	15.0	15.5	15.9	16.3	16.6	17.0	17.3	17.6	17.9		
19	11.6	11.6	12.2	12.7	13.3	13.9	14.4	14.9	15.4	15.9	16.2	16.6	16.9	17.3	17.6	17.9	
20	10.5	11.1	11.9	12.5	13.2	13.7	14.3	14.8	15.3	15.7	16.2	16.5	16.9	17.2	17.5	17.8	
21	10.0	10.8	11.6	12.4	13.0	13.7	14.2	14.8	15.2	15.7	16.1	16.5	16.9	17.2	17.5	17.8	
22	9.7	10.6	11.5	12.2	12.9	13.6	14.2	14.7	15.2	15.7	16.1	16.5	16.8	17.2	17.5	17.8	
23	9.5	10.5	11.4	12.2	12.9	13.5	14.1	14.7	15.2	15.6	16.1	16.5	16.9	17.2	17.5	17.8	
24	9.4	10.4	11.3	12.1	12.8	13.5	14.1	14.6	15.2	15.6	16.0	16.4	16.8	17.2	17.5	17.8	
25	9.3	10.3	11.2	12.1	12.8	13.5	14.1	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	
26	9.2	10.3	11.2	12.0	12.8	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.9	17.1	17.5	17.8	
27	9.1	10.2	11.1	12.0	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	
28	9.1	10.2	11.1	12.0	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	
29	9.1	10.1	11.1	11.9	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.9	17.1	17.5	17.8	
30	9.0	10.1	11.1	11.9	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.9	17.1	17.4	17.8	
31	9.0	10.1	11.1	11.9	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.9	17.1	17.4	17.8	
32	9.0	10.1	11.0	11.9	12.7	13.4	14.0	14.6	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
33	9.0	10.1	11.0	11.9	12.7	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
34	9.0	10.1	11.0	11.9	12.7	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
35	9.0	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
36	9.0	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
37	8.9	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	
38	8.9	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.84
PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.85

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	19.5	17.6	17.1	17.1	17.3	17.5	17.8	18.0	18.2	18.5
15	0.0	0.0	0.0	31.2	17.2	16.2	16.1	16.2	16.4	16.7	17.0	17.2	17.5	17.8	18.1	18.3
16	0.0	0.0	21.5	15.7	15.1	15.2	15.4	15.7	16.1	16.4	16.7	17.1	17.4	17.7	17.9	18.2
17	0.0	19.6	14.4	14.1	14.3	14.6	15.0	15.4	15.8	16.2	16.6	16.9	17.3	17.6	17.9	18.2
18	23.4	13.2	13.0	13.4	13.8	14.3	14.8	15.2	15.7	16.1	16.5	16.8	17.2	17.5	17.8	18.1
19	12.1	12.0	17.4	13.0	13.5	14.1	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.9	18.1
20	10.8	11.4	12.0	12.7	13.3	13.9	14.5	15.0	15.5	15.9	16.4	16.7	17.1	17.4	17.8	18.0
21	10.2	11.0	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.9	16.3	16.7	17.1	17.4	17.7	18.0
22	9.9	10.8	11.6	12.4	13.1	13.8	14.4	14.9	15.4	15.9	16.3	16.7	17.1	17.4	17.7	18.0
23	9.7	10.6	11.5	12.3	13.0	13.7	14.3	14.9	15.4	15.8	16.3	16.7	17.0	17.4	17.7	18.0
24	9.5	10.5	11.4	12.3	13.0	13.7	14.3	14.8	15.3	15.8	16.2	16.6	17.0	17.4	17.7	18.0
25	9.4	10.5	11.4	12.2	13.0	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.4	17.7	18.0
26	9.3	10.4	11.3	12.2	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.4	17.7	18.0
27	9.3	10.3	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.3	17.7	18.0
28	9.2	10.3	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.3	17.7	18.0
29	9.2	10.3	11.2	12.1	12.9	13.5	14.2	14.7	15.3	15.8	16.2	16.6	17.0	17.3	17.7	18.0
30	9.2	10.2	11.2	12.1	12.8	13.5	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0
31	9.1	10.2	11.2	12.1	12.8	13.5	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0
32	9.1	10.2	11.2	12.0	12.8	13.5	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0
33	9.1	10.2	11.2	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.7	18.0
34	9.1	10.2	11.2	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.7	18.0
35	9.1	10.2	11.2	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
36	9.1	10.2	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
37	9.0	10.2	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
38	9.0	10.1	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.86
PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	20.3	17.9	17.3	17.2	17.3	17.5	17.7	17.9	18.1	18.3	18.6
15	0.0	0.0	0.0	0.0	17.7	16.5	16.3	16.3	16.5	16.8	17.1	17.4	17.6	17.9	18.2	18.4
16	0.0	0.0	26.3	16.0	15.3	15.3	15.5	15.8	16.2	16.5	16.8	17.2	17.5	17.8	18.1	18.3
17	0.0	24.0	14.7	14.2	14.4	14.7	15.1	15.5	15.9	16.3	16.7	17.0	17.4	17.7	18.0	18.3
18	0.0	13.5	13.2	13.5	13.9	14.4	14.9	15.3	15.8	16.2	16.6	17.0	17.3	17.6	17.9	18.2
19	12.4	12.1	12.5	13.1	13.6	14.2	14.7	15.2	15.7	16.1	16.5	16.9	17.2	17.6	17.9	18.2
20	11.0	11.5	12.1	12.8	13.4	14.0	14.6	15.1	15.6	16.0	16.5	16.8	17.2	17.5	17.9	18.2
21	10.3	11.1	11.9	12.6	13.3	13.9	14.5	15.0	15.5	16.0	16.4	16.8	17.2	17.5	17.8	18.1
22	10.0	10.9	11.7	12.5	13.2	13.9	14.4	15.0	15.5	16.0	16.4	16.8	17.2	17.5	17.8	18.1
23	9.8	10.7	11.6	12.4	13.1	13.8	14.4	15.0	15.5	15.9	16.4	16.8	17.1	17.5	17.8	18.1
24	9.6	10.6	11.5	12.3	13.1	13.8	14.4	14.9	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1
25	9.5	10.5	11.5	12.3	13.0	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1
26	9.4	10.5	11.4	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1
27	9.3	10.4	11.4	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.1	17.4	17.8	18.1
28	9.3	10.4	11.3	12.2	13.0	13.6	14.3	14.8	15.4	15.9	16.3	16.7	17.1	17.4	17.8	18.1
29	9.2	10.3	11.3	12.2	12.9	13.6	14.3	14.8	15.4	15.9	16.3	16.7	17.1	17.4	17.8	18.1
30	9.2	10.3	11.3	12.1	12.9	13.6	14.3	14.8	15.4	15.8	16.3	16.7	17.1	17.4	17.8	18.1
31	9.2	10.3	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
32	9.2	10.3	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
33	9.1	10.3	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
34	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
35	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
36	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
37	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1
38	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.7	18.1

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.87

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN RULK DENSITY =0.89

PLAIN WEAVE FARRICS

WARP COVER FACT'R (K1)	RFTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	22.5	18.6	17.8	17.6	17.6	17.7	17.9	18.1	18.4	18.8
15	0.0	0.0	0.0	0.0	18.8	17.0	16.6	16.7	16.8	17.1	17.3	17.6	17.9	18.1	18.4	18.7
16	0.0	0.0	0.0	16.8	15.7	15.6	15.8	16.1	16.4	16.7	17.1	17.4	17.7	18.0	18.3	18.6
17	0.0	0.0	15.4	14.6	14.7	15.0	15.4	15.8	16.2	16.5	16.9	17.3	17.6	17.9	18.2	18.5
18	0.0	14.2	13.6	13.8	14.2	14.6	15.1	15.6	16.0	16.4	16.8	17.2	17.5	17.8	18.1	18.4
19	13.2	12.5	12.8	13.3	13.8	14.4	14.9	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1	18.4
20	11.3	11.7	12.4	13.0	13.6	14.2	14.8	15.3	15.8	16.2	16.7	17.0	17.4	17.8	18.1	18.4
21	10.6	11.3	12.1	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.4	17.7	18.0	18.4
22	10.2	11.1	11.9	12.7	13.4	14.0	14.6	15.2	15.7	16.1	16.6	17.0	17.4	17.7	18.0	18.3
23	9.9	10.9	11.8	12.6	13.3	14.0	14.6	15.1	15.6	16.1	16.6	17.0	17.3	17.7	18.0	18.3
24	9.8	10.8	11.7	12.5	13.2	13.9	14.5	15.1	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3
25	9.6	10.7	11.6	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3
26	9.5	10.6	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3
27	9.5	10.5	11.5	12.4	13.1	13.8	14.5	15.0	15.6	16.0	16.5	16.9	17.3	17.6	18.0	18.3
28	9.4	10.5	11.5	12.3	13.1	13.8	14.4	15.0	15.6	16.0	16.5	16.9	17.3	17.6	18.0	18.3
29	9.4	10.5	11.4	12.3	13.1	13.9	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
30	9.3	10.4	11.4	12.3	13.1	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
31	9.3	10.4	11.4	12.3	13.1	13.9	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
32	9.3	10.4	11.4	12.3	13.1	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
33	9.3	10.4	11.4	12.3	13.0	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
34	9.2	10.4	11.4	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
35	9.2	10.4	11.4	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
36	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
37	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3
39	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND PETA

YARN BULK DENSITY = 0.89

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	PETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	24.1	19.0	18.0	17.8	17.9	18.1	19.3	19.5	18.7	18.9
15	0.0	0.0	0.0	0.0	19.5	17.3	16.8	16.8	17.0	17.2	17.5	17.7	18.0	18.3	19.5	18.8
16	0.0	0.0	0.0	17.3	16.0	15.8	16.0	16.2	16.5	16.9	17.2	17.5	17.9	18.1	18.4	18.7
17	0.0	0.0	15.8	14.8	14.9	15.1	15.5	15.9	16.3	16.7	17.0	17.4	17.7	18.0	18.3	18.6
18	0.0	14.6	13.7	13.9	14.3	14.7	15.2	15.7	16.1	16.5	16.9	17.3	17.6	17.9	18.3	18.5
19	13.7	12.6	12.9	13.4	14.0	14.5	15.0	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.2	18.5
20	11.5	11.9	12.5	13.1	13.7	14.3	14.9	15.4	15.9	16.3	16.8	17.2	17.5	17.9	18.2	18.5
21	10.7	11.4	12.2	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.5	17.8	18.1	18.5
22	10.3	11.2	12.0	12.8	13.5	14.1	14.7	15.3	15.8	16.2	16.7	17.1	17.5	17.8	18.1	18.4
23	10.0	11.0	11.9	12.7	13.4	14.1	14.7	15.2	15.7	16.2	16.7	17.1	17.4	17.8	18.1	18.4
24	9.8	10.8	11.8	12.6	13.3	14.0	14.6	15.2	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4
25	9.7	10.7	11.7	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4
26	9.6	10.7	11.6	12.5	13.2	13.9	14.6	15.1	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4
27	9.5	10.6	11.6	12.4	13.2	13.9	14.5	15.1	15.7	16.1	16.6	17.0	17.4	17.8	18.1	18.4
28	9.5	10.6	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
29	9.4	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
30	9.4	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
31	9.4	10.5	11.5	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
32	9.3	10.5	11.5	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
33	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
34	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
35	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
36	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
37	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4
38	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.0	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.90

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	26.7	19.4	18.3	18.0	17.9	18.0	18.2	18.4	18.6	18.9	19.1
15	0.0	0.0	0.0	0.0	20.4	17.6	17.0	17.0	17.1	17.3	17.6	17.8	18.1	18.4	18.6	18.9
16	0.0	0.0	0.0	17.9	16.2	16.0	16.1	16.4	16.7	17.0	17.3	17.6	17.9	18.2	18.5	18.8
17	0.0	0.0	16.3	15.1	15.0	15.3	15.6	16.0	16.4	16.8	17.1	17.5	17.8	18.1	18.4	18.7
18	0.0	15.1	13.9	14.0	14.4	14.9	15.3	15.8	16.2	16.6	17.0	17.4	17.7	18.1	18.4	18.7
19	14.3	12.8	13.0	13.5	14.1	14.6	15.1	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3	18.6
20	11.7	12.0	12.6	13.2	13.8	14.4	15.0	15.5	16.0	16.4	16.9	17.3	17.6	18.0	18.3	18.6
21	10.8	11.5	12.3	13.0	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.6	17.9	18.3	18.6
22	10.4	11.2	12.1	12.8	13.6	14.2	14.8	15.4	15.9	16.3	16.8	17.2	17.6	17.9	18.2	18.5
23	10.1	11.1	11.9	12.7	13.5	14.1	14.8	15.3	15.8	16.3	16.7	17.2	17.5	17.9	18.2	18.5
24	9.9	10.9	11.8	12.7	13.4	14.1	14.7	15.3	15.8	16.3	16.7	17.1	17.5	17.9	18.2	18.5
25	9.8	10.8	11.8	12.6	13.4	14.0	14.7	15.3	15.8	16.3	16.7	17.1	17.5	17.9	18.2	18.5
26	9.7	10.7	11.7	12.6	13.3	14.0	14.7	15.2	15.8	16.2	16.7	17.1	17.5	17.9	18.2	18.5
27	9.6	10.7	11.6	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5
28	9.5	10.6	11.6	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5
29	9.5	10.6	11.6	12.5	13.2	14.0	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5
30	9.4	10.6	11.6	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5
31	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5
32	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5
33	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5
34	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5
35	9.3	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5
36	9.3	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5
37	9.3	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5
38	9.3	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.91

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	31.7	19.9	18.5	18.2	18.1	18.2	18.3	18.5	18.7	19.0	19.2	
15	0.0	0.0	0.0	0.0	21.5	17.9	17.2	17.1	17.3	17.5	17.7	18.0	18.2	18.5	18.8	19.0	
16	0.0	0.0	0.0	18.6	16.5	16.2	16.3	16.5	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	
17	0.0	0.0	16.9	15.3	15.2	15.4	15.7	16.1	16.5	16.9	17.2	17.6	17.9	18.2	18.5	18.8	
18	0.0	15.7	14.2	14.5	15.0	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.2	18.5	18.8		
19	15.1	13.1	13.2	13.6	14.2	14.7	15.2	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4	18.7	
20	11.9	12.1	12.7	13.3	13.9	14.5	15.1	15.6	16.1	16.5	17.0	17.4	17.7	18.1	18.4	18.7	
21	11.0	11.6	12.4	13.1	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.7	18.0	18.4	18.7	
22	10.5	11.3	12.2	12.9	13.6	14.3	14.9	15.5	16.0	16.4	16.9	17.3	17.7	18.0	18.3	18.7	
23	10.2	11.1	12.0	12.8	13.6	14.2	14.8	15.4	15.9	16.4	16.8	17.3	17.6	18.0	18.3	18.6	
24	10.0	11.0	11.9	12.7	13.5	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.6	18.0	18.3	18.6	
25	9.8	10.9	11.8	12.7	13.4	14.1	14.8	15.3	15.9	16.4	16.8	17.2	17.6	18.0	18.3	18.6	
26	9.7	10.8	11.8	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	
27	9.7	10.7	11.7	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	
28	9.6	10.7	11.7	12.6	13.3	14.1	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6	
29	9.5	10.7	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6	
30	9.5	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6	
31	9.5	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6	
32	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
33	9.4	10.6	11.6	12.5	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
34	9.4	10.6	11.6	12.5	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
35	9.4	10.5	11.5	12.4	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
36	9.4	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
37	9.4	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	
38	9.4	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.92

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	20.4	18.8	18.4	18.3	18.3	18.3	18.5	18.7	19.1	19.3
15	0.0	0.0	0.0	0.0	22.9	18.3	17.5	17.3	17.4	17.6	17.8	18.1	19.4	19.6	19.9	19.1
16	0.0	0.0	0.0	19.4	16.8	16.4	16.4	16.6	16.9	17.2	17.5	17.9	18.2	18.5	18.7	19.0
17	0.0	0.0	17.5	15.5	15.3	15.5	15.9	16.2	16.6	17.0	17.3	17.7	18.0	18.3	18.6	18.9
18	0.0	16.4	14.4	14.3	14.7	15.1	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.3	18.6	18.9
19	16.1	13.3	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.7	17.1	17.5	17.9	18.2	18.5	18.8
20	12.2	12.3	12.8	13.4	14.0	14.6	15.2	15.7	16.2	16.6	17.1	17.5	17.9	18.2	18.5	18.8
21	11.1	11.7	12.5	13.2	13.9	14.5	15.1	15.6	16.1	16.5	17.0	17.4	17.9	18.1	18.5	18.8
22	10.6	11.4	12.3	13.0	13.7	14.4	15.0	15.5	16.1	16.5	17.0	17.4	17.8	18.1	18.4	18.8
23	10.3	11.2	12.1	12.9	13.6	14.3	14.9	15.5	16.0	16.5	16.9	17.4	17.7	18.1	18.4	18.7
24	10.1	11.1	12.0	12.8	13.6	14.3	14.9	15.5	16.0	16.5	16.9	17.3	17.7	18.1	18.4	18.7
25	9.9	11.0	11.9	12.8	13.5	14.2	14.8	15.4	16.0	16.4	16.9	17.3	17.7	18.1	18.4	18.7
26	9.8	10.9	11.8	12.7	13.5	14.2	14.8	15.4	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.7
27	9.7	10.8	11.8	12.7	13.4	14.2	14.8	15.4	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.7
28	9.7	10.8	11.7	12.6	13.4	14.1	14.8	15.4	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
29	9.6	10.7	11.7	12.6	13.4	14.1	14.8	15.4	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
30	9.6	10.7	11.7	12.6	13.4	14.1	14.8	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
31	9.5	10.7	11.7	12.6	13.4	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
32	9.5	10.6	11.7	12.5	13.4	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
33	9.5	10.6	11.6	12.5	13.3	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
34	9.5	10.6	11.6	12.5	13.3	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
35	9.4	10.6	11.6	12.5	13.3	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
36	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7
37	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.9	16.4	16.9	17.3	17.6	18.0	18.4	18.7
38	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.9	16.4	16.9	17.3	17.6	18.0	18.4	18.7

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.93

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.94

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K ₁)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.95

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	22.5	19.7	19.0	18.8	18.8	18.9	19.1	19.3	19.5	19.7
15	0.0	0.0	0.0	0.0	42.1	19.5	18.2	17.9	17.9	18.0	18.2	18.5	18.7	19.0	19.2	19.5
16	0.0	0.0	0.0	23.8	17.7	16.9	16.9	17.0	17.3	17.6	17.9	18.2	18.5	18.8	19.1	19.3
17	0.0	0.0	20.8	16.3	15.9	16.0	16.2	16.6	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.3
18	0.0	20.1	15.1	14.8	15.1	15.4	15.9	16.3	16.7	17.1	17.5	17.9	18.3	18.6	18.9	19.2
19	29.7	14.0	13.8	14.1	14.6	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.2	18.5	18.8	19.1
20	13.0	12.7	13.1	13.7	14.3	14.9	15.5	16.0	16.5	16.9	17.4	17.8	18.1	18.5	18.8	19.1
21	11.6	12.1	12.8	13.5	14.1	14.8	15.3	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.8	19.1
22	10.9	11.7	12.5	13.3	14.0	14.6	15.3	15.8	16.3	16.8	17.3	17.7	18.1	18.4	18.8	19.1
23	10.5	11.5	12.3	13.2	13.9	14.6	15.2	15.8	16.3	16.8	17.2	17.6	18.0	18.4	18.7	19.0
24	10.3	11.3	12.2	13.1	13.8	14.5	15.1	15.7	16.3	16.7	17.2	17.6	18.0	18.4	18.7	19.0
25	10.1	11.2	12.1	13.0	13.8	14.5	15.1	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.0
26	10.0	11.1	12.1	12.9	13.7	14.4	15.1	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.0
27	9.9	11.0	12.0	12.9	13.7	14.4	15.0	15.6	16.2	16.7	17.2	17.6	18.0	18.3	18.7	19.0
28	9.8	11.0	12.0	12.8	13.6	14.4	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.3	18.7	19.0
29	9.8	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.3	18.7	19.0
30	9.7	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.3	18.7	19.0
31	9.7	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.1	16.7	17.1	17.6	18.0	18.3	18.7	19.0
32	9.7	10.8	11.8	12.8	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
33	9.6	10.8	11.8	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
34	9.6	10.8	11.8	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
35	9.6	10.8	11.8	12.7	13.5	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
36	9.6	10.8	11.8	12.7	13.5	14.3	14.9	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
37	9.6	10.8	11.8	12.7	13.5	14.3	14.9	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
38	9.6	10.7	11.8	12.7	13.5	14.3	14.9	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.96

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
14	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
15	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
16	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
17	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
18	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
19	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
20	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
21	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
22	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
23	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
24	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
25	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
26	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
27	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
28	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
29	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
30	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
31	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
32	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
33	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
34	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
35	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
36	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
37	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
38	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.97

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	24.7	20.5	19.5	19.2	19.1	19.2	19.3	19.5	19.7	19.9
15	0.0	0.0	0.0	0.0	0.0	20.6	19.7	19.2	18.2	18.3	19.5	18.7	19.0	19.2	19.5	19.7
16	0.0	0.0	0.0	39.6	18.5	17.4	17.2	17.3	17.5	17.9	19.1	18.4	19.7	19.0	19.3	19.6
17	0.0	0.0	27.3	17.0	16.2	16.3	16.5	16.9	17.2	17.5	17.9	18.2	18.6	19.9	19.2	19.5
18	0.0	33.4	15.7	15.2	15.3	15.7	16.1	16.5	16.9	17.3	17.7	19.1	18.5	18.9	19.1	19.4
19	0.0	14.6	14.1	14.4	14.9	15.3	15.9	16.3	16.9	17.2	17.6	19.0	18.4	18.7	19.0	19.4
20	13.7	13.0	13.4	13.9	14.5	15.1	15.7	16.2	16.7	17.1	17.5	17.9	19.3	19.7	19.0	19.3
21	11.9	12.3	13.0	13.7	14.3	14.9	15.5	16.1	16.6	17.1	17.5	17.9	19.3	19.6	19.0	19.3
22	11.1	11.9	12.7	13.5	14.2	14.9	15.4	16.0	16.5	17.0	17.4	17.9	19.3	19.6	19.0	19.3
23	10.7	11.6	12.5	13.3	14.1	14.7	15.4	15.9	16.5	17.0	17.4	17.9	19.2	19.6	19.9	19.3
24	10.5	11.5	12.4	13.2	14.0	14.7	15.3	15.9	16.4	16.9	17.4	17.9	19.2	19.6	19.9	19.2
25	10.3	11.3	12.3	13.1	13.9	14.6	15.3	15.9	16.4	16.9	17.4	17.9	19.2	19.6	19.9	19.2
26	10.1	11.2	12.2	13.1	13.9	14.6	15.2	15.8	16.4	16.9	17.3	17.9	19.2	19.5	19.9	19.2
27	10.0	11.1	12.1	13.0	13.8	14.6	15.2	15.8	16.4	16.9	17.3	17.9	19.2	19.5	19.9	19.2
28	10.0	11.1	12.1	13.0	13.8	14.5	15.2	15.8	16.3	16.9	17.3	17.9	19.2	19.5	19.9	19.2
29	9.9	11.0	12.1	13.0	13.8	14.5	15.2	15.8	16.3	16.8	17.3	17.7	19.2	19.5	19.9	19.2
30	9.9	11.0	12.0	12.9	13.8	14.5	15.2	15.8	16.3	16.8	17.3	17.7	19.1	19.5	19.9	19.2
31	9.8	11.0	12.0	12.9	13.7	14.5	15.1	15.8	16.3	16.8	17.3	17.7	19.1	19.5	19.9	19.2
32	9.8	10.9	12.0	12.9	13.7	14.5	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2
33	9.8	10.9	12.0	12.9	13.7	14.5	15.1	15.7	16.3	16.8	17.3	17.7	19.1	19.5	19.9	19.2
34	9.7	10.9	11.9	12.9	13.7	14.4	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2
35	9.7	10.9	11.9	12.9	13.7	14.4	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2
36	9.7	10.9	11.9	12.9	13.7	14.4	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2
37	9.7	10.9	11.9	12.8	13.7	14.4	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2
38	9.7	10.9	11.9	12.8	13.7	14.4	15.1	15.7	16.3	16.9	17.3	17.7	19.1	19.5	19.9	19.2

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.98

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	26.3	20.9	19.7	19.3	19.3	19.3	19.5	19.6	19.8	20.0
15	0.0	0.0	0.0	0.0	0.0	21.2	19.0	18.4	18.3	18.4	18.6	18.4	19.1	19.3	19.6	19.8
16	0.0	0.0	0.0	0.0	18.9	17.6	17.4	17.5	17.7	17.9	18.2	18.5	18.8	19.1	19.4	19.7
17	0.0	0.0	0.0	17.3	16.4	16.4	16.6	16.9	17.3	17.6	18.0	18.3	18.7	19.0	19.3	19.6
18	0.0	0.0	16.1	15.4	15.5	15.8	16.2	16.6	17.0	17.4	17.9	18.2	18.6	19.0	19.2	19.5
19	0.0	15.0	14.3	14.5	14.9	15.4	15.9	16.4	16.9	17.3	17.7	18.1	18.5	18.8	19.2	19.5
20	14.2	13.2	13.5	14.0	14.6	15.2	15.7	16.3	16.8	17.2	17.6	18.0	18.4	18.8	19.1	19.4
21	12.1	12.4	13.1	13.7	14.4	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.4	18.7	19.1	19.4
22	11.3	12.0	12.8	13.5	14.3	14.9	15.5	16.1	16.6	17.1	17.5	18.0	18.3	18.7	19.1	19.4
23	10.8	11.7	12.6	13.4	14.1	14.8	15.5	16.0	16.6	17.1	17.5	17.9	18.3	18.7	19.0	19.4
24	10.5	11.5	12.5	13.3	14.1	14.8	15.4	16.0	16.5	17.0	17.5	17.9	18.3	18.7	19.0	19.3
25	10.3	11.4	12.4	13.2	14.0	14.7	15.4	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.0	19.3
26	10.2	11.3	12.3	13.2	13.9	14.7	15.3	15.9	16.5	17.0	17.4	17.9	18.3	18.6	19.0	19.3
27	10.1	11.2	12.2	13.1	13.9	14.6	15.3	15.9	16.4	17.0	17.4	17.9	18.3	18.6	19.0	19.3
28	10.0	11.2	12.2	13.1	13.9	14.6	15.3	15.9	16.4	17.0	17.4	17.8	18.3	18.6	19.0	19.3
29	10.0	11.1	12.1	13.0	13.8	14.6	15.3	15.9	16.4	17.0	17.4	17.9	18.2	18.6	19.0	19.3
30	9.9	11.1	12.1	13.0	13.8	14.6	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
31	9.9	11.0	12.1	13.0	13.8	14.6	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
32	9.9	11.0	12.0	13.0	13.8	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
33	9.8	11.0	12.0	13.0	13.8	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
34	9.8	11.0	12.0	13.0	13.8	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
35	9.9	11.0	12.0	13.0	13.8	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
36	9.8	10.9	12.0	13.0	13.8	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
37	9.7	10.9	12.0	13.0	13.7	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3
38	9.7	10.9	12.0	13.0	13.7	14.5	15.2	15.8	16.4	17.0	17.4	17.8	18.2	18.6	19.0	19.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND META

YARN BULK DENSITY = 0.90

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K ₁)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	7.0	0.0	0.0	0.0	0.0	0.0	28.6	21.3	20.0	19.5	19.4	19.5	19.4	19.8	20.0	20.2			
15	7.0	0.0	0.0	0.0	0.0	22.0	19.3	18.6	18.5	18.6	18.7	19.0	19.2	19.4	19.7	19.9			
16	0.0	0.0	0.0	0.0	19.4	17.8	17.5	17.6	17.8	19.1	19.4	19.6	19.9	19.2	19.5	19.8			
17	0.0	0.0	0.0	17.7	16.7	16.6	16.8	17.1	17.4	17.9	19.1	19.4	19.8	19.1	19.4	19.7			
18	0.0	0.0	16.4	15.6	15.9	16.3	16.7	17.1	17.6	17.9	18.3	18.7	19.0	19.3	19.6				
19	0.0	15.4	14.5	14.7	15.1	15.5	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9	19.3	19.6			
20	14.7	13.4	13.6	14.2	14.7	15.3	15.8	16.4	16.9	17.3	17.7	18.1	18.5	18.9	19.2	19.5			
21	12.3	12.6	13.2	13.8	14.5	15.1	15.7	16.3	16.8	17.2	17.7	18.1	18.5	18.9	19.2	19.5			
22	11.4	12.1	12.9	13.6	14.3	15.0	15.6	16.2	16.7	17.2	17.6	18.1	18.4	18.8	19.2	19.5			
23	10.9	11.8	12.7	13.5	14.2	14.9	15.5	16.1	16.6	17.1	17.6	18.0	18.4	18.8	19.1	19.5			
24	10.6	11.6	12.5	13.4	14.1	14.8	15.5	16.1	16.6	17.1	17.6	18.0	18.4	18.8	19.1	19.4			
25	10.4	11.5	12.4	13.3	14.1	14.8	15.4	16.0	16.6	17.1	17.5	18.0	18.4	18.9	19.1	19.4			
26	10.3	11.4	12.3	13.2	14.0	14.7	15.4	16.0	16.6	17.1	17.5	18.0	18.4	18.7	19.1	19.4			
27	10.2	11.3	12.3	13.2	14.0	14.7	15.4	16.0	16.5	17.0	17.5	18.0	18.4	18.7	19.1	19.4			
28	10.1	11.2	12.2	13.1	13.9	14.7	15.4	16.0	16.5	17.0	17.5	18.0	18.3	18.7	19.1	19.4			
29	10.0	11.2	12.2	13.1	13.9	14.7	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
30	10.0	11.1	12.2	13.1	13.9	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
31	9.9	11.1	12.1	13.1	13.9	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
32	9.9	11.1	12.1	13.0	13.9	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
33	9.9	11.0	12.1	13.0	13.9	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
34	9.8	11.0	12.1	13.0	13.8	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
35	9.8	11.0	12.1	13.0	13.8	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	19.7	19.1	19.4			
36	9.8	11.0	12.1	13.0	13.8	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.1	19.4			
37	9.8	11.0	12.0	13.0	13.8	14.6	15.3	15.9	16.5	17.0	17.5	17.9	18.3	18.7	19.0	19.4			
38	9.8	11.0	12.0	13.0	13.8	14.6	15.3	15.9	16.4	17.0	17.5	17.9	18.3	18.7	19.0	19.4			

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =1.00

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	32.7	21.8	20.2	19.7	19.6	19.6	19.7	19.9	20.1	20.3
15	0.0	0.0	0.0	0.0	0.0	22.9	19.6	19.8	19.7	18.7	18.9	19.1	19.3	19.6	19.8	20.0
16	0.0	0.0	0.0	0.0	20.0	18.1	17.7	17.8	17.9	19.2	19.5	18.9	19.1	19.3	19.6	19.9
17	0.0	0.0	0.0	18.2	16.9	16.7	16.9	17.2	17.5	17.9	19.2	18.6	18.9	19.2	19.5	19.8
18	0.0	0.0	16.9	15.8	15.8	16.0	16.4	16.8	17.3	17.7	18.0	18.4	18.8	19.1	19.4	19.7
19	0.0	15.8	14.7	14.8	15.2	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0	19.4	19.7
20	15.3	13.6	13.8	14.3	14.8	15.4	15.9	16.5	16.9	17.4	17.8	18.2	18.6	19.0	19.3	19.6
21	12.5	12.7	13.3	13.9	14.6	15.2	15.8	16.3	16.9	17.3	17.9	18.2	18.6	18.9	19.3	19.6
22	11.5	12.2	13.0	13.7	14.4	15.1	15.7	16.3	16.8	17.3	17.7	18.1	18.5	18.9	19.2	19.6
23	11.0	11.9	12.8	13.6	14.3	15.0	15.6	16.2	16.7	17.2	17.7	18.1	18.5	18.9	19.2	19.6
24	10.7	11.7	12.6	13.5	14.2	14.9	15.6	16.2	16.7	17.2	17.7	18.1	18.5	18.9	19.2	19.5
25	10.5	11.5	12.5	13.4	14.2	14.9	15.5	16.1	16.7	17.2	17.6	18.1	18.5	18.8	19.2	19.5
26	10.3	11.4	12.4	13.3	14.1	14.8	15.5	16.1	16.6	17.1	17.6	18.1	18.5	18.8	19.2	19.5
27	10.2	11.3	12.4	13.2	14.1	14.8	15.5	16.1	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
28	10.1	11.3	12.3	13.2	14.0	14.8	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
29	10.1	11.2	12.3	13.2	14.0	14.7	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
30	10.0	11.2	12.2	13.1	14.0	14.7	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
31	10.0	11.2	12.2	13.1	14.0	14.7	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
32	9.9	11.1	12.2	13.1	13.9	14.7	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
33	9.9	11.1	12.2	13.1	13.9	14.7	15.4	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5
34	9.9	11.1	12.1	13.1	13.9	14.7	15.4	16.0	16.5	17.1	17.6	18.0	18.4	18.8	19.2	19.5
35	9.9	11.1	12.1	13.1	13.9	14.7	15.3	16.0	16.5	17.1	17.5	18.0	18.4	18.8	19.1	19.5
36	9.9	11.1	12.1	13.1	13.9	14.7	15.3	16.0	16.5	17.1	17.5	18.0	18.4	18.8	19.1	19.5
37	9.8	11.0	12.1	13.0	13.9	14.6	15.3	16.0	16.5	17.1	17.5	18.0	18.4	18.8	19.1	19.5
38	9.8	11.0	12.1	13.0	13.9	14.6	15.3	16.0	16.5	17.1	17.5	18.0	18.4	18.8	19.1	19.5

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.36

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
18	0.0	0.0	0.0	0.0	38.4	23.1	21.6	21.3	21.3	21.5	21.8	22.1	22.4	22.7	23.0	23.3	
19	0.0	0.0	0.0	36.0	21.7	20.5	20.3	20.5	20.7	21.1	21.4	21.8	22.2	22.5	22.8	23.2	
20	0.0	0.0	0.0	20.5	19.4	19.4	19.6	20.0	20.4	20.8	21.2	21.6	22.0	22.4	22.7	23.1	
21	0.0	0.0	19.6	18.4	18.4	18.7	19.2	19.6	20.1	20.6	21.0	21.5	21.9	22.3	22.6	23.0	
22	0.0	19.2	17.3	17.4	17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.4	21.8	22.2	22.6	22.9	
23	20.9	16.3	16.3	16.9	17.4	18.0	18.6	19.2	19.8	20.3	20.8	21.3	21.7	22.1	22.5	22.9	
24	15.4	15.1	15.7	16.4	17.1	17.8	18.5	19.1	19.7	20.2	20.8	21.2	21.7	22.1	22.5	22.9	
25	13.9	14.5	15.3	16.1	16.9	17.7	18.4	19.0	19.6	20.2	20.7	21.2	21.6	22.1	22.5	22.8	
26	13.2	14.1	15.0	15.9	16.8	17.6	18.3	18.9	19.6	20.1	20.7	21.2	21.6	22.0	22.4	22.8	
27	12.8	13.8	14.9	15.8	16.7	17.5	18.2	18.9	19.5	20.1	20.6	21.1	21.6	22.0	22.4	22.8	
28	12.5	13.6	14.7	15.7	16.6	17.4	18.1	18.8	19.5	20.1	20.6	21.1	21.6	22.0	22.4	22.8	
29	12.3	13.5	14.6	15.6	16.5	17.3	18.1	18.8	19.4	20.0	20.6	21.1	21.5	22.0	22.4	22.8	
30	12.1	13.4	14.5	15.5	16.5	17.3	18.1	18.8	19.4	20.0	20.6	21.1	21.5	22.0	22.4	22.8	
31	12.0	13.3	14.4	15.5	16.4	17.3	18.0	18.7	19.4	20.0	20.5	21.0	21.5	22.0	22.4	22.8	
32	11.9	13.2	14.4	15.4	16.4	17.2	18.0	18.7	19.4	20.0	20.5	21.0	21.5	22.0	22.4	22.7	
33	11.8	13.1	14.3	15.4	16.3	17.2	18.0	18.7	19.4	20.0	20.5	21.0	21.5	21.9	22.4	22.7	
34	11.7	13.1	14.3	15.4	16.3	17.2	18.0	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.4	22.7	
35	11.7	13.1	14.3	15.3	16.3	17.2	18.0	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
36	11.6	13.0	14.2	15.3	16.3	17.1	17.9	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
37	11.6	13.0	14.2	15.3	16.3	17.1	17.9	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
38	11.6	13.0	14.2	15.3	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
39	11.6	12.9	14.2	15.3	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
40	11.5	12.9	14.2	15.2	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
41	11.5	12.9	14.1	15.2	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	
42	11.5	12.9	14.1	15.2	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =1.48

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
18	0.0	0.0	0.0	0.0	0.0	32.5	24.7	23.4	23.0	23.0	23.1	23.3	23.6	23.9	24.2	24.4
19	0.0	0.0	0.0	0.0	29.5	23.2	22.2	22.0	22.1	22.3	22.6	23.0	23.3	23.6	23.9	24.3
20	0.0	0.0	0.0	28.9	22.0	21.1	21.0	21.2	21.6	21.9	22.3	22.7	23.1	23.4	23.8	24.1
21	0.0	0.0	33.7	21.0	20.1	20.1	20.4	20.8	21.2	21.7	22.1	22.5	22.9	23.3	23.7	24.0
22	0.0	0.0	20.1	19.0	19.1	19.5	19.9	20.5	21.0	21.5	21.9	22.4	22.8	23.2	23.6	24.0
23	0.0	19.8	19.0	19.1	18.5	19.1	19.7	20.2	20.8	21.3	21.9	22.3	22.7	23.2	23.6	23.9
24	21.7	17.0	17.0	17.5	18.1	18.8	19.4	20.1	20.7	21.2	21.7	22.2	22.7	23.1	23.5	23.9
25	16.1	15.8	16.4	17.1	17.9	18.6	19.3	19.9	20.6	21.1	21.7	22.2	22.6	23.1	23.5	23.9
26	14.6	15.2	16.0	16.8	17.7	18.4	19.2	19.8	20.5	21.1	21.6	22.1	22.6	23.0	23.4	23.8
27	13.9	14.8	15.7	16.6	17.5	18.3	19.1	19.9	20.4	21.0	21.6	22.1	22.5	23.0	23.4	23.8
28	13.4	14.5	15.5	16.5	17.4	18.2	19.0	19.7	20.4	21.0	21.5	22.0	22.5	23.0	23.4	23.8
29	13.1	14.3	15.4	16.4	17.3	18.2	19.9	19.7	20.3	20.9	21.5	22.0	22.5	23.0	23.4	23.8
30	12.8	14.1	15.2	16.3	17.2	18.1	18.9	19.6	20.3	20.9	21.5	22.0	22.5	22.9	23.4	23.8
31	12.7	14.0	15.2	16.2	17.2	18.1	18.9	19.6	20.3	20.9	21.4	22.0	22.5	22.9	23.4	23.8
32	12.5	13.9	15.1	16.2	17.1	18.0	18.8	19.6	20.2	20.9	21.4	22.0	22.5	22.9	23.3	23.7
33	12.4	13.8	15.0	16.1	17.1	18.0	18.8	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
34	12.3	13.7	15.0	16.1	17.1	18.0	18.8	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
35	12.3	13.7	14.9	16.0	17.0	17.9	18.8	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
36	12.2	13.6	14.9	16.0	17.0	17.9	18.7	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
37	12.2	13.6	14.9	16.0	17.0	17.9	18.7	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
38	12.1	13.6	14.8	16.0	17.0	17.9	18.7	19.5	20.2	20.8	21.4	21.9	22.4	22.9	23.3	23.7
39	12.1	13.5	14.8	15.9	17.0	17.9	18.7	19.5	20.1	20.8	21.4	21.9	22.4	22.9	23.3	23.7
40	12.1	13.5	14.8	15.9	16.9	17.9	18.7	19.4	20.1	20.8	21.4	21.9	22.4	22.9	23.3	23.7
41	12.0	13.5	14.9	15.9	16.9	17.9	18.7	19.4	20.1	20.8	21.4	21.9	22.4	22.9	23.3	23.7
42	12.0	13.5	14.8	15.9	16.9	17.8	18.7	19.4	20.1	20.9	21.4	21.9	22.4	22.9	23.3	23.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RPTA

YARN RULK DENSITY = 1.50

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
18	0.0	0.0	0.0	0.0	0.0	39.5	25.4	23.8	23.3	23.2	23.3	23.5	23.8	24.1	24.3	24.6
19	0.0	0.0	0.0	0.0	33.6	23.9	22.5	22.3	22.3	22.5	22.8	23.1	23.5	23.8	24.1	24.4
20	0.0	0.0	0.0	34.2	22.6	21.4	21.3	21.5	21.8	22.1	22.5	22.9	23.3	23.6	24.0	24.3
21	0.0	0.0	0.0	21.6	20.4	20.3	20.6	21.0	21.4	21.9	22.3	22.7	23.1	23.5	23.9	24.2
22	0.0	0.0	20.8	19.4	19.3	19.7	20.1	20.6	21.1	21.6	22.1	22.6	23.0	23.4	23.8	24.2
23	0.0	20.8	18.3	18.3	18.7	19.3	19.8	20.4	21.0	21.5	22.0	22.5	22.9	23.3	23.7	24.1
24	25.6	17.4	17.2	17.7	18.3	19.0	19.6	20.2	20.8	21.4	21.9	22.4	22.8	23.3	23.7	24.1
25	16.7	16.1	16.6	17.3	18.0	18.8	19.4	20.1	20.7	21.3	21.8	22.3	22.8	23.2	23.6	24.0
26	14.9	15.4	16.2	17.0	17.8	18.6	19.3	20.0	20.6	21.2	21.8	22.3	22.7	23.2	23.6	24.0
27	14.1	14.9	15.9	16.8	17.7	18.5	19.2	19.9	20.6	21.2	21.7	22.2	22.7	23.2	23.6	24.0
28	13.6	14.6	15.7	16.6	17.5	18.4	19.1	19.9	20.5	21.1	21.7	22.2	22.7	23.1	23.6	24.0
29	13.2	14.4	15.5	16.5	17.4	18.3	19.1	19.8	20.5	21.1	21.6	22.2	22.7	23.1	23.5	23.9
30	13.0	14.2	15.4	16.4	17.4	18.2	19.0	19.8	20.4	21.0	21.6	22.1	22.6	23.1	23.5	23.9
31	12.8	14.1	15.3	16.3	17.3	18.2	19.0	19.7	20.4	21.0	21.6	22.1	22.6	23.1	23.5	23.9
32	12.6	14.0	15.2	16.3	17.3	18.1	19.0	19.7	20.4	21.0	21.6	22.1	22.6	23.1	23.5	23.9
33	12.5	13.9	15.1	16.2	17.2	18.1	18.9	19.7	20.4	21.0	21.6	22.1	22.6	23.1	23.5	23.9
34	12.4	13.8	15.1	16.2	17.2	18.1	18.9	19.7	20.3	21.0	21.6	22.1	22.6	23.1	23.5	23.9
35	12.4	13.8	15.0	16.1	17.2	18.1	18.9	19.6	20.3	21.0	21.5	22.1	22.6	23.0	23.5	23.9
36	12.3	13.7	15.0	16.1	17.1	18.0	18.9	19.6	20.3	20.9	21.5	22.1	22.6	23.0	23.5	23.9
37	12.3	13.7	15.0	16.1	17.1	18.0	18.9	19.6	20.3	20.9	21.5	22.1	22.6	23.0	23.5	23.9
38	12.2	13.7	14.9	16.1	17.1	18.0	18.8	19.6	20.3	20.9	21.5	22.1	22.6	23.0	23.5	23.9
39	12.2	13.6	14.9	16.1	17.1	18.0	18.8	19.6	20.3	20.9	21.5	22.1	22.6	23.0	23.5	23.9
40	12.2	13.6	14.9	16.0	17.1	18.0	18.8	19.6	20.3	20.9	21.5	22.1	22.6	23.0	23.5	23.9
41	12.1	13.6	14.9	16.0	17.0	18.0	18.8	19.6	20.3	20.9	21.5	22.0	22.5	23.0	23.5	23.9
42	12.1	13.6	14.9	16.0	17.0	18.0	18.8	19.6	20.3	20.9	21.5	22.0	22.5	23.0	23.5	23.9

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 1.77

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
20	0.0	0.0	0.0	0.0	0.0	30.0	25.9	25.0	24.8	24.9	25.1	25.4	25.7	26.0	26.3	26.7	
21	0.0	0.0	0.0	0.0	28.9	24.8	23.9	23.8	24.0	24.3	24.7	25.0	25.4	25.8	26.2	26.5	
22	0.0	0.0	0.0	29.7	23.7	22.9	22.9	23.2	23.5	23.9	24.4	24.8	25.2	25.6	26.0	26.4	
23	0.0	0.0	34.6	22.8	21.9	21.9	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.5	25.9	26.3	
24	0.0	0.0	22.2	20.9	20.9	21.3	21.8	22.4	22.9	23.5	24.0	24.5	25.0	25.4	25.8	26.2	
25	0.0	22.5	19.9	19.9	20.3	20.9	21.5	22.2	22.8	23.3	23.9	24.4	24.9	25.3	25.8	26.2	
26	31.5	19.0	18.8	19.3	19.9	20.6	21.3	22.0	22.6	23.2	23.8	24.3	24.8	25.3	25.7	26.1	
27	18.6	17.6	18.1	18.8	19.6	20.4	21.1	21.8	22.5	23.1	23.7	24.2	24.8	25.2	25.7	26.1	
28	16.5	16.8	17.6	18.5	19.4	20.2	21.0	21.7	22.4	23.1	23.6	24.2	24.7	25.2	25.6	26.1	
29	15.5	16.3	17.3	18.3	19.2	20.1	20.9	21.7	22.4	23.0	23.6	24.2	24.7	25.2	25.6	26.0	
30	14.9	16.0	17.1	18.1	19.1	20.0	20.8	21.6	22.3	22.9	23.6	24.1	24.6	25.1	25.6	26.0	
31	14.5	15.7	16.9	18.0	19.0	19.9	20.8	21.5	22.2	22.9	23.5	24.1	24.6	25.1	25.6	26.0	
32	14.2	15.5	16.8	17.9	18.9	19.8	20.7	21.5	22.2	22.9	23.5	24.1	24.6	25.1	25.6	26.0	
33	14.0	15.4	16.7	17.8	18.8	19.8	20.7	21.4	22.2	22.9	23.5	24.0	24.6	25.1	25.5	26.0	
34	13.8	15.3	16.6	17.7	18.8	19.7	20.6	21.4	22.2	22.8	23.5	24.0	24.6	25.1	25.5	26.0	
35	13.7	15.2	16.5	17.7	18.7	19.7	20.6	21.4	22.1	22.8	23.4	24.0	24.6	25.1	25.5	26.0	
36	13.6	15.1	16.4	17.6	18.7	19.7	20.6	21.4	22.1	22.8	23.4	24.0	24.5	25.0	25.5	26.0	
37	13.5	15.0	16.4	17.6	18.7	19.6	20.5	21.3	22.1	22.8	23.4	24.0	24.5	25.0	25.5	26.0	
38	13.4	15.0	16.3	17.5	18.6	19.6	20.5	21.3	22.1	22.8	23.4	24.0	24.5	25.0	25.5	25.9	
39	13.4	14.9	16.3	17.5	18.6	19.6	20.5	21.3	22.1	22.8	23.4	24.0	24.5	25.0	25.5	25.9	
40	13.3	14.9	16.3	17.5	18.6	19.6	20.5	21.3	22.1	22.7	23.4	24.0	24.5	25.0	25.5	25.9	
41	13.3	14.9	16.2	17.5	18.6	19.6	20.5	21.3	22.0	22.7	23.4	24.0	24.5	25.0	25.5	25.9	
42	13.3	14.8	16.2	17.4	18.6	19.6	20.5	21.3	22.0	22.7	23.4	24.0	24.5	25.0	25.5	25.9	
43	13.2	14.8	16.2	17.4	18.5	19.5	20.4	21.3	22.0	22.7	23.4	24.0	24.5	25.0	25.5	25.9	
44	13.2	14.8	16.2	17.4	18.5	19.5	20.4	21.3	22.0	22.7	23.4	23.9	24.5	25.0	25.5	25.9	

41L-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =2.00

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	37.6	29.8	28.2	27.6	27.5	27.6	27.8	28.1	29.3	28.6
21	0.0	0.0	0.0	0.0	0.0	35.9	28.4	27.0	26.6	26.6	26.8	27.1	27.4	27.7	28.1	28.4
22	0.0	0.0	0.0	0.0	36.6	27.3	25.9	25.7	25.7	26.0	26.3	26.7	27.1	27.5	27.9	28.2
23	0.0	0.0	0.0	49.5	26.4	24.9	24.7	24.8	25.2	25.6	26.0	26.4	26.9	27.3	27.7	28.1
24	0.0	0.0	0.0	25.9	23.9	23.7	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.0
25	0.0	0.0	26.3	23.0	22.7	22.9	23.4	23.9	24.5	25.1	25.6	26.1	26.6	27.1	27.5	27.9
26	0.0	32.5	22.2	21.6	21.9	22.4	23.1	23.7	24.3	24.9	25.4	26.0	26.5	27.0	27.4	27.9
27	0.0	21.9	20.6	20.8	21.4	22.1	22.8	23.5	24.1	24.7	25.3	25.9	26.4	26.9	27.4	27.8
28	23.9	19.6	19.7	20.3	21.1	21.8	22.6	23.3	24.0	24.6	25.2	25.8	26.4	26.9	27.3	27.8
29	18.9	18.5	19.1	19.9	20.8	21.6	22.4	23.2	23.9	24.6	25.2	25.8	26.3	26.8	27.3	27.7
30	17.2	17.8	18.7	19.6	20.6	21.5	22.3	23.1	23.8	24.5	25.1	25.7	26.3	26.8	27.3	27.7
31	16.4	17.3	18.4	19.4	20.4	21.3	22.2	23.0	23.7	24.4	25.1	25.7	26.2	26.7	27.2	27.7
32	15.8	17.0	18.1	19.3	20.3	21.2	22.1	22.9	23.7	24.4	25.0	25.6	26.2	26.7	27.2	27.7
33	15.4	16.7	18.0	19.1	20.2	21.2	22.1	22.9	23.6	24.4	25.0	25.6	26.2	26.7	27.2	27.6
34	15.1	16.5	17.8	19.0	20.1	21.1	22.0	22.8	23.6	24.3	25.0	25.6	26.2	26.7	27.2	27.6
35	14.9	16.4	17.7	18.9	20.0	21.0	22.0	22.8	23.6	24.3	25.0	25.6	26.1	26.7	27.2	27.6
36	14.7	16.2	17.6	18.9	20.0	21.0	21.9	22.8	23.6	24.3	24.9	25.5	26.1	26.6	27.1	27.6
37	14.6	16.1	17.5	18.8	19.9	21.0	21.9	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6
38	14.5	16.1	17.5	18.7	19.9	20.9	21.9	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6
39	14.4	16.0	17.4	18.7	19.8	20.9	21.8	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6
40	14.3	15.9	17.4	18.7	19.8	20.9	21.8	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6
41	14.3	15.9	17.3	18.6	19.8	20.8	21.8	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6
42	14.2	15.8	17.3	18.6	19.8	20.8	21.8	22.7	23.4	24.2	24.9	25.5	26.1	26.6	27.1	27.6
43	14.2	15.8	17.3	18.6	19.7	20.8	21.8	22.6	23.4	24.2	24.9	25.5	26.1	26.6	27.1	27.6
44	14.1	15.8	17.2	18.6	19.7	20.8	21.8	22.6	23.4	24.2	24.8	25.5	26.1	26.6	27.1	27.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.36

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
24	0.0	0.0	0.0	0.0	37.2	29.3	28.0	27.8	27.9	28.2	28.6	29.0	29.4	29.8	30.2	30.6	
25	0.0	0.0	0.0	51.1	28.7	27.0	26.8	27.0	27.3	27.8	28.2	28.7	29.2	29.6	30.1	30.5	
26	0.0	0.0	0.0	28.5	26.1	25.8	26.0	26.4	26.9	27.5	28.0	28.5	29.0	29.5	30.0	30.4	
27	0.0	0.0	30.0	25.3	24.9	25.0	25.5	26.1	26.7	27.2	27.8	28.4	28.9	29.4	29.9	30.3	
28	0.0	0.0	24.7	23.8	24.0	24.5	25.1	25.8	26.4	27.1	27.7	28.2	28.8	29.3	29.8	30.3	
29	0.0	25.2	22.8	22.9	23.4	24.1	24.8	25.6	26.3	26.9	27.6	28.2	28.7	29.2	29.7	30.2	
30	38.3	22.0	21.7	22.2	23.0	23.8	24.6	25.4	26.1	26.8	27.5	28.1	28.6	29.2	29.7	30.2	
31	22.1	20.5	21.0	21.8	22.7	23.6	24.4	25.2	26.0	26.7	27.4	28.0	28.6	29.1	29.7	30.1	
32	19.5	19.7	20.5	21.5	22.5	23.4	24.3	25.1	25.9	26.6	27.3	28.0	28.5	29.1	29.6	30.1	
33	18.3	19.1	20.1	21.2	22.3	23.3	24.2	25.0	25.8	26.6	27.3	27.9	28.5	29.1	29.6	30.1	
34	17.6	18.7	19.9	21.0	22.1	23.2	24.1	25.0	25.8	26.5	27.2	27.9	28.5	29.0	29.6	30.1	
35	17.0	18.4	19.7	20.9	22.0	23.1	24.0	24.9	25.7	26.5	27.2	27.8	28.4	29.0	29.5	30.0	
36	16.7	18.1	19.5	20.8	21.9	23.0	24.0	24.9	25.7	26.4	27.2	27.8	28.4	29.0	29.5	30.0	
37	16.4	17.9	19.4	20.7	21.8	22.9	23.9	24.8	25.6	26.4	27.1	27.8	28.4	29.0	29.5	30.0	
38	16.2	17.8	19.2	20.6	21.8	22.9	23.9	24.8	25.6	26.4	27.1	27.8	28.4	29.0	29.5	30.0	
39	16.0	17.7	19.1	20.5	21.7	22.8	23.8	24.7	25.6	26.4	27.1	27.9	28.4	29.0	29.5	30.0	
40	15.9	17.6	19.1	20.4	21.7	22.8	23.8	24.7	25.6	26.3	27.1	27.7	28.4	28.9	29.5	30.0	
41	15.8	17.5	19.0	20.4	21.6	22.7	23.8	24.7	25.5	26.3	27.1	27.7	28.3	28.9	29.5	30.0	
42	15.7	17.4	18.9	20.3	21.6	22.7	23.7	24.7	25.5	26.3	27.0	27.7	28.3	28.9	29.5	30.0	
43	15.6	17.3	18.9	20.3	21.5	22.7	23.7	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.5	30.0	
44	15.5	17.3	18.9	20.3	21.5	22.7	23.7	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.4	30.0	
45	15.5	17.2	18.8	20.2	21.5	22.6	23.7	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.4	30.0	
46	15.4	17.2	18.8	20.2	21.5	22.6	23.7	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.4	29.9	
47	15.4	17.2	18.8	20.2	21.4	22.6	23.6	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.4	29.9	
48	15.3	17.1	18.7	20.2	21.4	22.6	23.6	24.6	25.4	26.2	27.0	27.7	28.3	28.9	29.4	29.9	

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =2.50

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	33.6	30.2	29.4	29.3	29.4	29.7	30.1	30.5	30.9	31.3	31.6
25	0.0	0.0	0.0	0.0	34.0	29.3	28.4	28.3	28.5	28.9	29.3	29.7	30.2	30.6	31.1	31.5
26	0.0	0.0	0.0	37.4	28.6	27.4	27.3	27.6	28.0	28.5	29.0	29.5	30.0	30.5	30.9	31.4
27	0.0	0.0	0.0	28.3	26.5	26.3	26.6	27.1	27.7	28.2	28.8	29.3	29.8	30.3	30.8	31.3
28	0.0	0.0	29.1	25.4	25.3	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.7	30.2	30.7	31.2
29	0.0	39.8	25.0	24.3	24.5	25.1	25.8	26.5	27.2	27.8	28.5	29.1	29.6	30.2	30.7	31.1
30	0.0	25.2	23.2	23.4	24.0	24.8	25.5	26.3	27.0	27.7	28.3	29.0	29.5	30.1	30.6	31.1
31	37.5	22.4	22.2	22.8	23.6	24.5	25.3	26.1	26.9	27.6	28.3	28.9	29.5	30.0	30.6	31.1
32	22.4	21.0	21.6	22.4	23.3	24.3	25.1	26.0	26.8	27.5	28.2	28.8	29.4	30.0	30.5	31.0
33	27.0	20.2	21.1	22.1	23.1	24.1	25.0	25.9	26.7	27.4	28.1	28.8	29.4	29.9	30.5	31.0
34	18.9	19.6	20.7	21.8	22.9	23.9	24.9	25.8	26.6	27.4	28.1	28.7	29.3	29.9	30.5	31.0
35	18.1	19.2	20.5	21.7	22.8	23.9	24.8	25.7	26.5	27.3	28.0	28.7	29.3	29.9	30.4	30.9
36	17.6	18.9	20.2	21.5	22.7	23.7	24.7	25.6	26.5	27.3	28.0	28.7	29.3	29.9	30.4	30.9
37	17.2	18.7	20.1	21.4	22.6	23.7	24.7	25.6	26.4	27.2	28.0	28.6	29.3	29.8	30.4	30.9
38	16.9	18.5	19.9	21.3	22.5	23.6	24.6	25.5	26.4	27.2	27.9	28.6	29.2	29.8	30.4	30.9
39	16.7	18.3	19.8	21.2	22.4	23.5	24.6	25.5	26.4	27.2	27.9	28.6	29.2	29.8	30.4	30.9
40	16.5	18.2	19.7	21.1	22.3	23.5	24.5	25.5	26.3	27.1	27.9	28.6	29.2	29.8	30.4	30.9
41	16.4	18.1	19.6	21.0	22.3	23.4	24.5	25.4	26.3	27.1	27.9	28.6	29.2	29.8	30.3	30.9
42	16.2	18.0	19.6	21.0	22.3	23.4	24.5	25.4	26.3	27.1	27.9	28.5	29.2	29.8	30.3	30.9
43	16.1	17.9	19.5	20.9	22.2	23.4	24.4	25.4	26.3	27.1	27.8	28.5	29.2	29.8	30.3	30.8
44	16.1	17.9	19.5	20.9	22.2	23.3	24.4	25.4	26.3	27.1	27.8	28.5	29.2	29.8	30.3	30.8
45	16.0	17.8	19.4	20.9	22.1	23.3	24.4	25.4	26.2	27.1	27.8	28.5	29.2	29.8	30.3	30.8
46	15.9	17.8	19.4	20.8	22.1	23.3	24.4	25.3	26.2	27.0	27.9	28.5	29.1	29.7	30.3	30.8
47	15.9	17.7	19.3	20.9	22.1	23.3	24.3	25.3	26.2	27.0	27.8	28.5	29.1	29.7	30.3	30.8
48	15.8	17.7	19.3	20.8	22.1	23.3	24.3	25.3	26.2	27.0	27.8	28.5	29.1	29.7	30.3	30.8

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 2.75

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MTL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =2.95

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	37.0	33.9	33.0	32.8	32.9	33.1	33.5	33.8	34.2	34.6	
26	0.0	0.0	0.0	0.0	0.0	37.0	33.0	32.0	31.8	32.0	32.3	32.7	33.1	33.5	34.0	34.4	
27	0.0	0.0	0.0	0.0	38.7	32.3	31.1	30.9	31.1	31.4	31.9	32.4	32.8	33.3	33.8	34.2	
28	0.0	0.0	0.0	51.4	31.9	30.1	29.9	30.1	30.5	31.0	31.6	32.1	32.6	33.1	33.6	34.1	
29	0.0	0.0	0.0	32.2	29.3	28.9	29.1	29.6	30.2	30.7	31.3	31.9	32.5	33.0	33.5	34.0	
30	0.0	0.0	35.9	28.7	27.9	28.1	28.6	29.2	29.8	30.5	31.1	31.7	32.3	32.9	33.4	33.9	
31	0.0	0.0	28.6	26.9	27.0	27.5	28.2	28.9	29.6	30.3	31.0	31.6	32.2	32.8	33.3	33.9	
32	0.0	31.3	26.1	25.9	26.4	27.1	27.9	28.7	29.4	30.2	30.9	31.5	32.1	32.7	33.3	33.8	
33	0.0	25.9	24.8	25.2	25.9	26.8	27.6	28.5	29.3	30.0	30.8	31.4	32.1	32.7	33.2	33.8	
34	29.1	23.8	23.9	24.6	25.6	26.5	27.4	28.3	29.1	29.9	30.7	31.4	32.0	32.6	33.2	33.7	
35	23.5	22.6	23.3	24.3	25.3	26.3	27.3	28.2	29.0	29.8	30.6	31.3	32.0	32.6	33.1	33.7	
36	21.5	21.8	22.8	24.0	25.1	26.1	27.1	28.1	29.0	29.9	30.5	31.2	31.9	32.5	33.1	33.7	
37	20.4	21.3	22.5	23.7	24.9	26.0	27.0	28.0	28.9	29.7	30.5	31.2	31.9	32.5	33.1	33.6	
38	19.6	20.9	22.2	23.5	24.8	25.9	26.9	27.9	28.8	29.7	30.4	31.2	31.8	32.5	33.1	33.6	
39	19.1	20.6	22.0	23.4	24.6	25.8	26.9	27.9	28.8	29.6	30.4	31.1	31.8	32.4	33.0	33.6	
40	18.7	20.3	21.8	23.2	24.5	25.7	26.8	27.8	28.7	29.6	30.4	31.1	31.8	32.4	33.0	33.6	
41	18.4	20.1	21.7	23.1	24.4	25.6	26.7	27.8	28.7	29.5	30.3	31.1	31.8	32.4	33.0	33.6	
42	18.2	20.0	21.6	23.0	24.4	25.6	26.7	27.7	28.7	29.5	30.3	31.1	31.7	32.4	33.0	33.5	
43	18.0	19.8	21.5	23.0	24.3	25.5	26.7	27.7	28.6	29.5	30.3	31.0	31.7	32.4	33.0	33.5	
44	17.8	19.7	21.4	22.9	24.2	25.5	26.6	27.6	28.6	29.5	30.3	31.0	31.7	32.4	33.0	33.5	
45	17.7	19.6	21.3	22.8	24.2	25.4	26.6	27.6	28.6	29.4	30.3	31.0	31.7	32.4	33.0	33.5	
46	17.6	19.5	21.2	22.8	24.2	25.4	26.6	27.6	28.6	29.4	30.2	31.0	31.7	32.3	32.9	33.5	
47	17.5	19.4	21.2	22.7	24.1	25.4	26.5	27.6	28.5	29.4	30.2	31.0	31.7	32.3	32.9	33.5	
48	17.4	19.4	21.1	22.7	24.1	25.4	26.5	27.6	28.5	29.4	30.2	31.0	31.7	32.3	32.9	33.5	
49	17.4	19.3	21.1	22.6	24.1	25.3	26.5	27.5	28.5	29.4	30.2	31.0	31.7	32.3	32.9	33.5	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.25

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.8	37.1	36.0	35.6	35.6	35.7	36.0	36.3	36.6
26	0.0	0.0	0.0	0.0	0.0	0.0	40.6	36.2	35.0	34.6	34.7	34.9	35.2	35.6	36.0	36.4
27	0.0	0.0	0.0	0.0	0.0	41.8	35.4	34.0	33.7	33.8	34.1	34.4	34.8	35.3	35.7	36.2
28	0.0	0.0	0.0	0.0	48.1	35.0	33.1	32.7	32.9	33.2	33.6	34.1	34.5	35.0	35.5	36.0
29	0.0	0.0	0.0	35.1	32.3	31.8	31.9	32.3	32.7	33.2	33.8	34.3	34.8	35.4	35.8	
30	0.0	0.0	0.0	37.2	31.7	30.8	30.9	31.3	31.8	32.4	33.0	33.6	34.1	34.7	35.2	35.7
31	0.0	0.0	71.3	31.5	29.9	29.8	30.3	30.8	31.5	32.1	32.6	33.4	34.0	34.6	35.1	35.6
32	0.0	0.0	32.6	29.1	28.8	29.2	29.8	30.5	31.2	31.9	32.6	33.3	33.9	34.5	35.0	35.6
33	0.0	51.1	28.7	27.7	28.0	28.7	29.4	30.2	31.0	31.7	32.5	33.1	33.8	34.4	35.0	35.5
34	0.0	29.7	26.8	26.8	27.5	28.3	29.2	30.0	30.8	31.6	32.3	33.0	33.7	34.3	34.9	35.5
35	0.0	26.2	25.6	26.2	27.1	28.0	28.9	29.8	30.7	31.5	32.2	33.0	33.6	34.3	34.9	35.4
36	27.9	24.5	24.9	25.7	26.7	27.8	28.7	29.7	30.6	31.4	32.2	32.9	33.6	34.2	34.8	35.4
37	24.0	23.5	24.3	25.4	26.5	27.6	28.6	29.6	30.5	31.3	32.1	32.8	33.5	34.2	34.8	35.3
38	22.3	22.8	23.9	25.1	26.3	27.4	28.5	29.5	30.4	31.2	32.0	32.8	33.5	34.1	34.7	35.3
39	21.2	22.3	23.6	24.9	26.1	27.3	28.4	29.4	30.3	31.2	32.0	32.7	33.4	34.1	34.7	35.3
40	20.5	21.9	23.3	24.7	26.0	27.2	28.3	29.3	30.2	31.1	31.9	32.7	33.4	34.1	34.7	35.3
41	20.0	21.6	23.1	24.5	25.8	27.1	28.2	29.2	30.2	31.1	31.9	32.7	33.4	34.1	34.7	35.3
42	19.7	21.3	22.9	24.4	25.7	27.0	28.1	29.2	30.1	31.0	31.9	32.6	33.4	34.0	34.7	35.2
43	19.4	21.1	22.8	24.3	25.7	26.9	28.1	29.1	30.1	31.0	31.8	32.6	33.3	34.0	34.6	35.2
44	19.1	21.0	22.6	24.2	25.6	26.9	28.0	29.1	30.1	31.0	31.8	32.6	33.3	34.0	34.6	35.2
45	18.9	20.8	22.5	24.1	25.5	26.8	28.0	29.1	30.0	31.0	31.8	32.6	33.3	34.0	34.6	35.2
46	18.8	20.7	22.5	24.0	25.5	26.8	27.9	29.0	30.0	30.9	31.8	32.6	33.3	34.0	34.6	35.2
47	18.6	20.6	22.4	24.0	25.4	26.7	27.9	29.0	30.0	30.9	31.8	32.5	33.3	34.0	34.6	35.2
48	18.5	20.5	22.3	23.9	25.4	26.7	27.9	29.0	30.0	30.9	31.7	32.5	33.3	33.9	34.6	35.2
49	18.4	20.4	22.2	23.9	25.3	26.6	27.9	28.9	30.0	30.9	31.7	32.5	33.3	33.9	34.6	35.2

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.54

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	38.3	34.3	33.5	33.8	34.3	34.8	35.3	35.9	36.4	36.9	37.4	
31	0.0	0.0	0.0	43.2	33.9	32.6	32.5	32.8	33.3	33.9	34.5	35.1	35.7	36.3	36.8	37.3
32	0.0	0.0	0.0	34.2	31.7	31.5	31.8	32.3	33.0	33.6	34.3	34.9	35.5	36.1	36.7	37.2
33	0.0	0.0	37.5	31.1	30.4	30.7	31.3	31.9	32.7	33.4	34.1	34.8	35.4	36.0	36.6	37.2
34	0.0	0.0	31.2	29.5	29.6	30.1	30.9	31.6	32.4	33.2	33.9	34.6	35.3	35.9	36.5	37.1
35	0.0	34.8	28.7	28.4	28.9	29.7	30.6	31.4	32.2	33.0	33.8	34.5	35.2	35.9	36.5	37.0
36	0.0	28.8	27.3	27.7	28.5	29.4	30.3	31.2	32.1	32.9	33.7	34.4	35.1	35.8	36.4	37.0
37	35.7	26.5	26.4	27.1	28.1	29.1	30.1	31.1	32.0	32.8	33.6	34.4	35.1	35.7	36.4	36.9
38	26.9	25.1	25.7	26.7	27.8	28.9	29.9	30.9	31.8	32.7	33.5	34.3	35.0	35.7	36.3	36.9
39	24.3	24.2	25.2	26.4	27.6	28.7	29.8	30.8	31.8	32.6	33.5	34.2	35.0	35.6	36.3	36.9
40	22.8	23.6	24.8	26.1	27.4	28.6	29.7	30.7	31.7	32.6	33.4	34.2	34.9	35.6	36.3	36.9
41	21.9	23.1	24.5	25.9	27.2	28.4	29.6	30.6	31.6	32.5	33.4	34.2	34.9	35.6	36.2	36.8
42	21.3	22.8	24.3	25.7	27.1	28.3	29.5	30.6	31.6	32.5	33.3	34.1	34.9	35.6	36.2	36.8
43	20.8	22.5	24.1	25.6	26.9	28.2	29.4	30.5	31.5	32.4	33.3	34.1	34.8	35.5	36.2	36.8
44	20.5	22.2	23.9	25.4	26.9	28.2	29.3	30.4	31.5	32.4	33.3	34.1	34.8	35.5	36.2	36.8
45	20.2	22.0	23.7	25.3	26.8	28.1	29.3	30.4	31.4	32.4	33.2	34.0	34.8	35.5	36.2	36.8
46	19.9	21.9	23.6	25.2	26.7	28.0	29.2	30.4	31.4	32.3	33.2	34.0	34.8	35.5	36.1	36.8
47	19.7	21.7	23.5	25.1	26.6	28.0	29.2	30.3	31.4	32.3	33.2	34.0	34.8	35.5	36.1	36.7
48	19.6	21.6	23.4	25.1	26.6	27.9	29.2	30.3	31.3	32.3	33.2	34.0	34.7	35.5	36.1	36.7
49	19.4	21.5	23.4	25.0	26.5	27.9	29.1	30.3	31.3	32.3	33.2	34.0	34.7	35.4	36.1	36.7
50	19.3	21.4	23.3	25.0	26.5	27.8	29.1	30.2	31.3	32.2	33.1	34.0	34.7	35.4	36.1	36.7
51	19.2	21.3	23.2	24.9	26.4	27.8	29.1	30.2	31.3	32.2	33.1	33.9	34.7	35.4	36.1	36.7
52	19.1	21.3	23.2	24.9	26.4	27.8	29.0	30.2	31.2	32.2	33.1	33.9	34.7	35.4	36.1	36.7
53	19.1	21.2	23.1	24.8	26.4	27.8	29.0	30.2	31.2	32.2	33.1	33.9	34.7	35.4	36.1	36.7
54	19.0	21.2	23.1	24.8	26.3	27.7	29.0	30.2	31.2	32.2	33.1	33.9	34.7	35.4	36.1	36.7

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 3.75

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	55.1	37.9	35.7	35.3	35.7	36.1	36.6	37.1	37.7	38.2	38.7	
31	0.0	0.0	0.0	0.0	38.6	35.0	34.3	34.4	34.7	35.2	35.8	36.3	36.9	37.5	38.0	38.5
32	0.0	0.0	0.0	42.8	34.6	33.4	33.4	33.7	34.3	34.9	35.5	36.1	36.7	37.3	37.9	38.4
33	0.0	0.0	0.0	34.9	32.5	32.3	32.7	33.2	33.9	34.6	35.3	35.9	36.6	37.2	37.8	38.3
34	0.0	0.0	38.2	31.9	31.3	31.6	32.2	32.9	33.6	34.3	35.1	35.9	36.4	37.1	37.7	38.2
35	0.0	0.0	32.1	30.3	30.4	31.0	31.8	32.6	33.4	34.2	34.9	35.6	36.3	37.0	37.6	38.2
36	0.0	36.1	29.6	29.2	29.8	30.6	31.5	32.3	33.2	34.0	34.9	35.5	36.2	36.9	37.5	38.1
37	0.0	29.9	28.1	28.5	29.3	30.2	31.2	32.1	33.0	33.9	34.7	35.4	36.2	36.8	37.5	38.1
38	38.8	27.4	27.2	27.9	28.9	30.0	31.0	32.0	32.9	33.8	34.6	35.4	36.1	36.8	37.4	38.0
39	28.2	26.0	26.5	27.5	28.6	29.7	30.8	31.8	32.8	33.7	34.5	35.3	36.0	36.7	37.4	38.0
40	25.3	25.0	26.0	27.2	28.4	29.6	30.7	31.7	32.7	33.6	34.5	35.3	36.0	36.7	37.3	38.0
41	23.7	24.4	25.6	26.9	28.2	29.4	30.6	31.6	32.6	33.5	34.4	35.2	36.0	36.7	37.3	37.9
42	22.7	23.9	25.3	26.7	28.0	29.3	30.5	31.5	32.5	33.5	34.4	35.2	35.9	36.6	37.3	37.9
43	22.0	23.5	25.0	26.5	27.9	29.2	30.4	31.5	32.5	33.4	34.3	35.1	35.9	36.6	37.3	37.9
44	21.5	23.2	24.8	26.3	27.8	29.1	30.3	31.4	32.4	33.4	34.3	35.1	35.9	36.6	37.2	37.9
45	21.2	22.9	24.6	26.2	27.7	29.0	30.2	31.4	32.4	33.4	34.2	35.1	35.8	36.6	37.2	37.9
46	20.8	22.7	24.5	26.1	27.6	28.9	30.2	31.3	32.4	33.3	34.2	35.0	35.8	36.5	37.2	37.8
47	20.6	22.6	24.4	26.0	27.5	28.9	30.1	31.3	32.3	33.3	34.2	35.0	35.8	36.5	37.2	37.8
48	20.4	22.4	24.2	25.9	27.4	28.8	30.1	31.2	32.3	33.3	34.2	35.0	35.8	36.5	37.2	37.8
49	20.2	22.3	24.2	25.9	27.4	28.8	30.0	31.2	32.3	33.2	34.1	35.0	35.8	36.5	37.2	37.8
50	20.1	22.2	24.1	25.8	27.3	28.7	30.0	31.2	32.2	33.2	34.1	35.0	35.8	36.5	37.2	37.8
51	19.9	22.1	24.0	25.7	27.3	28.7	30.0	31.1	32.2	33.2	34.1	35.0	35.7	36.5	37.2	37.8
52	19.8	22.0	23.9	25.7	27.2	28.6	29.9	31.1	32.2	33.2	34.1	34.9	35.7	36.5	37.1	37.8
53	19.7	21.9	23.9	25.6	27.2	28.6	29.9	31.1	32.2	33.2	34.1	34.9	35.7	36.5	37.1	37.8
54	19.7	21.9	23.8	25.6	27.2	28.6	29.9	31.1	32.2	33.2	34.1	34.9	35.7	36.4	37.1	37.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND PETA

YARN BULK DENSITY =4.00

PLAIN WEAVE FABRICS

WARP COVER FACTOR (K1)	PETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	45.8	39.2	37.7	37.3	37.4	37.8	38.2	38.6	39.1	39.6	40.1
31	0.0	0.0	0.0	0.0	56.1	39.1	36.9	36.4	36.5	36.8	37.3	37.8	38.3	38.9	39.4	39.9
32	0.0	0.0	0.0	0.0	40.0	36.2	35.4	35.5	35.9	36.4	36.9	37.5	38.1	38.7	39.2	39.8
33	0.0	0.0	0.0	45.0	35.8	34.5	34.5	34.9	35.4	36.0	36.7	37.3	37.9	38.5	39.1	39.7
34	0.0	0.0	0.0	36.4	33.7	33.4	33.8	34.4	35.0	35.7	36.4	37.1	37.8	38.4	39.0	39.6
35	0.0	0.0	40.9	33.2	32.4	32.7	33.3	34.0	34.7	35.5	36.2	37.0	37.6	38.3	38.9	39.5
36	0.0	0.0	33.7	31.5	31.5	32.1	32.9	33.7	34.5	35.3	36.1	36.8	37.5	38.2	38.8	39.4
37	0.0	39.9	30.9	30.4	30.9	31.7	32.5	33.4	34.3	35.2	36.0	36.7	37.4	38.1	38.8	39.4
38	0.0	31.6	29.3	29.6	30.4	31.3	32.3	33.2	34.1	35.0	35.8	36.6	37.4	38.1	38.7	39.3
39	57.9	28.7	28.3	29.0	30.0	31.0	32.1	33.1	34.0	34.9	35.8	36.5	37.3	38.0	38.7	39.3
40	30.5	27.1	27.5	28.5	29.7	30.8	31.9	32.9	33.9	34.8	35.7	36.5	37.2	38.0	38.6	39.2
41	26.8	26.1	27.0	28.2	29.4	30.6	31.7	32.8	33.8	34.7	35.6	36.4	37.2	37.9	38.6	39.2
42	24.9	25.4	26.6	27.9	29.2	30.4	31.6	32.7	33.7	34.7	35.6	36.4	37.2	37.9	38.6	39.2
43	23.8	24.9	26.2	27.6	29.0	30.3	31.5	32.6	33.6	34.6	35.5	36.3	37.1	37.8	38.5	39.2
44	23.0	24.4	25.9	27.4	28.9	30.2	31.4	32.5	33.6	34.6	35.5	36.3	37.1	37.8	38.5	39.1
45	22.5	24.1	25.7	27.3	28.7	30.1	31.3	32.5	33.5	34.5	35.4	36.3	37.1	37.8	38.5	39.1
46	22.0	23.8	25.5	27.1	28.6	30.0	31.2	32.4	33.5	34.5	35.4	36.2	37.0	37.8	38.5	39.1
47	21.7	23.6	25.4	27.0	28.5	29.9	31.2	32.4	33.4	34.4	35.4	36.2	37.0	37.7	38.4	39.1
48	21.4	23.4	25.2	26.9	28.4	29.8	31.1	32.3	33.4	34.4	35.3	36.2	37.0	37.7	38.4	39.1
49	21.2	23.2	25.1	26.8	28.4	29.8	31.1	32.3	33.4	34.4	35.3	36.2	37.0	37.7	38.4	39.1
50	21.0	23.1	25.0	26.7	28.3	29.7	31.0	32.2	33.3	34.3	35.3	36.1	36.9	37.7	38.4	39.1
51	20.8	23.0	24.9	26.7	28.2	29.7	31.0	32.2	33.3	34.3	35.3	36.1	36.9	37.7	38.4	39.0
52	20.7	22.9	24.8	26.6	28.2	29.6	31.0	32.2	33.3	34.3	35.2	36.1	36.9	37.7	38.4	39.0
53	20.6	22.8	24.8	26.5	28.2	29.6	30.9	32.1	33.3	34.3	35.2	36.1	36.9	37.7	38.4	39.0
54	20.5	22.7	24.7	26.5	28.1	29.6	30.9	32.1	33.2	34.3	35.2	36.1	36.9	37.7	38.4	39.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 4.13

PLAIN WEAVE FABRICS

WARP
COVER
FACTOR
(K1)

BETA

	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	56.7	41.6	39.1	38.5	38.4	38.6	39.0	39.4	39.9	40.4	40.8
31	0.0	0.0	0.0	0.0	0.0	42.2	38.5	37.6	37.5	37.7	38.1	38.6	39.1	39.6	40.1	40.7
32	0.0	0.0	0.0	0.0	45.1	38.0	36.7	36.5	36.7	37.2	37.7	38.3	38.8	39.4	40.0	40.5
33	0.0	0.0	0.0	89.5	38.2	35.9	35.5	35.7	36.2	36.8	37.4	38.0	38.6	39.2	39.8	40.4
34	0.0	0.0	0.0	40.3	35.3	34.5	34.7	35.2	35.8	36.5	37.1	37.8	38.5	39.1	39.7	40.3
35	0.0	0.0	65.2	35.3	33.6	33.6	34.1	34.7	35.5	36.2	36.9	37.6	38.3	39.0	39.6	40.2
36	0.0	0.0	37.3	32.9	32.5	32.9	33.6	34.4	35.2	36.0	36.8	37.5	38.2	38.9	39.5	40.1
37	0.0	0.0	32.9	31.5	31.7	32.4	33.2	34.1	35.0	35.8	36.6	37.4	38.1	38.8	39.4	40.0
38	0.0	35.7	30.7	30.5	31.1	32.0	32.9	33.9	34.8	35.7	36.5	37.3	38.0	38.7	39.4	40.0
39	0.0	30.8	29.4	29.8	30.7	31.7	32.7	33.7	34.6	35.5	36.4	37.2	37.9	38.6	39.3	39.9
40	37.8	28.5	28.4	29.3	30.3	31.4	32.5	33.5	34.5	35.4	36.3	37.1	37.9	38.6	39.3	39.9
41	29.3	27.2	27.8	28.9	30.0	31.2	32.3	33.4	34.4	35.3	36.2	37.1	37.8	38.5	39.2	39.9
42	26.5	26.3	27.3	28.5	29.8	31.0	32.2	33.3	34.3	35.3	36.2	37.0	37.8	38.5	39.2	39.8
43	24.9	25.6	26.9	29.2	29.6	30.9	32.1	33.2	34.2	35.2	36.1	36.9	37.7	38.5	39.2	39.8
44	23.9	25.1	26.6	28.0	29.4	30.7	32.0	33.1	34.2	35.1	36.1	36.9	37.7	38.4	39.1	39.8
45	23.2	24.7	26.3	27.8	29.3	30.6	31.9	33.0	34.1	35.1	36.0	36.9	37.7	38.4	39.1	39.8
46	22.7	24.4	26.1	27.7	29.2	30.5	31.8	33.0	34.0	35.0	36.0	36.8	37.6	38.4	39.1	39.7
47	22.3	24.1	25.9	27.5	29.1	30.4	31.7	32.9	34.0	35.0	35.9	36.8	37.6	38.4	39.1	39.7
48	22.0	23.9	25.7	27.4	29.0	30.4	31.7	32.9	34.0	35.0	35.9	36.8	37.6	38.4	39.1	39.7
49	21.7	23.7	25.6	27.3	28.9	30.3	31.6	32.8	33.9	34.9	35.9	36.8	37.6	38.3	39.0	39.7
50	21.5	23.6	25.5	27.2	28.8	30.3	31.6	32.8	33.9	34.9	35.9	36.7	37.6	38.3	39.0	39.7
51	21.3	23.4	25.4	27.1	28.7	30.2	31.5	32.7	33.9	34.9	35.8	36.7	37.5	38.3	39.0	39.7
52	21.1	23.3	25.3	27.1	28.7	30.2	31.5	32.7	33.8	34.9	35.8	36.7	37.5	38.3	39.0	39.7
53	21.0	23.2	25.2	27.0	28.6	30.1	31.5	32.7	33.8	34.8	35.8	36.7	37.5	38.3	39.0	39.7
54	20.9	23.1	25.2	27.0	28.6	30.1	31.4	32.7	33.8	34.8	35.8	36.7	37.5	38.3	39.0	39.7

HL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =4.60

PLAIN WFAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	45.2	39.5	38.4	38.3	38.6	39.1	39.7	40.3	40.9	41.5	42.1	42.7
35	0.0	0.0	0.0	61.4	39.7	37.6	37.3	37.6	38.1	38.8	39.4	40.1	40.7	41.4	42.0	42.6
36	0.0	0.0	0.0	41.6	37.0	36.3	36.5	37.1	37.7	38.4	39.2	39.9	40.6	41.2	41.9	42.5
37	0.0	0.0	61.2	37.0	35.4	35.4	35.9	36.6	37.4	38.2	39.0	39.7	40.4	41.1	41.8	42.4
38	0.0	0.0	39.3	34.7	34.3	34.7	35.5	36.3	37.1	38.0	38.8	39.6	40.3	41.0	41.7	42.3
39	0.0	0.0	34.8	33.3	33.5	34.2	35.1	36.0	36.9	37.8	38.6	39.4	40.2	40.9	41.6	42.3
40	0.0	38.6	32.6	32.3	32.9	33.8	34.8	35.8	36.7	37.7	38.5	39.3	40.1	40.9	41.6	42.2
41	0.0	33.0	31.2	31.6	32.5	33.5	34.5	35.6	36.6	37.5	38.4	39.3	40.1	40.8	41.5	42.2
42	46.1	30.5	30.2	31.0	32.1	33.2	34.3	35.4	36.5	37.4	38.3	39.2	40.0	40.7	41.5	42.1
43	32.2	29.0	29.5	30.6	31.8	33.0	34.2	35.3	36.3	37.3	38.3	39.1	39.9	40.7	41.4	42.1
44	28.6	28.0	28.9	30.2	31.5	32.8	34.0	35.2	36.2	37.2	38.2	39.1	39.9	40.7	41.4	42.1
45	26.8	27.2	28.5	29.9	31.3	32.6	33.9	35.1	36.2	37.2	38.1	39.0	39.8	40.6	41.3	42.0
46	25.6	26.7	28.2	29.7	31.1	32.5	33.8	35.0	36.1	37.1	38.1	39.0	39.9	40.6	41.3	42.0
47	24.8	26.2	27.9	29.5	31.0	32.4	33.7	34.9	36.0	37.1	38.0	38.9	39.8	40.6	41.3	42.0
48	24.2	25.9	27.6	29.3	30.8	32.3	33.6	34.8	36.0	37.0	38.0	38.9	39.7	40.5	41.3	42.0
49	23.7	25.6	27.4	29.1	30.7	32.2	33.5	34.8	35.9	37.0	38.0	38.9	39.7	40.5	41.2	41.9
50	23.4	25.4	27.3	29.0	30.6	32.1	33.5	34.7	35.9	36.9	37.9	38.8	39.7	40.5	41.2	41.9
51	23.1	25.2	27.1	28.9	30.5	32.0	33.4	34.7	35.8	36.9	37.9	38.8	39.7	40.5	41.2	41.9
52	22.8	25.0	27.0	28.8	30.5	32.0	33.4	34.6	35.8	36.9	37.9	38.8	39.7	40.5	41.2	41.9
53	22.6	24.8	26.9	28.7	30.4	31.9	33.3	34.6	35.8	36.8	37.8	38.8	39.6	40.4	41.2	41.9
54	22.4	24.7	26.8	28.6	30.3	31.9	33.3	34.6	35.7	36.8	37.8	38.8	39.6	40.4	41.2	41.9
55	22.3	24.6	26.7	28.6	30.3	31.8	33.2	34.5	35.7	36.8	37.8	38.7	39.6	40.4	41.2	41.9
56	22.1	24.5	26.6	28.5	30.2	31.8	33.2	34.5	35.7	36.8	37.8	38.7	39.6	40.4	41.2	41.9
57	22.0	24.4	26.5	28.5	30.2	31.7	33.2	34.5	35.7	36.8	37.8	38.7	39.6	40.4	41.1	41.9
58	21.9	24.3	26.5	28.4	30.1	31.7	33.1	34.4	35.6	36.7	37.8	38.7	39.6	40.4	41.1	41.8

MIL-HDBK-741 (CL)

(B) THREE-HARNESS WEAVE FABRICS

TABLE 1-3
MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.54
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	21.1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	20.0	19.2	18.8	18.6
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.7	19.7	18.5	18.0	17.9	17.8	17.8	17.9	17.9
13	0.0	0.0	0.0	0.0	0.0	0.0	23.0	18.3	17.4	17.1	17.0	17.1	17.1	17.3	17.4	17.5
14	0.0	0.0	0.0	0.0	0.0	17.4	16.4	16.2	16.2	16.3	16.4	16.6	16.8	17.0	17.1	17.3
15	0.0	0.0	0.0	17.3	15.5	15.2	15.3	15.4	15.7	15.9	16.1	16.4	16.6	16.8	17.0	17.2
16	0.0	0.0	14.9	14.2	14.5	14.5	14.8	15.1	15.4	15.7	16.0	16.2	16.5	16.7	16.9	17.1
17	21.4	13.2	13.1	13.3	13.7	14.1	14.5	14.9	15.2	15.5	15.8	16.1	16.4	16.6	16.9	17.1
18	11.8	11.9	12.4	12.9	13.4	13.9	14.3	14.7	15.1	15.5	15.8	16.1	16.3	16.6	16.9	17.1
19	10.7	11.4	12.0	12.7	13.2	13.7	14.2	14.6	15.0	15.4	15.7	16.0	16.3	16.6	16.8	17.0
20	10.3	11.1	11.8	12.5	13.1	13.7	14.1	14.6	15.0	15.4	15.7	16.0	16.3	16.5	16.8	17.0
21	10.0	10.9	11.7	12.4	13.0	13.6	14.1	14.5	15.0	15.3	15.7	16.0	16.3	16.5	16.8	17.0
22	9.9	10.8	11.6	12.3	13.0	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3	16.5	16.8	17.0
23	9.7	10.7	11.6	12.3	12.9	13.5	14.0	14.5	14.9	15.3	15.6	16.0	16.2	16.5	16.8	17.0
24	9.7	10.7	11.5	12.3	12.9	13.5	14.0	14.5	14.9	15.3	15.6	16.0	16.2	16.5	16.8	17.0
25	9.6	10.6	11.5	12.2	12.9	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	16.7	17.0
26	9.6	10.6	11.5	12.2	12.9	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	16.7	17.0
27	9.6	10.6	11.4	12.2	12.9	13.5	14.0	14.4	14.9	15.3	15.6	15.9	16.2	16.5	16.7	17.0
28	9.5	10.6	11.4	12.2	12.9	13.4	14.0	14.4	14.9	15.3	15.6	15.9	16.2	16.5	16.7	17.0
29	9.5	10.5	11.4	12.2	12.8	13.4	14.0	14.4	14.9	15.3	15.6	15.9	16.2	16.5	16.7	17.0
30	9.5	10.5	11.4	12.2	12.8	13.4	14.0	14.4	14.9	15.2	15.6	15.9	16.2	16.5	16.7	17.0
31	9.5	10.5	11.4	12.2	12.8	13.4	14.0	14.4	14.9	15.2	15.6	15.9	16.2	16.5	16.7	17.0
32	9.5	10.5	11.4	12.2	12.8	13.4	14.0	14.4	14.9	15.2	15.6	15.9	16.2	16.5	16.7	17.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.56

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	22.7
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4	21.5	20.1	19.5	19.2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	19.5	18.8	18.5	18.3	18.3	18.3	18.3
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	18.3	17.7	17.6	17.5	17.6	17.7	17.8	17.8	17.0
14	0.0	0.0	0.0	0.0	0.0	19.4	17.3	16.8	16.7	16.7	16.9	17.0	17.2	17.3	17.5	17.5	17.7
15	0.0	0.0	0.0	22.3	16.5	15.9	15.8	15.9	16.1	16.3	16.5	16.7	16.9	17.2	17.4	17.4	17.5
16	0.0	0.0	16.6	14.9	14.8	14.9	15.2	15.4	15.7	16.0	16.3	16.6	16.8	17.0	17.3	17.3	17.5
17	0.0	14.4	13.6	13.8	14.1	14.5	14.8	15.2	15.5	15.9	16.2	16.5	16.7	17.0	17.2	17.4	17.4
18	12.7	12.4	12.8	13.3	13.7	14.2	14.6	15.0	15.4	15.8	16.1	16.4	16.7	16.9	17.2	17.4	17.4
19	11.2	11.7	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.0	16.3	16.6	16.9	17.1	17.4	17.4
20	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.3	16.6	16.9	17.1	17.3	17.3
21	10.3	11.2	12.0	12.7	13.3	13.9	14.4	14.8	15.2	15.6	16.0	16.3	16.6	16.8	17.1	17.3	17.3
22	10.1	11.0	11.9	12.6	13.2	13.8	14.3	14.8	15.2	15.6	15.9	16.3	16.6	16.8	17.1	17.3	17.3
23	10.0	10.9	11.8	12.5	13.2	13.8	14.3	14.8	15.2	15.6	15.9	16.2	16.5	16.8	17.1	17.3	17.3
24	9.9	10.9	11.7	12.5	13.2	13.8	14.3	14.8	15.2	15.6	15.9	16.2	16.5	16.8	17.1	17.3	17.3
25	9.8	10.8	11.7	12.5	13.1	13.7	14.3	14.7	15.2	15.6	15.9	16.2	16.5	16.8	17.1	17.3	17.3
26	9.8	10.8	11.7	12.4	13.1	13.7	14.2	14.7	15.2	15.5	15.9	16.2	16.5	16.8	17.1	17.3	17.3
27	9.7	10.8	11.7	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.1	17.3	17.3
28	9.7	10.9	11.6	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.3
29	9.7	10.7	11.6	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.3
30	9.7	10.7	11.6	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.3
31	9.7	10.7	11.6	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.3
32	9.7	10.7	11.6	12.4	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN RULK DENSITY =0.58
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.3
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	21.3	20.3	19.9
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8	20.9	19.6	19.1	18.9	18.8	18.8
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3	19.4	18.5	18.1	18.0	18.0	18.1	18.2	18.3
14	0.0	0.0	0.0	0.0	0.0	24.3	18.4	17.5	17.2	17.2	17.3	17.4	17.5	17.7	17.9	18.0
15	0.0	0.0	0.0	0.0	18.0	16.6	16.3	16.3	16.5	16.7	16.9	17.1	17.3	17.5	17.7	17.9
16	0.0	0.0	21.3	15.9	15.3	15.4	15.6	15.8	16.1	16.4	16.6	16.9	17.1	17.4	17.6	17.8
17	0.0	16.5	14.3	14.3	14.5	14.9	15.2	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.5	17.7
18	14.2	13.0	13.2	13.6	14.1	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0	17.2	17.5	17.7
19	11.7	12.1	12.7	13.3	13.8	14.3	14.8	15.2	15.6	16.0	16.3	16.6	16.9	17.2	17.4	17.7
20	10.9	11.7	12.4	13.1	13.7	14.2	14.7	15.2	15.6	15.9	16.3	16.6	16.9	17.2	17.4	17.6
21	10.6	11.4	12.2	12.9	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.6	16.9	17.1	17.4	17.6
22	10.3	11.3	12.1	12.8	13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.6	16.9	17.1	17.4	17.6
23	10.2	11.2	12.0	12.8	13.4	14.0	14.6	15.0	15.5	15.9	16.2	16.5	16.8	17.1	17.4	17.6
24	10.1	11.1	12.0	12.7	13.4	14.0	14.5	15.0	15.5	15.8	16.2	16.5	16.8	17.1	17.4	17.6
25	10.0	11.0	11.9	12.7	13.4	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	17.6
26	10.0	11.0	11.9	12.7	13.4	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	17.6
27	9.9	11.0	11.9	12.7	13.3	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	17.6
28	9.9	11.0	11.9	12.6	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	17.6
29	9.9	10.9	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.4	17.6
30	9.9	10.9	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.3	17.6
31	9.9	10.9	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.3	17.6
32	9.8	10.9	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	17.3	17.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.65

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	23.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.3	22.3	21.2	20.8	20.5	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	20.8	20.1	19.8	19.7	19.7	19.7	
14	0.0	0.0	0.0	0.0	0.0	0.0	21.6	19.7	19.1	19.9	18.9	18.9	18.9	19.0	19.2	19.3	
15	0.0	0.0	0.0	0.0	0.0	21.7	18.9	18.2	18.1	18.1	18.2	18.3	18.5	18.7	18.9	19.1	
16	0.0	0.0	0.0	0.0	18.4	17.3	17.1	17.2	17.4	17.6	17.8	18.0	18.3	18.5	18.7	18.9	
17	0.0	0.0	20.8	16.6	16.2	16.2	16.4	16.7	17.0	17.3	17.6	17.9	18.1	18.4	18.6	18.8	
18	0.0	17.4	15.2	15.1	15.3	15.7	16.1	16.4	16.8	17.1	17.5	17.9	18.0	18.3	18.5	18.8	
19	15.4	13.9	14.0	14.4	14.9	15.4	15.8	16.3	16.7	17.0	17.4	17.7	18.0	18.2	18.5	18.7	
20	12.5	12.9	13.5	14.1	14.7	15.2	15.7	16.1	16.6	16.9	17.3	17.6	17.9	18.2	18.5	18.7	
21	11.7	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.5	16.9	17.2	17.6	17.9	18.2	18.4	18.7	
22	11.2	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.2	18.4	18.7	
23	11.0	12.0	12.9	13.6	14.3	14.9	15.5	16.0	16.4	16.8	17.2	17.5	17.9	18.1	18.4	18.7	
24	10.8	11.9	12.8	13.6	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.4	18.6	
25	10.7	11.8	12.7	13.5	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.4	18.6	
26	10.6	11.7	12.6	13.5	14.2	14.8	15.4	15.9	16.3	16.8	17.1	17.5	17.8	18.1	18.4	18.6	
27	10.6	11.7	12.6	13.4	14.2	14.8	15.4	15.9	16.3	16.8	17.1	17.5	17.8	18.1	18.4	18.6	
28	10.5	11.6	12.6	13.4	14.1	14.8	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.6	
29	10.5	11.6	12.6	13.4	14.1	14.8	15.3	15.9	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.6	
30	10.5	11.6	12.5	13.4	14.1	14.8	15.3	15.9	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.6	
31	10.5	11.6	12.5	13.4	14.1	14.8	15.3	15.8	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.6	
32	10.4	11.6	12.5	13.4	14.1	14.7	15.3	15.8	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.6	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY ≈ 0.66

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.67

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	24.3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.1	23.7	22.1	21.4	21.1	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.7	21.9	20.8	20.4	20.2	20.1	20.1	
14	0.0	0.0	0.0	0.0	0.0	0.0	24.5	20.7	19.8	19.5	19.3	19.4	19.4	19.4	19.5	19.6	
15	0.0	0.0	0.0	0.0	0.0	28.8	20.0	18.9	18.6	18.5	18.6	18.7	18.9	19.0	19.2	19.4	
16	0.0	0.0	0.0	0.0	20.1	18.1	17.7	17.6	17.8	17.9	18.2	18.4	18.6	18.8	19.0	19.2	
17	0.0	0.0	0.0	17.7	16.8	16.7	16.8	17.1	17.3	17.6	17.9	18.2	18.4	18.7	18.9	19.1	
18	0.0	24.4	16.0	15.6	15.7	16.0	16.4	16.7	17.1	17.4	17.8	18.1	18.3	18.6	18.8	19.1	
19	19.9	14.6	14.5	14.8	15.2	15.7	16.1	16.5	16.9	17.3	17.6	18.0	18.3	18.5	18.9	19.0	
20	13.2	13.3	13.8	14.4	14.9	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.2	18.5	18.8	19.0	
21	12.1	12.7	13.5	14.1	14.8	15.3	15.9	16.3	16.8	17.2	17.5	17.9	18.2	18.5	18.7	19.0	
22	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.7	19.0	
23	11.2	12.2	13.1	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	
24	11.0	12.1	13.0	13.8	14.5	15.1	15.7	16.2	16.6	17.1	17.4	17.8	18.1	18.4	18.7	18.9	
25	10.9	12.0	12.9	13.7	14.4	15.1	15.6	16.2	16.6	17.0	17.4	17.8	18.1	18.4	18.7	18.9	
26	10.8	11.9	12.9	13.7	14.4	15.0	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4	18.7	18.9	
27	10.8	11.9	12.8	13.7	14.4	15.0	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4	18.7	18.9	
28	10.7	11.8	12.8	13.6	14.4	15.0	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.4	18.7	18.9	
29	10.7	11.8	12.8	13.6	14.3	15.0	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4	18.7	18.9	
30	10.6	11.8	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4	18.7	18.9	
31	10.6	11.8	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4	18.6	18.9	
32	10.6	11.7	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4	18.6	18.9	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.68

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6	25.2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	22.6	21.8	21.4
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	22.6	21.7	20.7	20.4	20.3	20.3	
14	0.0	0.0	0.0	0.0	0.0	0.0	27.5	21.4	20.2	19.7	19.6	19.6	19.6	19.6	19.7	19.8	
15	0.0	0.0	0.0	0.0	0.0	20.7	19.3	18.9	18.8	18.8	18.9	19.1	19.2	19.4	19.6		
16	0.0	0.0	0.0	0.0	21.5	19.5	18.0	17.9	18.0	18.1	18.3	18.6	18.9	19.0	19.2	19.4	
17	0.0	0.0	0.0	18.4	17.1	16.9	17.0	17.3	17.5	17.8	18.1	18.3	18.6	18.8	19.1	19.3	
18	0.0	0.0	16.5	15.9	16.0	16.2	16.6	16.9	17.3	17.6	17.9	18.2	18.5	18.7	19.0	19.2	
19	0.0	15.0	14.7	15.0	15.4	15.8	16.3	16.7	17.1	17.4	17.8	18.1	18.4	18.7	18.9	19.2	
20	13.6	13.5	14.0	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.7	18.0	18.3	18.6	18.9	19.1	
21	12.3	12.9	13.6	14.3	14.9	15.5	16.0	16.5	16.9	17.3	17.7	18.0	18.3	18.6	18.9	19.1	
22	11.7	12.6	13.4	14.1	14.8	15.4	15.9	16.4	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.1	
23	11.4	12.3	13.2	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6	18.8	19.1	
24	11.2	12.2	13.1	13.9	14.6	15.2	15.8	16.3	16.8	17.2	17.6	17.9	18.2	18.5	18.8	19.1	
25	11.0	12.1	13.0	13.8	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.2	18.5	18.8	19.1	
26	10.9	12.0	13.0	13.8	14.5	15.2	15.7	16.3	16.7	17.2	17.5	17.9	18.2	18.5	18.8	19.1	
27	10.9	12.0	12.9	13.8	14.5	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.1	
28	10.8	11.9	12.9	13.7	14.5	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.1	
29	10.8	11.9	12.9	13.7	14.5	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.1	
30	10.7	11.9	12.8	13.7	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.0	
31	10.7	11.8	12.8	13.7	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.9	19.0	
32	10.7	11.8	12.8	13.7	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.0	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN BULK DENSITY = 0.69

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RFTA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	14.0	13.8	14.2	14.7	15.2	15.8	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.0	19.3	19.3
21	12.5	13.1	13.8	14.4	15.0	15.6	16.1	16.6	17.0	17.4	17.8	18.1	18.5	18.7	19.0	19.3	19.3
22	11.8	12.7	13.5	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	18.1	18.4	18.7	19.0	19.2	19.2
23	11.5	12.5	13.3	14.1	14.8	15.4	16.0	16.5	16.9	17.3	17.7	18.1	18.4	18.7	19.0	19.2	19.2
24	11.3	12.3	13.2	14.0	14.7	15.4	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.7	19.0	19.2	19.2
25	11.1	12.2	13.1	13.9	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.2	19.2
26	11.0	12.1	13.1	13.9	14.6	15.3	15.9	16.4	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.2	19.2
27	10.9	12.1	13.0	13.9	14.6	15.3	15.8	16.4	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.2	19.2
28	10.9	12.0	13.0	13.9	14.6	15.2	15.8	16.4	16.9	17.3	17.7	18.0	18.3	18.7	19.0	19.2	19.2
29	10.8	12.0	13.0	13.8	14.6	15.2	15.8	16.3	16.8	17.3	17.7	18.0	18.3	18.6	18.9	19.2	19.2
30	10.8	12.0	12.9	13.8	14.5	15.2	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.2	19.2
31	10.8	11.9	12.9	13.8	14.5	15.2	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.2	19.2
32	10.8	11.9	12.9	13.8	14.5	15.2	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.2	19.2

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.70
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.6
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	23.8	22.6	22.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	22.1	21.3	21.0	20.8	20.8
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	21.0	20.3	20.1	20.0	20.0	20.1	20.2	20.2
15	0.0	0.0	0.0	0.0	0.0	22.7	20.1	19.4	19.2	19.2	19.3	19.4	19.6	19.7	19.9	19.9
16	0.0	0.0	0.0	0.0	28.5	19.6	18.6	18.4	18.5	18.7	18.9	19.1	19.3	19.5	19.7	19.7
17	0.0	0.0	0.0	20.4	17.8	17.4	17.4	17.6	17.9	18.1	18.4	18.6	18.9	19.1	19.4	19.6
18	0.0	0.0	17.9	16.5	16.4	16.6	16.9	17.2	17.6	17.9	18.2	18.5	18.8	19.0	19.3	19.5
19	0.0	16.1	15.3	15.4	15.8	16.2	16.6	17.0	17.4	17.7	18.1	18.4	18.7	19.0	19.2	19.5
20	14.6	14.0	14.4	14.9	15.4	15.9	16.4	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.2	19.4
21	12.7	13.2	13.9	14.6	15.2	15.7	16.3	16.7	17.2	17.6	17.9	18.3	18.6	18.9	19.2	19.4
22	12.0	12.8	13.6	14.4	15.0	15.6	16.2	16.7	17.1	17.5	17.9	18.2	18.6	18.9	19.1	19.4
23	11.6	12.6	13.4	14.2	14.9	15.5	16.1	16.6	17.1	17.5	17.9	18.2	18.5	18.8	19.1	19.4
24	11.4	12.4	13.3	14.1	14.8	15.5	16.0	16.6	17.0	17.4	17.8	18.2	18.5	18.8	19.1	19.4
25	11.2	12.3	13.2	14.1	14.8	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.8	19.1	19.4
26	11.1	12.2	13.2	14.0	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.8	19.1	19.3
27	11.0	12.2	13.1	14.0	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.8	19.1	19.3
28	11.0	12.1	13.1	13.9	14.7	15.4	15.9	16.5	17.0	17.4	17.8	18.1	18.5	18.8	19.1	19.3
29	10.9	12.1	13.1	13.9	14.7	15.3	15.9	16.5	16.9	17.4	17.8	18.1	18.5	18.8	19.1	19.3
30	10.9	12.1	13.0	13.9	14.7	15.3	15.9	16.5	16.9	17.4	17.8	18.1	18.5	18.8	19.1	19.3
31	10.9	12.0	13.0	13.9	14.6	15.3	15.9	16.4	16.9	17.4	17.8	18.1	18.5	18.8	19.1	19.3
32	10.9	12.0	13.0	13.9	14.6	15.3	15.9	16.4	16.9	17.4	17.8	18.1	18.5	18.8	19.1	19.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.71

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.5
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	24.6	23.0	22.3	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.6	22.7	21.7	21.3	21.1	21.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1	21.5	20.7	20.4	20.2	20.2	20.3	20.4	
15	0.0	0.0	0.0	0.0	0.0	0.0	24.3	20.6	19.8	19.5	19.4	19.5	19.6	19.7	19.9	20.1	
16	0.0	0.0	0.0	0.0	0.0	20.2	18.9	18.6	18.6	18.7	18.9	19.1	19.3	19.5	19.7	19.9	
17	0.0	0.0	0.0	22.2	18.3	17.7	17.7	17.8	18.0	18.3	18.5	18.8	19.1	19.3	19.5	19.8	
18	0.0	0.0	18.8	16.8	16.6	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2	19.4	19.7	
19	0.0	16.8	15.6	15.6	15.9	16.3	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.1	19.4	19.6	
20	15.3	14.3	14.6	15.0	15.5	16.0	16.5	17.0	17.4	17.8	18.1	18.5	18.8	19.1	19.3	19.6	
21	13.0	13.4	14.1	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.7	19.0	19.3	19.5	
22	12.2	13.0	13.8	14.5	15.1	15.7	16.3	16.8	17.2	17.6	18.0	18.4	18.7	19.0	19.3	19.5	
23	11.7	12.7	13.6	14.3	15.0	15.7	16.2	16.7	17.2	17.6	18.0	18.3	18.7	19.0	19.3	19.5	
24	11.5	12.5	13.4	14.2	15.0	15.6	16.2	16.7	17.2	17.6	18.0	18.3	18.7	19.0	19.2	19.5	
25	11.3	12.4	13.3	14.2	14.9	15.5	16.1	16.7	17.1	17.6	17.9	18.3	18.6	18.9	19.2	19.5	
26	11.2	12.3	13.3	14.1	14.9	15.5	16.1	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
27	11.1	12.3	13.2	14.1	14.8	15.5	16.1	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
28	11.1	12.2	13.2	14.0	14.8	15.5	16.1	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
29	11.0	12.2	13.2	14.0	14.8	15.4	16.0	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
30	11.0	12.1	13.1	14.0	14.8	15.4	16.0	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
31	11.0	12.1	13.1	14.0	14.8	15.4	16.0	16.6	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	
32	10.9	12.1	13.1	14.0	14.7	15.4	16.0	16.6	17.0	17.5	17.9	18.3	18.6	18.9	19.2	19.5	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =0.72

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.9
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5	25.4	23.5	22.7
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4	23.3	22.1	21.6	21.3	21.2	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.6	22.0	21.0	20.6	20.5	20.4	20.5	20.6	
15	0.0	0.0	0.0	0.0	0.0	0.0	26.9	21.2	20.1	19.7	19.7	19.7	19.8	19.9	20.1	20.2	
16	0.0	0.0	0.0	0.0	0.0	21.0	19.3	18.9	18.8	18.9	19.0	19.2	19.4	19.6	19.8	20.0	
17	0.0	0.0	0.0	25.7	18.8	18.0	17.9	18.0	18.2	18.5	18.7	19.0	19.2	19.4	19.7	19.9	
18	0.0	0.0	20.7	17.2	16.9	17.0	17.2	17.6	17.9	18.2	18.5	18.8	19.1	19.3	19.6	19.8	
19	0.0	17.8	15.9	15.8	16.1	16.5	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.3	19.5	19.8	
20	16.2	14.6	14.8	15.2	15.7	16.2	16.7	17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.5	19.7	
21	13.2	13.6	14.2	14.8	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.9	19.2	19.4	19.7	
22	12.3	13.1	13.9	14.6	15.3	15.9	16.4	16.9	17.4	17.8	18.2	18.5	18.8	19.1	19.4	19.7	
23	11.9	12.8	13.7	14.5	15.2	15.8	16.3	16.8	17.3	17.7	18.1	18.5	18.8	19.1	19.4	19.6	
24	11.6	12.6	13.6	14.4	15.1	15.7	16.3	16.8	17.3	17.7	18.1	18.5	18.8	19.1	19.4	19.6	
25	11.4	12.5	13.5	14.3	15.0	15.7	16.2	16.8	17.2	17.7	18.1	18.4	18.8	19.1	19.4	19.6	
26	11.3	12.4	13.4	14.2	15.0	15.6	16.2	16.7	17.2	17.7	18.1	18.4	18.8	19.1	19.4	19.6	
27	11.2	12.4	13.3	14.2	14.9	15.6	16.2	16.7	17.2	17.7	18.0	18.4	18.8	19.1	19.3	19.6	
28	11.2	12.3	13.3	14.2	14.9	15.6	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.1	19.3	19.6	
29	11.1	12.3	13.3	14.1	14.9	15.6	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.1	19.3	19.6	
30	11.1	12.2	13.2	14.1	14.9	15.5	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.0	19.3	19.6	
31	11.0	12.2	13.2	14.1	14.9	15.5	16.1	16.7	17.2	17.6	18.0	18.4	18.7	19.0	19.3	19.6	
32	11.0	12.2	13.2	14.1	14.8	15.5	16.1	16.7	17.2	17.6	18.0	18.4	18.7	19.0	19.3	19.6	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.73

THREE-HARNESS WEAVE FARRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	24.1	23.1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	24.0	22.5	21.9	21.6	21.4	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	22.6	21.4	20.9	20.7	20.7	20.7	20.8	
15	0.0	0.0	0.0	0.0	0.0	0.0	34.5	21.8	20.5	20.0	19.9	19.9	20.0	20.1	20.2	20.4	
16	0.0	0.0	0.0	0.0	0.0	0.0	22.0	19.7	19.2	19.0	19.1	19.2	19.4	19.6	19.8	20.0	20.2
17	0.0	0.0	0.0	0.0	0.0	0.0	19.3	18.3	18.1	18.2	18.4	18.6	18.9	19.1	19.4	19.6	20.1
18	0.0	0.0	22.4	17.6	17.1	17.2	17.4	17.7	18.0	18.3	18.6	18.9	19.2	19.5	19.7	20.0	
19	0.0	19.2	16.2	16.1	16.3	16.7	17.0	17.4	17.8	18.2	18.5	18.8	19.1	19.4	19.7	19.9	
20	17.5	14.9	15.0	15.4	15.8	16.3	16.8	17.2	17.7	18.0	18.4	18.7	19.0	19.3	19.6	19.9	
21	13.5	13.8	14.4	15.0	15.6	16.1	16.6	17.1	17.6	18.0	18.3	18.7	19.0	19.3	19.6	19.8	
22	12.5	13.3	14.0	14.7	15.4	16.0	16.5	17.0	17.5	17.9	18.3	18.6	19.0	19.3	19.5	19.8	
23	12.0	13.0	13.8	14.6	15.3	15.9	16.5	17.0	17.4	17.9	18.3	18.6	18.9	19.2	19.5	19.8	
24	11.7	12.8	13.7	14.5	15.2	15.8	16.4	16.9	17.4	17.8	18.2	18.6	18.9	19.2	19.5	19.8	
25	11.5	12.6	13.6	14.4	15.1	15.8	16.4	16.9	17.4	17.8	18.2	18.6	18.9	19.2	19.5	19.8	
26	11.4	12.5	13.5	14.3	15.1	15.7	16.3	16.9	17.4	17.8	18.2	18.6	18.9	19.2	19.5	19.8	
27	11.3	12.4	13.4	14.3	15.0	15.7	16.3	16.8	17.3	17.8	18.2	18.5	18.9	19.2	19.5	19.8	
28	11.2	12.4	13.4	14.3	15.0	15.7	16.3	16.8	17.3	17.8	18.2	18.5	18.9	19.2	19.5	19.7	
29	11.2	12.4	13.4	14.2	15.0	15.7	16.3	16.8	17.3	17.8	18.2	18.5	18.9	19.2	19.5	19.7	
30	11.2	12.3	13.3	14.2	15.0	15.7	16.3	16.8	17.3	17.7	18.2	18.5	18.9	19.2	19.5	19.7	
31	11.1	12.3	13.3	14.2	15.0	15.6	16.3	16.8	17.3	17.7	18.1	18.5	18.9	19.2	19.5	19.7	
32	11.1	12.3	13.3	14.2	15.0	15.6	16.2	16.8	17.3	17.7	18.1	18.5	18.9	19.2	19.5	19.7	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.74

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.75

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	35.7	15.7	15.4	15.7	16.2	16.6	17.1	17.5	17.9	18.3	18.7	19.0	19.3	19.6	19.9	20.1	
21	14.3	14.2	14.7	15.3	15.9	16.4	16.9	17.4	17.8	18.2	18.6	19.0	19.3	19.6	19.8	20.1	
22	12.9	13.6	14.3	15.0	15.7	16.2	16.8	17.3	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.1	
23	12.3	13.2	14.1	14.8	15.5	16.1	16.7	17.2	17.7	18.1	18.5	18.9	19.2	19.5	19.8	20.1	
24	12.0	13.0	13.9	14.7	15.4	16.1	16.6	17.2	17.6	18.1	18.5	18.8	19.2	19.5	19.8	20.0	
25	11.8	12.8	13.8	14.6	15.4	16.0	16.6	17.1	17.6	18.1	18.5	18.8	19.2	19.5	19.8	20.0	
26	11.6	12.7	13.7	14.5	15.3	16.0	16.6	17.1	17.6	18.0	18.4	18.8	19.2	19.5	19.8	20.0	
27	11.5	12.6	13.6	14.5	15.3	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.5	19.8	20.0	
28	11.4	12.6	13.6	14.5	15.2	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.5	19.7	20.0	
29	11.4	12.5	13.5	14.4	15.2	15.9	16.5	17.1	17.5	18.0	18.4	18.8	19.1	19.4	19.7	20.0	
30	11.3	12.5	13.5	14.4	15.2	15.9	16.5	17.0	17.5	18.0	18.4	18.8	19.1	19.4	19.7	20.0	
31	11.3	12.5	13.5	14.4	15.2	15.9	16.5	17.0	17.5	18.0	18.4	18.8	19.1	19.4	19.7	20.0	
32	11.3	12.5	13.5	14.4	15.2	15.9	16.5	17.0	17.5	18.0	18.4	18.8	19.1	19.4	19.7	20.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.76

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.6	26.1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	24.0	22.9	22.2
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	22.7	21.8	21.5	21.3	21.3	21.3
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	21.7	20.9	20.6	20.5	20.6	20.6	20.9	20.9
16	0.0	0.0	0.0	0.0	0.0	29.0	21.2	20.1	19.8	19.7	19.8	19.9	20.1	20.3	20.5	20.7
17	0.0	0.0	0.0	0.0	21.8	19.4	18.9	18.8	18.9	19.1	19.4	19.6	19.8	20.1	20.3	20.5
18	0.0	0.0	0.0	19.3	18.0	17.9	18.0	18.2	18.5	18.8	19.1	19.4	19.7	19.9	20.2	20.4
19	0.0	0.0	17.6	16.8	16.9	17.2	17.5	17.9	18.2	18.6	18.9	19.7	19.5	19.8	20.1	20.3
20	0.0	16.1	15.7	15.9	16.3	16.8	17.2	17.7	18.1	18.5	18.8	19.1	19.5	19.8	20.0	20.3
21	14.7	14.4	14.9	15.4	16.0	16.5	17.0	17.5	18.0	18.4	18.7	19.1	19.4	19.7	20.0	20.2
22	13.1	13.7	14.4	15.1	15.8	16.4	16.9	17.4	17.9	18.3	18.7	19.0	19.4	19.7	20.0	20.2
23	12.5	13.4	14.2	14.9	15.6	16.3	16.8	17.3	17.8	18.2	18.6	19.0	19.3	19.6	19.9	20.2
24	12.1	13.1	14.0	14.8	15.5	16.2	16.8	17.3	17.8	18.2	18.6	19.0	19.3	19.6	19.9	20.2
25	11.9	12.9	13.9	14.7	15.5	16.1	16.7	17.3	17.7	18.2	18.6	19.0	19.3	19.6	19.9	20.2
26	11.7	12.8	13.8	14.7	15.4	16.1	16.7	17.2	17.7	18.2	18.6	18.9	19.3	19.6	19.9	20.2
27	11.6	12.7	13.7	14.6	15.4	16.0	16.7	17.2	17.7	18.1	18.6	18.9	19.3	19.6	19.9	20.2
28	11.5	12.7	13.7	14.6	15.3	16.0	16.6	17.2	17.7	18.1	18.5	18.9	19.3	19.6	19.9	20.2
29	11.4	12.6	13.6	14.5	15.3	16.0	16.6	17.2	17.7	18.1	18.5	18.9	19.3	19.6	19.9	20.1
30	11.4	12.6	13.6	14.5	15.3	16.0	16.6	17.2	17.7	18.1	18.5	18.9	19.3	19.6	19.9	20.1
31	11.4	12.6	13.6	14.5	15.3	16.0	16.6	17.1	17.7	18.1	18.5	18.9	19.2	19.6	19.9	20.1
32	11.3	12.5	13.6	14.5	15.3	16.0	16.6	17.1	17.6	18.1	18.5	18.9	19.2	19.6	19.9	20.1

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.77

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.78

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	25.4
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	25.2	23.7	23.0	22.7	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.3	23.7	22.5	22.0	21.8	21.7	21.7	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.2	22.8	21.6	21.1	21.0	21.0	21.0	21.1	21.2	
16	0.0	0.0	0.0	0.0	0.0	0.0	22.6	20.8	20.3	20.1	20.2	20.3	20.4	20.6	20.8	21.0	
17	0.0	0.0	0.0	0.0	25.3	20.3	19.4	19.3	19.3	19.5	19.7	19.9	20.1	20.4	20.6	20.8	
18	0.0	0.0	0.0	21.0	18.7	18.3	18.4	18.6	18.8	19.1	19.4	19.7	19.9	20.2	20.4	20.7	
19	0.0	0.0	18.9	17.4	17.3	17.5	17.8	18.2	18.5	18.9	19.2	19.5	19.8	20.1	20.4	20.6	
20	0.0	17.2	16.2	16.3	16.7	17.1	17.5	17.9	18.3	18.7	19.1	19.4	19.7	20.0	20.3	20.6	
21	15.8	14.9	15.2	15.7	16.3	16.8	17.3	17.8	18.2	18.6	19.0	19.3	19.7	20.0	20.3	20.5	
22	13.6	14.1	14.7	15.4	16.0	16.4	17.2	17.7	18.1	18.6	18.9	19.3	19.6	19.9	20.2	20.5	
23	12.8	13.6	14.4	15.2	15.9	16.5	17.1	17.6	18.1	18.5	18.9	19.3	19.6	19.9	20.2	20.5	
24	12.3	13.3	14.2	15.0	15.8	16.4	17.0	17.5	18.0	18.5	18.9	19.2	19.6	19.9	20.2	20.5	
25	12.1	13.2	14.1	14.9	15.7	16.4	17.0	17.5	18.0	18.4	18.8	19.2	19.6	19.9	20.2	20.4	
26	11.9	13.0	14.0	14.9	15.6	16.3	16.9	17.5	18.0	18.4	18.8	19.2	19.5	19.9	20.2	20.4	
27	11.8	12.9	13.9	14.8	15.6	16.3	16.9	17.4	17.9	18.4	18.8	19.2	19.5	19.8	20.1	20.4	
28	11.7	12.9	13.9	14.8	15.5	16.2	16.9	17.4	17.9	18.4	18.8	19.2	19.5	19.9	20.1	20.4	
29	11.6	12.8	13.8	14.7	15.5	16.2	16.8	17.4	17.9	18.4	18.8	19.2	19.5	19.8	20.1	20.4	
30	11.6	12.8	13.8	14.7	15.5	16.2	16.8	17.4	17.9	18.4	18.8	19.2	19.5	19.8	20.1	20.4	
31	11.5	12.7	13.8	14.7	15.5	16.2	16.8	17.4	17.9	18.3	18.8	19.1	19.5	19.8	20.1	20.4	
32	11.5	12.7	13.8	14.7	15.5	16.2	16.8	17.4	17.9	18.3	18.8	19.1	19.5	19.8	20.1	20.4	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BFTA

YARN BULK DENSITY = 0.79

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.80

THREE-HARNNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

4TL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN RULK DENSITY =0.81
THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	27.5	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	25.1	24.0	23.5	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	23.8	22.9	22.5	22.4	22.3	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.7	22.8	22.0	21.7	21.6	21.6	21.6	21.7	
16	0.0	0.0	0.0	0.0	0.0	0.0	26.3	22.1	21.1	20.8	20.8	20.8	21.0	21.1	21.3	21.4	
17	0.0	0.0	0.0	0.0	0.0	22.1	20.4	20.0	19.9	20.0	20.2	20.4	20.6	20.8	21.0	21.2	
18	0.0	0.0	0.0	29.0	20.0	19.1	19.0	19.1	19.3	19.6	19.8	20.1	20.4	20.6	20.9	21.1	
19	0.0	0.0	22.8	18.5	18.0	18.1	18.3	18.7	19.0	19.3	19.6	19.9	20.2	20.5	20.8	21.0	
20	0.0	20.5	17.1	16.9	17.2	17.5	18.0	18.4	18.8	19.1	19.5	19.8	20.1	20.4	20.7	21.0	
21	19.4	15.8	15.8	16.2	16.7	17.2	17.7	18.2	18.6	19.0	19.4	19.7	20.1	20.4	20.7	20.9	
22	14.5	14.6	15.2	15.8	16.4	17.0	17.6	18.1	18.5	18.9	19.3	19.7	20.0	20.3	20.6	20.9	
23	13.3	14.1	14.8	15.6	16.2	16.9	17.4	18.0	18.4	18.9	19.3	19.6	20.0	20.3	20.6	20.9	
24	12.8	13.7	14.6	15.4	16.1	16.8	17.4	17.9	18.4	18.8	19.2	19.6	20.0	20.3	20.6	20.8	
25	12.4	13.5	14.4	15.3	16.0	16.7	17.3	17.8	18.3	18.8	19.2	19.6	19.9	20.3	20.6	20.8	
26	12.2	13.3	14.3	15.2	16.0	16.6	17.3	17.8	18.3	18.8	19.2	19.6	19.9	20.2	20.5	20.8	
27	12.1	13.2	14.2	15.1	15.9	16.6	17.2	17.8	18.3	18.7	19.2	19.6	19.9	20.2	20.5	20.8	
28	12.0	13.1	14.2	15.1	15.9	16.6	17.2	17.8	18.3	18.7	19.2	19.5	19.9	20.2	20.5	20.8	
29	11.9	13.1	14.1	15.0	15.8	16.5	17.2	17.7	18.3	18.7	19.1	19.5	19.9	20.2	20.5	20.8	
30	11.8	13.0	14.1	15.0	15.8	16.5	17.2	17.7	18.2	18.7	19.1	19.5	19.9	20.2	20.5	20.8	
31	11.8	13.0	14.1	15.0	15.8	16.5	17.1	17.7	18.2	18.7	19.1	19.5	19.9	20.2	20.5	20.8	
32	11.7	13.0	14.0	15.0	15.8	16.5	17.1	17.7	18.2	18.7	19.1	19.5	19.9	20.2	20.5	20.8	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.82

THREE-HARNES WEAVE FABRICS

WARP
COVER
FACTOR
(K1)

BETA

	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	22.8	16.2	16.0	16.4	16.9	17.4	17.9	18.3	18.7	19.1	19.5	19.9	20.2	20.5	20.8	21.1
22	14.8	14.8	15.4	16.0	16.6	17.1	17.7	18.2	18.6	19.1	19.5	19.8	20.1	20.5	20.8	21.0
23	13.5	14.2	15.0	15.7	16.4	17.0	17.6	18.1	18.6	19.0	19.4	19.8	20.1	20.4	20.7	21.0
24	12.9	13.8	14.7	15.5	16.2	16.9	17.5	18.0	18.5	18.9	19.4	19.7	20.1	20.4	20.7	21.0
25	12.5	13.6	14.5	15.4	16.1	16.8	17.4	18.0	18.5	18.9	19.3	19.7	20.1	20.4	20.7	21.0
26	12.3	13.4	14.4	15.3	16.1	16.7	17.4	17.9	18.4	18.9	19.3	19.7	20.0	20.4	20.7	21.0
27	12.7	13.3	14.3	15.2	16.0	16.7	17.3	17.9	18.4	18.9	19.3	19.7	20.0	20.4	20.7	20.9
28	12.0	13.2	14.3	15.2	16.0	16.7	17.3	17.9	18.4	18.8	19.3	19.7	20.0	20.3	20.7	20.9
29	12.0	13.2	14.2	15.1	15.9	16.6	17.3	17.8	18.4	18.8	19.3	19.7	20.0	20.3	20.6	20.9
30	11.9	13.1	14.2	15.1	15.9	16.6	17.3	17.8	18.4	18.8	19.3	19.6	20.0	20.3	20.6	20.9
31	11.8	13.1	14.1	15.1	15.9	16.6	17.2	17.8	18.3	18.8	19.2	19.6	20.0	20.3	20.6	20.9
32	11.8	13.1	14.1	15.1	15.9	16.6	17.2	17.8	18.3	18.8	19.2	19.6	20.0	20.3	20.6	20.9

MIL-HDBK-741 (GL)

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K₂) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.83

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K ₁)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.84

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (CL)

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.85
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	25.7	24.7
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	26.0	24.4	23.6	23.3	23.2
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4	25.0	23.4	22.7	22.5	22.4	22.4	22.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.8	22.6	21.9	21.6	21.6	21.7	21.8	21.9	22.1
17	0.0	0.0	0.0	0.0	0.0	27.7	22.1	21.1	20.8	20.8	20.9	21.0	21.2	21.4	21.6	21.8
18	0.0	0.0	0.0	0.0	22.9	20.4	19.9	19.9	20.0	20.2	20.5	20.7	21.0	21.2	21.4	21.7
19	0.0	0.0	0.0	20.6	19.1	18.9	19.0	19.3	19.6	19.9	20.7	20.5	20.8	21.1	21.3	21.6
20	0.0	0.0	18.9	17.9	17.9	18.2	18.6	18.9	19.3	19.7	20.0	20.4	20.7	21.0	21.2	21.5
21	0.0	17.5	16.7	16.9	17.3	17.8	18.3	18.7	19.1	19.5	19.9	20.3	20.6	20.9	21.2	21.5
22	16.2	15.5	15.9	16.4	17.0	17.5	18.1	18.6	19.0	19.4	19.8	20.2	20.5	20.8	21.1	21.4
23	14.2	14.7	15.4	16.1	16.7	17.4	17.9	18.4	18.9	19.4	19.8	20.1	20.5	20.8	21.1	21.4
24	13.4	14.2	15.1	15.9	16.6	17.2	17.8	18.4	18.9	19.3	19.7	20.1	20.5	20.8	21.1	21.4
25	12.9	13.9	14.9	15.7	16.5	17.1	17.8	18.3	18.8	19.3	19.7	20.1	20.4	20.8	21.1	21.3
26	12.6	13.7	14.7	15.6	16.4	17.1	17.7	18.3	18.8	19.2	19.7	20.1	20.4	20.7	21.1	21.3
27	12.4	13.6	14.6	15.5	16.3	17.0	17.7	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3
28	12.3	13.5	14.6	15.5	16.3	17.0	17.6	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3
29	12.2	13.4	14.5	15.4	16.2	17.0	17.6	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3
30	12.1	13.4	14.5	15.4	16.2	16.9	17.6	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3
31	12.1	13.3	14.4	15.4	16.2	16.9	17.6	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3
32	12.0	13.3	14.4	15.3	16.2	16.9	17.6	18.1	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN PULK DENSITY = 0.86

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.87

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.88

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.89

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.00

THREE-HARNESS WEAWE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.91
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	27.2
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.3	27.6	25.7	24.9	24.5	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.2	26.3	24.7	24.0	23.7	23.6	23.5	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	23.8	23.1	22.9	22.8	22.8	22.9	23.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	27.2	23.3	22.3	22.0	22.0	22.1	22.2	22.3	22.5	22.7	
18	0.0	0.0	0.0	0.0	0.0	23.5	21.7	21.2	21.1	21.2	21.4	21.6	21.8	22.1	22.3	22.5	
19	0.0	0.0	0.0	0.0	21.5	20.4	20.2	20.3	20.5	20.8	21.1	21.3	21.6	21.9	22.1	22.4	
20	0.0	0.0	28.6	20.0	19.3	19.3	19.5	19.8	20.2	20.5	20.8	21.2	21.5	21.8	22.0	22.3	
21	0.0	26.9	18.6	18.2	18.3	18.7	19.1	19.5	19.9	20.3	20.7	21.0	21.4	21.7	22.0	22.2	
22	0.0	17.3	17.0	17.3	17.8	18.3	18.8	19.3	19.8	20.2	20.6	20.9	21.3	21.6	21.9	22.2	
23	16.0	15.8	16.3	16.9	17.5	18.1	18.7	19.2	19.6	20.1	20.5	20.9	21.2	21.6	21.9	22.1	
24	14.4	15.1	15.8	16.6	17.3	17.9	18.5	19.1	19.6	20.0	20.4	20.8	21.2	21.5	21.8	22.1	
25	13.7	14.7	15.6	16.4	17.1	17.8	18.4	19.0	19.5	20.0	20.4	20.8	21.2	21.5	21.9	22.1	
26	13.3	14.4	15.4	16.2	17.0	17.7	18.4	18.9	19.5	19.9	20.4	20.8	21.1	21.5	21.9	22.1	
27	13.0	14.2	15.2	16.1	16.9	17.7	18.3	18.9	19.4	19.9	20.3	20.7	21.1	21.5	21.9	22.1	
28	12.9	14.1	15.1	16.1	16.9	17.6	18.3	18.9	19.4	19.9	20.3	20.7	21.1	21.5	21.8	22.1	
29	12.7	14.0	15.1	16.0	16.8	17.6	18.2	18.8	19.4	19.9	20.3	20.7	21.1	21.4	21.8	22.1	
30	12.6	13.9	15.0	16.0	16.8	17.5	18.2	18.8	19.4	19.8	20.3	20.7	21.1	21.4	21.8	22.1	
31	12.6	13.9	15.0	15.9	16.8	17.5	18.2	18.8	19.3	19.8	20.3	20.7	21.1	21.4	21.7	22.0	
32	12.5	13.8	14.9	15.9	16.7	17.5	18.2	18.8	19.3	19.8	20.3	20.7	21.1	21.4	21.7	22.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =0.92
THREE-HARNESS WFAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	27.8
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	28.3	26.2	25.7	24.8	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	27.1	25.0	24.3	23.9	23.8	23.7	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	24.2	23.4	23.1	23.0	23.0	23.1	23.7	
17	0.0	0.0	0.0	0.0	0.0	0.0	29.1	23.8	22.6	22.3	22.2	22.2	22.4	22.7	22.7	22.9	
18	0.0	0.0	0.0	0.0	0.0	24.3	22.0	21.4	21.3	21.4	21.6	21.8	22.0	22.2	22.4	22.7	
19	0.0	0.0	0.0	0.0	22.1	20.7	20.4	20.5	20.7	20.9	21.2	21.5	21.8	22.0	22.3	22.5	
20	0.0	0.0	0.0	20.4	19.5	19.5	19.7	20.0	20.3	20.6	21.0	21.3	21.6	21.9	22.2	22.4	
21	0.0	0.0	19.0	18.4	18.5	18.8	19.2	19.6	20.1	20.4	20.8	21.2	21.5	21.8	22.1	22.4	
22	0.0	17.7	17.2	17.5	18.0	18.5	19.0	19.4	19.9	20.3	20.7	21.1	21.4	21.7	22.0	22.3	
23	16.5	16.0	16.4	17.0	17.6	18.2	18.8	19.3	19.8	20.2	20.6	21.0	21.4	21.7	22.0	22.3	
24	14.7	15.2	16.0	16.7	17.4	18.0	18.6	19.2	19.7	20.1	20.6	21.0	21.3	21.6	22.0	22.2	
25	13.9	14.8	15.7	16.5	17.2	17.9	18.5	19.1	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	
26	13.4	14.5	15.5	16.3	17.1	17.9	18.5	19.0	19.6	20.0	20.5	20.9	21.3	21.6	21.9	22.2	
27	13.2	14.3	15.3	16.2	17.0	17.8	18.4	19.0	19.5	20.0	20.5	20.9	21.2	21.6	21.9	22.2	
28	13.0	14.2	15.2	16.2	17.0	17.7	18.4	19.0	19.5	20.0	20.4	20.9	21.2	21.6	21.9	22.2	
29	12.8	14.1	15.2	16.1	16.9	17.7	18.3	18.9	19.5	20.0	20.4	20.8	21.2	21.6	21.9	22.2	
30	12.7	14.0	15.1	16.1	16.9	17.6	18.3	18.9	19.5	20.0	20.4	20.8	21.2	21.6	21.9	22.2	
31	12.6	13.9	15.0	16.0	16.9	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.2	21.5	21.9	22.2	
32	12.6	13.9	15.0	16.0	16.8	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.2	21.5	21.9	22.2	

MIL-HDBK-741 (GL)

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.93

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.94

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 1.00
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =1.36
THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

TIL-HDEK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 1.48

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.50

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.6
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6	35.6	33.7
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.1	35.2	32.9	32.0	31.5
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.9	32.5	31.3	30.7	30.5	30.4
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8	32.8	30.8	30.1	29.8	29.7	29.7	29.7	29.8
21	0.0	0.0	0.0	0.0	0.0	0.0	35.7	30.8	29.5	29.0	28.9	28.9	29.0	29.2	29.4	29.4
22	0.0	0.0	0.0	0.0	0.0	32.8	29.3	28.4	28.1	28.1	28.2	28.4	28.6	28.9	29.1	29.1
23	0.0	0.0	0.0	0.0	0.0	31.0	28.1	27.4	27.2	27.3	27.5	27.8	28.1	28.4	28.6	28.9
24	0.0	0.0	0.0	0.0	29.7	26.9	26.4	26.4	26.5	26.8	27.2	27.5	27.8	28.2	28.5	28.8
25	0.0	0.0	0.0	28.9	25.9	25.4	25.5	25.7	26.1	26.5	26.9	27.3	27.7	28.0	28.4	28.7
26	0.0	0.0	28.9	24.8	24.3	24.5	24.9	25.3	25.8	26.3	26.7	27.1	27.5	27.9	28.3	28.6
27	0.0	32.7	23.8	23.3	23.5	24.0	24.5	25.0	25.6	26.1	26.6	27.0	27.4	27.8	28.2	28.5
28	0.0	22.9	22.1	22.4	23.0	23.6	24.2	24.8	25.4	25.9	26.4	26.9	27.3	27.8	28.1	28.5
29	22.6	20.9	21.2	21.9	22.6	23.3	24.0	24.7	25.3	25.8	26.4	26.8	27.3	27.7	28.1	28.5
30	19.6	19.9	20.6	21.5	22.4	23.1	23.9	24.6	25.2	25.8	26.3	26.8	27.2	27.7	28.1	28.4
31	18.4	19.3	20.3	21.2	22.2	23.0	23.8	24.5	25.1	25.7	26.2	26.7	27.2	27.6	28.0	28.4
32	17.7	18.9	20.0	21.1	22.0	22.9	23.7	24.4	25.0	25.6	26.2	26.7	27.2	27.6	28.0	28.4
33	17.2	18.6	19.8	20.9	21.9	22.8	23.6	24.3	25.0	25.6	26.2	26.7	27.1	27.6	28.0	28.4
34	16.9	18.4	19.6	20.8	21.8	22.7	23.5	24.3	25.0	25.6	26.1	26.7	27.1	27.6	28.0	28.4
35	16.7	18.2	19.5	20.7	21.7	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6	28.0	28.3
36	16.5	18.1	19.4	20.6	21.7	22.6	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.5	27.9	28.3
37	16.4	18.0	19.4	20.6	21.6	22.6	23.4	24.2	24.9	25.5	26.1	26.6	27.1	27.5	27.9	28.3
38	16.3	17.9	19.3	20.5	21.6	22.5	23.4	24.2	24.9	25.5	26.1	26.6	27.1	27.5	27.9	28.3
39	16.2	17.8	19.2	20.5	21.6	22.5	23.4	24.1	24.8	25.5	26.1	26.6	27.1	27.5	27.9	28.3
40	16.1	17.8	19.2	20.4	21.5	22.5	23.4	24.1	24.8	25.5	26.0	26.6	27.1	27.5	27.9	28.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.77

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7	38.7
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.3	38.4	36.2	35.1	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.3	35.9	34.5	33.9	33.6		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	36.2	34.2	33.3	32.9	32.9	32.9	32.8		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.3	34.3	32.8	32.3	32.1	32.0	32.1	32.2		
23	0.0	0.0	0.0	0.0	0.0	0.0	36.5	32.8	31.7	31.3	31.2	31.3	31.5	31.6	31.9		
24	0.0	0.0	0.0	0.0	0.0	34.7	31.6	30.7	30.4	30.5	30.6	30.8	31.1	31.3	31.6		
25	0.0	0.0	0.0	0.0	0.0	33.5	30.5	29.7	29.6	29.7	30.2	30.5	30.8	31.1	31.4		
26	0.0	0.0	0.0	0.0	32.8	29.4	28.7	28.7	28.9	29.2	29.5	29.9	30.2	30.6	30.9	31.3	
27	0.0	0.0	0.0	32.8	28.4	27.7	27.8	28.0	28.4	28.8	29.2	29.7	30.1	30.4	30.8	31.2	
28	0.0	0.0	35.6	27.5	26.7	26.8	27.2	27.6	28.1	28.6	29.0	29.5	29.9	30.3	30.7	31.1	
29	0.0	0.0	26.8	25.7	25.8	26.2	26.7	27.3	27.8	28.4	28.9	29.4	29.9	30.2	30.6	31.0	
30	0.0	26.6	24.6	24.6	25.2	25.8	26.4	27.1	27.7	28.2	28.8	29.3	29.7	30.2	30.6	31.0	
31	29.4	23.5	23.4	24.0	24.7	25.5	26.2	26.9	27.5	28.1	28.7	29.2	29.7	30.1	30.5	30.9	
32	22.6	22.1	22.7	23.6	24.4	25.2	26.0	26.7	27.4	28.0	28.6	29.1	29.6	30.1	30.5	30.9	
33	20.7	21.3	22.3	23.2	24.2	25.1	25.9	26.6	27.3	28.0	28.5	29.1	29.6	30.0	30.5	30.9	
34	19.7	20.8	21.9	23.0	24.0	24.9	25.8	26.5	27.3	27.9	28.5	29.0	29.5	30.0	30.4	30.8	
35	19.1	20.4	21.7	22.8	23.9	24.9	25.7	26.5	27.2	27.8	28.4	29.0	29.5	30.0	30.4	30.8	
36	18.7	20.1	21.5	22.7	23.8	24.7	25.6	26.4	27.1	27.8	28.4	29.0	29.5	30.0	30.4	30.8	
37	18.4	19.9	21.3	22.6	23.7	24.7	25.6	26.4	27.1	27.8	28.4	28.9	29.5	29.9	30.4	30.8	
38	19.1	19.8	21.2	22.5	23.6	24.6	25.5	26.3	27.1	27.7	28.4	28.9	29.4	29.9	30.4	30.8	
39	18.0	19.6	21.1	22.4	23.5	24.6	25.5	26.3	27.0	27.7	28.3	28.9	29.4	29.9	30.4	30.8	
40	17.8	19.5	21.0	22.3	23.5	24.5	25.4	26.3	27.0	27.7	28.3	28.9	29.4	29.9	30.4	30.8	
41	17.7	19.5	21.0	22.3	23.5	24.5	25.4	26.3	27.0	27.7	28.3	28.9	29.4	29.9	30.3	30.8	
42	17.6	19.4	20.9	22.2	23.4	24.5	25.4	26.2	27.0	27.7	28.3	28.9	29.4	29.9	30.3	30.8	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 2.00

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.36

THREE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.6
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.4
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.5
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.9
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.4
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.7
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.3
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.1
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.9
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.50

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.6 49.2
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.4	45.6	43.3
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5	43.4	41.8	41.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.7	44.7	41.8	40.6	40.0	39.7	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.3	42.8	40.5	39.5	39.1	38.9	38.9	
26	0.0	0.0	0.0	0.0	0.0	0.0	49.4	41.4	39.4	38.5	38.2	38.2	38.2	38.2	38.4	
27	0.0	0.0	0.0	0.0	0.0	48.2	40.2	38.3	37.6	37.4	37.4	37.4	37.5	37.7	38.0	
28	0.0	0.0	0.0	0.0	0.0	48.7	39.3	37.4	36.7	36.6	36.7	36.9	37.1	37.4	37.7	
29	0.0	0.0	0.0	0.0	53.8	38.5	36.4	35.9	35.8	35.9	36.1	36.5	36.8	37.1	37.5	
30	0.0	0.0	0.0	0.0	38.1	35.6	35.0	34.9	35.1	35.4	35.8	36.2	36.5	36.9	37.3	
31	0.0	0.0	0.0	38.2	34.7	34.0	34.0	34.3	34.6	35.1	35.5	35.9	36.3	36.8	37.2	
32	0.0	0.0	0.0	40.1	34.0	33.1	33.1	33.4	33.8	34.3	34.8	35.3	35.7	36.2	36.6	37.1
33	0.0	0.0	0.0	33.6	32.1	32.1	32.4	32.9	33.5	34.0	34.6	35.1	35.6	36.1	36.5	37.0
34	0.0	0.0	33.9	31.2	31.0	31.4	31.9	32.6	33.2	33.8	34.4	35.0	35.5	36.0	36.5	36.9
35	0.0	38.2	30.4	29.9	30.3	30.9	31.6	32.3	33.0	33.6	34.3	34.8	35.4	35.9	36.4	36.8
36	0.0	30.1	28.7	29.0	29.7	30.5	31.3	32.1	32.8	33.5	34.2	34.8	35.3	35.8	36.3	36.8
37	32.6	27.6	27.7	28.4	29.3	30.2	31.1	31.9	32.7	33.4	34.1	34.7	35.3	35.8	36.3	36.8
38	26.9	26.3	27.0	29.0	29.0	30.0	30.9	31.8	32.6	33.3	34.0	34.6	35.2	35.7	36.2	36.7
39	24.9	25.5	26.5	27.7	28.8	29.8	30.8	31.7	32.5	33.2	33.9	34.6	35.2	35.7	36.2	36.7
40	23.7	24.9	26.2	27.4	28.6	29.7	30.7	31.6	32.4	33.2	33.9	34.5	35.1	35.7	36.2	36.7
41	23.0	24.5	25.9	27.2	28.5	29.6	30.6	31.5	32.4	33.1	33.8	34.5	35.1	35.6	36.2	36.6
42	22.5	24.1	25.7	27.1	28.3	29.5	30.5	31.4	32.3	33.1	33.8	34.5	35.1	35.6	36.1	36.6
43	22.1	23.9	25.5	26.9	28.2	29.4	30.4	31.4	32.3	33.0	33.8	34.4	35.0	35.6	36.1	36.6
44	21.8	23.7	25.3	26.8	28.1	29.3	30.4	31.3	32.2	33.0	33.7	34.4	35.0	35.6	36.1	36.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =2.75

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WAPP COVER FACTOR AND RETA
 YARN RULK DENSITY = 2.95
 THREE-HARNESS WEAVE FABRICS

WARD COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 3.25

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.8	55.5
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.8	52.6	49.7
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.0	50.6	48.2	47.1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	49.0	47.1	46.1	45.7	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.6	47.8	46.0	45.2	44.9	44.7	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.5	46.7	45.0	44.3	44.1	44.0	44.1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	45.8	44.1	43.5	43.3	43.3	43.4	43.6
31	0.0	0.0	0.0	0.0	0.0	0.0	51.4	45.0	43.3	42.6	42.5	42.5	42.5	42.7	42.9	43.2
32	0.0	0.0	0.0	0.0	0.0	53.7	44.5	42.5	41.8	41.7	41.8	42.0	42.3	42.6	42.9	
33	0.0	0.0	0.0	0.0	0.0	67.0	44.2	41.7	41.0	40.8	41.0	41.2	41.6	42.0	42.3	42.7
34	0.0	0.0	0.0	0.0	0.0	44.6	41.0	40.1	40.0	40.1	40.5	40.9	41.3	41.7	42.1	42.5
35	0.0	0.0	0.0	0.0	46.7	40.5	39.2	39.1	39.3	39.6	40.1	40.5	41.0	41.5	42.0	42.4
36	0.0	0.0	0.0	63.4	40.3	38.4	38.1	38.3	38.7	39.2	39.8	40.3	40.8	41.3	41.8	42.3
37	0.0	0.0	0.0	41.1	37.7	37.1	37.3	37.8	38.3	38.9	39.5	40.1	40.7	41.2	41.7	42.2
38	0.0	0.0	46.8	37.2	36.1	36.3	36.8	37.4	38.0	38.7	39.3	40.0	40.5	41.1	41.6	42.1
39	0.0	0.0	37.5	35.2	35.1	35.6	36.3	37.1	37.8	38.5	39.2	39.8	40.4	41.0	41.5	42.1
40	0.0	41.9	34.4	34.0	34.4	35.2	36.0	36.8	37.6	38.3	39.1	39.7	40.3	40.9	41.5	42.0
41	0.0	34.5	32.8	33.1	33.9	34.8	35.7	36.6	37.4	38.2	38.9	39.6	40.3	40.9	41.4	41.9
42	39.9	31.8	31.8	32.5	33.5	34.5	35.5	36.4	37.3	38.1	38.9	39.6	40.2	40.8	41.4	41.9
43	31.8	30.3	31.0	32.1	33.2	34.3	35.3	36.3	37.2	38.0	38.8	39.5	40.2	40.8	41.3	41.9
44	29.1	29.4	30.5	31.7	32.9	34.1	35.2	36.2	37.1	37.9	38.7	39.4	40.1	40.7	41.3	41.8

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.54

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.1	58.4
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5	55.5	52.2
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.0	53.5	50.7	49.4	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.2	52.0	49.6	48.4	47.9	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.6	50.8	48.5	47.5	47.0	46.9	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9	49.8	47.6	46.6	46.2	46.1	46.1	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5	49.0	46.7	45.8	45.4	45.4	45.5	45.6	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	48.4	45.9	45.0	44.6	44.6	44.7	45.0	45.7	
33	0.0	0.0	0.0	0.0	0.0	0.0	84.4	49.2	45.1	44.1	43.8	43.8	44.0	44.3	44.6	44.9	
34	0.0	0.0	0.0	0.0	0.0	0.0	48.7	44.5	43.3	43.0	43.0	43.3	43.6	43.9	44.3	44.7	
35	0.0	0.0	0.0	0.0	0.0	50.8	44.0	42.5	42.1	42.2	42.5	42.8	43.2	43.6	44.1	44.5	
36	0.0	0.0	0.0	0.0	62.6	43.9	41.8	41.3	41.3	41.6	42.0	42.5	42.9	43.4	43.9	44.3	
37	0.0	0.0	0.0	0.0	44.7	41.1	40.4	40.4	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	
38	0.0	0.0	0.0	48.9	40.7	39.5	39.4	39.8	40.3	40.8	41.4	42.0	42.5	43.1	43.6	44.1	
39	0.0	0.0	0.0	41.0	38.6	38.4	38.7	39.3	39.9	40.5	41.2	41.8	42.4	43.0	43.5	44.0	
40	0.0	0.0	43.8	38.0	37.3	37.6	38.2	38.9	39.6	40.3	41.0	41.7	42.3	42.9	43.4	43.9	
41	0.0	0.0	37.9	36.3	36.5	37.1	37.8	38.6	39.4	40.1	40.9	41.5	42.2	42.8	43.3	43.9	
42	0.0	40.6	35.4	35.2	35.8	36.6	37.5	38.4	39.2	40.0	40.7	41.4	42.1	42.7	43.3	43.8	
43	0.0	35.2	34.0	34.4	35.3	36.3	37.2	38.2	39.0	39.9	40.6	41.3	42.0	42.6	43.2	43.8	
44	39.1	32.9	33.0	33.9	34.9	36.0	37.0	38.0	38.9	39.7	40.5	41.3	42.0	42.6	43.2	43.7	
45	32.7	31.5	32.3	33.4	34.6	35.8	36.8	37.9	38.8	39.7	40.5	41.2	41.9	42.5	43.1	43.7	
46	30.2	30.6	31.8	33.1	34.4	35.6	36.7	37.7	38.7	39.6	40.4	41.2	41.9	42.5	43.1	43.7	
47	28.8	29.9	31.4	32.8	34.2	35.4	36.6	37.6	38.6	39.5	40.3	41.1	41.8	42.5	43.1	43.6	
48	27.9	29.4	31.0	32.6	34.0	35.3	36.5	37.6	38.5	39.5	40.3	41.1	41.8	42.4	43.1	43.6	

PL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.75

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.5	57.7
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.1	55.6	52.9
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.2	54.0	51.6	50.5	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.4	52.7	50.5	49.5	49.1		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.3	51.6	49.6	48.7	48.3	48.1		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9	50.7	48.7	47.8	47.5	47.4	47.4		
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.6	50.0	47.9	47.0	46.7	46.6	46.7	46.9		
33	0.0	0.0	0.0	0.0	0.0	0.0	60.6	49.6	47.1	46.2	45.9	45.9	46.0	46.2	46.5		
34	0.0	0.0	0.0	0.0	0.0	77.8	49.5	46.4	45.4	45.1	45.1	45.3	45.6	45.9	46.2		
35	0.0	0.0	0.0	0.0	0.0	0.0	50.1	45.8	44.6	44.2	44.3	44.5	44.8	45.2	45.6	46.0	
36	0.0	0.0	0.0	0.0	52.6	45.4	43.8	43.4	43.4	43.7	44.1	44.5	44.9	45.4	45.8		
37	0.0	0.0	0.0	0.0	68.9	45.4	43.1	42.5	42.6	42.9	43.3	43.7	44.2	44.7	45.2	45.6	
38	0.0	0.0	0.0	0.0	46.6	42.5	41.6	41.6	41.9	42.4	42.9	43.5	44.0	44.5	45.0	45.5	
39	0.0	0.0	0.0	52.4	42.2	40.8	40.7	41.0	41.5	42.0	42.6	43.2	43.8	44.4	44.9	45.4	
40	0.0	0.0	0.0	42.8	40.0	39.6	39.9	40.5	41.1	41.8	42.4	43.0	43.7	44.2	44.8	45.3	
41	0.0	0.0	47.1	39.5	38.6	38.8	39.4	40.1	40.8	41.5	42.2	42.9	43.5	44.1	44.7	45.2	
42	0.0	0.0	39.8	37.6	37.7	38.2	39.0	39.8	40.6	41.3	42.1	42.8	43.4	44.0	44.6	45.2	
43	0.0	44.5	36.9	36.5	37.0	37.8	38.6	39.5	40.4	41.2	41.9	42.7	43.3	44.0	44.6	45.1	
44	0.0	37.2	35.5	35.6	36.5	37.4	38.4	39.3	40.2	41.0	41.8	42.6	43.3	43.9	44.5	45.1	
45	45.6	34.4	34.2	35.0	36.0	37.1	38.2	39.1	40.1	40.9	41.7	42.5	43.2	43.8	44.5	45.0	
46	34.9	32.8	33.4	34.5	35.7	36.9	38.0	39.0	40.0	40.8	41.7	42.4	43.1	43.8	44.4	45.0	
47	31.8	31.8	32.9	34.2	35.4	36.7	37.8	38.9	39.9	40.8	41.6	42.4	43.1	43.8	44.4	45.0	
48	30.1	31.0	32.4	33.8	35.2	36.5	37.7	38.8	39.8	40.7	41.5	42.3	43.0	43.7	44.3	44.9	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =4.00

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 4.13

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =4.60

THREE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	46.9	37.8	37.7	38.7	39.9	41.1	42.2	43.3	44.4	45.3	46.2	47.1	47.8	48.6	49.2	49.9

MIL-HDBK-741 (GL)

MIL-HDBK-741 (GL)

(C) FOUR-HARNESS WEAVE FABRICS

TABLE 1-3
MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY ≈ 0.54
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	13.3	13.7	14.2	14.8	15.3	15.8	16.3	16.7	17.0	17.3	17.7	17.9	18.2	18.4	18.6	18.9
21	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.6	17.0	17.3	17.6	17.9	18.2	18.4	18.6	18.8
22	12.0	12.9	13.7	14.4	15.1	15.6	16.1	16.5	16.9	17.3	17.6	17.9	18.1	18.4	18.6	18.8
23	11.8	12.8	13.6	14.3	15.0	15.5	16.0	16.5	16.9	17.2	17.6	17.8	18.1	18.4	18.6	18.8
24	11.6	12.7	13.5	14.3	14.9	15.5	16.0	16.5	16.9	17.2	17.5	17.8	18.1	18.4	18.6	18.8
25	11.6	12.6	13.5	14.2	14.9	15.5	16.0	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
26	11.5	12.6	13.4	14.2	14.9	15.5	16.0	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
27	11.4	12.5	13.4	14.2	14.9	15.4	16.0	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
28	11.4	12.5	13.4	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
29	11.4	12.5	13.4	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
30	11.4	12.5	13.4	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
31	11.4	12.5	13.4	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8
32	11.4	12.4	13.4	14.1	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.1	18.3	18.6	18.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.56

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	23.4
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.2	22.8	21.6	21.1	20.9	
14	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	21.2	20.5	20.2	20.1	20.0	20.1	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	20.1	19.6	19.4	19.4	19.4	19.5	19.6	19.7	
16	0.0	0.0	0.0	0.0	0.0	21.1	19.2	18.7	18.6	18.6	18.7	18.9	19.0	19.2	19.3	19.5	
17	0.0	0.0	0.0	23.1	18.4	17.8	17.7	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	
18	0.0	0.0	18.1	16.8	16.7	16.9	17.1	17.4	17.7	17.9	18.2	18.4	18.7	18.9	19.1	19.3	
19	0.0	15.9	15.5	15.7	16.0	16.4	16.8	17.1	17.5	17.8	18.1	18.3	18.6	18.8	19.0	19.2	
20	14.1	14.2	14.7	15.2	15.7	16.2	16.6	17.0	17.4	17.7	18.0	18.3	18.5	18.8	19.0	19.2	
21	12.9	13.6	14.3	14.9	15.5	16.0	16.5	16.9	17.3	17.6	17.9	18.2	18.5	18.7	19.0	19.2	
22	12.4	13.3	14.1	14.8	15.4	15.9	16.4	16.8	17.2	17.6	17.9	18.2	18.5	18.7	19.0	19.2	
23	12.1	13.1	13.9	14.6	15.3	15.9	16.4	16.8	17.2	17.6	17.9	18.2	18.5	18.7	18.9	19.1	
24	11.9	12.9	13.8	14.6	15.2	15.8	16.3	16.8	17.2	17.5	17.9	18.2	18.4	18.7	18.9	19.1	
	11.8	12.9	13.8	14.5	15.2	15.8	16.3	16.7	17.2	17.5	17.9	18.2	18.4	18.7	18.9	19.1	
	11.7	12.8	13.7	14.5	15.2	15.7	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.7	12.8	13.7	14.5	15.1	15.7	16.3	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.6	12.7	13.7	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.6	12.7	13.6	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.6	12.7	13.6	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.6	12.7	13.6	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	
	11.6	12.7	13.6	14.4	15.1	15.7	16.2	16.7	17.1	17.5	17.8	18.1	18.4	18.7	18.9	19.1	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY ≈ 0.58

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	22.8	21.9	21.5
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	22.7	21.4	20.9	20.7	20.6	20.6
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	21.3	20.4	20.0	19.9	19.9	19.9	20.0	20.1
16	0.0	0.0	0.0	0.0	0.0	28.4	20.4	19.5	19.2	19.1	19.2	19.3	19.4	19.6	19.7	19.9
17	0.0	0.0	0.0	0.0	20.0	18.6	18.3	18.3	19.4	18.6	19.8	19.0	19.2	19.4	19.6	19.7
18	0.0	0.0	22.3	17.8	17.3	17.4	17.6	17.8	18.1	18.3	18.6	18.8	19.0	19.3	19.5	19.6
19	0.0	17.7	16.3	16.2	16.5	16.8	17.2	17.5	17.8	18.1	18.4	18.7	18.9	19.2	19.4	19.6
20	15.4	14.9	15.2	15.6	16.1	16.5	17.0	17.3	17.7	18.0	18.3	18.6	18.9	19.1	19.3	19.6
21	13.4	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6	18.8	19.1	19.3	19.5
22	12.7	13.6	14.4	15.1	15.7	16.2	16.7	17.2	17.6	17.9	18.2	18.5	18.8	19.1	19.3	19.5
23	12.4	13.4	14.2	14.9	15.6	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8	19.0	19.3	19.5
24	12.2	13.2	14.1	14.9	15.5	16.1	16.6	17.1	17.5	17.9	18.2	18.5	18.8	19.0	19.3	19.5
25	12.1	13.1	14.0	14.8	15.5	16.1	16.6	17.0	17.5	17.8	18.2	18.5	18.8	19.0	19.3	19.5
26	12.0	13.1	14.0	14.8	15.4	16.0	16.6	17.0	17.4	17.8	18.2	18.5	18.8	19.0	19.3	19.5
27	11.9	13.0	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.7	19.0	19.2	19.5
28	11.9	13.0	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.7	19.0	19.2	19.5
29	11.8	12.9	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.1	18.5	18.7	19.0	19.2	19.5
30	11.8	12.9	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.1	18.5	18.7	19.0	19.2	19.5
31	11.8	12.9	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.1	18.5	18.7	19.0	19.2	19.5
32	11.8	12.9	13.9	14.7	15.4	16.0	16.5	17.0	17.4	17.8	18.1	18.5	18.7	19.0	19.2	19.5

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.65
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN RULK DENSITY =0.66
FOUR-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	25.6
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4	23.8	23.1	22.8
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	23.8	22.7	22.2	22.0	21.9	21.9
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	22.8	21.8	21.4	21.2	21.2	21.3	21.4	21.5
17	0.0	0.0	0.0	0.0	0.0	0.0	22.1	20.9	20.6	20.5	20.5	20.6	20.8	20.9	21.1	21.2
18	0.0	0.0	0.0	0.0	22.3	20.1	19.7	19.6	19.7	19.9	20.1	20.3	20.5	20.7	20.9	21.1
19	0.0	0.0	0.0	19.6	18.8	18.7	18.8	19.1	19.3	19.6	19.8	20.1	20.3	20.6	20.8	21.0
20	0.0	22.5	17.9	17.6	17.8	18.1	18.4	18.7	19.1	19.4	19.7	20.0	20.2	20.5	20.7	20.9
21	18.7	16.4	16.4	16.8	17.3	17.7	18.1	18.6	18.9	19.3	19.6	19.9	20.2	20.4	20.6	20.9
22	14.8	15.2	15.8	16.4	17.0	17.5	18.0	18.4	18.8	19.2	19.5	19.8	20.1	20.4	20.6	20.8
23	13.8	14.7	15.5	16.2	16.8	17.4	17.9	18.3	18.8	19.1	19.5	19.8	20.1	20.3	20.6	20.8
24	13.4	14.4	15.2	16.0	16.7	17.3	17.8	18.3	18.7	19.1	19.4	19.8	20.1	20.3	20.6	20.8
25	13.1	14.2	15.1	15.9	16.6	17.2	17.7	18.2	18.7	19.1	19.4	19.7	20.0	20.3	20.6	20.8
26	12.9	14.1	15.0	15.8	16.5	17.2	17.7	18.2	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
27	12.8	14.0	14.9	15.8	16.5	17.1	17.7	18.2	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
28	12.7	13.9	14.9	15.7	16.5	17.1	17.7	18.2	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
29	12.7	13.9	14.9	15.7	16.4	17.1	17.6	18.2	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
30	12.6	13.8	14.8	15.7	16.4	17.1	17.6	18.1	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
31	12.6	13.8	14.8	15.7	16.4	17.1	17.6	18.1	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8
32	12.6	13.8	14.8	15.7	16.4	17.1	17.6	18.1	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFA

YARN RULK DENSITY =0.67

FOUR-HARNESS WFAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.6	26.5
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	24.4	23.5	23.1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6	23.1	22.5	22.3	22.2	22.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	22.2	21.7	21.5	21.5	21.5	21.6	21.7
17	0.0	0.0	0.0	0.0	0.0	0.0	23.0	21.4	20.9	20.7	20.8	20.8	20.8	21.0	21.3	21.4
18	0.0	0.0	0.0	0.0	24.0	20.7	20.0	19.9	20.0	20.1	20.3	20.5	20.7	20.9	21.1	21.2
19	0.0	0.0	0.0	20.4	19.2	19.0	19.1	19.3	19.5	19.8	20.0	20.3	20.5	20.7	20.9	21.1
20	0.0	0.0	18.4	17.9	18.0	18.3	18.6	18.9	19.3	19.6	19.9	20.1	20.4	20.6	20.9	21.1
21	22.0	16.8	16.7	17.0	17.5	17.9	18.3	18.7	19.1	19.4	19.8	20.0	20.3	20.6	20.8	21.0
22	15.2	15.5	16.0	16.6	17.1	17.7	18.1	18.6	19.0	19.3	19.7	20.0	20.3	20.5	20.8	21.0
23	14.1	14.9	15.6	16.3	16.9	17.5	18.0	18.5	18.9	19.3	19.6	19.9	20.2	20.5	20.7	21.0
24	13.5	14.5	15.4	16.1	16.8	17.4	17.9	18.4	18.9	19.2	19.6	19.9	20.2	20.5	20.7	21.0
25	13.2	14.3	15.2	16.0	16.7	17.3	17.9	18.4	18.8	19.2	19.6	19.9	20.2	20.5	20.7	20.9
26	13.1	14.2	15.1	16.0	16.7	17.3	17.9	18.3	18.8	19.2	19.5	19.9	20.2	20.5	20.7	20.9
27	12.9	14.1	15.1	15.9	16.6	17.3	17.8	18.3	18.8	19.2	19.5	19.9	20.2	20.4	20.7	20.9
28	12.9	14.0	15.0	15.9	16.6	17.2	17.8	18.3	18.8	19.2	19.5	19.9	20.2	20.4	20.7	20.9
29	12.8	14.0	15.0	15.8	16.6	17.2	17.8	18.3	18.7	19.1	19.5	19.8	20.2	20.4	20.7	20.9
30	12.8	13.9	15.0	15.8	16.6	17.2	17.8	18.3	18.7	19.1	19.5	19.8	20.1	20.4	20.7	20.9
31	12.7	13.9	14.9	15.8	16.5	17.2	17.8	18.3	18.7	19.1	19.5	19.8	20.1	20.4	20.7	20.9
32	12.7	13.9	14.9	15.8	16.5	17.2	17.8	18.3	18.7	19.1	19.5	19.8	20.1	20.4	20.7	20.9

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.68
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.69

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.70

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.71
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	25.5 24.6
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6	25.7	24.2	23.6	23.2	23.1	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.9	24.5	23.2	22.7	22.5	22.4	22.4	22.5	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8	22.4	21.9	21.7	21.7	21.8	21.9	22.0	22.1	
18	0.0	0.0	0.0	0.0	0.0	23.9	21.6	21.1	20.9	21.0	21.1	21.3	21.4	21.6	21.8	21.9	
19	0.0	0.0	0.0	0.0	21.2	20.2	20.1	20.1	20.3	20.5	20.7	21.0	21.2	21.4	21.6	21.9	
20	0.0	0.0	22.9	19.5	19.1	19.2	19.4	19.7	20.0	20.3	20.5	20.8	21.1	21.3	21.5	21.7	
21	0.0	19.8	18.0	18.0	18.3	18.6	19.0	19.4	19.7	20.1	20.4	20.7	21.0	21.2	21.5	21.7	
22	17.7	16.6	16.9	17.3	17.8	18.3	18.8	19.2	19.6	20.0	20.3	20.6	20.9	21.2	21.4	21.6	
23	15.1	15.6	16.3	17.0	17.6	18.1	18.6	19.1	19.5	19.9	20.2	20.6	20.9	21.1	21.4	21.6	
24	14.3	15.2	16.0	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.2	20.5	20.8	21.1	21.4	21.6	
25	13.8	14.9	15.8	16.6	17.3	17.9	18.5	19.0	19.4	19.8	20.2	20.5	20.8	21.1	21.3	21.6	
26	13.6	14.7	15.7	16.5	17.2	17.8	18.4	18.9	19.4	19.8	20.1	20.5	20.8	21.1	21.3	21.6	
27	13.4	14.6	15.6	16.4	17.2	17.8	18.4	18.9	19.3	19.7	20.1	20.5	20.8	21.1	21.3	21.6	
28	13.3	14.5	15.5	16.4	17.1	17.8	18.3	18.9	19.3	19.7	20.1	20.4	20.8	21.0	21.3	21.5	
29	13.2	14.4	15.4	16.3	17.1	17.7	18.3	18.8	19.3	19.7	20.1	20.4	20.7	21.0	21.3	21.5	
30	13.2	14.4	15.4	16.3	17.1	17.7	18.3	18.8	19.3	19.7	20.1	20.4	20.7	21.0	21.3	21.5	
31	13.1	14.4	15.4	16.3	17.0	17.7	18.3	18.8	19.3	19.7	20.1	20.4	20.7	21.0	21.3	21.5	
32	13.1	14.3	15.4	16.3	17.0	17.7	18.3	18.8	19.3	19.7	20.1	20.4	20.7	21.0	21.3	21.5	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.72

FOUR-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.5	26.1	25.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	24.7	23.9	23.5	23.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.3	23.6	23.0	22.8	22.7	22.7	22.7
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	22.8	22.2	22.0	22.0	22.0	22.1	22.2	22.3
18	0.0	0.0	0.0	0.0	0.0	25.6	22.1	21.4	21.2	21.2	21.3	21.4	21.6	21.8	21.9	22.1
19	0.0	0.0	0.0	0.0	21.9	20.6	20.3	20.4	20.5	20.7	20.9	21.2	21.4	21.6	21.8	22.0
20	0.0	0.0	27.0	20.0	19.4	19.4	19.6	19.9	20.1	20.4	20.7	21.0	21.2	21.5	21.7	21.9
21	0.0	21.4	18.4	18.3	18.5	18.8	19.2	19.6	19.9	20.2	20.6	20.8	21.1	21.4	21.6	21.8
22	18.9	17.0	17.1	17.5	18.0	18.5	18.9	19.4	19.8	20.1	20.5	20.9	21.1	21.3	21.6	21.8
23	15.5	15.9	16.5	17.1	17.7	18.3	18.8	19.2	19.7	20.0	20.4	20.7	21.0	21.3	21.5	21.8
24	14.5	15.3	16.1	16.9	17.5	18.1	18.7	19.2	19.6	20.0	20.3	20.7	21.0	21.2	21.5	21.7
25	14.0	15.0	15.9	16.7	17.4	18.0	18.6	19.1	19.5	19.9	20.3	20.6	20.9	21.2	21.5	21.7
26	13.7	14.8	15.8	16.6	17.3	18.0	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.5	21.7
27	13.5	14.7	15.7	16.5	17.3	17.9	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.5	21.7
28	13.4	14.6	15.6	16.5	17.2	17.9	18.5	19.0	19.5	19.9	20.2	20.6	20.9	21.2	21.5	21.7
29	13.3	14.5	15.6	16.4	17.2	17.9	18.5	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.7
30	13.3	14.5	15.5	16.4	17.2	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.7
31	13.2	14.5	15.5	16.4	17.2	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.7
32	13.2	14.4	15.5	16.4	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
33	13.2	14.4	15.5	16.4	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
34	13.1	14.4	15.5	16.4	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
35	13.1	14.4	15.4	16.3	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
36	13.1	14.4	15.4	16.3	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
37	13.1	14.4	15.4	16.3	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7
38	13.1	14.4	15.4	16.3	17.1	17.8	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.73

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.74

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8 26.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8	25.9	24.7	24.2	23.9
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	24.7	23.9	23.3	23.2	23.1	23.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	23.9	22.9	22.6	22.4	22.4	22.5	22.6	22.7
18	0.0	0.0	0.0	0.0	0.0	0.0	23.4	22.1	21.8	21.7	21.7	21.8	22.0	22.1	22.3	22.5
19	0.0	0.0	0.0	0.0	24.2	21.5	20.9	20.8	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3
20	0.0	0.0	0.0	21.3	20.1	19.9	20.0	20.2	20.5	20.8	21.0	21.3	21.5	21.8	22.0	22.2
21	0.0	0.0	19.4	18.8	18.9	19.2	19.5	19.9	20.2	20.6	20.9	21.2	21.4	21.7	21.9	22.2
22	28.1	17.8	17.6	17.9	18.4	19.8	19.3	19.7	20.1	20.4	20.8	21.1	21.4	21.6	21.9	22.1
23	16.2	16.3	16.9	17.5	18.0	18.6	19.1	19.5	20.0	20.3	20.7	21.0	21.3	21.6	21.8	22.1
24	14.9	15.7	16.5	17.2	17.8	18.4	19.0	19.4	19.9	20.3	20.6	21.0	21.3	21.6	21.8	22.0
25	14.3	15.3	16.2	17.0	17.7	18.3	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0
26	14.0	15.1	16.0	16.9	17.6	18.2	18.8	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0
27	13.8	14.9	15.9	16.8	17.5	18.2	18.8	19.3	19.8	20.2	20.5	20.9	21.2	21.5	21.8	22.0
28	13.6	14.8	15.9	16.7	17.5	18.2	18.7	19.3	19.7	20.2	20.5	20.9	21.2	21.5	21.8	22.0
29	13.5	14.8	15.8	16.7	17.5	18.1	18.7	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.7	22.0
30	13.5	14.7	15.8	16.7	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.7	22.0
31	13.4	14.7	15.7	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.7	22.0
32	13.4	14.6	15.7	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.7	22.0
33	13.4	14.6	15.7	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0
34	13.3	14.6	15.7	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0
35	13.3	14.6	15.7	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0
36	13.3	14.6	15.7	16.6	17.4	18.0	18.7	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0
37	13.3	14.6	15.6	16.6	17.4	18.0	18.6	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0
38	13.3	14.6	15.4	16.6	17.4	18.0	18.6	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.7	22.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.75

FOUR-HARNESS WEAWE FABRICS

WARP COVER FACTOR (K1)	RETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.76

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	17.3	16.9	17.3	17.8	18.4	18.9	19.4	19.8	20.3	20.6	21.0	21.3	21.6	21.9	22.1	22.4
24	15.4	16.1	16.8	17.5	18.1	18.7	19.3	19.7	20.2	20.6	20.9	21.3	21.6	21.8	22.1	22.4
25	14.7	15.6	16.5	17.3	18.0	18.6	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.8	22.1	22.3
26	14.3	15.4	16.3	17.1	17.9	18.5	19.1	19.6	20.1	20.5	20.9	21.2	21.5	21.8	22.1	22.3
27	14.0	15.2	16.2	17.0	17.8	18.5	19.0	19.6	20.0	20.4	20.8	21.2	21.5	21.8	22.1	22.3
28	13.9	15.1	16.1	17.0	17.7	18.4	19.0	19.5	20.0	20.4	20.8	21.2	21.5	21.8	22.0	22.3
29	13.8	15.0	16.0	16.9	17.7	18.4	19.0	19.5	20.0	20.4	20.8	21.2	21.5	21.8	22.0	22.3
30	13.7	14.9	16.0	16.9	17.7	18.4	19.0	19.5	20.0	20.4	20.8	21.1	21.5	21.8	22.0	22.3
31	13.6	14.9	15.9	16.9	17.6	18.3	18.9	19.5	20.0	20.4	20.8	21.1	21.5	21.8	22.0	22.3
32	13.6	14.9	15.9	16.8	17.6	18.3	18.9	19.5	20.0	20.4	20.8	21.1	21.5	21.8	22.0	22.3
33	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.5	19.9	20.4	20.8	21.1	21.5	21.8	22.0	22.3
34	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.5	19.9	20.4	20.8	21.1	21.5	21.8	22.0	22.3
35	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.5	19.9	20.4	20.8	21.1	21.5	21.7	22.0	22.3
36	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.1	21.4	21.7	22.0	22.3
37	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.1	21.4	21.7	22.0	22.3
38	13.5	14.8	15.9	16.8	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.1	21.4	21.7	22.0	22.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY ≈ 0.77

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	14.9	15.8	16.7	17.4	18.1	18.7	19.3	19.8	20.2	20.7	21.0	21.4	21.7	22.0	22.3	22.5
26	14.4	15.5	16.4	17.3	18.0	18.6	19.2	19.7	20.2	20.6	21.0	21.3	21.7	21.9	22.2	22.5
27	14.2	15.3	16.3	17.2	17.9	18.6	19.2	19.7	20.2	20.6	21.0	21.3	21.6	21.9	22.2	22.5
28	14.0	15.2	16.2	17.1	17.9	18.5	19.1	19.7	20.1	20.6	21.0	21.3	21.6	21.9	22.2	22.4
29	13.9	15.1	16.1	17.0	17.8	18.5	19.1	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
30	13.8	15.0	16.1	17.0	17.8	18.5	19.1	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
31	13.7	15.0	16.1	17.0	17.8	18.5	19.1	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
32	13.7	15.0	16.0	17.0	17.7	18.4	19.1	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
33	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
34	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
35	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
36	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
37	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4
38	13.6	14.9	16.0	16.9	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.4

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.78

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9 28.8
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.1	26.8	25.6	25.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1	25.6	24.7	24.3	24.1	24.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	24.7	23.8	23.5	23.4	23.3	23.4	23.5
18	0.0	0.0	0.0	0.0	0.0	0.0	29.3	24.1	23.1	22.7	22.6	22.7	22.8	22.9	23.0	23.2
19	0.0	0.0	0.0	0.0	0.0	24.1	22.4	21.9	21.8	21.9	22.1	22.2	22.4	22.6	27.8	23.0
20	0.0	0.0	0.0	30.1	21.9	21.1	21.0	21.1	21.3	21.5	21.7	22.0	22.2	22.4	22.7	22.9
21	0.0	0.0	23.4	20.3	20.0	20.1	20.3	20.6	20.9	21.2	21.5	21.8	22.1	22.3	27.6	22.8
22	0.0	20.8	18.9	18.9	19.1	19.5	19.9	20.3	20.7	21.0	21.4	21.7	22.0	22.2	27.5	22.7
23	18.9	17.5	17.7	18.2	18.7	19.2	19.7	20.1	20.6	20.9	21.3	21.6	21.9	22.2	22.4	22.7
24	16.0	16.5	17.1	17.8	18.4	19.0	19.5	20.0	20.5	20.9	21.2	21.6	21.9	22.1	22.4	22.7
25	15.1	16.0	16.8	17.6	18.3	18.9	19.4	19.9	20.4	20.8	21.2	21.5	21.8	22.1	22.4	22.6
26	14.6	15.6	16.6	17.4	18.1	18.8	19.4	19.9	20.3	20.8	21.1	21.5	21.8	22.1	22.4	22.6
27	14.3	15.4	16.4	17.3	18.1	18.7	19.3	19.8	20.3	20.7	21.1	21.5	21.8	22.1	22.4	22.6
28	14.1	15.3	16.3	17.2	18.0	18.7	19.3	19.8	20.3	20.7	21.1	21.4	21.8	22.1	22.3	22.6
29	14.0	15.2	16.3	17.2	17.9	18.6	19.2	19.8	20.3	20.7	21.1	21.4	21.8	22.1	22.3	22.6
30	13.9	15.1	16.2	17.1	17.9	18.6	19.2	19.8	20.2	20.7	21.1	21.4	21.8	22.1	22.3	22.6
31	13.8	15.1	16.2	17.1	17.9	18.6	19.2	19.7	20.2	20.7	21.1	21.4	21.7	22.0	22.3	22.6
32	13.8	15.1	16.1	17.1	17.9	18.6	19.2	19.7	20.2	20.7	21.1	21.4	21.7	22.0	22.3	22.6
33	13.7	15.0	16.1	17.0	17.9	18.6	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6
34	13.7	15.0	16.1	17.0	17.8	18.5	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6
35	13.7	15.0	16.1	17.0	17.8	18.5	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6
36	13.7	15.0	16.1	17.0	17.8	18.5	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6
37	13.7	15.0	16.1	17.0	17.8	18.5	19.1	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6
38	13.7	15.0	16.1	17.0	17.8	18.5	19.1	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.3	22.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND α/β

YARN BULK DENSITY = 0.79

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.80

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.3
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.3	29.3	26.5	25.8
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	26.9	25.4	24.9	24.6	24.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.9	25.9	24.6	24.1	23.9	23.8	23.8	23.9
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	23.8	23.3	23.1	23.1	23.2	23.3	23.4	23.5
19	0.0	0.0	0.0	0.0	0.0	25.6	23.3	22.5	22.3	22.3	22.4	22.6	22.8	22.9	23.1	23.3
20	0.0	0.0	0.0	0.0	23.3	21.8	21.5	21.5	21.6	21.8	22.1	22.3	22.5	22.8	23.0	23.2
21	0.0	0.0	0.0	21.3	20.5	20.5	20.7	21.0	21.3	21.5	21.8	22.1	22.4	22.6	22.9	23.1
22	0.0	25.4	19.7	19.4	19.6	19.9	20.3	20.6	21.0	21.4	21.7	22.0	22.3	22.5	22.8	23.0
23	22.5	18.3	18.2	19.6	19.0	19.5	20.0	20.4	20.9	21.2	21.6	21.9	22.2	22.5	22.7	23.0
24	16.7	16.9	17.5	18.1	18.7	19.3	19.8	20.3	20.7	21.1	21.5	21.8	22.2	22.4	22.7	22.9
25	15.5	16.3	17.1	17.9	18.5	19.2	19.7	20.2	20.7	21.1	21.5	21.8	22.1	22.4	22.7	22.9
26	14.9	15.9	16.9	17.7	18.4	19.0	19.6	20.1	20.6	21.0	21.4	21.8	22.1	22.4	22.7	22.9
27	14.6	15.7	16.7	17.6	18.3	19.0	19.6	20.1	20.6	21.0	21.4	21.7	22.1	22.4	22.6	22.9
28	14.3	15.5	16.6	17.5	18.2	18.9	19.5	20.1	20.5	21.0	21.4	21.7	22.1	22.4	22.6	22.9
29	14.2	15.4	16.5	17.4	18.2	18.9	19.5	20.0	20.5	21.0	21.4	21.7	22.0	22.3	22.6	22.9
30	14.1	15.4	16.4	17.4	18.2	18.9	19.5	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
31	14.0	15.3	16.4	17.3	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
32	14.0	15.3	16.4	17.3	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
33	13.9	15.2	16.3	17.3	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
34	13.9	15.2	16.3	17.3	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
35	13.9	15.2	16.3	17.2	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
36	13.9	15.2	16.3	17.2	18.1	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
37	13.9	15.2	16.3	17.2	18.0	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.9
38	13.8	15.2	16.3	17.2	18.0	18.8	19.4	20.0	20.4	20.9	21.3	21.7	22.0	22.3	22.6	22.9

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 0.91
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	34.1	18.7	18.5	18.8	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.1	22.4	22.7	22.9	23.1
24	17.1	17.2	17.7	18.3	18.9	19.5	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.1
25	15.7	16.5	17.3	18.0	18.7	19.3	19.8	20.4	20.8	21.2	21.6	21.9	22.3	22.6	22.8	23.1
26	15.1	16.1	17.0	17.8	18.5	19.2	19.8	20.3	20.7	21.2	21.6	21.9	22.2	22.5	22.8	23.1
27	14.7	15.8	16.8	17.7	18.4	19.1	19.7	20.2	20.7	21.1	21.5	21.9	22.2	22.5	22.8	23.0
28	14.5	15.7	16.7	17.6	18.4	19.0	19.7	20.2	20.7	21.1	21.5	21.9	22.2	22.5	22.8	23.0
29	14.3	15.6	16.6	17.5	18.3	19.0	19.6	20.2	20.6	21.1	21.5	21.8	22.2	22.5	22.8	23.0
30	14.2	15.5	16.5	17.5	18.3	19.0	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.5	22.8	23.0
31	14.1	15.4	16.5	17.4	18.2	18.9	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.5	22.7	23.0
32	14.1	15.4	16.5	17.4	18.2	18.9	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.5	22.7	23.0
33	14.0	15.3	16.4	17.4	18.2	18.9	19.5	20.1	20.6	21.0	21.5	21.8	22.2	22.5	22.7	23.0
34	14.0	15.3	16.4	17.4	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0
35	14.0	15.3	16.4	17.4	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0
36	13.9	15.3	16.4	17.3	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0
37	13.9	15.3	16.4	17.3	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0
38	13.9	15.3	16.4	17.3	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.82

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.9
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5	27.6
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	26.4	25.5	25.1	24.9
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.6	25.5	24.7	24.4	24.2	24.2	24.2	24.2
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	24.8	23.9	23.6	23.5	23.6	23.6	23.7	23.9	23.9
19	0.0	0.0	0.0	0.0	0.0	37.2	24.4	23.2	22.9	22.8	22.8	23.0	23.1	23.3	23.5	23.6	23.6
20	0.0	0.0	0.0	0.0	25.5	22.6	22.0	21.9	22.0	22.2	22.4	22.6	22.9	23.1	23.3	23.5	23.5
21	0.0	0.0	0.0	22.7	21.2	21.0	21.1	21.3	21.6	21.9	22.2	22.4	22.7	22.9	23.2	23.4	23.4
22	0.0	0.0	20.8	20.0	20.0	20.3	20.6	21.0	21.3	21.7	22.0	22.3	22.6	22.8	23.1	23.3	23.3
23	0.0	19.2	19.7	19.0	19.4	19.9	20.3	20.7	21.1	21.5	21.9	22.2	22.5	22.8	23.0	23.3	23.3
24	17.6	17.4	17.9	18.5	19.1	19.6	20.1	20.6	21.0	21.4	21.8	22.1	22.4	22.7	23.0	23.2	23.2
25	15.9	16.7	17.4	18.2	18.8	19.4	20.0	20.5	20.9	21.4	21.7	22.1	22.4	22.7	23.0	23.2	23.2
26	15.2	16.2	17.1	17.9	18.7	19.3	19.9	20.4	20.9	21.3	21.7	22.0	22.4	22.7	22.9	23.2	23.2
27	14.8	16.0	16.9	17.8	18.6	19.2	19.8	20.4	20.8	21.3	21.7	22.0	22.3	22.6	22.9	23.2	23.2
28	14.6	15.8	16.8	17.7	18.5	19.2	19.8	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.2	23.2
29	14.4	15.7	16.7	17.6	18.4	19.1	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.2	23.2
30	14.3	15.6	16.7	17.6	18.4	19.1	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.2	23.2
31	14.2	15.5	16.6	17.5	18.4	19.1	19.7	20.2	20.7	21.2	21.6	22.0	22.3	22.6	22.9	23.2	23.2
32	14.2	15.5	16.6	17.5	18.3	19.0	19.7	20.2	20.7	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.1
33	14.1	15.4	16.5	17.5	18.3	19.0	19.7	20.2	20.7	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.1
34	14.1	15.4	16.5	17.5	18.3	19.0	19.7	20.2	20.7	21.2	21.6	21.9	22.3	22.6	22.9	23.1	23.1
35	14.1	15.4	16.5	17.5	18.3	19.0	19.6	20.2	20.7	21.2	21.6	21.9	22.3	22.6	22.9	23.1	23.1
36	14.0	15.4	16.5	17.5	18.3	19.0	19.6	20.2	20.7	21.2	21.6	21.9	22.3	22.6	22.9	23.1	23.1
37	14.0	15.4	16.5	17.4	18.3	19.0	19.6	20.2	20.7	21.2	21.6	21.9	22.3	22.6	22.9	23.1	23.1
38	14.0	15.3	16.5	17.4	18.3	19.0	19.6	20.2	20.7	21.2	21.6	21.9	22.3	22.6	22.9	23.1	23.1

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.83
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.84

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.85

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8	27.8
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.1	28.1	26.7	26.0	25.7
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	27.1	25.8	25.2	25.0	24.9	24.9
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	25.7	24.5	24.3	24.2	24.2	24.3	24.4
19	0.0	0.0	0.0	0.0	0.0	0.0	27.1	24.4	23.7	23.5	23.5	23.5	23.7	23.8	24.0	24.1
20	0.0	0.0	0.0	0.0	24.3	23.0	22.7	22.7	22.8	23.0	23.2	23.4	23.6	23.8	24.0	
21	0.0	0.0	0.0	22.5	21.8	21.9	21.9	22.1	22.4	22.6	22.9	23.2	23.4	23.6	23.9	
22	0.0	0.0	23.6	21.0	20.7	20.9	21.2	21.5	21.9	22.1	22.4	22.7	23.0	23.3	23.5	23.8
23	0.0	21.5	19.7	19.7	20.0	20.4	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.2	23.5	23.7
24	19.8	18.3	18.5	19.0	19.5	20.1	20.6	21.0	21.5	21.9	22.2	22.6	22.9	23.2	23.4	23.7
25	16.8	17.2	17.9	18.6	19.3	19.9	20.4	20.9	21.4	21.8	22.2	22.5	22.8	23.1	23.4	23.6
26	15.9	16.7	17.6	18.4	19.1	19.7	20.3	20.8	21.3	21.7	22.1	22.5	22.8	23.1	23.4	23.6
27	15.3	16.4	17.3	18.2	18.9	19.6	20.2	20.8	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6
28	15.0	16.2	17.2	18.1	18.9	19.5	20.2	20.7	21.2	21.6	22.0	22.4	22.7	23.1	23.3	23.6
29	14.8	16.0	17.1	18.0	18.8	19.5	20.1	20.7	21.2	21.6	22.0	22.4	22.7	23.1	23.3	23.6
30	14.6	15.9	17.0	17.9	18.7	19.5	20.1	20.6	21.1	21.6	22.0	22.4	22.7	23.0	23.3	23.6
31	14.5	15.8	16.9	17.9	18.7	19.4	20.1	20.6	21.1	21.6	22.0	22.4	22.7	23.0	23.3	23.6
32	14.4	15.8	16.9	17.9	18.7	19.4	20.0	20.6	21.1	21.6	22.0	22.4	22.7	23.0	23.3	23.6
33	14.4	15.7	16.9	17.8	18.7	19.4	20.0	20.6	21.1	21.6	22.0	22.4	22.7	23.0	23.3	23.6
34	14.4	15.7	16.8	17.8	18.6	19.4	20.0	20.6	21.1	21.6	22.0	22.3	22.7	23.0	23.3	23.6
35	14.3	15.7	16.8	17.8	18.6	19.4	20.0	20.6	21.1	21.6	22.0	22.3	22.7	23.0	23.3	23.6
36	14.3	15.7	16.8	17.9	18.6	19.4	20.0	20.6	21.1	21.5	22.0	22.3	22.7	23.0	23.3	23.6
37	14.3	15.6	16.8	17.8	18.6	19.3	20.0	20.6	21.1	21.5	22.0	22.3	22.7	23.0	23.3	23.6
38	14.3	15.6	16.8	17.8	18.6	19.3	20.0	20.6	21.1	21.5	22.0	22.3	22.7	23.0	23.3	23.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.86

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	28.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.6	28.9	27.1	26.4	26.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.2	27.9	26.2	25.5	25.2	25.1	25.1	25.1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	25.5	24.8	24.5	24.4	24.4	24.4	24.5	24.6
19	0.0	0.0	0.0	0.0	0.0	28.7	24.9	24.0	23.7	23.7	23.7	23.9	23.9	24.0	24.1	24.3
20	0.0	0.0	0.0	0.0	25.0	23.4	23.0	22.9	23.0	23.1	23.3	23.5	23.7	23.9	24.1	24.1
21	0.0	0.0	0.0	31.6	23.0	22.1	22.0	22.1	22.3	22.6	22.8	23.1	23.3	23.6	23.8	24.0
22	0.0	0.0	25.4	21.5	21.0	21.1	21.3	21.6	22.0	22.3	22.6	22.9	23.2	23.4	23.7	23.9
23	0.0	22.8	20.0	19.9	20.2	20.5	21.0	21.4	21.7	22.1	22.5	22.8	23.1	23.4	23.6	23.9
24	21.0	18.6	18.7	19.2	19.7	20.2	20.7	21.2	21.6	22.0	22.4	22.7	23.0	23.3	23.6	23.8
25	17.1	17.4	18.1	18.8	19.4	20.0	20.5	21.0	21.5	21.9	22.3	22.6	23.0	23.3	23.5	23.8
26	16.0	16.9	17.7	18.5	19.2	19.9	20.4	20.9	21.4	21.9	22.2	22.6	22.9	23.2	23.5	23.8
27	15.4	16.5	17.5	18.3	19.1	19.7	20.3	20.9	21.4	21.8	22.2	22.6	22.9	23.2	23.5	23.7
28	15.1	16.3	17.3	18.2	19.0	19.7	20.3	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7
29	14.9	16.1	17.2	18.1	18.9	19.6	20.2	20.8	21.3	21.7	22.2	22.5	22.9	23.2	23.5	23.7
30	14.7	16.0	17.1	18.0	18.9	19.6	20.2	20.8	21.3	21.7	22.1	22.5	22.9	23.2	23.5	23.7
31	14.6	15.9	17.0	18.0	18.8	19.5	20.2	20.7	21.3	21.7	22.1	22.5	22.8	23.2	23.4	23.7
32	14.5	15.9	17.0	18.0	18.8	19.5	20.2	20.7	21.2	21.7	22.1	22.5	22.8	23.2	23.4	23.7
33	14.5	15.8	17.0	17.9	18.8	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7
34	14.4	15.8	16.9	17.9	18.8	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7
35	14.4	15.8	16.9	17.9	18.7	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7
36	14.4	15.8	16.9	17.9	18.7	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7
37	14.4	15.7	16.9	17.9	18.7	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7
38	14.4	15.7	16.9	17.9	18.7	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.87

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	17.5	17.7	18.3	18.9	19.6	20.1	20.7	21.2	21.6	22.0	22.4	22.8	23.1	23.4	23.7	23.9	24.1	24.3	24.5
26	16.2	17.0	17.9	18.6	19.3	20.0	20.6	21.1	21.6	22.0	22.4	22.7	23.1	23.4	23.6	23.9	24.1	24.3	24.5
27	15.6	16.6	17.6	18.5	19.2	19.9	20.5	21.0	21.5	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.3	24.5
28	15.2	16.4	17.4	18.3	19.1	19.8	20.4	21.0	21.5	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.3	24.5
29	15.0	16.2	17.3	18.2	19.0	19.7	20.4	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.3	24.5
30	14.8	16.1	17.2	18.2	19.0	19.7	20.3	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.3	24.5
31	14.7	16.0	17.2	18.1	18.9	19.7	20.3	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.3	24.5
32	14.6	16.0	17.1	18.1	18.9	19.6	20.3	20.9	21.4	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
33	14.6	15.9	17.1	18.0	18.9	19.6	20.3	20.8	21.4	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
34	14.5	15.9	17.0	18.0	18.9	19.6	20.3	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
35	14.5	15.9	17.0	18.0	18.9	19.6	20.2	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
36	14.5	15.8	17.0	18.0	18.8	19.6	20.2	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
37	14.5	15.8	17.0	18.0	18.8	19.6	20.2	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5
38	14.4	15.8	17.0	18.0	18.8	19.6	20.2	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	24.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.88
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.3	29.6
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	28.1	26.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8	27.1	26.2	25.8	25.6	25.5	25.6	25.5
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	26.4	25.4	25.0	24.9	24.8	24.9	24.9	24.9	24.9	24.9
19	0.0	0.0	0.0	0.0	0.0	0.0	39.5	26.1	24.7	24.3	24.1	24.1	24.2	24.3	24.5	24.6	24.3	24.5	24.6
20	0.0	0.0	0.0	0.0	0.0	27.0	24.2	23.5	23.4	23.4	23.5	23.7	23.9	24.1	24.2	24.4	24.1	24.2	24.4
21	0.0	0.0	0.0	0.0	24.3	22.8	22.5	22.5	22.7	22.9	23.1	23.4	23.6	23.9	24.1	24.3	23.6	23.9	24.3
22	0.0	0.0	0.0	22.5	21.6	21.5	21.7	22.0	22.3	22.6	22.9	23.2	23.5	23.7	24.0	24.2	23.5	23.7	24.0
23	0.0	30.8	20.9	20.4	20.6	20.9	21.3	21.7	22.1	22.4	22.8	23.1	23.4	23.6	23.9	24.2	23.4	23.6	23.9
24	29.4	19.4	19.2	19.6	20.0	20.5	21.0	21.5	21.9	22.3	22.6	23.0	23.3	23.6	23.9	24.1	23.3	23.6	23.9
25	17.9	17.9	19.4	19.1	19.7	20.3	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.8	24.1	23.2	23.5	23.8
26	16.4	17.2	18.0	18.8	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.9	23.2	23.5	23.8	24.0	23.2	23.5	23.8
27	15.7	16.8	17.7	18.6	19.3	20.0	20.6	21.1	21.6	22.1	22.5	22.8	23.2	23.5	23.8	24.0	23.2	23.5	23.8
28	15.4	16.5	17.6	18.4	19.2	19.9	20.5	21.1	21.6	22.0	22.4	22.8	23.2	23.5	23.7	24.0	23.2	23.5	23.7
29	15.1	16.4	17.4	18.3	19.2	19.9	20.5	21.0	21.6	22.0	22.4	22.8	23.1	23.4	23.7	24.0	23.1	23.4	23.7
30	14.9	16.2	17.3	18.3	19.1	19.8	20.5	21.0	21.5	22.0	22.4	22.8	23.1	23.4	23.7	24.0	23.1	23.4	23.7
31	14.8	16.1	17.3	18.2	19.1	19.8	20.4	21.0	21.5	22.0	22.4	22.8	23.1	23.4	23.7	24.0	23.1	23.4	23.7
32	14.7	16.1	17.2	18.2	19.0	19.8	20.4	21.0	21.5	22.0	22.4	22.8	23.1	23.4	23.7	24.0	23.1	23.4	23.7
33	14.7	16.0	17.2	18.2	19.0	19.7	20.4	21.0	21.5	21.9	22.4	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7
34	14.6	16.0	17.1	18.1	19.0	19.7	20.4	21.0	21.5	21.9	22.4	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7
35	14.6	16.0	17.1	18.1	19.0	19.7	20.4	20.9	21.5	21.9	22.4	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7
36	14.6	15.9	17.1	18.1	19.0	19.7	20.4	20.9	21.5	21.9	22.4	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7
37	14.5	15.9	17.1	18.1	18.9	19.7	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7
38	14.5	15.9	17.1	18.1	18.9	19.7	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.7	24.0	23.1	23.4	23.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.89

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.4	30.4	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6	28.7	27.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	26.0	25.8
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	25.0	25.1
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.5	24.4	24.7
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2	24.0	24.4
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0	24.5
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	23.5	24.1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	23.2	24.3
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1	23.1	24.2
25	18.3	18.1	18.6	19.2	19.8	20.4	21.0	21.5	21.9	22.3	22.7	23.1	23.4	23.7	24.0	24.2			
26	16.7	17.4	18.2	18.9	19.6	20.3	20.8	21.3	21.8	22.3	22.6	23.0	23.3	23.6	23.9	24.2			
27	15.9	16.9	17.9	18.7	19.5	20.1	20.7	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.2			
28	15.5	16.7	17.7	18.6	19.4	20.0	20.7	21.2	21.7	22.2	22.6	22.9	23.3	23.5	23.9	24.2			
29	15.2	16.5	17.5	18.5	19.3	20.0	20.6	21.2	21.7	22.1	22.5	22.9	23.3	23.6	23.9	24.1			
30	15.1	16.3	17.4	18.4	19.2	19.9	20.6	21.1	21.7	22.1	22.5	22.9	23.3	23.6	23.9	24.1			
31	14.9	16.1	17.4	18.3	19.2	19.9	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.6	23.9	24.1			
32	14.8	16.2	17.3	18.3	19.1	19.9	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.6	23.9	24.1			
33	14.8	16.1	17.3	18.3	19.1	19.9	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.9	24.1			
34	14.7	16.1	17.2	18.2	19.1	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.9	24.1			
35	14.7	16.1	17.2	18.2	19.1	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.9	24.1			
36	14.7	16.0	17.2	18.2	19.1	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.9	24.1			
37	14.6	16.0	17.2	18.2	19.1	19.8	20.5	21.1	21.6	22.0	22.5	22.9	23.2	23.5	23.9	24.1			
38	14.6	16.0	17.2	18.2	19.0	19.8	20.5	21.0	21.6	22.0	22.5	22.9	23.2	23.5	23.9	24.1			

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 0.90
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K ₁)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.3
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.2	29.4	27.9	27.2
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5	29.3	26.9	26.3	26.0	25.0	25.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	27.6	26.2	25.6	25.3	25.3	25.3	25.3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	25.5	24.8	24.6	24.6	24.6	24.7	24.8	25.0
20	0.0	0.0	0.0	0.0	0.0	31.5	25.2	24.1	23.8	23.8	23.9	24.0	24.2	24.4	24.6	24.8
21	0.0	0.0	0.0	0.0	26.2	23.6	23.0	23.0	23.1	23.3	23.5	23.7	23.9	24.2	24.4	24.6
22	0.0	0.0	0.0	23.9	22.2	22.0	22.1	22.3	22.6	22.9	23.2	23.5	23.8	24.0	24.3	24.5
23	0.0	0.0	22.0	21.0	21.0	21.3	21.6	22.0	22.4	22.7	23.0	23.4	23.7	23.9	24.2	24.4
24	0.0	20.4	19.7	20.0	20.4	20.8	21.3	21.8	22.2	22.6	22.9	23.3	23.6	23.9	24.1	24.4
25	18.9	18.4	18.8	19.4	20.0	20.6	21.1	21.6	22.0	22.5	22.8	23.2	23.5	23.8	24.1	24.4
26	16.9	17.6	18.3	19.1	19.8	20.4	21.0	21.5	22.0	22.4	22.8	23.1	23.5	23.8	24.1	24.3
27	16.1	17.1	18.0	18.8	19.6	20.3	20.9	21.4	21.9	22.3	22.7	23.1	23.4	23.8	24.0	24.3
28	15.6	16.8	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.3	22.7	23.1	23.4	23.7	24.0	24.3
29	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.3	21.8	22.3	22.7	23.1	23.4	23.7	24.0	24.3
30	15.2	16.5	17.6	18.5	19.3	20.1	20.7	21.3	21.8	22.2	22.7	23.0	23.4	23.7	24.0	24.3
31	15.0	16.4	17.5	18.4	19.3	20.0	20.7	21.2	21.8	22.2	22.6	23.0	23.4	23.7	24.0	24.3
32	14.9	16.3	17.4	18.4	19.2	20.0	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.3
33	14.9	16.2	17.4	18.4	19.2	20.0	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.3
34	14.8	16.2	17.3	18.3	19.2	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.2
35	14.8	16.2	17.3	18.3	19.2	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.2
36	14.7	16.1	17.3	18.3	19.2	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	24.0	24.2
37	14.7	16.1	17.3	18.3	19.2	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	24.0	24.2
38	14.7	16.1	17.3	18.3	19.2	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	24.0	24.2

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.91

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	30.1	28.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	27.3	26.3
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	25.6	25.5
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9	24.8	25.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2	24.4	24.7
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	24.1	24.3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	23.9	24.2
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	23.8	24.1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	23.7	24.0
25	19.5	18.7	19.0	19.6	20.2	20.7	21.2	21.7	22.2	22.6	23.0	23.3	23.7	24.0	24.2	24.5
26	17.2	17.7	18.5	19.2	19.9	20.5	21.1	21.6	22.1	22.5	22.9	23.3	23.6	23.9	24.2	24.5
27	16.3	17.2	18.1	19.0	19.7	20.4	21.0	21.5	22.0	22.5	22.9	23.2	23.6	23.9	24.2	24.4
28	15.8	16.9	17.9	18.8	19.6	20.3	20.9	21.5	22.0	22.4	22.8	23.2	23.6	23.9	24.2	24.4
29	15.5	16.7	17.8	18.7	19.5	20.2	20.9	21.4	21.9	22.4	22.8	23.2	23.5	23.9	24.1	24.4
30	15.3	16.6	17.7	18.6	19.4	20.2	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4
31	15.1	16.5	17.6	18.6	19.4	20.1	20.8	21.4	21.9	22.3	22.8	23.2	23.5	23.8	24.1	24.4
32	15.0	16.4	17.5	18.5	19.4	20.1	20.8	21.3	21.9	22.3	22.8	23.1	23.5	23.8	24.1	24.4
33	15.0	16.3	17.5	18.5	19.3	20.1	20.7	21.3	21.9	22.3	22.7	23.1	23.5	23.8	24.1	24.4
34	14.9	16.3	17.5	18.4	19.3	20.1	20.7	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4
35	14.9	16.3	17.4	18.4	19.3	20.0	20.7	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4
36	14.8	16.2	17.4	18.4	19.3	20.0	20.7	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4
37	14.8	16.2	17.4	18.4	19.3	20.0	20.7	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4
38	14.8	16.2	17.4	18.4	19.3	20.0	20.7	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.92

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.8
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	27.8
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.7	27.7	26.9	26.4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.3	27.0	26.2	25.8	25.7	25.7	25.7
19	0.0	0.0	0.0	0.0	0.0	0.0	30.3	26.5	25.5	25.1	25.0	25.0	25.0	25.1	25.2	25.3
20	0.0	0.0	0.0	0.0	0.0	26.5	24.8	24.4	24.2	24.3	24.3	24.4	24.5	24.7	24.9	25.1
21	0.0	0.0	0.0	0.0	30.1	24.5	23.6	23.4	23.5	23.6	23.8	24.0	24.3	24.5	24.7	24.9
22	0.0	0.0	0.0	25.9	23.0	22.5	22.5	22.7	23.0	23.2	23.5	23.8	24.1	24.3	24.6	24.8
23	0.0	0.0	23.6	21.7	21.5	21.6	22.0	22.3	22.7	23.0	23.3	23.6	23.9	24.2	24.5	24.7
24	0.0	21.9	20.3	20.4	20.7	21.2	21.6	22.0	22.5	22.8	23.2	23.5	23.9	24.1	24.4	24.7
25	20.4	19.0	19.2	19.7	20.3	20.9	21.4	21.9	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24.6
26	17.5	17.9	18.6	19.4	20.0	20.7	21.2	21.7	22.2	22.7	23.0	23.4	23.7	24.1	24.3	24.6
27	16.5	17.4	18.3	19.1	19.9	20.5	21.1	21.7	22.1	22.6	23.0	23.4	23.7	24.0	24.3	24.6
28	15.9	17.1	18.1	18.9	19.7	20.4	21.0	21.6	22.1	22.6	23.0	23.3	23.7	24.0	24.3	24.6
29	15.6	16.8	17.9	18.8	19.6	20.3	21.0	21.5	22.1	22.5	22.9	23.3	23.7	24.0	24.3	24.6
30	15.4	16.7	17.8	18.7	19.6	20.3	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.3	24.5
31	15.2	16.6	17.7	18.7	19.5	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.3	24.5
32	15.1	16.5	17.6	18.6	19.5	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.3	24.5
33	15.1	16.4	17.6	18.6	19.4	20.2	20.9	21.4	22.0	22.4	22.9	23.3	23.6	23.9	24.2	24.5
34	15.0	16.4	17.6	18.6	19.4	20.2	20.9	21.4	22.0	22.4	22.9	23.3	23.6	23.9	24.2	24.5
35	14.9	16.3	17.5	18.5	19.4	20.2	20.8	21.4	22.0	22.4	22.9	23.3	23.6	23.9	24.2	24.5
36	14.9	16.3	17.5	18.5	19.4	20.1	20.8	21.4	21.9	22.4	22.9	23.2	23.6	23.9	24.2	24.5
37	14.9	16.3	17.5	18.5	19.4	20.1	20.8	21.4	21.9	22.4	22.9	23.2	23.6	23.9	24.2	24.5
38	14.9	16.3	17.5	18.5	19.4	20.1	20.8	21.4	21.9	22.4	22.8	23.7	23.6	23.9	24.2	24.5

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.93

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.1	29.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	28.2	27.3	26.8
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	27.5	26.5	26.1	25.9	25.9	25.9	25.9
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.7	27.0	25.8	25.4	25.2	25.2	25.3	25.4	25.5
20	0.0	0.0	0.0	0.0	0.0	0.0	27.3	25.2	24.6	24.5	24.5	24.6	24.7	24.9	25.0	25.2
21	0.0	0.0	0.0	0.0	36.5	25.0	23.9	23.6	23.7	23.8	24.0	24.2	24.4	24.6	24.8	25.1
22	0.0	0.0	0.0	0.0	27.6	23.4	22.8	22.7	22.9	23.1	23.4	23.7	24.0	24.2	24.5	24.9
23	0.0	0.0	24.8	22.0	21.7	21.8	22.1	22.5	22.8	23.2	23.5	23.8	24.1	24.4	24.6	24.9
24	0.0	22.9	20.7	20.6	20.9	21.3	21.8	22.2	22.6	23.0	23.3	23.7	24.0	24.3	24.6	24.8
25	21.5	19.3	19.4	19.9	20.5	21.0	21.5	22.0	22.5	22.9	23.3	23.6	23.9	24.2	24.5	24.8
26	17.8	18.1	18.8	19.5	20.2	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.9	24.2	24.5	24.7
27	16.7	17.5	19.4	19.2	20.0	20.6	21.2	21.8	22.3	22.7	23.1	23.5	23.8	24.2	24.4	24.7
28	16.1	17.2	18.2	19.1	19.8	20.5	21.2	21.7	22.2	22.7	23.1	23.5	23.8	24.1	24.4	24.7
29	15.7	17.0	18.0	18.9	19.7	20.5	21.1	21.7	22.2	22.6	23.1	23.4	23.8	24.1	24.4	24.7
30	15.5	16.8	17.9	18.8	19.7	20.4	21.1	21.6	22.2	22.6	23.0	23.4	23.8	24.1	24.4	24.7
31	15.3	16.7	17.8	18.8	19.6	20.4	21.0	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.7
32	15.2	16.6	17.7	18.7	19.6	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.7
33	15.1	16.5	17.7	18.7	19.6	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.7
34	15.1	16.5	17.7	18.7	19.5	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.7
35	15.0	16.4	17.6	18.6	19.5	20.3	20.9	21.5	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.6
36	15.0	16.4	17.6	18.6	19.5	20.3	20.9	21.5	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.6
37	15.0	16.4	17.6	18.6	19.5	20.3	20.9	21.5	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.6
38	15.0	16.4	17.6	18.6	19.5	20.2	20.9	21.5	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WAPP COVER FACTOR AND BETA

YARN BULK DENSITY =0.94

FOUR-HARNESS WEAVE FABRICS

MIL-HDBK-741 (GL)

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	23.1	19.6	19.7	20.1	20.6	21.2	21.7	22.1	22.6	23.0	23.4	23.7	24.1	24.4	24.6	24.9	25.4
26	18.1	18.4	19.0	19.7	20.3	20.9	21.5	22.0	22.5	22.9	23.3	23.7	24.0	24.3	24.6	24.9	25.7
27	16.9	17.7	18.6	19.4	20.1	20.8	21.4	21.9	22.4	22.9	23.3	23.6	24.0	24.3	24.6	24.9	25.1
28	16.2	17.3	18.3	19.2	20.0	20.7	21.3	21.8	22.3	22.8	23.2	23.6	23.9	24.2	24.5	24.9	25.0
29	15.9	17.1	18.1	19.1	19.9	20.6	21.2	21.8	22.3	22.8	23.2	23.6	23.9	24.2	24.5	24.8	25.0
30	15.6	16.9	18.0	19.0	19.9	20.5	21.2	21.8	22.3	22.7	23.2	23.6	23.9	24.2	24.5	24.8	25.0
31	15.4	16.8	17.9	18.9	19.7	20.5	21.1	21.7	22.2	22.7	23.2	23.5	23.9	24.2	24.5	24.8	25.0
32	15.3	16.7	17.8	18.8	19.7	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
33	15.2	16.6	17.8	18.8	19.7	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
34	15.2	16.6	17.8	18.8	19.6	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
35	15.1	16.5	17.7	18.7	19.6	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
36	15.1	16.5	17.7	18.7	19.6	20.4	21.0	21.6	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
37	15.1	16.5	17.7	18.7	19.6	20.4	21.0	21.6	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
38	15.0	16.5	17.7	18.7	19.6	20.4	21.0	21.6	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.95

FOUR-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	26.4	20.0	19.9	20.3	20.8	21.3	21.8	22.3	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0
26	18.5	19.6	19.2	19.4	20.5	21.1	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.5	24.7	25.0
27	17.1	17.9	18.7	19.5	20.2	20.9	21.5	22.0	22.5	23.0	23.4	23.8	24.1	24.4	24.7	25.0
28	16.4	17.5	18.4	19.3	20.1	20.8	21.4	22.0	22.5	22.9	23.3	23.7	24.1	24.4	24.7	25.0
29	16.0	17.2	18.3	19.2	20.0	20.7	21.3	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	25.0
30	15.7	17.0	18.1	19.1	19.9	20.6	21.3	21.9	22.4	22.9	23.3	23.7	24.0	24.4	24.7	24.9
31	15.5	16.9	18.0	19.0	19.8	20.6	21.3	21.8	22.4	22.9	23.3	23.7	24.0	24.4	24.7	24.9
32	15.4	16.8	17.9	18.9	19.8	20.6	21.2	21.8	22.4	22.9	23.3	23.7	24.0	24.3	24.6	24.9
33	15.3	16.7	17.9	18.9	19.8	20.5	21.2	21.8	22.3	22.8	23.3	23.6	24.0	24.3	24.6	24.9
34	15.3	16.7	17.9	18.9	19.7	20.5	21.2	21.8	22.3	22.9	23.2	23.6	24.0	24.3	24.6	24.9
35	15.2	16.6	17.8	18.8	19.7	20.5	21.2	21.8	22.3	22.9	23.2	23.6	24.0	24.3	24.6	24.9
36	15.2	16.6	17.8	18.8	19.7	20.5	21.2	21.8	22.3	22.9	23.2	23.6	24.0	24.3	24.6	24.9
37	15.1	16.6	17.8	18.8	19.7	20.5	21.2	21.8	22.3	22.8	23.2	23.6	24.0	24.3	24.6	24.9
38	15.1	16.6	17.8	18.8	19.7	20.5	21.1	21.8	22.3	22.8	23.2	23.6	24.0	24.3	24.6	24.9

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.96
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND AFTA

YARN RULK DENSITY = 0.97

FOUR-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.98
FOUR-HARNESS WEAVE FABRICS

MIL-HDBK-741 (GL)

WARP COVER FACTOR (K1)	RETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.99
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	30.9
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5	29.7	28.6	28.1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	28.9	27.8	27.4	27.1	27.1	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5	28.4	27.2	26.7	26.5	26.4	26.4	26.5	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	26.6	26.0	25.7	25.7	25.8	25.9	26.0	26.2	
21	0.0	0.0	0.0	0.0	32.3	26.3	25.3	25.0	24.9	24.9	25.0	25.2	25.4	25.6	25.8	26.0	
22	0.0	0.0	0.0	0.0	27.7	24.8	24.2	24.1	24.2	24.4	24.6	24.9	25.1	25.4	25.6	25.8	
23	0.0	0.0	0.0	25.4	23.5	23.2	23.2	23.5	23.8	24.1	24.4	24.7	24.9	25.2	25.5	25.7	
24	0.0	0.0	23.7	22.2	22.1	22.4	22.7	23.1	23.5	23.8	24.2	24.5	24.8	25.1	25.4	25.6	
25	0.0	22.2	20.9	21.1	21.5	21.9	22.4	22.8	23.3	23.7	24.1	24.4	24.7	25.0	25.3	25.6	
26	20.8	19.6	19.9	20.4	21.0	21.6	22.2	22.7	23.1	23.6	24.0	24.3	24.7	25.0	25.3	25.5	
27	19.1	18.6	19.3	20.1	20.8	21.4	22.0	22.6	23.0	23.5	23.9	24.3	24.6	25.0	25.2	25.5	
28	17.1	18.0	19.0	19.8	20.6	21.3	21.9	22.5	23.0	23.4	23.9	24.2	24.6	24.9	25.2	25.5	
29	16.5	17.7	18.7	19.7	20.5	21.2	21.8	22.4	22.9	23.4	23.8	24.2	24.6	24.9	25.2	25.5	
30	16.2	17.5	18.6	19.5	20.4	21.1	21.8	22.4	22.9	23.4	23.8	24.2	24.5	24.9	25.2	25.5	
31	16.0	17.3	18.5	19.4	20.3	21.1	21.7	22.3	22.9	23.3	23.8	24.2	24.5	24.9	25.2	25.5	
32	15.8	17.2	18.4	19.4	20.2	21.0	21.7	22.3	22.8	23.3	23.8	24.2	24.5	24.9	25.2	25.4	
33	15.7	17.1	18.3	19.3	20.2	21.0	21.7	22.3	22.8	23.3	23.7	24.1	24.5	24.8	25.2	25.4	
34	15.6	17.1	18.3	19.3	20.2	21.0	21.6	22.3	22.8	23.3	23.7	24.1	24.5	24.8	25.2	25.4	
35	15.6	17.0	18.2	19.3	20.1	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.8	25.1	25.4	
36	15.5	17.0	18.2	19.2	20.1	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.8	25.1	25.4	
37	15.5	16.9	18.2	19.2	20.1	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.8	25.1	25.4	
38	15.5	16.9	18.1	19.2	20.1	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA
YARN RULK DENSITY =1.00
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RFTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.3	31.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9	30.2	29.0	28.4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5	29.4	28.2	27.6	27.4	27.3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.2	29.0	27.5	26.9	26.7	26.6	26.6	26.6	26.7
20	0.0	0.0	0.0	0.0	0.0	0.0	29.4	27.0	26.2	26.0	25.9	26.0	26.1	26.2	26.3	26.3
21	0.0	0.0	0.0	0.0	38.2	26.9	25.6	25.2	25.2	25.2	25.4	25.5	25.7	25.9	26.1	26.1
22	0.0	0.0	0.0	0.0	29.2	25.2	24.5	24.3	24.4	24.6	24.9	25.0	25.3	25.5	25.7	26.0
23	0.0	0.0	0.0	26.4	23.8	23.4	23.6	23.9	24.2	24.5	24.9	25.1	25.4	25.6	25.9	25.9
24	0.0	0.0	24.5	22.5	22.4	22.6	22.9	23.2	23.6	24.0	24.3	24.7	25.0	25.3	25.5	25.9
25	0.0	23.0	21.3	21.3	21.6	22.1	22.5	23.0	23.4	23.9	24.2	24.5	24.9	25.2	25.5	25.7
26	21.7	19.9	20.1	20.6	21.7	21.8	22.3	22.8	23.3	23.7	24.1	24.5	24.8	25.1	25.4	25.7
27	18.4	18.8	19.5	20.2	20.9	21.6	22.1	22.7	23.2	23.6	24.0	24.4	24.8	25.1	25.4	25.7
28	17.3	18.2	19.1	20.0	20.7	21.4	22.0	22.6	23.1	23.6	24.0	24.4	24.7	25.0	25.4	25.6
29	16.7	17.8	18.9	19.8	20.6	21.3	21.9	22.5	23.0	23.5	23.9	24.3	24.7	25.0	25.3	25.6
30	16.3	17.6	18.7	19.6	20.5	21.2	21.9	22.5	23.0	23.5	23.9	24.3	24.7	25.0	25.3	25.6
31	16.1	17.4	18.6	19.6	20.4	21.2	21.8	22.4	23.0	23.5	23.9	24.3	24.7	25.0	25.3	25.6
32	15.9	17.3	18.5	19.5	20.4	21.1	21.8	22.4	22.9	23.4	23.9	24.3	24.6	25.0	25.3	25.6
33	15.8	17.2	18.4	19.4	20.3	21.1	21.8	22.4	22.9	23.4	23.9	24.3	24.6	25.0	25.3	25.6
34	15.7	17.1	18.4	19.4	20.3	21.1	21.8	22.4	22.9	23.4	23.9	24.3	24.6	25.0	25.3	25.6
35	15.7	17.1	18.3	19.4	20.3	21.0	21.7	22.4	22.9	23.4	23.8	24.3	24.6	25.0	25.3	25.6
36	15.6	17.1	18.3	19.3	20.2	21.0	21.7	22.3	22.9	23.4	23.8	24.2	24.6	25.0	25.3	25.6
37	15.6	17.0	18.3	19.3	20.2	21.0	21.7	22.3	22.9	23.4	23.8	24.2	24.6	25.0	25.3	25.6
38	15.5	17.0	18.2	19.3	20.2	21.0	21.7	22.3	22.9	23.4	23.8	24.2	24.6	25.0	25.3	25.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 1.36

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																	
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.2	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.2	37.5	35.1
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	34.5	33.4	32.8	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.9	34.3	32.8	32.2	31.9	31.8		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.7	32.5	31.6	31.3	31.1	31.1	31.2		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.9	32.6	31.2	30.6	30.5	30.5	30.5	30.6	30.8		
24	0.0	0.0	0.0	0.0	0.0	0.0	34.7	31.0	30.1	29.8	29.7	29.8	30.0	30.1	30.3	30.5		
25	0.0	0.0	0.0	0.0	0.0	32.4	29.7	29.1	28.9	29.0	29.2	29.4	29.6	29.9	30.1	30.4		
26	0.0	0.0	0.0	0.0	30.8	28.6	28.1	28.1	28.3	28.5	28.8	29.1	29.4	29.7	30.0	30.2		
27	0.0	0.0	0.0	29.5	27.4	27.1	27.2	27.5	27.8	28.2	28.5	28.9	29.2	29.5	29.8	30.1		
28	0.0	0.0	28.5	26.3	26.1	26.3	26.7	27.1	27.5	28.0	28.4	28.7	29.1	29.4	29.8	30.1		
29	0.0	27.0	25.1	24.9	25.3	25.8	26.3	26.8	27.3	27.8	28.2	28.6	29.0	29.4	29.7	30.0		
30	29.1	23.8	23.7	24.2	24.8	25.5	26.1	26.7	27.2	27.7	28.1	28.6	28.9	29.3	29.6	30.0		
31	22.4	22.3	23.0	23.7	24.5	25.2	25.9	26.5	27.1	27.6	28.1	28.5	28.9	29.3	29.6	29.9		
32	20.7	21.6	22.5	23.4	24.3	25.1	25.8	26.4	27.0	27.5	28.0	28.4	28.9	29.2	29.6	29.9		
33	19.9	21.1	22.2	23.2	24.1	24.9	25.7	26.3	26.9	27.5	28.0	28.4	28.8	29.2	29.6	29.9		
34	19.4	20.7	22.0	23.0	24.0	24.8	25.6	26.3	26.9	27.4	27.9	28.4	28.8	29.2	29.5	29.9		
35	19.0	20.5	21.8	22.9	23.9	24.8	25.5	26.2	26.8	27.4	27.9	28.4	28.8	29.2	29.5	29.9		
36	18.8	20.3	21.7	22.9	23.8	24.7	25.5	26.2	26.8	27.4	27.9	28.3	28.8	29.1	29.5	29.8		
37	18.6	20.2	21.6	22.7	23.8	24.6	25.4	26.1	26.8	27.3	27.9	28.3	28.7	29.1	29.5	29.8		
38	18.5	20.1	21.5	22.7	23.7	24.6	25.4	26.1	26.7	27.3	27.8	28.3	28.7	29.1	29.5	29.8		
39	18.4	20.0	21.4	22.6	23.7	24.6	25.4	26.1	26.7	27.3	27.8	28.3	28.7	29.1	29.5	29.8		
40	18.3	20.0	21.4	22.6	23.6	24.6	25.4	26.1	26.7	27.3	27.8	28.3	28.7	29.1	29.5	29.8		
41	18.2	19.9	21.4	22.6	23.6	24.5	25.3	26.1	26.7	27.3	27.8	28.3	28.7	29.1	29.5	29.8		
42	18.2	19.9	21.3	22.5	23.6	24.5	25.3	26.1	26.7	27.3	27.8	28.3	28.7	29.1	29.5	29.8		

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY =1.48
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

41L-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.50

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 1.77

FOUR-HARNESSE WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	50.1	27.6	27.3	27.8	28.4	29.1	29.8	30.4	31.0	31.6	32.1	32.6	33.0	33.5	33.8	34.2
35	26.7	25.9	26.4	27.2	28.1	28.9	29.6	30.3	30.9	31.5	32.0	32.5	33.0	33.4	33.8	34.2
36	24.3	24.9	25.9	26.9	27.8	28.7	29.5	30.2	30.8	31.4	32.0	32.5	32.9	33.4	33.8	34.1
37	23.2	24.3	25.5	26.6	27.6	28.5	29.3	30.1	30.8	31.4	31.9	32.4	32.9	33.3	33.7	34.1
38	22.5	23.9	25.2	26.4	27.5	28.4	29.2	30.0	30.7	31.3	31.9	32.4	32.9	33.3	33.7	34.1
39	22.0	23.6	25.0	26.2	27.3	28.3	29.2	29.9	30.6	31.3	31.8	32.4	32.8	33.3	33.7	34.1
40	21.7	23.4	24.9	26.1	27.2	28.2	29.1	29.9	30.6	31.2	31.8	32.3	32.8	33.3	33.7	34.1
41	21.5	23.2	24.7	26.0	27.2	28.2	29.1	29.9	30.6	31.2	31.8	32.3	32.8	33.3	33.7	34.0
42	21.3	23.1	24.6	26.0	27.1	28.1	29.0	29.8	30.5	31.2	31.8	32.3	32.8	33.2	33.7	34.0
43	21.1	23.0	24.5	25.9	27.1	28.1	29.0	29.8	30.5	31.2	31.8	32.3	32.8	33.2	33.6	34.0
44	21.0	22.9	24.5	25.8	27.0	28.1	29.0	29.8	30.5	31.2	31.7	32.3	32.8	33.2	33.6	34.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.00

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY =2.36
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.7
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.4
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	47.0	44.8	43.8
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8	45.3	43.6	42.8	42.5	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	43.9	42.6	42.0	41.7	41.6	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.6	42.7	41.6	41.2	41.0	41.0	41.1	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3	41.7	40.8	40.4	40.3	40.4	40.5	40.7	
31	0.0	0.0	0.0	0.0	0.0	0.0	43.3	40.8	39.9	39.6	39.6	39.7	39.7	39.9	40.1	40.4	
32	0.0	0.0	0.0	0.0	0.0	0.0	42.6	39.9	39.1	38.8	38.9	39.1	39.3	39.6	39.9	40.2	
33	0.0	0.0	0.0	0.0	0.0	42.2	39.0	38.2	38.0	38.1	38.4	38.7	39.0	39.3	39.7	40.0	
34	0.0	0.0	0.0	0.0	47.5	38.7	37.3	37.2	37.4	37.7	38.0	38.4	38.8	39.1	39.5	39.8	
35	0.0	0.0	0.0	44.8	37.4	36.4	36.3	36.5	36.9	37.3	37.7	38.2	38.6	39.0	39.4	39.7	
36	0.0	0.0	0.0	36.9	35.4	35.3	35.6	36.0	36.5	37.0	37.5	38.0	38.4	38.9	39.3	39.7	
37	0.0	0.0	36.8	34.4	34.2	34.6	35.1	35.7	36.3	36.8	37.4	37.9	38.3	38.8	39.2	39.6	
38	0.0	39.0	33.4	33.1	33.5	34.1	34.7	35.4	36.0	36.7	37.2	37.7	38.2	38.7	39.1	39.5	
39	0.0	32.6	31.8	32.2	32.9	33.7	34.5	35.2	35.9	36.5	37.1	37.7	38.2	38.6	39.1	39.5	
40	32.9	30.5	30.8	31.6	32.5	33.4	34.3	35.0	35.8	36.4	37.0	37.6	38.1	38.6	39.0	39.5	
41	29.1	29.3	30.2	31.2	32.2	33.2	34.1	34.9	35.6	36.3	37.0	37.5	38.1	38.5	39.0	39.4	
42	27.5	28.5	29.7	30.9	32.0	33.0	34.0	34.8	35.6	36.3	36.9	37.5	38.0	38.5	39.0	39.4	
43	26.5	28.0	29.4	30.7	31.8	32.9	33.8	34.7	35.5	36.2	36.8	37.4	38.0	38.5	38.9	39.4	
44	25.9	27.6	29.1	30.5	31.7	32.8	33.8	34.6	35.4	36.2	36.8	37.4	38.0	38.5	38.9	39.4	
45	25.4	27.3	28.9	30.3	31.6	32.7	33.7	34.6	35.4	36.1	36.8	37.4	37.9	38.4	38.9	39.3	
46	25.1	27.0	28.7	30.2	31.5	32.6	33.6	34.5	35.3	36.1	36.7	37.4	37.9	38.4	38.9	39.3	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND PETA

YARN BULK DENSITY = 2.50

FOUR-HARNESS WFAVE FABRICS

WARP COVER FACTOR (K ₁)	PETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9	49.2
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.9	47.3
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.8	44.5
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.5	42.7
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.2	42.2
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.5	41.8
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.3	41.5
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.3	41.3
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.1	41.1
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9	41.1
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9	41.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.8	40.8
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.8	40.8
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7	40.7
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	40.6
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	40.6
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	40.6
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	40.6
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5	40.5
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5	40.5
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5	40.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.75

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.4
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.5	50.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.5	51.1	48.6	47.4
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.8	49.5	47.4	46.5	46.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	48.1	46.4	45.6	45.2	45.1
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.9	47.0	45.5	44.8	44.5	44.4	44.5
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.8	46.1	44.6	44.0	43.8	43.8	43.9	44.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.4	45.2	43.8	43.2	43.1	43.1	43.3	43.5	43.7
34	0.0	0.0	0.0	0.0	0.0	0.0	50.9	44.5	42.9	42.4	42.3	42.4	42.6	42.9	43.2	43.5
35	0.0	0.0	0.0	0.0	0.0	53.8	43.9	42.1	41.6	41.6	41.7	42.0	42.3	42.6	42.9	43.3
36	0.0	0.0	0.0	0.0	0.0	43.5	41.3	40.3	40.8	41.0	41.3	41.6	42.0	42.4	42.7	43.1
37	0.0	0.0	0.0	0.0	43.6	40.5	39.9	39.9	40.2	40.5	40.9	41.4	41.8	42.2	42.6	43.0
38	0.0	0.0	0.0	45.2	39.8	39.0	39.0	39.3	39.7	40.2	40.7	41.2	41.6	42.1	42.5	42.9
39	0.0	0.0	60.7	39.3	38.0	38.0	38.3	38.8	39.4	39.9	40.5	41.0	41.5	41.9	42.4	42.8
40	0.0	0.0	39.4	37.0	36.9	37.3	37.9	38.5	39.1	39.7	40.3	40.9	41.4	41.9	42.3	42.7
41	0.0	42.4	36.1	35.7	36.1	36.8	37.5	38.2	38.9	39.6	40.2	40.7	41.3	41.8	42.2	42.7
42	0.0	35.6	34.5	34.9	35.6	36.4	37.2	38.0	38.7	39.4	40.1	40.7	41.2	41.7	42.2	42.6
43	36.8	33.2	33.4	34.2	35.2	36.1	37.0	37.8	38.6	39.3	40.0	40.6	41.1	41.7	42.1	42.6
44	32.1	31.8	32.7	33.8	34.9	35.9	36.8	37.7	38.5	39.2	39.9	40.5	41.1	41.6	42.1	42.6
45	30.1	31.0	32.2	33.5	34.6	35.7	36.7	37.6	38.4	39.2	39.8	40.5	41.1	41.6	42.1	42.5
46	29.0	30.4	31.8	33.2	34.4	35.6	36.6	37.5	38.3	39.1	39.8	40.4	41.0	41.6	42.0	42.5

IL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.95

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.4
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.2	55.1	51.7
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.6	53.0	50.3	49.1	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.4	51.4	49.2	48.2	47.7
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.2	50.2	49.2	47.3	46.9	46.8
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.9	49.1	47.3	46.5	46.2	46.1	46.1
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	48.2	46.5	45.8	45.5	45.4	45.5	45.7
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.7	47.5	45.6	45.0	44.8	44.8	44.9	45.1	45.3
35	0.0	0.0	0.0	0.0	0.0	0.0	57.2	46.9	44.9	44.2	44.0	44.1	44.3	44.5	44.8	45.1
36	0.0	0.0	0.0	0.0	0.0	46.5	44.1	43.4	43.3	43.4	43.4	43.4	43.9	44.2	44.5	44.8
37	0.0	0.0	0.0	0.0	46.5	43.4	42.6	42.6	42.6	42.9	43.2	43.6	44.0	44.3	44.7	
38	0.0	0.0	0.0	47.6	42.7	41.7	41.6	41.8	42.1	42.5	42.9	43.3	43.8	44.2	44.6	
39	0.0	0.0	53.5	42.2	40.8	40.7	40.9	41.3	41.7	42.2	42.7	43.2	43.6	44.0	44.4	
40	0.0	0.0	42.2	40.0	39.7	39.9	40.4	40.9	41.5	42.0	42.5	43.0	43.5	43.9	44.4	
41	0.0	43.8	39.2	38.6	38.9	39.4	40.0	40.6	41.2	41.8	42.4	42.9	43.4	43.9	44.3	
42	0.0	0.0	38.6	37.5	37.7	38.1	39.0	39.7	40.4	41.1	41.7	42.3	42.9	43.3	43.8	44.2
43	0.0	39.1	36.4	36.5	37.1	37.9	38.7	39.5	40.2	40.9	41.6	42.2	42.7	43.2	43.7	44.2
44	49.1	35.4	35.1	35.8	36.6	37.6	38.4	39.3	40.1	40.8	41.5	42.1	42.6	43.2	43.7	44.1
45	35.2	33.7	34.3	35.2	36.3	37.3	38.3	39.1	39.9	40.7	41.4	42.0	42.6	43.1	43.6	44.1
46	32.2	32.6	33.7	34.8	36.0	37.1	38.1	39.0	39.8	40.6	41.3	41.9	42.5	43.1	43.6	44.1
47	30.7	31.8	33.2	34.5	35.8	36.9	38.0	38.9	39.8	40.5	41.2	41.9	42.5	43.1	43.6	44.0
48	29.7	31.3	32.8	34.3	35.6	36.8	37.9	38.8	39.7	40.5	41.2	41.9	42.5	43.0	43.5	44.0
49	29.1	30.9	32.6	34.1	35.5	36.7	37.8	38.7	39.6	40.4	41.2	41.8	42.4	43.0	43.5	44.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 3.25

FOUR-HARNES WEAVE FABRICS

WARD COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.54

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.75

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.9
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.4	56.9
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.4	58.2	54.8
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.2	57.2	55.1	54.1	53.6
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.7	56.4	54.3	53.3	52.9	52.7
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	55.7	53.5	52.6	52.2	52.0	52.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.8	55.2	52.8	51.9	51.5	51.4	51.4	51.6
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.2	54.9	52.1	51.1	50.8	50.7	50.8	51.0	51.2
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.1	51.6	50.4	50.0	50.0	50.1	50.3	50.6	50.9
40	0.0	0.0	0.0	0.0	0.0	0.0	56.1	51.1	49.7	49.3	49.2	49.4	49.7	50.0	50.3	50.7
41	0.0	0.0	0.0	0.0	0.0	59.9	50.8	49.0	48.5	48.5	48.7	49.0	49.3	49.7	50.1	50.5
42	0.0	0.0	0.0	0.0	0.0	51.0	48.3	47.7	47.6	47.9	48.7	48.6	49.1	49.5	49.9	50.3
43	0.0	0.0	0.0	0.0	52.3	47.8	46.8	46.8	47.0	47.4	47.9	48.4	48.8	49.3	49.8	50.2
44	0.0	0.0	0.0	59.4	47.5	46.0	45.8	46.1	46.5	47.1	47.6	48.1	48.7	49.2	49.7	50.1
45	0.0	0.0	0.0	48.1	45.2	44.8	45.1	45.6	46.2	46.8	47.4	48.0	48.5	49.0	49.5	50.0
46	0.0	0.0	52.0	44.7	43.8	44.0	44.5	45.2	45.9	46.5	47.2	47.8	48.4	48.9	49.5	49.9
47	0.0	0.0	44.8	42.8	42.8	43.4	44.1	44.9	45.6	46.3	47.0	47.7	48.3	48.9	49.4	49.9
48	0.0	47.9	41.9	41.6	42.1	42.9	43.8	44.6	45.4	46.2	46.9	47.6	48.2	48.8	49.3	49.8
49	0.0	41.7	40.3	40.7	41.6	42.5	43.5	44.4	45.3	46.1	46.8	47.5	48.1	48.7	49.3	49.8
50	45.3	39.1	39.2	40.1	41.2	42.2	43.3	44.2	45.1	45.9	46.7	47.4	48.1	48.7	49.2	49.7
51	38.7	37.6	38.4	39.6	40.8	42.0	43.1	44.1	45.0	45.8	46.6	47.3	48.0	48.6	49.2	49.7
52	36.1	36.6	37.9	39.2	40.6	41.8	42.9	44.0	44.9	45.8	46.6	47.3	48.0	48.6	49.2	49.7
53	34.6	35.9	37.4	38.9	40.3	41.6	42.8	43.9	44.8	45.7	46.5	47.2	47.9	48.5	49.1	49.7
54	33.6	35.3	37.1	38.7	40.2	41.5	42.7	43.8	44.8	45.6	46.5	47.2	47.9	48.5	49.1	49.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 4.00

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.6	63.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.5	61.6	58.9
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.7	60.5	58.0	56.8
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.9	59.5	57.1	56.0	55.4	
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	58.8	56.4	55.3	54.7	54.5	
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.5	58.3	55.7	54.5	54.1	53.9	53.8	
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.4	58.0	55.0	53.8	53.4	53.2	53.2	53.3	
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.1	54.4	53.1	52.7	52.5	52.6	52.7	53.0	
40	0.0	0.0	0.0	0.0	0.0	0.0	58.9	54.0	52.5	51.9	51.8	51.9	52.1	52.4	52.7	
41	0.0	0.0	0.0	0.0	0.0	61.5	53.7	51.8	51.2	51.1	51.2	51.4	51.7	52.1	52.4	
42	0.0	0.0	0.0	0.0	0.0	76.4	53.8	51.2	50.4	50.3	50.4	50.7	51.1	51.4	51.8	52.2
43	0.0	0.0	0.0	0.0	0.0	54.7	50.7	49.7	49.5	49.6	50.0	50.3	50.8	51.2	51.6	52.0
44	0.0	0.0	0.0	0.0	58.5	50.4	48.9	48.6	48.8	49.1	49.6	50.0	50.5	51.0	51.5	51.9
45	0.0	0.0	0.0	0.0	50.7	48.2	47.7	47.9	48.3	48.7	49.3	49.8	50.3	50.8	51.3	51.8
46	0.0	0.0	0.0	52.8	47.6	46.8	46.9	47.3	47.8	48.4	49.0	49.6	50.2	50.7	51.2	51.7
47	0.0	0.0	83.3	47.5	45.9	45.8	46.3	46.9	47.5	48.2	48.8	49.4	50.0	50.6	51.1	51.6
48	0.0	0.0	49.0	45.1	44.7	45.1	45.8	46.5	47.2	48.0	48.7	49.3	49.9	50.5	51.0	51.6
49	0.0	70.8	44.7	43.6	43.9	44.6	45.4	46.2	47.0	47.8	48.5	49.2	49.8	50.4	51.0	51.5
50	0.0	45.9	42.5	42.5	43.3	44.1	45.1	46.0	46.8	47.6	48.4	49.1	49.7	50.4	50.9	51.4
51	0.0	41.8	41.1	41.8	42.8	43.8	44.8	45.8	46.7	47.5	48.3	49.0	49.7	50.3	50.9	51.4
52	43.3	39.8	40.2	41.2	42.4	43.5	44.6	45.6	46.6	47.4	48.2	48.9	49.6	50.2	50.8	51.4
53	38.9	38.5	39.5	40.8	42.1	43.3	44.4	45.5	46.4	47.3	48.1	48.9	49.6	50.2	50.8	51.3
54	36.7	37.6	39.0	40.4	41.8	43.1	44.3	45.4	46.4	47.2	48.1	48.8	49.5	50.2	50.8	51.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 4.13

FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =4.67
FOUR-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MIL-HDBK-741 (GL)

(D) FIVE-HARNESS WEAVE FABRICS

TABLE 1-3
MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.54

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K ₁)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.55

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	24.7	23.0	22.4
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.4	22.5	21.9	21.5	21.4	21.3	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	21.4	21.0	20.9	20.9	20.8	20.8	20.8	20.9	
17	0.0	0.0	0.0	0.0	0.0	0.0	21.6	20.5	20.1	20.1	20.1	20.2	20.3	20.4	20.5	20.7	
18	0.0	0.0	0.0	0.0	20.9	19.6	19.3	19.3	19.4	19.5	19.7	19.9	20.0	20.2	20.4	20.5	
19	0.0	0.0	21.6	18.6	18.3	18.3	18.5	18.7	19.0	19.2	19.5	19.7	19.9	20.1	20.3	20.4	
20	0.0	17.9	17.1	17.2	17.5	17.8	18.2	18.5	18.8	19.1	19.3	19.6	19.8	20.0	20.2	20.4	
21	15.7	15.7	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0	19.2	19.5	19.7	20.0	20.2	20.3	
22	14.3	15.0	15.7	16.3	16.9	17.4	17.8	18.2	18.6	18.9	19.2	19.5	19.7	19.9	20.1	20.3	
23	13.7	14.7	15.5	16.1	16.7	17.3	17.7	18.1	18.5	18.9	19.1	19.4	19.7	19.9	20.1	20.3	
24	13.4	14.5	15.3	16.0	16.7	17.2	17.7	18.1	18.5	18.8	19.1	19.4	19.7	19.9	20.1	20.3	
25	13.3	14.3	15.2	16.0	16.6	17.2	17.6	18.1	18.5	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
26	13.7	14.3	15.2	15.9	16.6	17.1	17.6	18.1	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
27	13.1	14.2	15.1	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
28	13.1	14.2	15.1	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
29	13.0	14.2	15.1	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
30	13.0	14.1	15.1	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	
31	13.0	14.1	15.1	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
32	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
33	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
34	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
35	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
36	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	
37	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.8	20.1	20.3	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.56

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	23.2	22.3	21.9	21.7	21.6	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	22.0	21.4	21.1	21.0	21.0	21.1	21.1	
17	0.0	0.0	0.0	0.0	0.0	0.0	22.8	21.0	20.5	20.4	20.4	20.4	20.5	20.6	20.7	20.9	
18	0.0	0.0	0.0	0.0	22.5	20.1	19.6	19.6	19.6	19.8	19.9	20.1	20.2	20.4	20.6	20.7	
19	0.0	0.0	0.0	19.3	18.7	18.6	18.8	19.0	19.2	19.4	19.7	19.9	20.1	20.3	20.5	20.6	
20	0.0	19.1	17.6	17.5	17.7	18.0	18.4	18.7	19.0	19.3	19.5	19.8	20.0	20.2	20.4	20.6	
21	16.4	16.1	16.4	16.9	17.3	17.7	18.1	18.5	18.8	19.1	19.4	19.7	19.9	20.1	20.3	20.5	
22	14.6	15.2	15.9	16.5	17.1	17.6	18.0	18.4	18.8	19.1	19.4	19.6	19.9	20.1	20.3	20.5	
23	13.9	14.8	15.6	16.3	16.9	17.4	17.9	18.3	18.7	19.0	19.3	19.6	19.9	20.1	20.3	20.5	
24	13.6	14.6	15.5	16.2	16.8	17.4	17.9	18.3	18.7	19.0	19.3	19.6	19.8	20.1	20.3	20.5	
25	13.4	14.5	15.4	16.1	16.8	17.3	17.8	18.2	18.6	19.0	19.3	19.6	19.8	20.1	20.3	20.5	
26	13.3	14.4	15.3	16.1	16.7	17.3	17.8	18.2	18.6	19.0	19.3	19.6	19.8	20.0	20.3	20.5	
27	13.2	14.3	15.3	16.0	16.7	17.3	17.8	18.2	18.6	18.9	19.3	19.5	19.8	20.0	20.3	20.5	
28	13.2	14.3	15.2	16.0	16.7	17.3	17.8	18.2	18.6	18.9	19.3	19.5	19.8	20.0	20.3	20.4	
29	13.2	14.3	15.2	16.0	16.7	17.2	17.7	18.2	18.6	18.9	19.3	19.5	19.8	20.0	20.2	20.4	
30	13.1	14.3	15.2	16.0	16.7	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
31	13.1	14.3	15.2	16.0	16.7	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
32	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
33	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
34	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
35	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
36	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	
37	13.1	14.2	15.2	16.0	16.6	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.8	20.0	20.2	20.4	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.57
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.58

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K ₁)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RPTA

YARN RULK DENSITY = 0.57

FIVE-HARNESS WEAVE FARRICS

WARP COVER FACTOR (K1)	RPTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY = 0.60
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDEK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.61

FIVE-HARNESS WEAVE FABRICS

WARD COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	24.3	23.6	23.2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	24.3	23.1	22.7	22.5	22.4	22.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	23.1	22.2	21.9	21.8	21.8	21.8	21.9	22.0
18	0.0	0.0	0.0	0.0	0.0	30.1	22.3	21.4	21.1	21.1	21.1	21.2	21.3	21.5	21.6	21.7
19	0.0	0.0	0.0	0.0	21.8	20.5	20.2	20.3	20.4	20.5	20.7	20.9	21.1	21.3	21.4	21.6
20	0.0	0.0	23.0	19.6	19.3	19.3	19.5	19.7	20.0	20.3	20.5	20.7	20.9	21.1	21.3	21.5
21	0.0	19.1	18.1	18.2	18.4	18.8	19.1	19.5	19.8	20.1	20.4	20.6	20.8	21.1	21.3	21.5
22	16.9	16.7	17.1	17.6	18.0	18.5	18.9	19.3	19.7	20.0	20.3	20.5	20.8	21.0	21.2	21.4
23	15.2	15.9	16.6	17.2	17.8	18.3	18.8	19.2	19.6	19.9	20.2	20.5	20.7	21.0	21.2	21.4
24	14.6	15.5	16.3	17.0	17.7	18.2	18.7	19.1	19.5	19.9	20.2	20.5	20.7	21.0	21.2	21.4
25	14.2	15.3	16.2	16.9	17.6	18.1	18.6	19.1	19.5	19.8	20.1	20.4	20.7	20.9	21.2	21.4
26	14.0	15.1	16.1	16.8	17.5	18.1	18.6	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.2	21.4
27	13.9	15.0	16.0	16.8	17.5	18.1	18.6	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.4
28	13.8	15.0	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
29	13.8	14.9	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
30	13.7	14.9	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
31	13.7	14.9	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
32	13.7	14.9	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
33	13.7	14.9	15.9	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
34	13.7	14.9	15.8	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
35	13.7	14.9	15.8	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
36	13.7	14.9	15.8	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3
37	13.7	14.9	15.8	16.7	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	20.9	21.1	21.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY =0.67
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	17.7	17.0	17.3	17.8	18.2	18.7	19.1	19.5	19.8	20.2	20.4	20.7	21.0	21.2	21.5	21.6	
23	15.5	16.1	16.8	17.4	18.0	18.5	19.0	19.4	19.7	20.1	20.4	20.7	20.9	21.2	21.4	21.6	
24	14.8	15.7	16.5	17.2	17.8	18.4	18.9	19.3	19.7	20.0	20.3	20.6	20.9	21.1	21.4	21.6	
25	14.4	15.4	16.3	17.1	17.7	18.3	18.8	19.2	19.6	20.0	20.3	20.6	20.9	21.1	21.3	21.5	
26	14.2	15.3	16.2	17.0	17.7	18.2	18.9	19.2	19.6	20.0	20.3	20.6	20.9	21.1	21.3	21.5	
27	14.0	15.2	16.1	16.9	17.6	18.2	18.7	19.2	19.6	20.0	20.3	20.6	20.9	21.1	21.3	21.5	
28	14.0	15.1	16.1	16.9	17.6	18.2	18.7	19.2	19.6	19.9	20.3	20.6	20.9	21.1	21.3	21.5	
29	13.9	15.1	16.0	16.9	17.6	18.2	18.7	19.2	19.6	19.9	20.3	20.6	20.9	21.1	21.3	21.5	
30	13.9	15.0	16.0	16.8	17.5	18.2	18.7	19.1	19.6	19.9	20.3	20.6	20.8	21.1	21.3	21.5	
31	13.8	15.0	16.0	16.9	17.5	18.1	18.7	19.1	19.6	19.9	20.3	20.6	20.9	21.1	21.3	21.5	
32	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.6	19.9	20.3	20.6	20.9	21.1	21.3	21.5	
33	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.5	19.9	20.3	20.6	20.8	21.1	21.3	21.5	
34	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.5	19.9	20.3	20.6	20.8	21.1	21.3	21.5	
35	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.5	19.9	20.2	20.6	20.9	21.1	21.3	21.5	
36	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.5	19.9	20.2	20.5	20.8	21.1	21.3	21.5	
37	13.8	15.0	16.0	16.8	17.5	18.1	18.7	19.1	19.5	19.9	20.2	20.5	20.8	21.1	21.3	21.5	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K?) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.63

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.64

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	21.1	17.9	17.9	18.2	18.7	19.1	19.5	19.9	20.2	20.5	20.9	21.2	21.4	21.6	21.8	22.0
23	16.2	16.6	17.2	17.8	18.4	18.9	19.3	19.7	20.1	20.4	20.7	21.0	21.3	21.5	21.7	21.9
24	15.2	16.1	16.9	17.5	18.2	18.7	19.2	19.6	20.0	20.4	20.7	21.0	21.2	21.5	21.7	21.9
25	14.7	15.8	16.6	17.4	18.0	18.6	19.1	19.6	20.0	20.3	20.7	20.9	21.2	21.5	21.7	21.9
26	14.5	15.6	16.5	17.3	18.0	18.6	19.1	19.5	19.9	20.3	20.6	20.9	21.2	21.4	21.7	21.9
27	14.3	15.5	16.4	17.2	17.9	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.4	21.7	21.9
28	14.2	15.4	16.4	17.2	17.9	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.4	21.7	21.9
29	14.2	15.3	16.3	17.1	17.8	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.4	21.7	21.9
30	14.1	15.3	16.3	17.1	17.8	18.4	19.0	19.5	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
31	14.1	15.3	16.3	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
32	14.1	15.3	16.3	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
33	14.0	15.2	16.2	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
34	14.0	15.2	16.2	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
35	14.0	15.2	16.2	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
36	14.0	15.2	16.2	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9
37	14.0	15.2	16.2	17.1	17.8	18.4	19.0	19.4	19.9	20.2	20.6	20.9	21.2	21.4	21.6	21.9

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.65
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	25.8	24.8
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	24.4	23.9	23.6	23.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	24.6	23.5	23.0	22.9	22.8	22.8	22.9	
18	0.0	0.0	0.0	0.0	0.0	0.0	33.7	23.7	22.6	22.3	22.2	22.2	22.3	22.3	22.4	22.5
19	0.0	0.0	0.0	0.0	0.0	23.2	21.8	21.5	21.4	21.5	21.6	21.7	21.9	22.1	22.2	22.4
20	0.0	0.0	0.0	23.9	21.0	20.6	20.5	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3
21	0.0	0.0	20.5	19.5	19.7	19.7	20.0	20.3	20.6	20.8	21.1	21.3	21.6	21.8	22.0	22.2
22	0.0	18.5	18.2	18.5	18.9	19.3	19.7	20.0	20.4	20.7	21.0	21.3	21.5	21.7	21.9	22.1
23	16.7	16.9	17.4	18.0	18.5	19.0	19.5	19.9	20.3	20.6	20.9	21.2	21.4	21.7	21.9	22.1
24	15.5	16.3	17.0	17.7	18.3	18.9	19.4	19.8	20.2	20.5	20.9	21.1	21.4	21.7	21.9	22.1
25	14.9	15.9	16.8	17.6	18.2	18.8	19.3	19.7	20.1	20.5	20.8	21.1	21.4	21.6	21.9	22.1
26	14.6	15.7	16.7	17.4	18.1	18.7	19.2	19.7	20.1	20.5	20.8	21.1	21.4	21.6	21.8	22.1
27	14.5	15.6	16.6	17.4	18.1	18.7	19.2	19.7	20.1	20.4	20.8	21.1	21.4	21.6	21.8	22.0
28	14.4	15.5	16.5	17.3	18.0	18.6	19.2	19.6	20.1	20.4	20.8	21.1	21.3	21.6	21.8	22.0
29	14.3	15.5	16.5	17.3	18.0	18.6	19.1	19.6	20.0	20.4	20.8	21.1	21.3	21.6	21.9	22.0
30	14.2	15.4	16.4	17.3	18.0	18.6	19.1	19.6	20.0	20.4	20.7	21.1	21.3	21.6	21.8	22.0
31	14.2	15.4	16.4	17.2	18.0	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
32	14.2	15.4	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
33	14.1	15.4	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
34	14.1	15.4	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
35	14.1	15.3	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
36	14.1	15.3	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0
37	14.1	15.3	16.4	17.2	17.9	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.66

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	26.5
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	25.0	24.3	23.9
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	24.0	23.4	23.2	23.1	23.1	23.1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6	23.1	22.6	22.4	22.4	22.5	22.5	22.6	22.8
19	0.0	0.0	0.0	0.0	0.0	24.4	22.3	21.8	21.7	21.7	21.8	22.0	22.1	22.3	22.4	22.6
20	0.0	0.0	0.0	24.3	21.6	20.9	20.8	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3	22.4
21	0.0	0.0	21.6	20.0	19.8	20.0	20.2	20.5	20.8	21.0	21.3	21.5	21.8	22.0	22.2	22.4
22	0.0	19.2	18.6	18.8	19.1	19.5	19.9	20.2	20.6	20.9	21.2	21.4	21.7	21.9	22.1	22.3
23	17.2	17.2	17.7	18.2	18.7	19.2	19.7	20.1	20.4	20.8	21.1	21.4	21.6	21.9	22.1	22.3
24	15.7	16.5	17.2	17.9	18.5	19.0	19.5	20.0	20.4	20.7	21.0	21.3	21.6	21.8	22.0	22.3
25	15.1	16.1	17.0	17.7	18.4	18.9	19.4	19.9	20.3	20.7	21.0	21.3	21.6	21.8	22.0	22.2
26	14.8	15.9	16.8	17.6	18.3	18.9	19.4	19.8	20.3	20.6	21.0	21.3	21.5	21.8	22.0	22.2
27	14.6	15.7	16.7	17.5	18.2	18.8	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0	22.2
28	14.5	15.7	16.6	17.5	18.2	18.8	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0	22.2
29	14.4	15.6	16.6	17.4	18.1	18.8	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0	22.2
30	14.3	15.6	16.6	17.4	18.1	18.7	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0	22.2
31	14.3	15.5	16.5	17.4	18.1	18.7	19.3	19.8	20.2	20.6	20.9	21.2	21.5	21.7	22.0	22.2
32	14.3	15.5	16.5	17.4	18.1	18.7	19.3	19.7	20.2	20.6	20.9	21.2	21.5	21.7	22.0	22.2
33	14.3	15.5	16.5	17.4	18.1	18.7	19.3	19.7	20.2	20.6	20.9	21.2	21.5	21.7	22.0	22.2
34	14.2	15.5	16.5	17.3	18.1	18.7	19.3	19.7	20.2	20.6	20.9	21.2	21.5	21.7	22.0	22.2
35	14.2	15.5	16.5	17.3	18.1	18.7	19.3	19.7	20.2	20.5	20.9	21.2	21.5	21.7	22.0	22.2
36	14.2	15.5	16.5	17.3	18.1	18.7	19.3	19.7	20.2	20.5	20.9	21.2	21.5	21.7	22.0	22.2
37	14.2	15.5	16.5	17.3	18.1	18.7	19.3	19.7	20.2	20.5	20.9	21.2	21.5	21.7	22.0	22.2

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.67

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN RULK DENSITY =0.68
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.69

FIVE-HARNLESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.70

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0
23	22.2	18.8	18.7	19.1	19.5	20.0	20.4	20.8	21.1	21.5	21.8	22.0	22.3	22.5	22.8	23.0	
24	17.1	17.4	18.0	18.6	19.2	19.7	20.2	20.6	21.0	21.4	21.7	22.0	22.2	22.5	22.7	22.9	
25	16.0	16.8	17.7	18.4	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.5	22.7	22.9	
26	15.5	16.5	17.4	18.2	18.9	19.5	20.0	20.5	20.9	21.3	21.6	21.9	22.2	22.4	22.7	22.9	
27	15.2	16.3	17.3	18.1	18.8	19.4	20.0	20.4	20.9	21.2	21.6	21.9	22.2	22.4	22.7	22.9	
28	15.0	16.2	17.2	18.0	18.7	19.4	19.9	20.4	20.8	21.2	21.6	21.9	22.2	22.4	22.7	22.9	
29	14.9	16.1	17.1	18.0	18.7	19.3	19.9	20.4	20.8	21.2	21.5	21.7	22.1	22.4	22.7	22.9	
30	14.8	16.1	17.1	17.9	18.7	19.3	19.9	20.4	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
31	14.8	16.0	17.0	17.9	18.7	19.3	19.9	20.4	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
32	14.7	16.0	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
33	14.7	16.0	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
34	14.7	15.9	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
35	14.7	15.9	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
36	14.7	15.9	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	
37	14.7	15.9	17.0	17.9	18.6	19.3	19.8	20.3	20.8	21.2	21.5	21.9	22.1	22.4	22.6	22.9	

MTL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN BULK DENSITY = 0.71

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	27.0	25.8	25.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1	25.7	24.9	24.5	24.4	24.3	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.1	24.8	24.1	23.8	23.7	23.7	23.7	23.8	
19	0.0	0.0	0.0	0.0	0.0	0.0	27.1	24.1	23.3	23.1	23.0	23.1	23.2	23.3	23.4	23.5
20	0.0	0.0	0.0	0.0	0.0	23.5	22.5	22.3	22.3	22.4	22.5	22.7	22.9	23.0	23.2	23.4
21	0.0	0.0	0.0	23.9	21.7	21.4	21.4	21.6	21.8	22.0	22.2	22.4	22.7	22.9	23.1	23.3
22	0.0	0.0	21.2	20.3	20.3	20.6	20.9	21.2	21.5	21.8	22.0	22.3	22.5	22.8	23.0	23.2
23	0.0	19.3	19.1	19.3	19.7	20.1	20.6	20.9	21.3	21.6	21.9	22.2	22.5	22.7	22.9	23.1
24	17.5	17.7	18.2	18.8	19.4	19.9	20.4	20.8	21.2	21.5	21.9	22.1	22.4	22.7	22.9	23.1
25	16.2	17.0	17.8	18.5	19.2	19.7	20.2	20.7	21.1	21.5	21.8	22.1	22.4	22.6	22.9	23.1
26	15.7	16.7	17.6	18.4	19.0	19.6	20.2	20.6	21.0	21.4	21.8	22.1	22.4	22.6	22.8	23.1
27	15.3	16.5	17.4	18.2	19.0	19.6	20.1	20.6	21.0	21.4	21.7	22.0	22.3	22.6	22.8	23.0
28	15.1	16.3	17.3	18.2	18.9	19.5	20.1	20.5	21.0	21.4	21.7	22.0	22.3	22.6	22.8	23.0
29	15.0	16.2	17.3	18.1	18.8	19.5	20.0	20.5	21.0	21.4	21.7	22.0	22.3	22.6	22.8	23.0
30	14.9	16.2	17.2	18.1	18.8	19.5	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
31	14.9	16.1	17.2	18.0	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
32	14.8	16.1	17.1	18.0	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
33	14.8	16.1	17.1	18.0	18.8	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
34	14.8	16.1	17.1	18.0	18.9	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
35	14.8	16.1	17.1	18.0	18.7	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
36	14.8	16.0	17.1	18.0	18.7	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0
37	14.8	16.0	17.1	18.0	18.7	19.4	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.72

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.6	27.8	26.3	25.7
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.2	26.4	25.3	24.9	24.6	24.5	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	25.4	24.5	24.1	24.0	23.9	24.0	24.0	
19	0.0	0.0	0.0	0.0	0.0	30.5	24.7	23.7	23.4	23.3	23.3	23.4	23.5	23.6	23.7	
20	0.0	0.0	0.0	0.0	24.4	23.0	22.6	22.5	22.6	22.7	22.9	23.0	23.2	23.4	23.5	
21	0.0	0.0	0.0	26.0	22.3	21.7	21.8	22.0	22.2	22.4	22.6	22.8	23.1	23.2	23.4	
22	0.0	0.0	22.2	20.7	20.6	20.9	21.1	21.4	21.7	21.9	22.2	22.5	22.7	22.9	23.2	23.4
23	0.0	20.0	19.4	19.6	19.9	20.3	20.7	21.1	21.5	21.8	22.1	22.4	22.6	22.9	23.1	23.3
24	19.0	18.0	18.5	19.0	19.6	20.1	20.5	21.0	21.3	21.7	22.0	22.3	22.6	22.8	23.1	23.3
25	16.5	17.3	18.0	18.7	19.3	19.9	20.4	20.9	21.3	21.6	22.0	22.3	22.5	22.8	23.0	23.2
26	15.8	16.9	17.7	18.5	19.2	19.8	20.3	20.8	21.2	21.6	21.9	22.2	22.5	22.8	23.0	23.2
27	15.5	16.6	17.6	18.4	19.1	19.7	20.3	20.7	21.2	21.5	21.9	22.2	22.5	22.9	23.0	23.2
28	15.3	16.5	17.5	18.3	19.0	19.7	20.2	20.7	21.1	21.5	21.9	22.2	22.5	22.7	23.0	23.2
29	15.2	16.4	17.4	18.2	19.0	19.6	20.2	20.7	21.1	21.5	21.9	22.2	22.5	22.7	23.0	23.2
30	15.1	16.3	17.3	18.2	19.0	19.6	20.2	20.7	21.1	21.5	21.8	22.2	22.5	22.7	23.0	23.2
31	15.0	16.3	17.3	18.2	18.9	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.5	22.7	23.0	23.2
32	15.0	16.2	17.3	18.2	18.9	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.4	22.7	23.0	23.2
33	14.9	16.2	17.3	18.1	18.9	19.6	20.1	20.6	21.1	21.5	21.8	22.2	22.4	22.7	23.0	23.2
34	14.9	16.2	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.2	22.4	22.7	23.0	23.2
35	14.9	16.2	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.1	22.4	22.7	23.0	23.2
36	14.9	16.2	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.1	22.4	22.7	23.0	23.2
37	14.9	16.2	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.1	22.4	22.7	23.0	23.2
38	14.9	16.1	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.1	22.4	22.7	23.0	23.2
39	14.9	16.1	17.2	18.1	18.9	19.5	20.1	20.6	21.1	21.5	21.8	22.1	22.4	22.7	23.0	23.2

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.73

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	26.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.1	27.1	25.8	25.2	24.9	24.8	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	26.1	24.9	24.4	24.2	24.2	24.2	24.2	
19	0.0	0.0	0.0	0.0	0.0	0.0	25.5	24.1	23.7	23.5	23.5	23.6	23.7	23.9	23.9	
20	0.0	0.0	0.0	0.0	0.0	25.5	23.4	22.9	22.9	22.9	23.1	23.2	23.4	23.6	23.7	
21	0.0	0.0	0.0	33.5	22.9	22.1	21.9	22.0	22.2	22.4	22.6	22.9	23.0	23.2	23.4	23.6
22	0.0	0.0	23.5	21.2	20.9	21.0	21.3	21.6	21.8	22.1	22.4	22.7	22.9	23.1	23.3	23.5
23	0.0	20.8	19.8	19.8	20.2	20.5	20.9	21.3	21.6	22.0	22.3	22.5	22.9	23.0	23.3	23.5
24	19.7	18.3	18.7	19.2	19.8	20.2	20.7	21.1	21.5	21.9	22.2	22.5	22.7	23.0	23.2	23.4
25	16.9	17.5	18.2	18.9	19.5	20.1	20.6	21.0	21.4	21.9	22.1	22.4	22.7	23.0	23.2	23.4
26	16.0	17.0	17.9	18.7	19.3	19.9	20.5	20.9	21.4	21.7	22.1	22.4	22.7	22.9	23.2	23.4
27	15.7	16.8	17.7	18.5	19.2	19.9	20.4	20.9	21.3	21.7	22.0	22.4	22.7	22.9	23.2	23.4
28	15.4	16.6	17.6	18.4	19.2	19.8	20.4	20.8	21.3	21.7	22.0	22.3	22.6	22.9	23.1	23.4
29	15.3	16.5	17.5	18.4	19.1	19.8	20.3	20.8	21.3	21.7	22.0	22.3	22.6	22.9	23.1	23.4
30	15.2	16.4	17.5	18.3	19.1	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.4
31	15.1	16.4	17.4	18.3	19.1	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.4
32	15.1	16.3	17.4	18.3	19.0	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
33	15.0	16.3	17.4	18.3	19.0	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
34	15.0	16.3	17.4	18.3	19.0	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
35	15.0	16.3	17.3	18.2	19.0	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
36	15.0	16.3	17.3	18.2	19.0	19.7	20.3	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
37	15.0	16.3	17.3	18.2	19.0	19.7	20.2	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
38	15.0	16.3	17.3	18.2	19.0	19.7	20.2	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3
39	15.0	16.3	17.3	18.2	19.0	19.7	20.2	20.8	21.2	21.6	22.0	22.3	22.6	22.9	23.1	23.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =0.74

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.75

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	17.4	17.9	18.6	19.2	19.8	20.4	20.9	21.3	21.7	22.1	22.4	22.7	23.0	23.3	23.5	23.7
26	16.5	17.4	18.2	19.0	19.7	20.3	20.8	21.2	21.7	22.0	22.4	22.7	23.0	23.3	23.5	23.7
27	16.0	17.1	18.0	18.8	19.5	20.2	20.7	21.2	21.6	22.0	22.4	22.7	23.0	23.2	23.5	23.7
28	15.7	16.9	17.9	18.7	19.5	20.1	20.7	21.1	21.6	22.0	22.3	22.7	22.9	23.2	23.5	23.7
29	15.5	16.8	17.8	18.7	19.4	20.0	20.6	21.1	21.6	22.0	22.3	22.6	22.9	23.2	23.5	23.7
30	15.4	16.7	17.7	18.6	19.4	20.0	20.6	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
31	15.3	16.6	17.7	18.6	19.3	20.0	20.6	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
32	15.3	16.6	17.6	18.5	19.3	20.0	20.6	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
33	15.3	16.5	17.6	18.5	19.3	20.0	20.5	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
34	15.2	16.5	17.6	18.5	19.3	20.0	20.5	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
35	15.2	16.5	17.6	18.5	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
36	15.2	16.5	17.6	18.5	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
37	15.2	16.5	17.6	18.5	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
38	15.2	16.5	17.6	18.5	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7
39	15.2	16.5	17.6	18.5	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.76

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	27.5	26.4	25.9	25.6
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8	26.5	25.5	25.1	25.0	24.9	24.9
19	0.0	0.0	0.0	0.0	0.0	0.0	30.1	25.7	24.8	24.4	24.3	24.3	24.3	24.3	24.4	24.5
20	0.0	0.0	0.0	0.0	0.0	25.3	24.0	23.7	23.6	23.6	23.7	23.8	24.0	24.0	24.1	24.3
21	0.0	0.0	0.0	0.0	25.9	23.4	22.8	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.0	24.1
22	0.0	0.0	0.0	23.0	22.0	21.8	22.0	22.2	22.4	22.7	22.9	23.2	23.4	23.6	23.8	24.0
23	0.0	28.6	21.1	20.7	20.9	21.2	21.5	21.8	22.2	22.5	22.8	23.0	23.3	23.5	23.8	24.0
24	22.5	19.5	19.5	19.9	20.3	20.8	21.2	21.6	22.0	22.4	22.7	23.0	23.2	23.5	23.7	23.9
25	17.9	18.2	18.8	19.4	20.0	20.6	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.4	23.7	23.9
26	16.7	17.6	18.4	19.2	19.8	20.4	20.9	21.4	21.8	22.2	22.5	22.9	23.1	23.4	23.7	23.9
27	16.2	17.2	18.2	19.0	19.7	20.3	20.9	21.3	21.8	22.2	22.5	22.8	23.1	23.4	23.6	23.9
28	15.9	17.0	18.0	18.9	19.6	20.2	20.9	21.3	21.7	22.1	22.5	22.8	23.1	23.4	23.6	23.8
29	15.7	16.9	17.9	18.8	19.5	20.2	20.8	21.3	21.7	22.1	22.5	22.8	23.1	23.4	23.6	23.8
30	15.5	16.8	17.9	18.7	19.5	20.2	20.7	21.2	21.7	22.1	22.5	22.8	23.1	23.4	23.6	23.8
31	15.5	16.7	17.8	18.7	19.5	20.1	20.7	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6	23.8
32	15.4	16.7	17.8	18.7	19.4	20.1	20.7	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6	23.8
33	15.4	16.7	17.7	18.7	19.4	20.1	20.7	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6	23.8
34	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6	23.8
35	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.6	22.1	22.4	22.8	23.1	23.3	23.6	23.8
36	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.6	22.1	22.4	22.8	23.1	23.3	23.6	23.8
37	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.6	22.1	22.4	22.8	23.1	23.3	23.6	23.8
38	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.6	22.1	22.4	22.8	23.1	23.3	23.6	23.8
39	15.3	16.6	17.7	18.6	19.4	20.1	20.7	21.2	21.6	22.0	22.4	22.8	23.1	23.3	23.6	23.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.77

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	29.5	20.0	19.8	20.1	20.5	21.0	21.4	21.8	22.2	22.5	22.8	23.1	23.4	23.6	23.9	24.1	24.1
25	18.2	18.4	19.0	19.6	20.2	20.7	21.2	21.7	22.1	22.4	22.8	23.1	23.3	23.6	23.8	24.1	24.1
26	16.9	17.8	19.6	19.3	20.0	20.6	21.1	21.6	22.0	22.4	22.7	23.0	23.3	23.6	23.8	24.0	24.0
27	16.3	17.4	18.3	19.1	19.8	20.5	21.0	21.5	21.9	22.3	22.7	23.0	23.3	23.5	23.8	24.0	24.0
28	16.0	17.2	18.2	19.0	19.7	20.4	20.9	21.4	21.9	22.3	22.6	23.0	23.3	23.5	23.8	24.0	24.0
29	15.8	17.0	18.1	18.9	19.7	20.3	20.9	21.4	21.9	22.3	22.6	22.9	23.2	23.5	23.8	24.0	24.0
30	15.7	16.9	18.0	18.9	19.6	20.3	20.9	21.4	21.8	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.0
31	15.6	16.9	17.9	18.8	19.6	20.3	20.8	21.4	21.8	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.0
32	15.5	16.8	17.9	18.8	19.6	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
33	15.5	16.8	17.9	18.8	19.6	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
34	15.4	16.8	17.8	18.8	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
35	15.4	16.7	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
36	15.4	16.7	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
37	15.4	16.7	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
38	15.4	16.7	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0
39	15.4	16.7	17.8	18.7	19.5	20.2	20.8	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.7	24.0	24.0

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 0.78
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K ₁)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	18.7	18.7	19.2	19.8	20.4	20.9	21.4	21.8	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.2
26	17.2	18.0	18.8	19.5	20.1	20.7	21.2	21.7	22.1	22.5	22.9	23.2	23.5	23.7	24.0	24.2
27	16.5	17.6	18.5	19.3	20.0	20.6	21.1	21.6	22.1	22.5	22.8	23.1	23.4	23.7	23.9	24.2
28	16.2	17.3	18.3	19.2	19.9	20.5	21.1	21.6	22.0	22.4	22.8	23.1	23.4	23.7	23.9	24.2
29	15.9	17.2	18.2	19.1	19.8	20.5	21.0	21.5	22.0	22.4	22.8	23.1	23.4	23.7	23.9	24.2
30	15.8	17.1	18.1	19.0	19.8	20.4	21.0	21.5	22.0	22.4	22.8	23.1	23.4	23.7	23.9	24.1
31	15.7	17.0	18.1	19.0	19.7	20.4	21.0	21.5	22.0	22.4	22.7	23.1	23.4	23.7	23.9	24.1
32	15.6	16.9	18.0	18.9	19.7	20.4	21.0	21.5	22.0	22.4	22.7	23.1	23.4	23.6	23.9	24.1
33	15.6	16.9	18.0	18.9	19.7	20.4	21.0	21.5	21.9	22.4	22.7	23.1	23.4	23.6	23.9	24.1
34	15.5	16.9	18.0	18.9	19.7	20.4	20.9	21.5	21.9	22.4	22.7	23.1	23.4	23.6	23.9	24.1
35	15.5	16.8	17.9	18.9	19.7	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.6	23.9	24.1
36	15.5	16.8	17.9	18.9	19.7	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.6	23.9	24.1
37	15.5	16.8	17.9	18.9	19.7	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.6	23.9	24.1
38	15.5	16.8	17.9	18.9	19.6	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.6	23.9	24.1
39	15.5	16.8	17.9	18.8	19.6	20.3	20.9	21.5	21.9	22.3	22.7	23.1	23.4	23.6	23.9	24.1

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = C.79

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	19.3	19.0	19.4	20.0	20.5	21.1	21.5	22.0	22.4	22.7	23.1	23.4	23.7	23.9	24.2	24.4	
26	17.5	18.2	18.9	19.6	20.3	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.4	
27	16.7	17.7	18.6	19.4	20.1	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.6	23.9	24.1	24.3	
28	16.3	17.5	18.5	19.3	20.0	20.7	21.2	21.7	22.2	22.6	22.9	23.3	23.6	23.8	24.1	24.3	
29	16.1	17.3	18.3	19.2	20.0	20.6	21.2	21.7	22.1	22.6	22.9	23.2	23.5	23.8	24.1	24.3	
30	15.9	17.7	18.2	19.1	19.9	20.6	21.1	21.7	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	
31	15.8	17.1	18.2	19.1	19.9	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	
32	15.7	17.0	18.1	19.1	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	
33	15.7	17.0	18.1	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	
34	15.6	17.0	18.1	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	
35	15.6	17.0	18.1	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.0	24.3	
36	15.6	16.9	18.1	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.0	24.3	
37	15.6	16.9	18.0	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.0	24.3	
38	15.6	16.9	18.0	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.0	24.3	
39	15.6	16.9	18.0	19.0	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.0	24.3	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.80

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5	28.6	27.4	26.9	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	27.5	26.5	25.1	25.9	25.8	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.1	26.7	25.8	25.4	25.2	25.2	25.2	25.3	
20	0.0	0.0	0.0	0.0	0.0	0.0	33.7	26.2	25.0	24.7	24.6	24.6	24.6	24.8	24.9	25.0	
21	0.0	0.0	0.0	0.0	0.0	26.2	24.4	23.9	23.8	23.9	24.0	24.1	24.3	24.5	24.7	24.8	
22	0.0	0.0	0.0	37.8	23.9	23.1	22.9	23.0	23.2	23.4	23.7	23.9	24.1	24.3	24.5	24.7	
23	0.0	0.0	24.9	22.3	21.9	22.1	22.3	22.6	22.9	23.2	23.5	23.7	24.0	24.2	24.4	24.6	
24	0.0	22.2	20.8	20.8	21.1	21.5	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.4	24.6	
25	20.0	19.3	19.7	20.2	20.7	21.2	21.7	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	24.5	
26	17.7	18.4	19.1	19.8	20.5	21.0	21.5	22.0	22.4	22.8	23.2	23.5	23.8	24.0	24.3	24.5	
27	16.9	17.9	18.8	19.6	20.3	20.9	21.4	21.9	22.4	22.8	23.1	23.4	23.7	24.0	24.3	24.5	
28	16.5	17.6	18.6	19.4	20.2	20.8	21.4	21.9	22.3	22.7	23.1	23.4	23.7	24.0	24.2	24.5	
29	16.2	17.4	18.5	19.3	20.1	20.7	21.3	21.8	22.3	22.7	23.1	23.4	23.7	24.0	24.2	24.5	
30	16.0	17.3	18.4	19.3	20.0	20.7	21.3	21.8	22.3	22.7	23.0	23.4	23.7	24.0	24.2	24.5	
31	15.9	17.2	18.3	19.2	20.0	20.7	21.3	21.8	22.2	22.7	23.0	23.4	23.7	24.0	24.2	24.5	
32	15.8	17.2	18.3	19.2	20.0	20.6	21.2	21.8	22.2	22.7	23.0	23.4	23.7	24.0	24.2	24.4	
33	15.8	17.1	18.2	19.2	19.9	20.6	21.2	21.8	22.2	22.6	23.0	23.4	23.7	23.9	24.2	24.4	
34	15.8	17.1	18.2	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	23.9	24.2	24.4	
35	15.7	17.1	18.2	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.4	23.7	23.9	24.2	24.4	
36	15.7	17.1	18.2	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	23.9	24.2	24.4	
37	15.7	17.0	18.2	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	23.9	24.2	24.4	
38	15.7	17.0	18.2	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	23.9	24.2	24.4	
39	15.7	17.0	18.1	19.1	19.9	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.7	23.9	24.2	24.4	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY ≈ 0.91

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	29.3	27.9	27.2
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.9	28.1	26.9	26.4	26.2	26.1	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	27.3	26.2	25.7	25.5	25.4	25.5	25.5	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9	25.5	25.0	24.8	24.8	24.9	25.0	25.1	25.2
21	0.0	0.0	0.0	0.0	0.0	27.5	24.8	24.2	24.1	24.1	24.2	24.3	24.5	24.7	24.8	25.0
22	0.0	0.0	0.0	0.0	24.6	23.4	23.2	23.3	23.4	23.6	23.8	24.1	24.3	24.5	24.7	24.9
23	0.0	0.0	27.5	22.8	22.3	22.3	22.5	22.8	23.1	23.3	23.6	23.9	24.1	24.4	24.6	24.8
24	0.0	23.5	21.2	21.1	21.4	21.7	22.1	22.5	22.8	23.2	23.5	23.8	24.0	24.3	24.5	24.7
25	21.0	19.7	19.9	20.4	20.9	21.4	21.9	22.3	22.7	23.1	23.4	23.7	24.0	24.2	24.5	24.7
26	18.1	18.6	19.3	20.0	20.6	21.2	21.7	22.2	22.6	23.0	23.3	23.6	23.9	24.2	24.4	24.7
27	17.1	18.1	19.0	19.7	20.4	21.0	21.6	22.1	22.5	22.9	23.3	23.6	23.9	24.2	24.4	24.6
28	16.6	17.8	18.7	19.6	20.3	21.0	21.5	22.0	22.5	22.9	23.2	23.6	23.9	24.1	24.4	24.6
29	16.3	17.6	18.6	19.5	20.2	20.9	21.5	22.0	22.4	22.8	23.2	23.5	23.9	24.1	24.4	24.6
30	16.2	17.4	18.5	19.4	20.2	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
31	16.0	17.3	18.4	19.3	20.1	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
32	16.0	17.3	18.4	19.3	20.1	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
33	15.9	17.2	18.3	19.3	20.1	20.8	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
34	15.9	17.2	18.3	19.3	20.1	20.7	21.4	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
35	15.8	17.2	18.3	19.2	20.0	20.7	21.3	21.9	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.6
36	15.8	17.2	18.3	19.2	20.0	20.7	21.3	21.9	22.3	22.8	23.2	23.5	23.8	24.1	24.4	24.6
37	15.8	17.1	18.3	19.2	20.0	20.7	21.3	21.9	22.3	22.8	23.1	23.5	23.8	24.1	24.3	24.6
38	15.8	17.1	18.3	19.2	20.0	20.7	21.3	21.9	22.3	22.8	23.1	23.5	23.8	24.1	24.3	24.6
39	15.8	17.1	18.3	19.2	20.0	20.7	21.3	21.9	22.3	22.8	23.1	23.5	23.8	24.1	24.3	24.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.82
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	22.5	20.1	20.2	20.6	21.1	21.6	22.0	22.5	22.8	23.2	23.5	23.8	24.1	24.4	24.6	24.9
26	18.4	18.9	19.5	20.2	20.9	21.3	21.9	22.3	22.7	23.1	23.5	23.8	24.1	24.3	24.6	24.8
27	17.3	18.3	19.1	19.9	20.6	21.2	21.7	22.2	22.7	23.1	23.4	23.7	24.0	24.3	24.6	24.8
28	16.8	17.9	18.9	19.7	20.5	21.1	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.3	24.5	24.8
29	16.5	17.7	18.7	19.6	20.4	21.0	21.6	22.1	22.6	23.0	23.4	23.7	24.0	24.3	24.5	24.8
30	16.3	17.6	18.6	19.5	20.3	21.0	21.6	22.1	22.6	23.0	23.3	23.7	24.0	24.3	24.5	24.8
31	16.2	17.5	18.6	19.5	20.3	20.9	21.5	22.1	22.5	22.9	23.3	23.7	24.0	24.3	24.5	24.8
32	16.1	17.4	18.5	19.4	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.7	24.0	24.3	24.5	24.8
33	16.0	17.4	18.5	19.4	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.7	24.0	24.2	24.5	24.7
34	16.0	17.3	18.4	19.4	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.2	24.5	24.7
35	15.9	17.3	18.4	19.4	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.2	24.5	24.7
36	15.9	17.3	18.4	19.3	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.2	24.5	24.7
37	15.9	17.3	18.4	19.3	20.2	20.9	21.5	22.0	22.5	22.9	23.3	23.6	24.0	24.2	24.5	24.7
38	15.9	17.2	18.4	19.3	20.1	20.9	21.5	22.0	22.5	22.9	23.3	23.6	23.9	24.2	24.5	24.7
39	15.9	17.2	18.4	19.3	20.1	20.8	21.5	22.0	22.5	22.9	23.3	23.6	23.9	24.2	24.5	24.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN RULK DENSITY = 7.83
FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	28.9	27.9	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	27.0	27.1	25.7	26.5	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	27.1	26.3	26.0	25.9	25.9	25.9	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	26.4	25.6	25.4	25.3	25.3	25.4	25.5	25.6	
21	0.0	0.0	0.0	0.0	0.0	34.8	26.0	24.9	24.5	24.6	24.6	24.7	24.9	25.0	25.2	25.4	
22	0.0	0.0	0.0	0.0	0.0	26.5	24.3	23.8	23.7	23.8	24.0	24.2	24.4	24.6	24.8	25.0	25.7
23	0.0	0.0	0.0	0.0	0.0	27.9	22.8	23.2	23.4	23.7	24.0	24.2	24.5	24.7	24.9	25.1	
24	0.0	34.9	22.2	21.7	21.8	22.1	22.5	22.8	23.2	23.5	23.8	24.1	24.4	24.6	24.8	25.1	
25	25.3	20.5	20.5	20.8	21.3	21.7	22.2	22.6	23.0	23.4	23.7	24.0	24.3	24.5	24.8	25.0	
26	19.8	19.1	19.7	20.3	20.9	21.5	22.0	22.5	22.9	23.3	23.6	23.9	24.2	24.5	24.7	25.0	
27	17.6	18.4	19.3	20.1	20.7	21.3	21.9	22.4	22.8	23.2	23.6	23.9	24.2	24.5	24.7	25.0	
28	17.0	18.1	19.0	19.9	20.6	21.2	21.8	22.3	22.8	23.2	23.5	23.9	24.2	24.4	24.7	24.9	
29	16.6	17.3	18.9	19.7	20.5	21.2	21.7	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24.7	24.9	
30	16.4	17.7	18.8	19.7	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.8	24.1	24.4	24.7	24.9	
31	16.3	17.6	18.7	19.6	20.4	21.1	21.7	22.2	22.7	23.1	23.5	23.8	24.1	24.4	24.7	24.9	
32	16.2	17.5	18.6	19.6	20.4	21.0	21.6	22.2	22.7	23.1	23.5	23.8	24.1	24.4	24.7	24.9	
33	16.1	17.5	18.6	19.5	20.3	21.0	21.6	22.2	22.6	23.1	23.5	23.8	24.1	24.4	24.7	24.9	
34	16.1	17.4	18.6	19.5	20.3	21.0	21.6	22.2	22.6	23.1	23.4	23.8	24.1	24.4	24.7	24.9	
35	16.0	17.4	18.5	19.5	20.3	21.0	21.6	22.1	22.6	23.1	23.4	23.8	24.1	24.4	24.7	24.9	
36	16.0	17.4	18.5	19.5	20.3	21.0	21.6	22.1	22.6	23.1	23.4	23.8	24.1	24.4	24.6	24.9	
37	15.0	17.4	18.5	19.5	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.6	24.9	
38	16.0	17.4	18.5	19.5	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.6	24.9	
39	16.0	17.3	18.5	19.4	20.3	21.0	21.6	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.6	24.9	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.84

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA
YARN BULK DENSITY = 0.85
FIVE-HARNESS WFAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.7	30.2	28.8
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.8	29.0	27.9	27.3	27.1	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.2	28.1	27.1	26.6	26.4	26.3	26.3
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7	27.6	26.4	25.9	25.8	25.7	25.8	25.9	25.9
21	0.0	0.0	0.0	0.0	0.0	0.0	27.6	25.7	25.2	25.0	25.1	25.1	25.3	25.4	25.5	25.7
22	0.0	0.0	0.0	0.0	31.2	25.3	24.5	24.3	24.3	24.4	24.6	24.8	25.0	25.2	25.4	25.5
23	0.0	0.0	0.0	26.0	23.7	23.4	23.4	23.6	23.8	24.1	24.3	24.6	24.8	25.0	25.2	25.4
24	0.0	0.0	23.6	22.4	22.3	22.5	22.9	23.2	23.5	23.8	24.1	24.4	24.7	24.9	25.2	25.4
25	0.0	21.6	21.1	21.3	21.7	22.1	22.5	22.9	23.3	23.7	24.0	24.3	24.6	24.9	25.1	25.3
26	19.8	19.6	20.1	20.7	21.3	21.8	22.3	22.8	23.2	23.6	23.9	24.2	24.5	24.8	25.1	25.3
27	18.1	18.8	19.6	20.4	21.0	21.6	22.2	22.7	23.1	23.5	23.9	24.2	24.5	24.8	25.0	25.3
28	17.3	18.4	19.3	20.2	20.9	21.5	22.1	22.6	23.0	23.5	23.8	24.2	24.5	24.7	25.0	25.2
29	16.9	18.1	19.1	20.0	20.8	21.4	22.0	22.5	23.0	23.4	23.8	24.1	24.4	24.7	25.0	25.2
30	16.7	18.0	19.0	19.9	20.7	21.4	22.0	22.5	23.0	23.4	23.8	24.1	24.4	24.7	25.0	25.2
31	16.5	17.8	18.9	19.9	20.6	21.3	21.9	22.5	22.9	23.4	23.8	24.1	24.4	24.7	25.0	25.2
32	16.4	17.8	18.9	19.8	20.6	21.3	21.9	22.5	22.9	23.4	23.7	24.1	24.4	24.7	25.0	25.2
33	16.3	17.7	18.8	19.8	20.6	21.3	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	25.0	25.2
34	16.3	17.6	18.8	19.7	20.6	21.3	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	25.0	25.2
35	16.2	17.6	18.8	19.7	20.5	21.3	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	24.9	25.2
36	16.2	17.6	18.7	19.7	20.5	21.2	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	24.9	25.2
37	16.2	17.6	18.7	19.7	20.5	21.2	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	24.9	25.2
38	16.2	17.6	18.7	19.7	20.5	21.2	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	24.9	25.2
39	16.2	17.6	18.7	19.7	20.5	21.2	21.9	22.4	22.9	23.3	23.7	24.1	24.4	24.7	24.9	25.2

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.86

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.87

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = C.89

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9	30.4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	29.2	28.4	27.9
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	28.4	27.6	27.2	27.1	27.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	27.7	26.9	26.5	26.4	26.4	26.4	26.5
21	0.0	0.0	0.0	0.0	0.0	34.0	27.3	26.2	25.8	25.7	25.9	25.8	25.8	26.0	26.1	26.2
22	0.0	0.0	0.0	0.0	0.0	27.7	25.6	25.1	25.0	25.0	25.2	25.3	25.5	25.7	25.9	26.0
23	0.0	0.0	0.0	0.0	25.3	24.3	24.1	24.2	24.4	24.6	24.8	25.1	25.3	25.5	25.7	25.9
24	0.0	0.0	29.0	23.5	23.2	23.2	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.4	25.6	25.8
25	7.0	24.6	22.1	22.0	22.3	22.7	23.0	23.4	23.8	24.2	24.5	24.9	25.1	25.3	25.6	25.9
26	22.3	20.6	20.8	21.3	21.4	22.3	22.9	23.2	23.7	24.0	24.4	24.7	25.0	25.3	25.5	25.7
27	19.0	19.5	20.2	20.9	21.5	22.1	22.6	23.1	23.6	23.9	24.3	24.6	24.9	25.2	25.5	25.7
28	17.9	19.9	19.8	20.6	21.3	22.0	22.5	23.0	23.5	23.9	24.3	24.6	24.9	25.2	25.5	25.7
29	17.4	19.6	19.6	20.4	21.2	21.9	22.4	23.0	23.4	23.8	24.2	24.6	24.9	25.2	25.4	25.7
30	17.1	19.4	19.4	20.3	21.1	21.9	22.4	22.9	23.4	23.8	24.2	24.5	24.9	25.2	25.4	25.7
31	16.9	19.2	19.3	20.2	21.0	21.7	22.3	22.9	23.4	23.9	24.2	24.5	24.9	25.1	25.4	25.7
32	16.8	18.1	19.2	20.2	21.0	21.7	22.3	22.9	23.3	23.8	24.2	24.5	24.9	25.1	25.4	25.6
33	16.7	18.0	19.2	20.1	21.0	21.7	22.3	22.8	23.3	23.8	24.2	24.5	24.9	25.1	25.4	25.6
34	16.6	19.0	19.1	20.1	20.9	21.6	22.3	22.8	23.3	23.8	24.1	24.5	24.9	25.1	25.4	25.6
35	16.5	17.9	19.1	20.1	20.9	21.6	22.3	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	25.6
36	16.5	17.9	19.1	20.1	20.9	21.6	22.3	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	25.6
37	16.5	17.9	19.1	20.0	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	25.6
38	16.5	17.9	19.1	20.0	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	25.6
39	16.5	17.9	19.0	20.0	20.9	21.6	22.2	22.8	23.3	23.7	24.1	24.5	24.9	25.1	25.4	25.6

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.39
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
 YARN BULK DENSITY = 0.90
 FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.9
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.2	30.4	29.1	28.5
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9	29.5	28.3	27.8	27.6	27.4
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4	28.9	27.6	27.1	26.9	26.8	26.8	26.9
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	27.0	26.4	26.2	26.2	26.2	26.3	26.4	26.6
22	0.0	0.0	0.0	0.0	0.0	30.9	26.6	25.7	25.5	25.5	25.6	25.7	25.9	26.0	26.2	26.4
23	0.0	0.0	0.0	0.0	26.9	25.1	24.7	24.7	24.8	25.0	25.2	25.4	25.6	25.8	26.0	26.2
24	0.0	0.0	0.0	24.8	23.8	23.7	23.9	24.1	24.4	24.7	24.9	25.2	25.5	25.7	25.9	26.2
25	0.0	34.4	23.1	22.6	22.7	23.0	23.4	23.8	24.1	24.5	24.8	25.1	25.4	25.6	25.9	26.1
26	27.4	21.5	21.3	21.7	22.2	22.7	23.1	23.6	24.0	24.3	24.7	25.0	25.3	25.6	25.8	26.0
27	19.8	20.0	20.6	21.2	21.8	22.4	22.9	23.4	23.8	24.2	24.6	24.9	25.2	25.5	25.8	26.0
28	18.4	19.3	20.1	20.9	21.6	22.2	22.8	23.3	23.8	24.2	24.5	24.9	25.2	25.5	25.7	26.0
29	17.7	18.9	19.9	20.7	21.5	22.1	22.7	23.2	23.7	24.1	24.5	24.9	25.2	25.5	25.7	26.0
30	17.4	18.6	19.7	20.6	21.4	22.1	22.7	23.2	23.7	24.1	24.5	24.8	25.1	25.4	25.7	26.0
31	17.1	18.5	19.6	20.5	21.3	22.0	22.6	23.2	23.6	24.1	24.5	24.8	25.1	25.4	25.7	25.9
32	17.0	18.3	19.5	20.4	21.2	22.0	22.6	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
33	16.9	18.3	19.4	20.4	21.2	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
34	16.8	18.2	19.4	20.3	21.2	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
35	16.8	18.2	19.3	20.3	21.2	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
36	16.7	18.1	19.3	20.3	21.1	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
37	16.7	18.1	19.3	20.3	21.1	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
38	16.7	18.1	19.3	20.3	21.1	21.9	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9
39	16.6	18.1	19.3	20.3	21.1	21.8	22.5	23.1	23.6	24.0	24.4	24.8	25.1	25.4	25.7	25.9

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.91

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 0.92
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND PETA

YARN BULK DENSITY = 0.93

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	PETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.94

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.95

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN RULK DENSITY =0.96
FIVE-HARNNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6	30.8
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	31.5	29.9	29.3	28.9
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	29.2	28.6	28.3	28.1	28.1
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	28.6	27.9	27.6	27.5	27.5	27.6	27.6
22	0.0	0.0	0.0	0.0	0.0	0.0	33.3	28.3	27.3	26.9	26.8	26.9	27.0	27.1	27.2	27.4
23	0.0	0.0	0.0	0.0	0.0	0.0	28.7	26.7	26.2	26.1	26.3	26.4	26.6	26.8	27.0	27.2
24	0.0	0.0	0.0	0.0	26.5	25.4	25.2	25.3	25.5	25.7	25.9	26.2	26.4	26.7	26.9	27.1
25	0.0	0.0	31.1	24.9	24.3	24.3	24.5	24.8	25.1	25.4	25.7	26.0	26.3	26.5	26.9	27.0
26	0.0	27.2	23.4	23.1	23.3	23.7	24.1	24.5	24.9	25.2	25.6	25.9	26.2	26.5	26.7	26.9
27	24.9	21.8	21.9	22.3	22.8	23.4	23.9	24.3	24.7	25.1	25.5	25.8	26.1	26.4	26.7	26.9
28	20.2	20.5	21.2	21.9	22.5	23.1	23.7	24.2	24.6	25.0	25.4	25.7	26.1	26.3	26.6	26.9
29	18.9	19.9	20.8	21.6	22.3	23.0	23.5	24.1	24.5	25.0	25.4	25.7	26.0	26.3	26.6	26.9
30	18.3	19.5	20.5	21.4	22.2	22.9	23.5	24.0	24.5	24.9	25.3	25.7	26.0	26.3	26.6	26.8
31	17.9	19.2	20.3	21.3	22.1	22.8	23.4	23.9	24.4	24.9	25.3	25.6	26.0	26.3	26.6	26.8
32	17.7	19.1	20.2	21.2	22.0	22.7	23.4	23.9	24.4	24.9	25.3	25.6	26.0	26.3	26.5	26.8
33	17.6	18.9	20.1	21.1	21.9	22.7	23.3	23.9	24.4	24.9	25.2	25.6	25.9	26.3	26.5	26.8
34	17.4	18.9	20.0	21.0	21.9	22.6	23.3	23.9	24.4	24.8	25.2	25.6	25.9	26.2	26.5	26.8
35	17.4	18.8	20.0	21.0	21.9	22.6	23.3	23.8	24.4	24.8	25.2	25.6	25.9	26.2	26.5	26.8
36	17.3	18.8	20.0	21.0	21.9	22.6	23.3	23.8	24.3	24.8	25.2	25.6	25.9	26.2	26.5	26.8
37	17.3	18.7	19.9	21.0	21.8	22.6	23.2	23.8	24.3	24.8	25.2	25.6	25.9	26.2	26.5	26.8
38	17.2	18.7	19.9	20.9	21.8	22.6	23.2	23.8	24.3	24.8	25.2	25.6	25.9	26.2	26.5	26.8
39	17.2	18.7	19.9	20.9	21.8	22.6	23.2	23.8	24.3	24.8	25.2	25.6	25.9	26.2	26.5	26.8

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.97

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.98

FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 2.00

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.00

FIVE-HARNESSE WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.4	33.1
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4	32.0	30.6	30.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.5	31.2	29.9	29.4	29.1	28.9
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	29.3	28.7	28.4	28.3	28.3	28.4
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	28.8	28.1	27.9	27.7	27.7	27.9	27.9	28.0
23	0.0	0.0	0.0	0.0	0.0	0.0	28.7	27.5	27.1	27.0	27.0	27.2	27.3	27.5	27.7	27.8
24	0.0	0.0	0.0	0.0	30.7	27.0	26.3	26.2	26.3	26.4	26.6	26.8	27.1	27.3	27.5	27.7
25	0.0	0.0	0.0	27.7	25.6	25.3	25.3	25.5	25.8	26.1	26.4	26.6	26.9	27.1	27.4	27.6
26	0.0	0.0	25.7	24.3	24.2	24.5	24.8	25.2	25.5	25.9	26.2	26.5	26.8	27.0	27.3	27.5
27	0.0	23.9	23.0	23.2	23.6	24.0	24.5	24.9	25.3	25.7	26.1	26.4	26.7	27.0	27.2	27.5
28	22.2	21.6	22.0	22.5	23.1	23.7	24.2	24.7	25.2	25.6	26.0	26.3	26.6	26.9	27.2	27.4
29	19.9	20.6	21.4	22.2	22.9	23.5	24.1	24.6	25.1	25.5	25.9	26.3	26.6	26.9	27.2	27.4
30	19.0	20.1	21.1	21.9	22.7	23.4	24.0	24.5	25.0	25.5	25.9	26.2	26.5	26.8	27.1	27.4
31	18.5	19.8	20.8	21.8	22.6	23.3	23.9	24.5	25.0	25.4	25.8	26.2	26.5	26.8	27.1	27.4
32	18.2	19.6	20.7	21.7	22.5	23.2	23.9	24.4	24.9	25.4	25.9	26.2	26.5	26.8	27.1	27.4
33	18.0	19.4	20.6	21.6	22.4	23.2	23.8	24.4	24.9	25.4	25.9	26.1	26.5	26.8	27.1	27.3
34	17.9	19.3	20.5	21.5	22.4	23.1	23.8	24.4	24.9	25.3	25.8	26.1	26.5	26.8	27.1	27.3
35	17.8	19.2	20.4	21.5	22.3	23.1	23.8	24.3	24.9	25.3	25.8	26.1	26.5	26.8	27.1	27.3
36	17.7	19.2	20.4	21.4	22.3	23.1	23.7	24.3	24.9	25.3	25.7	26.1	26.5	26.8	27.1	27.3
37	17.7	19.1	20.4	21.4	22.3	23.1	23.7	24.3	24.8	25.3	25.7	26.1	26.5	26.8	27.1	27.3
38	17.6	19.1	20.3	21.4	22.3	23.1	23.7	24.3	24.8	25.3	25.7	26.1	26.5	26.8	27.1	27.3
39	17.6	19.1	20.3	21.4	22.3	23.0	23.7	24.3	24.8	25.3	25.7	26.1	26.5	26.8	27.1	27.3

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.36
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9 2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 1.48

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	1.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.50

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.3	40.8
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.8	39.3	37.3
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	38.1	36.8	36.2	35.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6	36.5	35.7	35.3	35.2	35.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.4	36.6	35.3	34.8	34.6	34.6	34.5	34.6	34.6
27	0.0	0.0	0.0	0.0	0.0	0.0	38.1	35.2	34.0	33.9	33.9	33.9	34.0	34.0	34.2	34.3
28	0.0	0.0	0.0	0.0	0.0	36.0	34.0	33.4	33.2	33.2	33.3	33.5	33.7	33.9	34.1	34.1
29	0.0	0.0	0.0	0.0	34.5	32.9	32.4	32.4	32.5	32.7	33.0	33.2	33.5	33.7	34.0	34.0
30	0.0	0.0	0.0	0.0	33.2	31.9	31.5	31.6	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9
31	0.0	0.0	0.0	31.9	30.7	30.5	30.8	31.1	31.5	31.8	32.2	32.5	32.9	33.2	33.5	33.8
32	0.0	0.0	30.8	29.5	29.6	29.9	30.3	30.8	31.2	31.6	32.0	32.4	32.8	33.1	33.4	33.7
33	0.0	29.6	28.3	28.4	28.9	29.4	30.0	30.5	31.0	31.5	31.9	32.3	32.7	33.0	33.3	33.6
34	28.7	26.8	27.1	27.8	28.4	29.1	29.9	30.3	30.9	31.4	31.8	32.2	32.6	33.0	33.3	33.6
35	25.2	25.6	26.5	27.3	28.1	28.9	29.6	30.2	30.8	31.3	31.8	32.2	32.6	32.9	33.3	33.6
36	23.9	25.0	26.0	27.0	27.9	28.7	29.5	30.1	30.7	31.2	31.7	32.1	32.5	32.9	33.2	33.6
37	23.1	24.5	25.7	26.8	27.8	28.6	29.4	30.0	30.6	31.2	31.7	32.1	32.5	32.9	33.2	33.5
38	22.7	24.2	25.5	26.7	27.7	28.5	29.3	30.0	30.6	31.1	31.6	32.1	32.5	32.9	33.2	33.5
39	22.4	24.0	25.4	26.5	27.6	28.5	29.2	29.9	30.5	31.1	31.6	32.1	32.5	32.9	33.2	33.5
40	22.1	23.8	25.2	26.5	27.5	28.4	29.2	29.9	30.5	31.1	31.6	32.0	32.4	32.8	33.2	33.5
41	22.0	23.7	25.2	26.4	27.4	28.4	29.2	29.9	30.5	31.1	31.6	32.0	32.4	32.8	33.2	33.5
42	21.9	23.6	25.1	26.3	27.4	28.3	29.1	29.8	30.5	31.0	31.5	32.0	32.4	32.8	33.2	33.5
43	21.8	23.5	25.0	26.3	27.4	28.3	29.1	29.8	30.5	31.0	31.5	32.0	32.4	32.8	33.2	33.5
44	21.7	23.5	25.0	26.3	27.3	28.3	29.1	29.8	30.4	31.0	31.5	32.0	32.4	32.8	33.1	33.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.77

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2	41.6	40.4
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.9	41.7	40.1	39.4	39.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	40.1	39.0	38.5	39.3	39.2	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.7	40.8	38.9	38.1	37.8	37.7	37.7	37.7	
29	0.0	0.0	0.0	0.0	0.0	0.0	45.9	39.3	37.8	37.2	37.1	37.0	37.1	37.2	37.4	
30	0.0	0.0	0.0	0.0	0.0	42.8	38.0	36.8	36.4	36.4	36.4	36.6	36.7	36.9	37.1	
31	0.0	0.0	0.0	0.0	41.1	36.8	35.9	35.6	35.6	35.8	36.0	36.2	36.5	36.7	37.0	
32	0.0	0.0	0.0	40.0	35.8	34.9	34.8	34.9	35.1	35.4	35.7	36.0	36.3	36.6	36.8	
33	0.0	0.0	39.5	34.7	33.9	33.9	34.1	34.4	34.8	35.1	35.5	35.8	36.1	36.4	36.7	
34	0.0	40.6	33.6	32.9	33.0	33.3	33.7	34.1	34.5	34.9	35.3	35.7	36.0	36.3	36.7	
35	0.0	0.0	32.6	31.7	31.9	32.3	32.8	33.3	33.8	34.3	34.8	35.2	35.6	35.9	36.3	36.6
36	0.0	31.5	30.5	30.7	31.3	31.9	32.5	33.1	33.7	34.2	34.7	35.1	35.5	35.9	36.2	36.5
37	30.8	29.1	29.4	30.1	30.9	31.6	32.3	32.9	33.5	34.1	34.6	35.0	35.4	35.8	36.2	36.5
38	27.4	27.9	28.8	29.7	30.6	31.4	32.1	32.8	33.4	34.0	34.5	35.0	35.4	35.8	36.1	36.5
39	26.0	27.2	28.3	29.4	30.4	31.2	32.0	32.7	33.3	33.9	34.4	34.9	35.3	35.7	36.1	36.4
40	25.2	26.7	28.0	29.2	30.2	31.1	31.9	32.6	33.3	33.9	34.4	34.9	35.3	35.7	36.1	36.4
41	24.7	26.4	27.8	29.0	30.1	31.0	31.8	32.6	33.2	33.8	34.4	34.9	35.3	35.7	36.1	36.4
42	24.4	26.1	27.6	28.9	30.0	30.9	31.8	32.5	33.2	33.8	34.3	34.8	35.3	35.7	36.1	36.4
43	24.1	26.0	27.5	28.8	29.9	30.9	31.7	32.5	33.2	33.8	34.3	34.8	35.3	35.7	36.1	36.4
44	24.0	25.8	27.4	28.7	29.8	30.8	31.7	32.5	33.1	33.7	34.3	34.8	35.2	35.7	36.1	36.4
45	23.8	25.7	27.3	28.6	29.8	30.8	31.7	32.4	33.1	33.7	34.3	34.8	35.2	35.6	36.0	36.4
46	23.7	25.6	27.2	28.6	29.7	30.8	31.6	32.4	33.1	33.7	34.3	34.8	35.2	35.6	36.0	36.4
47	23.6	25.6	27.2	28.5	29.7	30.7	31.6	32.4	33.1	33.7	34.3	34.8	35.2	35.6	36.0	36.4
48	23.5	25.5	27.1	28.5	29.7	30.7	31.6	32.4	33.1	33.7	34.2	34.8	35.2	35.6	36.0	36.4

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 2.00

FIVE-HARNESS WEAVE FARRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.6
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0	46.9
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.2	44.6	43.0	42.3
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.8	43.1	42.0	41.4	41.2
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.8	43.8	41.9	41.0	40.7	40.5	40.5
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.2	42.3	40.8	40.2	40.0	39.9	39.9	40.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	41.1	39.9	39.4	39.3	39.3	39.4	39.5	39.7
32	0.0	0.0	0.0	0.0	0.0	0.0	44.2	40.0	39.0	38.6	38.6	38.7	38.8	39.0	39.2	39.5
33	0.0	0.0	0.0	0.0	0.0	43.1	39.0	38.1	37.8	37.9	38.0	38.2	38.5	38.8	39.0	39.3
34	0.0	0.0	0.0	0.0	42.7	38.1	37.1	37.0	37.1	37.3	37.6	37.9	38.3	38.6	38.9	39.2
35	0.0	0.0	43.3	37.1	36.2	36.1	36.3	36.6	37.0	37.4	37.7	38.1	38.4	38.7	39.1	
36	0.0	0.0	49.6	36.2	35.1	35.1	35.4	35.8	36.3	36.7	37.1	37.6	37.9	38.3	38.6	39.0
37	0.0	0.0	35.3	34.0	34.1	34.5	35.0	35.5	36.0	36.5	37.0	37.4	37.8	38.2	38.6	38.9
38	0.0	34.8	32.8	32.9	33.4	34.0	34.7	35.3	35.8	36.4	36.9	37.3	37.8	38.1	38.5	38.9
39	35.6	31.5	31.6	32.2	32.9	33.7	34.4	35.1	35.7	36.3	36.8	37.2	37.7	38.1	38.5	38.8
40	37.0	30.0	30.8	31.7	32.6	33.5	34.2	34.9	35.6	36.2	36.7	37.2	37.6	38.0	38.4	38.8
41	28.2	29.2	30.3	31.4	32.4	33.3	34.1	34.8	35.5	36.1	36.6	37.1	37.6	38.0	38.4	38.8
42	27.2	28.6	29.9	31.1	32.2	33.1	34.0	34.7	35.4	36.0	36.6	37.1	37.6	38.0	38.4	38.7
43	26.6	28.2	29.7	30.9	32.0	33.0	33.9	34.7	35.4	36.0	36.5	37.1	37.5	38.0	38.4	38.7
44	26.1	27.9	29.4	30.8	31.9	32.9	33.8	34.6	35.3	35.9	36.5	37.0	37.5	37.9	38.3	38.7
45	25.8	27.7	29.3	30.7	31.8	32.9	33.8	34.6	35.3	35.9	36.5	37.0	37.5	37.9	38.3	38.7
46	25.6	27.5	29.2	30.6	31.8	32.8	33.7	34.5	35.2	35.9	36.5	37.0	37.5	37.9	38.3	38.7
47	25.4	27.4	29.1	30.5	31.7	32.8	33.7	34.5	35.2	35.9	36.4	37.0	37.5	37.9	38.3	38.7
48	25.3	27.3	29.0	30.4	31.7	32.7	33.6	34.5	35.2	35.8	36.4	37.0	37.4	37.9	38.3	38.7

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.36

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	52.2	35.0	34.7	35.2	35.9	36.7	37.5	38.2	38.8	39.4	40.0	40.5	41.0	41.4	41.8	42.2
43	34.2	33.1	33.8	34.6	35.6	36.4	37.3	38.0	38.7	39.3	39.9	40.4	40.9	41.3	41.8	42.1
44	31.4	32.1	33.1	34.2	35.3	36.2	37.1	37.9	38.6	39.2	39.8	40.4	40.9	41.3	41.7	42.1
45	30.1	31.4	32.7	33.9	35.1	36.1	37.0	37.8	38.5	39.2	39.8	40.3	40.8	41.3	41.7	42.1
46	29.3	30.9	32.4	33.7	34.9	35.9	36.9	37.7	38.4	39.1	39.7	40.3	40.8	41.2	41.7	42.1
47	29.7	30.5	32.1	33.5	34.8	35.8	36.8	37.6	38.4	39.1	39.7	40.2	40.8	41.2	41.7	42.1
48	29.3	30.3	32.0	33.4	34.7	35.8	36.7	37.6	38.3	39.0	39.7	40.2	40.7	41.2	41.6	42.0
49	29.0	30.1	31.8	33.3	34.6	35.7	36.7	37.5	38.3	39.0	39.6	40.2	40.7	41.2	41.6	42.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.50

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.9	49.9
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.7	50.7	48.6	47.6
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.2	49.2	47.5	46.7	46.3	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.8	47.9	46.6	45.9	45.6	45.5	
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2	46.9	45.7	45.0	44.9	44.5	45.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	45.9	44.9	44.4	44.3	44.3	44.4	44.6
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.1	45.0	44.1	43.7	43.7	43.7	43.9	44.1	44.3
36	0.0	0.0	0.0	0.0	0.0	47.5	44.2	43.2	43.0	43.0	43.1	43.3	43.3	43.6	43.8	44.1
37	0.0	0.0	0.0	0.0	47.2	43.4	42.4	42.2	42.3	42.5	42.7	43.0	43.3	43.6	43.9	
38	0.0	0.0	0.0	47.9	42.6	41.5	41.4	41.5	41.8	42.1	42.4	42.8	43.1	43.5	43.8	
39	0.0	0.0	51.7	41.9	40.6	40.5	40.7	41.0	41.4	41.8	42.2	42.6	43.0	43.3	43.7	
40	0.0	0.0	41.3	39.7	39.5	39.8	40.2	40.6	41.1	41.6	42.0	42.5	42.9	43.2	43.6	
41	0.0	0.0	41.3	38.7	38.4	39.3	39.8	40.4	40.9	41.4	41.9	42.3	42.8	43.2	43.5	
42	0.0	43.2	37.6	37.3	37.6	38.2	38.9	39.5	40.1	40.7	41.3	41.8	42.2	42.7	43.1	43.5
43	0.0	36.7	35.9	36.4	37.1	37.9	38.6	39.3	40.0	40.6	41.2	41.7	42.2	42.6	43.0	43.4
44	35.4	34.5	34.9	35.8	36.7	37.6	38.4	39.2	39.9	40.5	41.1	41.6	42.1	42.6	43.0	43.4
45	32.9	33.3	34.3	35.3	36.4	37.3	38.2	39.0	39.7	40.4	41.0	41.5	42.1	42.5	43.0	43.4
46	31.3	32.5	33.8	35.0	36.2	37.2	38.1	38.9	39.7	40.3	40.9	41.5	42.0	42.5	42.9	43.3
47	30.4	32.0	33.4	34.8	36.0	37.0	38.0	38.8	39.6	40.3	40.9	41.5	42.0	42.5	42.9	43.3
48	29.7	31.6	33.2	34.6	35.8	36.9	37.9	38.8	39.5	40.2	40.9	41.4	42.0	42.4	42.9	43.3
49	29.3	31.3	33.0	34.4	35.7	36.8	37.8	38.7	39.5	40.2	40.8	41.4	41.9	42.4	42.9	43.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 2.75

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.95

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN BULK DENSITY = 3.25

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	42.6	39.6	40.0	40.9	41.9	42.9	43.8	44.7	45.5	46.2	46.8	47.5	48.0	48.5	49.0	49.5
51	38.3	38.2	39.2	40.4	41.6	42.6	43.6	44.5	45.3	46.1	46.8	47.4	48.0	48.5	49.0	49.4
52	36.3	37.4	38.7	40.1	41.3	42.5	43.5	44.4	45.3	46.0	46.7	47.3	47.9	48.5	49.0	49.4
53	35.1	36.7	38.3	39.8	41.1	42.3	43.4	44.3	45.2	46.0	46.7	47.3	47.9	48.4	48.9	49.4
54	34.3	36.3	38.0	39.6	40.9	42.2	43.3	44.2	45.1	45.9	46.6	47.3	47.9	48.4	48.9	49.4

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K?) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RIJK DENSITY = 3.54
FIVE-HARNES WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 3.75

FIVE-HARNESS WEAWE FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.6	63.3
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.7	59.7
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.9	57.8
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.1	56.7
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.4	55.9
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.7	55.3
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.1	54.8
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.5	54.5
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9	54.2
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3	54.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.7	53.8
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.1	53.7
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5	53.6
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	53.5
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	53.4
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	53.3
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.1	53.3
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	53.2
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9	53.1
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.3	53.1
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.7	53.1
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.1	53.1
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	53.1
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.9	53.1

IL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 4.00

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0121.3
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.8 66.2
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.8 64.9 62.1
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.9 61.3 60.1
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.5 59.4 58.8
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.7 58.1 57.9
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5 57.3 57.2
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9 56.7 56.8
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.1 56.2 56.4
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.6 55.9 56.1
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3 55.6 55.9
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0 55.3 55.7
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.6 54.7 55.1
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.4 54.6 55.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.1 54.4 55.3
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.7 54.1 54.9
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.4 53.9 54.7
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0 53.6 54.2
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.7 53.1 53.6
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.4 52.9 53.5
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0 52.5 53.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.6 52.1 52.6
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.3 51.7 52.2
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0 51.4 51.9
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.8 51.2 51.7
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5 50.9 51.4
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2 50.6 51.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0 50.4 50.8
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7 50.1 50.5
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.4 49.8 50.2
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.1 49.5 49.9
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8 49.2 49.6
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.5 48.9 49.3
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.2 48.6 49.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.9 48.3 48.7
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.6 48.0 48.4
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3 47.7 48.1
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0 47.4 47.8
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7 47.1 47.5
74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.4 46.8 47.2
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1 46.5 46.9
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.8 46.2 46.6
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5 45.9 46.3
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2 45.6 46.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9 45.3 45.7
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.6 45.0 45.4
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3 44.7 45.1
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0 44.4 44.8
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7 44.1 44.5
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.4 43.8 44.2
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1 43.5 43.9
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8 43.2 43.6
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5 42.9 43.3
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.2 42.6 43.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.9 42.3 42.7
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6 42.0 42.4
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.3 41.7 42.1
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0 41.4 41.8
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7 41.1 41.5
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.4 40.8 41.2
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.1 40.5 40.9
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.8 40.2 40.6
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5 39.9 40.3
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2 39.6 39.9
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.9 39.3 39.7
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6 39.0 39.4

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 4.13

FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.8
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.7	65.1
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.2	64.2	62.2
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.3	63.3	61.4	60.5
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.8	62.6	60.7	59.8	59.4
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.9	62.0	60.1	59.2	58.7	58.6
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.9	61.6	59.5	58.1	58.0	58.0	58.0	58.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.8	61.3	58.9	57.9	57.5	57.4	57.4	57.5	57.5
44	0.0	0.0	0.0	0.0	0.0	0.0	99.9	61.3	58.3	57.3	56.9	56.8	56.8	57.0	57.2	57.2
45	0.0	0.0	0.0	0.0	0.0	0.0	61.7	57.9	56.6	56.2	56.1	56.2	56.4	56.7	56.9	56.9
46	0.0	0.0	0.0	0.0	0.0	63.3	57.5	56.0	55.5	55.4	55.5	55.8	56.1	56.4	56.7	56.7
47	0.0	0.0	0.0	0.0	0.0	69.3	57.4	55.3	54.7	54.9	55.1	55.4	55.8	56.2	56.5	56.5
48	0.0	0.0	0.0	0.0	0.0	57.8	54.8	54.0	53.9	54.1	54.4	54.8	55.2	55.6	56.0	56.4
49	0.0	0.0	0.0	0.0	59.8	54.3	53.2	53.0	53.2	53.6	54.0	54.5	54.9	55.4	55.8	56.2
50	0.0	0.0	0.0	73.2	54.2	52.4	52.1	52.3	52.7	53.2	53.7	54.3	54.8	55.2	55.7	56.1
51	0.0	0.0	0.0	55.1	51.7	51.2	51.4	51.8	52.4	52.9	53.5	54.1	54.6	55.1	55.6	56.1
52	0.0	0.0	60.5	51.2	50.2	50.3	50.8	51.4	52.1	52.7	53.3	53.9	54.5	55.0	55.5	56.0
53	0.0	0.0	51.5	49.2	49.1	49.6	50.3	51.1	51.8	52.5	53.2	53.8	54.4	54.9	55.4	55.9
54	0.0	55.3	48.3	47.9	48.4	49.1	50.0	50.8	51.6	52.3	53.0	53.7	54.3	54.9	55.4	55.9
55	0.0	48.1	46.5	47.0	47.8	48.7	49.7	50.6	51.4	52.2	52.9	53.6	54.2	54.8	55.3	55.8
56	51.7	45.3	45.4	46.3	47.4	48.4	49.5	50.4	51.3	52.1	52.8	53.5	54.2	54.7	55.3	55.8
57	44.7	43.7	44.6	45.8	47.0	48.2	49.3	50.3	51.2	52.0	52.8	53.5	54.1	54.7	55.2	55.7
58	42.0	42.6	44.0	45.4	46.7	48.0	49.1	50.1	51.1	51.9	52.7	53.4	54.1	54.7	55.2	55.7
59	40.4	41.8	43.5	45.1	46.5	47.8	49.0	50.0	51.0	51.8	52.6	53.4	54.0	54.6	55.2	55.7
60	39.4	41.3	43.1	44.8	46.3	47.6	48.9	49.9	50.9	51.8	52.6	53.3	54.0	54.6	55.1	55.7

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY =4.60
FIVE-HARNESS WEAVE FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.8
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.2 68.9
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	68.1	65.8
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.9	67.4	65.7	64.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	66.9	64.5	63.4	62.8	
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.8	66.5	64.0	62.8	62.3	62.0	
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	66.4	63.4	62.2	61.7	61.4	61.4		
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.5	63.0	61.6	61.0	60.8	60.8	60.9		
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.3	62.6	61.0	60.4	60.2	60.2	60.3	60.5		
47	0.0	0.0	0.0	0.0	0.0	0.0	69.5	62.4	60.5	59.8	59.5	59.6	59.7	59.9	60.2		
48	0.0	0.0	0.0	0.0	0.0	78.4	62.5	60.0	59.1	58.9	58.9	59.1	59.3	59.6	60.0		
49	0.0	0.0	0.0	0.0	0.0	63.3	59.6	58.4	58.1	58.2	58.4	58.7	59.0	59.4	59.8		
50	0.0	0.0	0.0	0.0	65.9	59.3	57.8	57.4	57.4	57.7	58.0	58.4	58.8	59.2	59.6		
51	0.0	0.0	0.0	0.0	86.3	59.5	57.2	56.6	56.6	56.9	57.3	57.7	58.1	58.6	59.0	59.4	
52	0.0	0.0	0.0	0.0	60.9	56.7	55.8	55.7	56.0	56.5	56.9	57.4	57.9	58.4	58.9	59.3	
53	0.0	0.0	0.0	67.3	56.5	55.0	54.8	55.1	55.6	56.1	56.7	57.2	57.8	58.3	58.8	59.7	
54	0.0	0.0	0.0	57.2	54.2	53.8	54.1	54.6	55.2	55.8	56.4	57.0	57.6	58.2	58.7	59.1	
55	0.0	0.0	61.7	53.7	52.8	53.0	53.5	54.2	54.9	55.6	56.3	56.9	57.5	58.1	58.6	59.1	
56	0.0	0.0	54.0	51.8	51.8	52.3	53.1	53.9	54.7	55.4	56.1	56.8	57.4	58.0	58.5	59.0	
57	0.0	58.2	51.0	50.5	51.0	51.9	52.7	53.6	54.5	55.2	56.0	56.7	57.3	57.9	58.4	59.0	
58	0.0	51.0	49.2	49.6	50.5	51.5	52.5	53.4	54.3	55.1	55.9	56.6	57.2	57.8	58.4	58.9	
59	56.2	48.0	48.0	48.9	50.0	51.1	52.2	53.2	54.1	55.0	55.8	56.5	57.2	57.8	58.3	58.9	
60	47.8	46.3	47.1	48.4	49.7	50.9	52.0	53.1	54.0	54.9	55.7	56.4	57.1	57.7	58.3	58.8	
61	44.8	45.2	46.5	48.0	49.4	50.7	51.9	52.9	53.9	54.8	55.6	56.4	57.1	57.7	58.3	58.8	
62	43.0	44.3	46.0	47.6	49.1	50.5	51.7	52.8	53.8	54.7	55.6	56.3	57.0	57.7	58.2	58.8	

MIL-HDBK-741 (GL)

(D) OXFORD FABRICS

TABLE 1-3
MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN RULK DENSITY ≈ 0.54
OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.56

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4	20.2
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	19.3	17.7	17.0	16.7	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	17.1	16.2	15.9	15.7	15.7	15.7	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9	15.7	15.1	14.9	14.9	14.9	15.0	15.1	15.2	
16	0.0	0.0	0.0	0.0	0.0	17.1	14.6	14.1	14.0	14.0	14.1	14.3	14.5	14.6	14.8	15.0	
17	0.0	0.0	0.0	19.7	13.7	13.1	13.0	13.1	13.3	13.5	13.7	14.0	14.2	14.4	14.6	14.9	
18	0.0	0.0	13.4	12.0	11.9	12.1	12.4	12.6	12.9	13.2	13.5	13.8	14.1	14.3	14.5	14.8	
19	0.0	11.1	10.7	10.9	11.3	11.6	12.0	12.4	12.7	13.1	13.4	13.7	14.0	14.2	14.5	14.7	
20	9.5	9.6	10.0	10.5	10.9	11.4	11.9	12.2	12.6	13.0	13.3	13.6	13.9	14.2	14.4	14.7	
21	9.4	9.0	9.6	10.2	10.7	11.2	11.7	12.1	12.5	12.9	13.3	13.6	13.9	14.1	14.4	14.6	
22	7.9	8.7	9.4	10.0	10.6	11.2	11.6	12.1	12.5	12.9	13.2	13.5	13.9	14.1	14.4	14.6	
23	7.7	8.5	9.3	9.9	10.5	11.1	11.6	12.0	12.4	12.9	13.2	13.5	13.8	14.1	14.4	14.6	
24	7.6	8.4	9.2	9.9	10.5	11.0	11.5	12.0	12.4	12.8	13.2	13.5	13.9	14.1	14.3	14.6	
25	7.5	8.4	9.1	9.8	10.5	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
26	7.4	8.3	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
27	7.4	8.3	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
28	7.4	8.3	9.1	9.8	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
29	7.3	8.2	9.0	9.7	10.4	11.0	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
30	7.3	8.2	9.0	9.7	10.4	10.9	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
31	7.3	8.2	9.0	9.7	10.4	10.9	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	
32	7.3	8.2	9.0	9.7	10.4	10.9	11.5	11.9	12.4	12.8	13.1	13.5	13.8	14.1	14.3	14.6	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY =0.58

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.65

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY ≈ 0.66

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.67

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.2	23.4
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	20.3	19.2	18.6
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	18.7	17.9	17.6	17.4	17.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	17.5	16.9	16.6	16.6	16.7	16.8
17	0.0	0.0	0.0	0.0	0.0	0.0	18.5	16.5	15.9	15.7	15.8	15.9	16.0	16.2	16.3	16.5
18	0.0	0.0	0.0	0.0	19.9	15.6	14.9	14.8	14.9	15.0	15.2	15.4	15.7	15.9	16.1	16.3
19	0.0	0.0	0.0	15.4	14.0	13.8	13.9	14.1	14.4	14.6	14.9	15.2	15.5	15.7	16.0	16.2
20	0.0	0.0	13.2	12.7	12.8	13.1	13.4	13.7	14.1	14.4	14.7	15.1	15.3	15.6	15.9	16.1
21	17.2	11.6	11.5	11.8	12.2	12.7	13.1	13.5	13.9	14.3	14.6	15.0	15.3	15.5	15.8	16.1
22	10.1	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.8	14.2	14.5	14.9	15.2	15.5	15.8	16.0
23	9.2	9.8	10.5	11.2	11.7	12.3	12.9	13.3	13.7	14.1	14.5	14.9	15.2	15.5	15.7	16.0
24	8.7	9.5	10.3	11.0	11.6	12.2	12.7	13.2	13.7	14.1	14.5	14.8	15.1	15.4	15.7	16.0
25	8.5	9.4	10.2	10.9	11.5	12.1	12.7	13.2	13.6	14.0	14.4	14.8	15.1	15.4	15.7	16.0
26	8.3	9.2	10.1	10.8	11.5	12.1	12.6	13.1	13.6	14.0	14.4	14.8	15.1	15.4	15.7	16.0
27	8.2	9.2	10.0	10.8	11.4	12.1	12.6	13.1	13.6	14.0	14.4	14.7	15.1	15.4	15.7	16.0
28	8.2	9.1	10.0	10.7	11.4	12.0	12.6	13.1	13.6	14.0	14.4	14.7	15.1	15.4	15.7	16.0
29	8.1	9.1	9.9	10.7	11.4	12.0	12.6	13.1	13.5	14.0	14.4	14.7	15.1	15.4	15.7	15.9
30	8.1	9.0	9.9	10.7	11.4	12.0	12.6	13.1	13.5	14.0	14.4	14.7	15.1	15.4	15.7	15.9
31	8.0	9.0	9.9	10.7	11.4	12.0	12.5	13.1	13.5	14.0	14.4	14.7	15.1	15.4	15.7	15.9
32	8.0	9.0	9.9	10.7	11.4	12.0	12.5	13.1	13.5	14.0	14.4	14.7	15.1	15.4	15.7	15.9

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.68

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.69

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.70

OXFORD FARRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	20.8	19.8
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	20.9	19.2	18.5	18.2	18.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	19.3	18.0	17.5	17.3	17.2	17.3	17.4
17	0.0	0.0	0.0	0.0	0.0	0.0	29.5	19.3	17.0	16.5	16.4	16.4	16.5	16.7	16.8	17.0
18	0.0	0.0	0.0	0.0	0.0	18.0	16.1	15.6	15.5	15.6	15.7	15.9	16.1	16.3	16.5	16.8
19	0.0	0.0	0.0	22.3	15.4	14.6	14.5	14.7	14.9	15.1	15.4	15.6	15.9	16.1	16.4	16.6
20	0.0	0.0	16.0	13.7	13.5	13.6	13.9	14.2	14.5	14.8	15.1	15.4	15.7	16.0	16.3	16.5
21	0.0	13.4	12.3	12.4	12.7	13.1	13.5	13.9	14.3	14.7	15.0	15.3	15.6	15.9	16.2	16.5
22	11.5	11.0	11.4	11.8	12.3	12.8	13.3	13.7	14.2	14.5	14.9	15.2	15.6	15.9	16.1	16.4
23	9.7	10.3	10.9	11.5	12.1	12.6	13.1	13.6	14.1	14.5	14.8	15.2	15.5	15.8	16.1	16.4
24	9.1	9.9	10.6	11.3	11.9	12.5	13.1	13.5	14.0	14.4	14.8	15.1	15.5	15.8	16.1	16.4
25	9.8	9.7	10.5	11.2	11.8	12.4	13.0	13.5	13.9	14.4	14.8	15.1	15.5	15.8	16.1	16.3
26	9.6	9.5	10.3	11.1	11.8	12.4	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.8	16.0	16.3
27	8.5	9.4	10.3	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3
28	8.4	9.3	10.2	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3
29	9.3	9.3	10.2	11.0	11.7	12.3	12.9	13.4	13.9	14.3	14.7	15.1	15.4	15.7	16.0	16.3
30	8.3	9.3	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3
31	9.2	9.2	10.1	10.9	11.6	12.3	12.8	13.4	13.8	14.3	14.7	15.1	15.4	15.7	16.0	16.3
32	8.2	9.2	10.1	10.9	11.6	12.2	12.8	13.3	13.8	14.3	14.7	15.0	15.4	15.7	16.0	16.3

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =0.71

OXFORD FABRICS

WARP COVER FACTOR (K1)	RFTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.72

OXFORD FARRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	22.3 20.7
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1	20.3	19.3	18.8	18.6	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	18.9	18.1	17.8	17.7	17.7	17.7	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	17.9	17.1	16.9	16.9	16.9	17.0	17.1	17.3	
18	0.0	0.0	0.0	0.0	0.0	21.6	17.1	16.2	16.0	16.0	16.1	16.3	16.4	16.6	16.8	17.0	
19	0.0	0.0	0.0	0.0	16.8	15.3	15.0	15.0	15.2	15.4	15.7	15.9	16.2	16.4	16.6	16.9	
20	0.0	0.0	23.5	14.6	14.0	14.0	14.2	14.5	14.8	15.1	15.4	15.7	16.0	16.3	16.5	16.8	
21	0.0	16.2	13.0	12.9	13.1	13.4	13.8	14.2	14.5	14.9	15.3	15.6	15.9	16.2	16.4	16.7	
22	13.5	11.6	11.7	17.1	12.6	13.1	13.5	14.0	14.4	14.8	15.1	15.5	15.8	16.1	16.4	16.7	
23	10.2	10.6	11.2	11.8	12.3	12.9	13.4	13.8	14.3	14.7	15.1	15.4	15.8	16.1	16.3	16.6	
24	9.4	10.1	10.9	11.5	12.2	12.7	13.3	13.8	14.2	14.6	15.0	15.4	15.7	16.0	16.3	16.6	
25	9.0	9.9	10.7	11.4	12.0	12.6	13.2	13.7	14.2	14.6	15.0	15.3	15.7	16.0	16.3	16.6	
26	8.9	9.7	10.5	11.3	12.0	12.6	13.1	13.6	14.1	14.6	15.0	15.3	15.7	16.0	16.3	16.6	
27	8.6	9.6	10.4	11.2	11.9	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3	16.6	
28	8.5	9.5	10.4	11.2	11.9	12.5	13.1	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3	16.5	
29	8.5	9.5	10.3	11.1	11.8	12.5	13.0	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.3	16.5	
30	8.4	9.4	10.3	11.1	11.8	12.4	13.0	13.6	14.0	14.5	14.9	15.3	15.6	15.9	16.3	16.5	
31	8.4	9.4	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
32	8.3	9.4	10.3	11.1	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
33	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
34	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
35	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
36	8.3	9.3	10.2	11.0	11.8	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
37	8.3	9.3	10.2	11.0	11.7	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	
38	8.3	9.3	10.2	11.0	11.7	12.4	13.0	13.5	14.0	14.5	14.9	15.3	15.6	15.9	16.2	16.5	

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.73

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.74

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA																
	7.5	8.6	9.7	10.8	11.9	13.0	14.1	15.2	16.3	17.4	18.5	19.6	20.7	21.8	22.9	24.0	25.1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	25.1	12.4	12.2	12.5	12.9	13.3	13.8	14.2	14.6	15.0	15.4	15.7	16.1	16.4	16.7	17.0	17.3
23	17.9	11.0	11.5	12.0	12.6	13.1	13.6	14.1	14.5	14.9	15.3	15.7	16.0	16.3	16.6	16.9	17.2
24	9.7	10.4	11.1	11.8	12.4	12.9	13.5	14.0	14.4	14.8	15.2	15.6	15.9	16.3	16.6	16.9	17.1
25	9.2	10.1	10.9	11.6	12.2	12.8	13.4	13.9	14.4	14.8	15.2	15.6	15.9	16.2	16.5	16.8	17.0
26	9.0	9.9	10.7	11.5	12.2	12.8	13.3	13.9	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
27	8.8	9.8	10.6	11.4	12.1	12.7	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
28	8.7	9.7	10.5	11.3	12.0	12.7	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
29	8.6	9.6	10.5	11.3	12.0	12.6	13.2	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
30	8.5	9.6	10.5	11.3	12.0	12.6	13.2	13.8	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
31	8.5	9.5	10.4	11.2	12.0	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
32	8.5	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
33	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
34	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
35	8.4	9.5	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
36	8.4	9.4	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
37	8.4	9.4	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0
38	8.4	9.4	10.4	11.2	11.9	12.6	13.2	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.5	16.8	17.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.75

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.76
OXFORD FARRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8	23.4
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	21.2	20.2	19.7	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.1	21.8	19.8	19.0	18.7	18.5	18.5		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	18.7	18.0	17.8	17.7	17.7	17.8	17.9	
18	0.0	0.0	0.0	0.0	0.0	0.0	20.8	17.8	17.1	16.9	16.9	16.9	17.1	17.2	17.4	17.6	
19	0.0	0.0	0.0	0.0	30.3	17.3	16.2	15.9	16.0	16.1	16.3	16.5	16.7	17.0	17.2	17.4	
20	0.0	0.0	0.0	18.4	15.4	15.0	15.0	15.1	15.4	15.7	16.0	16.2	16.5	16.8	17.0	17.3	
21	0.0	0.0	15.4	14.0	13.9	14.1	14.4	14.7	15.1	15.4	15.8	16.1	16.4	16.7	16.9	17.7	
22	0.0	13.4	12.7	12.9	13.2	13.6	14.0	14.5	14.9	15.3	15.6	16.0	16.3	16.6	16.9	17.1	
23	11.8	11.4	11.8	12.3	12.8	13.3	13.8	14.3	14.7	15.1	15.5	15.9	16.2	16.5	16.9	17.1	
24	10.1	10.7	11.3	12.0	12.6	13.2	13.7	14.2	14.6	15.1	15.5	15.8	16.2	16.5	16.9	17.1	
25	9.5	10.3	11.1	11.8	12.4	13.0	13.6	14.1	14.6	15.0	15.4	15.8	16.1	16.5	16.8	17.0	
26	9.2	10.1	10.9	11.7	12.3	13.0	13.5	14.1	14.5	15.0	15.4	15.8	16.1	16.4	16.7	17.0	
27	9.0	9.9	10.8	11.6	12.3	12.9	13.5	14.0	14.5	14.9	15.4	15.7	16.1	16.4	16.7	17.0	
28	8.8	9.8	10.7	11.5	12.2	12.9	13.4	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0	
29	8.7	9.8	10.7	11.5	12.2	12.8	13.4	14.0	14.5	14.9	15.3	15.7	16.1	16.4	16.7	17.0	
30	8.7	9.7	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.1	16.4	16.7	17.0	
31	8.6	9.7	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
32	8.6	9.6	10.6	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
33	8.6	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
34	8.5	9.6	10.5	11.4	12.1	12.8	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
35	8.5	9.6	10.5	11.3	12.1	12.7	13.4	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
36	8.5	9.6	10.5	11.3	12.1	12.7	13.3	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
37	8.5	9.6	10.5	11.3	12.1	12.7	13.3	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	
38	8.5	9.6	10.5	11.3	12.1	12.7	13.3	13.9	14.4	14.9	15.3	15.7	16.0	16.4	16.7	17.0	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.77

OXFORD FARRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	24.4	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	21.9	20.6	20.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	20.3	19.4	19.0	18.8	18.7	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	19.2	18.4	18.0	17.9	17.9	18.0	18.1	
18	0.0	0.0	0.0	0.0	0.0	0.0	22.8	18.4	17.4	17.1	17.1	17.1	17.2	17.4	17.6	17.8	
19	0.0	0.0	0.0	0.0	0.0	18.1	16.6	16.2	16.2	16.3	16.4	16.7	16.9	17.1	17.3	17.5	
20	0.0	0.0	0.0	20.9	15.9	15.2	15.3	15.6	15.8	16.1	16.4	16.6	16.9	17.2	17.4		
21	0.0	0.0	16.5	14.3	14.1	14.3	14.5	14.9	15.2	15.5	15.9	16.2	16.5	16.8	17.1	17.3	
22	0.0	14.2	13.0	13.0	13.4	13.8	14.2	14.6	15.0	15.4	15.7	16.1	16.4	16.7	17.0	17.3	
23	12.4	11.7	12.0	12.4	13.0	13.5	14.0	14.4	14.8	15.3	15.6	16.0	16.3	16.6	16.9	17.2	
24	10.3	10.8	11.5	12.1	12.7	13.3	13.8	14.3	14.8	15.7	15.6	15.9	16.3	16.6	16.9	17.2	
25	9.6	10.4	11.2	11.9	12.5	13.1	13.7	14.2	14.7	15.1	15.5	15.9	16.2	16.6	16.9	17.2	
26	9.3	10.2	11.0	11.8	12.4	13.1	13.6	14.2	14.6	15.1	15.5	15.9	16.2	16.5	16.9	17.1	
27	9.0	10.0	10.9	11.7	12.4	13.0	13.6	14.1	14.6	15.0	15.5	15.8	16.2	16.5	16.8	17.1	
28	8.9	9.9	10.8	11.6	12.3	13.0	13.5	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.8	17.1	
29	8.8	9.8	10.7	11.5	12.3	12.9	13.5	14.1	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	
30	8.7	9.8	10.7	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	
31	8.7	9.7	10.7	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.9	17.1	
32	8.7	9.7	10.6	11.5	12.2	12.9	13.5	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.8	17.1	
33	8.6	9.7	10.6	11.4	12.2	12.8	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	
34	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.9	16.1	16.5	16.8	17.1	
35	8.6	9.7	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	
36	8.6	9.6	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	
37	8.6	9.6	10.6	11.4	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	
38	8.6	9.6	10.6	11.4	12.1	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.1	16.5	16.8	17.1	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.78

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.79

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.80

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.81

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	22.7	21.4
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.0	23.4	21.1	20.2	19.8	19.6	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	20.0	19.2	18.9	18.7	18.7	18.8	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.9	19.1	18.2	18.0	17.9	17.9	18.1	18.2	18.3	
19	0.0	0.0	0.0	0.0	0.0	25.7	18.5	17.4	17.1	17.0	17.1	17.3	17.5	17.7	17.9	18.1	
20	0.0	0.0	0.0	0.0	19.0	16.6	16.1	16.1	16.2	16.4	16.7	16.9	17.2	17.4	17.7	17.9	
21	0.0	0.0	0.0	16.3	15.2	15.0	15.2	15.5	15.8	16.1	16.4	16.7	17.0	17.3	17.6	17.8	
22	0.0	0.0	14.5	13.9	14.0	14.4	14.7	15.1	15.5	15.9	16.2	16.6	16.9	17.2	17.5	17.7	
23	34.8	13.0	12.7	13.1	13.5	14.0	14.4	14.9	15.3	15.7	16.1	16.5	16.8	17.1	17.4	17.7	
24	11.5	11.5	12.0	12.6	13.2	13.7	14.2	14.7	15.2	15.6	16.0	16.4	16.7	17.0	17.4	17.6	
25	10.3	10.9	11.6	12.3	13.0	13.6	14.1	14.6	15.1	15.5	15.9	16.3	16.7	17.0	17.3	17.6	
26	9.7	10.6	11.4	12.1	12.8	13.5	14.0	14.6	15.0	15.5	15.9	16.3	16.6	17.0	17.3	17.6	
27	9.4	10.4	11.2	12.0	12.7	13.4	14.0	14.5	15.0	15.5	15.9	16.3	16.6	17.0	17.3	17.6	
28	9.2	10.2	11.1	11.9	12.7	13.3	13.9	14.5	15.0	15.4	15.8	16.2	16.6	16.9	17.3	17.6	
29	9.1	10.1	11.1	11.9	12.6	13.3	13.9	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.3	17.6	
30	9.0	10.1	11.0	11.8	12.6	13.2	13.9	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5	
31	8.9	10.0	11.0	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5	
32	8.9	10.0	10.9	11.8	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5	
33	8.9	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5	
34	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.4	15.8	16.2	16.6	16.9	17.2	17.5	
35	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5	
36	8.8	9.9	10.9	11.7	12.5	13.2	13.8	14.4	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5	
37	8.8	9.9	10.8	11.7	12.5	13.2	13.8	14.3	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5	
38	8.8	9.9	10.8	11.7	12.5	13.2	13.8	14.3	14.9	15.3	15.8	16.2	16.6	16.9	17.2	17.5	

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.82

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	23.4	21.9
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	21.7	20.6	20.1	19.8
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	20.5	19.5	19.1	19.0	18.9	19.0	19.0
18	0.0	0.0	0.0	0.0	0.0	0.0	23.6	19.6	18.6	18.2	18.1	18.2	18.1	18.2	18.3	18.5
19	0.0	0.0	0.0	0.0	41.5	19.2	17.7	17.3	17.2	17.3	17.4	17.6	17.8	18.0	18.2	18.2
20	0.0	0.0	0.0	0.0	20.5	17.0	16.4	16.3	16.4	16.6	16.8	17.1	17.3	17.6	17.8	18.0
21	0.0	0.0	0.0	17.1	15.5	15.3	15.4	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	17.9
22	0.0	0.0	15.1	14.2	14.5	14.9	15.2	15.6	16.0	16.3	16.7	17.0	17.3	17.6	17.9	17.9
23	0.0	13.4	13.0	13.2	13.6	14.1	14.6	15.0	15.4	15.8	16.2	16.6	16.9	17.2	17.5	17.8
24	11.9	11.7	12.2	12.7	13.3	13.8	14.4	14.8	15.3	15.7	16.1	16.5	16.8	17.2	17.5	17.8
25	10.4	11.1	11.8	12.4	13.1	13.7	14.2	14.7	15.2	15.6	16.1	16.4	16.8	17.1	17.4	17.7
26	9.8	10.7	11.5	12.2	12.9	13.5	14.1	14.7	15.1	15.6	16.0	16.4	16.8	17.1	17.4	17.7
27	9.5	10.5	11.3	12.1	12.8	13.5	14.1	14.6	15.1	15.6	16.0	16.4	16.7	17.1	17.4	17.7
28	9.3	10.3	11.2	12.0	12.7	13.4	14.0	14.6	15.1	15.5	15.9	16.3	16.7	17.1	17.4	17.7
29	9.2	10.2	11.1	12.0	12.7	13.4	14.0	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.4	17.7
30	9.1	10.1	11.1	11.9	12.7	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.4	17.7
31	9.0	10.1	11.0	11.9	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
32	9.0	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
33	8.9	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	15.9	16.3	16.7	17.0	17.3	17.6
34	8.9	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
35	8.9	10.0	10.9	11.8	12.6	13.3	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
36	8.9	10.0	10.9	11.8	12.6	13.2	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
37	8.9	10.0	10.9	11.8	12.5	13.2	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6
38	8.8	9.9	10.9	11.8	12.5	13.2	13.9	14.4	15.0	15.4	15.9	16.3	16.7	17.0	17.3	17.6

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.83

OXFORD FARRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	12.4	12.0	12.3	12.9	13.4	13.9	14.5	14.9	15.4	15.8	16.2	16.6	16.9	17.3	17.6	17.9	17.9
25	10.6	11.2	11.9	12.5	13.2	13.8	14.3	14.8	15.3	15.8	16.2	16.5	16.9	17.2	17.5	17.8	17.8
26	10.0	10.8	11.5	12.3	13.0	13.6	14.2	14.8	15.2	15.7	16.1	16.5	16.9	17.2	17.5	17.8	17.8
27	9.6	10.6	11.4	12.2	12.9	13.6	14.2	14.7	15.2	15.7	16.1	16.5	16.9	17.2	17.5	17.8	17.8
28	9.4	10.4	11.3	12.1	12.8	13.5	14.1	14.7	15.2	15.6	16.0	16.4	16.8	17.2	17.5	17.8	17.8
29	9.3	10.3	11.2	12.0	12.8	13.5	14.1	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	17.8
30	9.2	10.2	11.1	12.0	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	17.8
31	9.1	10.2	11.1	11.9	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.5	17.8	17.8
32	9.0	10.1	11.1	11.9	12.7	13.4	14.0	14.6	15.1	15.6	16.0	16.4	16.8	17.1	17.4	17.8	17.8
33	9.0	10.1	11.0	11.9	12.7	13.4	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7
34	9.0	10.1	11.0	11.9	12.7	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7
35	8.9	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7
36	8.9	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.1	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7
37	8.9	10.0	11.0	11.9	12.6	13.3	14.0	14.5	15.0	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7
38	8.9	10.0	11.0	11.8	12.6	13.3	13.9	14.5	15.0	15.5	16.0	16.4	16.8	17.1	17.4	17.7	17.7

MAXIMUM FILLING COVER FACTORS (K₂) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = C.84

OXFORD FABRICS

WARP COVER FACTOR (K ₁)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.85

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	23.9	21.9	21.0	20.6
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	22.5	20.7	20.0	19.7	19.5	19.5
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	19.7	19.0	18.9	18.7	18.7	18.8	19.0
19	0.0	0.0	0.0	0.0	0.0	0.0	22.5	19.0	18.1	17.9	17.9	17.9	18.1	18.3	18.4	18.6
20	0.0	0.0	0.0	0.0	0.0	18.8	17.3	17.0	16.9	17.1	17.3	17.5	17.7	18.0	18.2	18.4
21	0.0	0.0	0.0	27.3	16.7	16.0	16.0	16.1	16.3	16.6	16.9	17.2	17.5	17.8	18.0	18.3
22	0.0	0.0	18.0	15.2	14.9	15.0	15.3	15.6	16.0	16.3	16.7	17.0	17.3	17.6	17.9	18.2
23	0.0	15.7	13.8	13.8	14.1	14.5	14.9	15.4	15.8	16.2	16.5	16.9	17.2	17.6	17.9	18.1
24	13.9	12.5	12.7	13.1	13.7	14.2	14.7	15.2	15.6	16.0	16.4	16.8	17.2	17.5	17.8	18.1
25	11.1	11.5	12.1	12.8	13.4	14.0	14.5	15.0	15.5	16.0	16.4	16.9	17.1	17.4	17.9	18.1
26	10.3	11.0	11.8	12.5	13.2	13.8	14.4	15.0	15.4	15.9	16.3	16.7	17.1	17.4	17.7	18.0
27	9.8	10.8	11.6	12.4	13.1	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.0	17.4	17.7	18.0
28	9.6	10.6	11.5	12.3	13.0	13.7	14.3	14.8	15.3	15.8	16.3	16.7	17.0	17.4	17.7	18.0
29	9.4	10.4	11.4	12.2	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.4	17.7	18.0
30	9.3	10.4	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.3	17.7	18.0
31	9.2	10.3	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.2	16.6	17.0	17.3	17.7	18.0
32	9.2	10.2	11.2	12.1	12.8	13.5	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0
33	9.1	10.2	11.2	12.0	12.8	13.5	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0
34	9.1	10.2	11.2	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.7	18.0
35	9.1	10.2	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
36	9.0	10.2	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
37	9.0	10.1	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0
38	9.0	10.1	11.1	12.0	12.8	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.3	17.6	18.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =0.86
OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	24.1	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.3	24.9	22.4	21.3	20.9			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.3	23.4	21.1	20.3	19.9	19.7	19.7				
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	20.2	19.3	19.0	18.9	18.9	19.0	19.1				
19	0.0	0.0	0.0	0.0	0.0	0.0	24.6	19.5	18.5	18.1	18.1	18.2	18.4	18.6	18.8				
20	0.0	0.0	0.0	0.0	0.0	19.6	17.7	17.2	17.1	17.2	17.4	17.6	17.9	18.1	18.3	18.6			
21	0.0	0.0	0.0	29.2	17.3	16.3	16.2	16.3	16.5	16.8	17.0	17.3	17.6	17.9	18.2	18.4			
22	0.0	0.0	20.1	15.6	15.1	15.2	15.5	15.8	16.1	16.5	16.8	17.1	17.5	17.8	18.0	18.3			
23	0.0	17.0	14.1	14.0	14.3	14.6	15.1	15.5	15.9	16.3	16.7	17.0	17.4	17.7	18.0	18.3			
24	15.1	12.8	12.9	13.3	13.8	14.3	14.8	15.3	15.7	16.2	16.6	16.9	17.3	17.6	17.9	18.2			
25	11.4	11.7	12.3	12.9	13.5	14.1	14.6	15.1	15.6	16.1	16.5	16.9	17.2	17.6	17.9	18.2			
26	10.4	11.2	11.9	12.6	13.3	13.9	14.5	15.1	15.5	16.0	16.4	16.8	17.2	17.5	17.8	18.1			
27	9.9	10.9	11.7	12.5	13.2	13.8	14.4	15.0	15.5	16.0	16.4	16.8	17.1	17.5	17.8	18.1			
28	9.7	10.7	11.6	12.4	13.1	13.8	14.4	14.9	15.4	15.9	16.3	16.8	17.1	17.5	17.8	18.1			
29	9.5	10.5	11.5	12.3	13.0	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.1	17.5	17.8	18.1			
30	9.4	10.4	11.4	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.3	16.7	17.1	17.4	17.8	18.1			
31	9.3	10.4	11.3	12.2	12.9	13.6	14.3	14.8	15.4	15.9	16.3	16.7	17.1	17.4	17.8	18.1			
32	9.2	10.3	11.3	12.1	12.9	13.6	14.3	14.8	15.4	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
33	9.2	10.3	11.3	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
34	9.1	10.3	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
35	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
36	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
37	9.1	10.2	11.2	12.1	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.8	18.1			
38	9.1	10.2	11.2	12.1	12.8	13.6	14.2	14.8	15.3	15.8	16.3	16.7	17.1	17.4	17.7	18.1			

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.87

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	22.9	21.7	21.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.5	21.6	20.6	20.2	20.0	19.9	19.9
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	20.7	19.7	19.3	19.1	19.1	19.2	19.3	19.3
19	0.0	0.0	0.0	0.0	0.0	0.0	28.5	20.1	18.8	18.4	18.3	18.3	18.4	18.6	18.7	18.9
20	0.0	0.0	0.0	0.0	0.0	20.7	18.1	17.5	17.3	17.4	17.6	17.8	18.0	18.2	18.5	18.7
21	0.0	0.0	0.0	0.0	17.9	16.6	16.4	16.5	16.7	16.9	17.2	17.5	17.7	18.0	18.3	18.5
22	0.0	0.0	24.8	16.0	15.4	15.4	15.6	15.9	16.3	16.6	16.9	17.3	17.6	17.9	18.2	18.4
23	0.0	19.5	14.5	14.2	14.4	14.8	15.2	15.6	16.0	16.4	16.8	17.1	17.5	17.8	18.1	18.4
24	17.4	13.1	13.1	13.4	13.9	14.4	14.9	15.4	15.8	16.3	16.7	17.0	17.4	17.7	18.0	18.3
25	11.7	11.9	12.4	13.0	13.6	14.2	14.7	15.3	15.7	16.2	16.6	17.0	17.3	17.7	18.0	18.3
26	10.6	11.3	12.0	12.7	13.4	14.0	14.6	15.2	15.6	16.1	16.5	16.9	17.3	17.6	17.9	18.2
27	10.1	11.0	11.8	12.6	13.3	13.9	14.5	15.1	15.6	16.0	16.5	16.9	17.3	17.6	17.9	18.2
28	9.8	10.7	11.6	12.5	13.2	13.9	14.5	15.0	15.5	16.0	16.4	16.9	17.2	17.6	17.9	18.2
29	9.6	10.6	11.5	12.4	13.1	13.8	14.4	15.0	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.2
30	9.4	10.5	11.5	12.3	13.1	13.8	14.4	15.0	15.5	16.0	16.4	16.8	17.2	17.6	17.9	18.2
31	9.3	10.4	11.4	12.3	13.0	13.7	14.4	14.9	15.5	15.9	16.4	16.8	17.2	17.5	17.9	18.2
32	9.3	10.4	11.4	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
33	9.2	10.3	11.3	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
34	9.2	10.3	11.3	12.2	13.0	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
35	9.2	10.3	11.3	12.2	12.9	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
36	9.2	10.3	11.3	12.1	12.9	13.6	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
37	9.1	10.3	11.3	12.1	12.9	13.6	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2
38	9.1	10.3	11.2	12.1	12.9	13.6	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.5	17.8	18.2

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.88

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.8	25.7
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	23.6
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	22.7	21.0	20.4	20.2	20.1	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.3	21.3	20.0	19.5	19.3	19.3	19.3	19.4	
19	0.0	0.0	0.0	0.0	0.0	0.0	45.7	20.9	19.2	18.6	18.5	18.5	18.6	18.7	19.9	19.1	
20	0.0	0.0	0.0	0.0	0.0	22.1	18.5	17.7	17.6	17.6	17.7	17.9	18.1	18.4	18.6	18.8	
21	0.0	0.0	0.0	0.0	0.0	18.6	16.9	16.6	16.8	17.1	17.3	17.6	17.9	18.1	18.4	19.7	
22	0.0	0.0	0.0	16.6	15.6	15.6	15.8	16.1	16.4	16.7	17.1	17.4	17.7	18.0	18.3	18.6	
23	0.0	27.7	14.9	14.4	14.6	14.9	15.3	15.7	16.1	16.5	16.9	17.2	17.6	17.9	18.2	18.5	
24	25.5	13.5	13.3	13.6	14.1	14.5	15.0	15.5	16.0	16.4	16.8	17.1	17.5	17.8	18.1	18.4	
25	12.0	12.0	12.5	13.1	13.7	14.3	14.8	15.4	15.8	16.3	16.7	17.1	17.4	17.8	18.1	18.4	
26	10.7	11.4	12.1	12.9	13.5	14.1	14.7	15.3	15.7	16.2	16.6	17.0	17.4	17.7	18.1	18.4	
27	10.2	11.1	11.9	12.7	13.4	14.0	14.6	15.2	15.7	16.1	16.6	17.0	17.4	17.7	18.0	18.3	
28	9.8	10.8	11.7	12.5	13.3	13.9	14.6	15.1	15.6	16.1	16.5	17.0	17.3	17.7	18.0	18.3	
29	9.6	10.7	11.6	12.5	13.2	13.9	14.5	15.1	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3	
30	9.5	10.6	11.5	12.4	13.2	13.8	14.5	15.0	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.3	
31	9.4	10.5	11.5	12.3	13.1	13.8	14.4	15.0	15.6	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
32	9.3	10.5	11.4	12.3	13.1	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
33	9.3	10.4	11.4	12.3	13.1	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
34	9.3	10.4	11.4	12.3	13.0	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
35	9.2	10.4	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
36	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.6	18.0	18.3	
37	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.4	16.9	17.3	17.6	18.0	18.3	
38	9.2	10.3	11.3	12.2	13.0	13.7	14.4	15.0	15.5	16.0	16.4	16.9	17.3	17.6	18.0	18.3	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.89

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	12.4	12.2	12.7	13.3	13.9	14.4	15.0	15.5	15.9	16.4	16.8	17.2	17.5	17.9	18.2	18.5
26	10.9	11.5	12.3	13.0	13.6	14.2	14.8	15.4	15.8	16.3	16.7	17.1	17.5	17.8	18.2	18.5
27	10.3	11.2	12.0	12.8	13.5	14.1	14.7	15.3	15.9	16.2	16.7	17.1	17.5	17.8	18.1	18.4
28	9.9	10.9	11.8	12.6	13.4	14.0	14.7	15.2	15.7	16.2	16.6	17.1	17.4	17.8	18.1	18.4
29	9.7	10.8	11.7	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4
30	9.6	10.7	11.6	12.5	13.2	13.9	14.6	15.1	15.7	16.2	16.6	17.0	17.4	17.8	18.1	18.4
31	9.5	10.6	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4
32	9.4	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4
33	9.4	10.5	11.5	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4
34	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.7	18.1	18.4
35	9.3	10.4	11.4	12.3	13.1	13.8	14.5	15.1	15.6	16.1	16.5	17.0	17.4	17.7	18.1	18.4
36	9.3	10.4	11.4	12.3	13.1	13.9	14.5	15.1	15.6	16.1	16.5	17.0	17.4	17.7	18.1	18.4
37	9.2	10.4	11.4	12.3	13.1	13.9	14.5	15.0	15.6	16.1	16.5	17.0	17.4	17.7	18.1	18.4
38	9.2	10.4	11.4	12.3	13.1	13.9	14.4	15.0	15.6	16.1	16.5	17.0	17.4	17.7	18.1	18.4

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.90

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.2	25.2	23.0	22.1		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.9	23.6	21.8	21.0	20.7	20.5			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0	22.7	20.8	20.1	19.8	19.7	19.7	19.8			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.8	20.0	19.2	18.9	18.9	18.9	19.0	19.2	19.3			
20	0.0	0.0	0.0	0.0	0.0	28.5	19.6	18.4	18.0	18.0	18.1	18.2	18.4	18.6	19.9	19.1			
21	0.0	0.0	0.0	0.0	20.8	17.7	17.1	17.0	17.1	17.3	17.6	17.9	18.1	18.4	19.7	18.9			
22	0.0	0.0	0.0	18.0	16.2	16.0	16.1	16.4	16.7	17.0	17.3	17.6	17.9	18.2	18.5	18.8			
23	0.0	0.0	16.0	15.0	15.0	15.2	15.6	16.0	16.4	16.8	17.1	17.5	17.8	18.1	18.4	18.7			
24	0.0	14.4	13.7	13.9	14.3	14.8	15.3	15.7	16.2	16.6	17.0	17.4	17.7	18.0	18.4	18.6			
25	12.9	12.5	12.8	13.4	14.0	14.5	15.1	15.6	16.0	16.5	16.9	17.3	17.6	18.0	18.3	18.6			
26	11.1	11.7	12.4	13.1	13.7	14.3	14.9	15.4	15.9	16.4	16.8	17.2	17.6	17.9	18.3	18.6			
27	10.4	11.3	12.1	12.9	13.6	14.2	14.8	15.4	15.9	16.3	16.8	17.2	17.6	17.9	18.2	18.5			
28	10.0	11.0	11.9	12.7	13.5	14.1	14.7	15.3	15.8	16.3	16.7	17.2	17.5	17.9	18.2	18.5			
29	9.8	10.8	11.8	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.7	17.1	17.5	17.9	18.2	18.5			
30	9.7	10.7	11.7	12.5	13.3	14.0	14.6	15.2	15.8	16.2	16.7	17.1	17.5	17.9	18.2	18.5			
31	9.6	10.6	11.6	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5			
32	9.5	10.6	11.6	12.5	13.2	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5			
33	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.7	17.1	17.5	17.8	18.2	18.5			
34	9.4	10.5	11.5	12.4	13.2	13.9	14.6	15.2	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5			
35	9.3	10.5	11.5	12.4	13.2	13.9	14.6	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5			
36	9.3	10.5	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5			
37	9.3	10.4	11.5	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5			
38	9.3	10.4	11.4	12.3	13.1	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.8	18.2	18.5			

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =0.91

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.1	26.2	23.5	22.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.4	24.5	22.2	21.3	20.9	20.7
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	21.2	20.4	20.0	19.9	19.9	19.9
19	0.0	0.0	0.0	0.0	0.0	0.0	24.3	20.5	19.5	19.1	19.0	19.1	19.2	19.3	19.3	19.5
20	0.0	0.0	0.0	0.0	0.0	64.6	20.3	18.7	18.3	18.2	18.2	18.4	18.6	18.8	19.0	19.2
21	0.0	0.0	0.0	0.0	22.7	18.1	17.4	17.2	17.3	17.5	17.7	18.0	18.3	18.5	18.8	19.0
22	0.0	0.0	0.0	19.0	16.6	16.2	16.3	16.5	16.8	17.1	17.4	17.7	18.1	18.3	18.6	18.9
23	0.0	0.0	16.7	15.2	15.4	15.4	15.7	16.1	16.5	16.9	17.2	17.6	17.9	18.2	18.5	18.8
24	0.0	15.0	14.0	14.1	14.5	14.9	15.4	15.8	16.3	16.7	17.1	17.5	17.8	18.2	18.5	18.8
25	13.5	12.7	13.0	13.5	14.1	14.6	15.2	15.7	16.1	16.6	17.0	17.4	17.8	18.1	18.4	18.7
26	11.3	11.8	12.5	13.2	13.8	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.7	18.0	18.4	18.7
27	10.6	11.4	12.2	13.0	13.7	14.3	14.9	15.5	16.0	16.4	16.9	17.3	17.7	18.0	18.3	18.7
28	10.1	11.1	12.0	12.8	13.5	14.2	14.8	15.4	15.9	16.4	16.8	17.3	17.6	18.0	18.3	18.6
29	9.9	10.9	11.9	12.7	13.5	14.2	14.8	15.4	15.9	16.4	16.8	17.2	17.6	18.0	18.3	18.6
30	9.7	10.8	11.8	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.8	17.2	17.6	18.0	18.3	18.6
31	9.6	10.7	11.7	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6
32	9.5	10.7	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6
33	9.5	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.2	17.6	17.9	18.3	18.6
34	9.4	10.6	11.6	12.5	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6
35	9.4	10.5	11.6	12.4	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6
36	9.4	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	17.9	18.3	18.6
37	9.4	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.5	17.9	18.3	18.6
38	9.3	10.5	11.5	12.4	13.2	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.5	17.9	18.3	18.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY =0.92

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	24.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.5	22.7
25	14.3	12.9	13.2	13.7	14.2	14.7	15.3	15.8	16.2	16.7	17.1	17.5	17.9	18.2	18.5	18.8			
26	11.6	12.0	12.6	13.3	13.9	14.5	15.1	15.6	16.1	16.6	17.0	17.4	17.8	18.2	18.5	18.8			
27	10.7	11.5	12.3	13.1	13.8	14.4	15.0	15.6	16.1	16.5	17.0	17.4	17.8	18.1	18.5	18.8			
28	10.3	11.2	12.1	12.9	13.6	14.3	14.9	15.5	16.0	16.5	16.9	17.4	17.7	18.1	18.4	18.7			
29	10.0	11.0	11.9	12.8	13.5	14.2	14.9	15.4	16.0	16.5	16.9	17.3	17.7	18.1	18.4	18.7			
30	9.8	10.9	11.8	12.7	13.5	14.2	14.8	15.4	15.9	16.4	16.9	17.3	17.7	18.1	18.4	18.7			
31	9.7	10.8	11.7	12.6	13.4	14.1	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			
32	9.6	10.7	11.6	12.5	13.3	14.0	14.6	15.2	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.7			
33	9.5	10.6	11.5	12.4	13.2	13.9	14.5	15.1	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7			
34	9.5	10.6	11.6	12.5	13.3	14.1	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			
35	9.5	10.6	11.6	12.5	13.3	14.1	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			
36	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			
37	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			
38	9.4	10.6	11.6	12.5	13.3	14.0	14.7	15.3	15.8	16.3	16.8	17.3	17.7	18.0	18.4	18.7			

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY = 0.93

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.2	23.2
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	23.3	22.0	21.4	21.2
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.4	22.3	21.0	20.5	20.3	20.2	20.1
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	21.7	20.2	19.6	19.4	19.4	19.5	19.6	19.8
20	0.0	0.0	0.0	0.0	0.0	0.0	22.1	19.5	18.8	18.6	18.6	18.7	19.9	19.0	19.3	19.5
21	0.0	0.0	0.0	0.0	37.2	19.2	18.0	17.7	17.7	17.8	18.0	19.3	19.5	19.8	19.0	19.3
22	0.0	0.0	0.0	22.5	17.4	16.7	16.7	16.8	17.1	17.4	17.7	18.0	19.3	19.6	18.9	19.1
23	0.0	0.0	19.0	15.9	15.6	15.7	16.0	16.4	16.7	17.1	17.5	17.9	19.1	19.5	19.8	19.0
24	0.0	16.9	14.5	14.5	14.8	15.2	15.6	16.1	16.5	16.9	17.3	17.7	18.0	18.4	18.7	19.0
25	15.3	13.2	13.3	13.8	14.3	14.9	15.4	15.9	16.4	16.9	17.2	17.6	18.0	18.3	18.6	18.9
26	11.9	12.1	12.9	13.4	14.0	14.6	15.2	15.8	16.2	16.7	17.1	17.5	17.9	19.3	19.6	18.9
27	10.8	11.6	12.4	13.2	13.9	14.5	15.1	15.7	16.2	16.6	17.1	17.5	17.9	19.2	19.6	18.9
28	10.4	11.3	12.2	13.0	13.7	14.4	15.0	15.6	16.1	16.6	17.0	17.5	17.9	19.2	19.5	18.8
29	10.1	11.1	12.0	12.9	13.6	14.3	15.0	15.5	16.1	16.6	17.0	17.4	17.8	18.2	19.5	18.8
30	9.9	11.0	11.9	12.8	13.6	14.3	14.9	15.5	16.0	16.5	17.0	17.4	17.8	19.2	19.5	18.8
31	9.8	10.9	11.8	12.7	13.5	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	19.1	19.5	19.8
32	9.7	10.8	11.7	12.6	13.4	14.1	14.8	15.4	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
33	9.6	10.7	11.6	12.5	13.3	14.0	14.7	15.3	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
34	9.5	10.6	11.5	12.4	13.2	13.9	14.6	15.2	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
35	9.5	10.6	11.5	12.4	13.2	13.9	14.6	15.2	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
36	9.5	10.6	11.5	12.4	13.2	13.9	14.6	15.2	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
37	9.5	10.6	11.5	12.4	13.2	13.9	14.6	15.2	16.0	16.5	16.9	17.4	17.8	19.1	19.5	19.8
38	9.4	10.5	11.4	12.3	13.1	13.8	14.5	15.1	15.9	16.4	16.9	17.3	17.7	19.1	19.5	19.8

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN RULK DENSITY =0.94
OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	17.0	13.5	13.5	13.9	14.4	15.0	15.5	16.0	16.5	16.9	17.3	17.7	18.1	18.4	18.7	19.0
26	12.1	12.3	12.9	13.5	14.2	14.8	15.3	15.9	16.3	16.8	17.2	17.6	18.0	18.4	18.7	19.0
27	11.0	11.7	12.5	13.3	14.0	14.6	15.2	15.8	16.3	16.7	17.2	17.6	18.0	18.3	18.7	19.0
28	10.5	11.4	12.3	13.1	13.8	14.5	15.1	15.7	16.2	16.7	17.1	17.5	17.9	18.3	18.6	18.9
29	10.2	11.2	12.1	13.0	13.7	14.4	15.0	15.6	16.2	16.6	17.1	17.5	17.9	18.3	18.6	18.9
30	10.0	11.0	12.0	12.9	13.6	14.4	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.6	18.9
31	9.9	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.2	18.6	18.9
32	9.7	10.9	11.9	12.8	13.6	14.3	14.9	15.5	16.1	16.6	17.0	17.5	17.9	18.2	18.6	18.9
33	9.7	10.8	11.8	12.7	13.5	14.2	14.9	15.5	16.1	16.5	17.0	17.5	17.9	18.2	18.6	18.9
34	9.6	10.8	11.8	12.7	13.5	14.2	14.9	15.5	16.0	16.6	17.0	17.5	17.9	18.2	18.6	18.9
35	9.6	10.7	11.8	12.7	13.5	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9
36	9.5	10.7	11.7	12.6	13.5	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9
37	9.5	10.7	11.7	12.6	13.5	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9
38	9.5	10.7	11.7	12.6	13.4	14.2	14.9	15.5	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RPTA
YARN BULK DENSITY = 0.95
OXFORD FABRICS

WARP COVER FACTOR (K1)	RPTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	20.8	13.8	13.7	14.1	14.6	15.1	15.6	16.1	16.6	17.0	17.4	17.9	18.2	18.5	18.8	19.1
26	12.4	12.5	13.0	13.6	14.3	14.9	15.4	16.0	16.4	16.9	17.3	17.7	18.1	18.5	18.8	19.1
27	11.2	11.2	12.6	13.4	14.1	14.7	15.3	15.8	16.4	16.8	17.3	17.7	18.1	18.4	18.8	19.1
28	10.6	11.5	12.4	13.2	13.9	14.6	15.2	15.8	16.3	16.9	17.2	17.6	18.0	18.4	18.7	19.1
29	10.3	11.1	12.2	13.0	13.8	14.5	15.1	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.0
30	10.0	11.1	12.1	12.9	13.7	14.4	15.1	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.7	19.0
31	9.9	11.0	12.0	12.9	13.7	14.4	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.3	18.7	19.0
32	9.8	10.9	11.9	12.8	13.6	14.4	15.0	15.6	16.2	16.7	17.1	17.6	18.0	18.3	18.7	19.0
33	9.7	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.1	16.7	17.1	17.6	18.0	18.3	18.7	19.0
34	9.7	10.8	11.9	12.8	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
35	9.6	10.8	11.8	12.7	13.6	14.3	15.0	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
36	9.6	10.8	11.8	12.7	13.5	14.3	14.9	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
37	9.6	10.7	11.8	12.7	13.5	14.3	14.9	15.6	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0
38	9.6	10.7	11.8	12.7	13.5	14.3	14.9	15.5	16.1	16.6	17.1	17.5	17.9	18.3	18.7	19.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 0.96

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.8	27.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4	25.4	23.2	22.3	21.9
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	24.4	22.2	21.3	21.0	20.9	20.8
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	21.4	20.5	20.1	20.0	20.0	20.1	20.2
20	0.0	0.0	0.0	0.0	0.0	0.0	28.1	21.0	19.7	19.2	19.1	19.2	19.3	19.5	19.7	19.9
21	0.0	0.0	0.0	0.0	0.0	21.8	19.0	19.4	18.2	18.3	18.5	19.7	18.9	19.1	19.4	19.6
22	0.0	0.0	0.0	0.0	19.1	17.6	17.3	17.3	17.5	17.9	18.1	18.4	18.7	18.9	19.2	19.5
23	0.0	0.0	0.0	17.2	16.3	16.3	16.5	16.8	17.1	17.5	17.8	18.2	18.5	18.8	19.1	19.4
24	0.0	35.1	15.7	15.1	15.3	15.6	16.0	16.4	16.8	17.3	17.6	18.0	18.4	18.7	19.0	19.3
25	0.0	14.2	13.9	14.7	14.7	15.2	15.7	16.2	16.7	17.1	17.5	17.9	18.3	18.6	18.9	19.2
26	12.9	12.7	13.2	13.8	14.4	15.0	15.5	16.1	16.5	17.0	17.4	17.9	18.2	18.6	18.9	19.2
27	11.3	12.0	12.7	13.5	14.1	14.8	15.4	15.9	16.5	16.9	17.4	17.8	18.2	18.5	18.9	19.2
28	10.7	11.6	12.5	13.3	14.0	14.7	15.3	15.9	16.4	16.9	17.3	17.7	18.1	18.5	18.8	19.2
29	10.4	11.4	12.3	13.1	13.9	14.6	15.2	15.8	16.3	16.8	17.3	17.7	18.1	18.5	18.8	19.1
30	10.1	11.2	12.2	13.0	13.8	14.5	15.2	15.8	16.3	16.8	17.3	17.7	18.1	18.5	18.8	19.1
31	10.0	11.1	12.1	13.0	13.8	14.5	15.1	15.7	16.3	16.8	17.2	17.7	18.1	18.4	18.8	19.1
32	9.9	11.0	12.0	12.9	13.7	14.4	15.1	15.7	16.3	16.8	17.2	17.7	18.1	18.4	18.8	19.1
33	9.8	10.9	12.0	12.9	13.7	14.4	15.1	15.7	16.2	16.7	17.2	17.6	18.1	18.4	18.8	19.1
34	9.7	10.9	11.9	12.8	13.6	14.4	15.1	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.8	19.1
35	9.7	10.9	11.9	12.8	13.6	14.4	15.0	15.7	16.2	16.7	17.2	17.6	18.0	18.4	18.8	19.1
36	9.7	10.8	11.9	12.8	13.6	14.4	15.0	15.6	16.2	16.7	17.2	17.6	18.0	18.4	18.8	19.1
37	9.6	10.8	11.8	12.8	13.6	14.3	15.0	15.6	16.2	16.7	17.2	17.6	18.0	18.4	18.8	19.1
38	9.6	10.8	11.8	12.8	13.6	14.3	15.0	15.6	16.2	16.7	17.2	17.6	18.0	18.4	18.8	19.1

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 0.97

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																		
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 0.98

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 0.99

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA														
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA
YARN BULK DENSITY = 1.00
OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA																
	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
14	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN RULK DENSITY =1.36

OXFORD FABRICS

WARP COVER FACTOR (K1)	RFTA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	21.9	16.4	16.3	16.8	17.4	18.0	18.7	19.2	19.8	20.3	20.8	21.3	21.7	22.1	22.5	22.9	23.4
31	15.1	15.0	15.6	16.4	17.1	17.8	18.5	19.1	19.7	20.2	20.7	21.2	21.7	22.1	22.5	22.9	23.2
32	13.6	14.3	15.2	16.1	16.9	17.6	18.3	19.0	19.6	20.2	20.7	21.2	21.6	22.1	22.5	22.9	23.1
33	12.9	13.9	14.9	15.8	16.7	17.5	18.2	18.9	19.5	20.1	20.6	21.1	21.6	22.0	22.4	22.8	23.0
34	12.5	13.6	14.7	15.7	16.6	17.4	18.2	18.8	19.5	20.1	20.6	21.1	21.6	22.0	22.4	22.8	22.9
35	12.2	13.4	14.6	15.6	16.5	17.3	18.1	18.8	19.4	20.0	20.6	21.1	21.5	22.0	22.4	22.8	22.9
36	12.0	13.3	14.4	15.5	16.4	17.3	18.0	18.7	19.4	20.0	20.5	21.1	21.5	22.0	22.4	22.8	22.9
37	11.9	13.2	14.4	15.4	16.4	17.2	18.0	18.7	19.4	20.0	20.5	21.0	21.5	22.0	22.4	22.7	22.7
38	11.8	13.1	14.3	15.4	16.3	17.2	18.0	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.4	22.7	22.7
39	11.7	13.0	14.2	15.3	16.3	17.2	17.9	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	22.7
40	11.6	13.0	14.2	15.3	16.3	17.1	17.9	18.7	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	22.7
41	11.6	12.9	14.2	15.3	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	22.7
42	11.5	12.9	14.1	15.2	16.2	17.1	17.9	18.6	19.3	19.9	20.5	21.0	21.5	21.9	22.3	22.7	22.7

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =1.48
OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.8
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 1.50

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN RULK DENSITY =2.36

OXFORD FARRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	39.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.8	40.0	36.9	35.5
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2	37.5	35.3	34.3	33.8
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.4	35.4	34.0	33.2	32.9	32.8
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	34.1	32.9	32.2	32.0	32.0	32.1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.3	32.9	31.7	31.3	31.2	31.2	31.4	31.6
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.9	31.7	30.7	30.4	30.3	30.5	30.7	30.9	31.2
32	0.0	0.0	0.0	0.0	0.0	0.0	34.0	30.6	29.7	29.4	29.5	29.7	30.0	30.3	30.6	31.0
33	0.0	0.0	0.0	0.0	0.0	33.5	29.6	28.7	28.5	28.6	28.9	29.3	29.6	30.0	30.4	30.8
34	0.0	0.0	0.0	0.0	33.8	28.7	27.7	27.6	27.8	28.1	28.5	28.9	29.4	29.8	30.2	30.6
35	0.0	0.0	0.0	36.9	27.8	26.7	26.6	26.8	27.2	27.7	28.2	28.7	29.1	29.6	30.1	30.5
36	0.0	0.0	0.0	27.2	25.6	25.5	25.9	26.3	26.9	27.4	27.9	28.5	29.0	29.5	29.9	30.4
37	0.0	0.0	27.2	24.6	24.4	24.8	25.3	25.9	26.6	27.2	27.8	28.3	28.9	29.4	29.9	30.3
38	0.0	29.7	23.6	23.3	23.7	24.3	25.0	25.7	26.3	27.0	27.6	28.2	28.8	29.3	29.8	30.2
39	0.0	22.9	22.0	22.4	23.1	23.9	24.7	25.4	26.2	26.9	27.5	28.1	28.7	29.2	29.7	30.2
40	23.1	20.8	21.1	21.9	22.8	23.4	24.5	25.3	26.0	26.7	27.4	28.0	28.6	29.1	29.7	30.1
41	19.6	19.7	20.5	21.5	22.5	23.4	24.3	25.1	25.9	26.6	27.3	28.0	28.5	29.1	29.6	30.1
42	18.1	19.0	20.1	21.2	22.2	23.2	24.2	25.0	25.8	26.6	27.3	27.9	28.5	29.1	29.6	30.1
43	17.3	18.5	19.8	21.0	22.1	23.1	24.1	24.9	25.8	26.5	27.2	27.9	28.5	29.0	29.6	30.1
44	16.7	18.2	19.5	20.8	21.9	23.0	24.0	24.9	25.7	26.5	27.2	27.8	28.4	29.0	29.5	30.0
45	16.4	17.9	19.3	20.6	21.8	22.9	23.9	24.8	25.6	26.4	27.1	27.8	28.4	29.0	29.5	30.0
46	16.1	17.7	19.2	20.5	21.7	22.8	23.8	24.8	25.6	26.4	27.1	27.8	28.4	29.0	29.5	30.0
47	15.9	17.6	19.1	20.4	21.7	22.8	23.8	24.7	25.6	26.3	27.1	27.7	28.4	28.9	29.5	30.0
48	15.7	17.4	19.0	20.4	21.6	22.7	23.7	24.7	25.5	26.3	27.0	27.7	28.3	28.9	29.5	30.0

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN BULK DENSITY = 2.50

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA

YARN HULK DENSITY = 1.77

OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K_F) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 2.00

OXFORD FABRICS

WARP COVER FACTOR (K ₁)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.9
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	36.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	36.3	33.9	32.6	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.4	33.9	32.1	31.3	30.9
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	35.0	32.0	30.8	30.2	30.0	30.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	32.8	30.5	29.6	29.3	29.2	29.2	29.4
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2	31.1	29.2	29.6	29.4	29.4	28.5	28.7	29.0
29	0.0	0.0	0.0	0.0	0.0	0.0	36.9	29.7	29.1	27.6	27.5	27.6	27.8	28.1	28.3	28.6
30	0.0	0.0	0.0	0.0	0.0	36.0	29.5	27.0	26.6	26.6	26.8	27.1	27.4	27.7	28.1	29.4
31	0.0	0.0	0.0	0.0	37.0	27.4	26.0	25.7	25.8	26.0	26.3	26.7	27.1	27.5	27.9	28.2
32	0.0	0.0	0.0	49.3	26.4	24.9	24.7	24.8	25.2	25.5	26.0	26.4	26.9	27.3	27.7	28.1
33	0.0	0.0	0.0	25.7	23.8	23.6	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.0
34	0.0	0.0	25.4	22.9	22.9	23.4	23.9	24.5	25.0	25.6	26.1	26.6	27.0	27.5	27.9	
35	0.0	27.0	21.7	21.4	21.9	22.4	23.0	23.6	24.2	24.8	25.4	26.0	26.5	27.0	27.4	27.8
36	0.0	20.8	20.2	20.6	21.3	22.0	22.7	23.4	24.1	24.7	25.3	25.9	26.4	26.9	27.3	27.8
37	20.3	18.9	19.3	20.1	20.9	21.7	22.5	23.2	23.9	24.6	25.2	25.9	26.3	26.8	27.3	27.7
38	17.5	17.9	18.8	19.7	20.6	21.5	22.3	23.1	23.8	24.5	25.1	25.7	26.3	26.8	27.3	27.7
39	16.4	17.3	18.4	19.4	20.4	21.3	22.2	23.0	23.7	24.4	25.1	25.7	26.2	26.7	27.2	27.7
40	15.7	16.9	18.1	19.2	20.3	21.2	22.1	22.9	23.7	24.4	25.0	25.6	26.2	26.7	27.2	27.7
41	15.2	16.6	17.9	19.1	20.1	21.1	22.0	22.9	23.6	24.3	25.0	25.6	26.2	26.7	27.2	27.6
42	14.9	16.4	17.7	18.9	20.0	21.0	22.0	22.8	23.6	24.3	25.0	25.6	26.1	26.7	27.2	27.6
43	14.7	16.2	17.6	18.8	20.0	21.0	21.9	22.8	23.5	24.3	24.9	25.5	26.1	26.6	27.1	27.6
44	14.5	16.1	17.5	18.8	19.9	20.9	21.9	22.7	23.5	24.2	24.9	25.5	26.1	26.6	27.1	27.6

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY =2.75

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA																
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	43.7	40.1	38.5	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	41.3	38.5	37.3	36.7	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	39.5	37.2	36.2	35.7	35.6	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.6	38.1	36.0	35.2	34.9	34.8	34.8		
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	36.8	35.0	34.2	34.0	34.0	34.1	34.3		
33	0.0	0.0	0.0	0.0	0.0	0.0	42.7	35.7	33.9	33.3	33.1	33.2	33.3	33.6	33.9		
34	0.0	0.0	0.0	0.0	0.0	43.4	34.8	33.0	32.4	32.3	32.4	32.6	32.9	33.2	33.6		
35	0.0	0.0	0.0	0.0	47.8	34.1	32.0	31.4	31.4	31.6	31.9	32.2	32.6	32.9	33.3		
36	0.0	0.0	0.0	0.0	33.6	31.1	30.5	30.5	30.7	31.0	31.4	31.9	32.3	32.7	33.1		
37	0.0	0.0	0.0	0.0	33.9	30.2	29.5	29.5	29.8	30.2	30.7	31.1	31.6	32.1	32.6	33.0	
38	0.0	0.0	0.0	35.6	29.4	28.5	28.5	28.8	29.3	29.9	30.4	30.9	31.4	31.9	32.4	32.9	
39	0.0	0.0	59.7	28.9	27.5	27.4	27.8	28.4	28.9	29.5	30.1	30.7	31.3	31.8	32.3	32.8	
40	0.0	0.0	29.0	26.5	26.3	26.7	27.3	28.0	28.7	29.3	30.0	30.6	31.1	31.7	32.2	32.7	
41	0.0	32.4	25.5	25.1	25.6	26.2	27.0	27.7	28.4	29.1	29.9	30.4	31.0	31.6	32.1	32.6	
42	0.0	25.0	23.9	24.3	25.0	25.8	26.7	27.5	28.3	29.0	29.7	30.3	31.0	31.5	32.1	32.6	
43	26.3	22.7	22.9	23.7	24.6	25.6	26.5	27.3	28.1	28.9	29.6	30.3	30.9	31.5	32.0	32.5	
44	21.7	21.5	22.3	23.3	24.3	25.3	26.3	27.2	28.0	28.8	29.5	30.2	30.8	31.4	32.0	32.5	
45	19.9	20.7	21.8	23.0	24.1	25.1	26.1	27.1	27.9	28.7	29.4	30.1	30.8	31.4	31.9	32.5	
46	19.0	20.2	21.5	22.7	23.9	25.0	26.0	27.0	27.8	28.6	29.4	30.1	30.7	31.3	31.9	32.5	
47	18.3	19.8	21.2	22.5	23.7	24.9	25.9	26.9	27.8	28.6	29.3	30.0	30.7	31.3	31.9	32.4	
48	17.9	19.5	21.0	22.4	23.6	24.8	25.8	26.8	27.7	28.5	29.3	30.0	30.7	31.3	31.9	32.4	
49	17.5	19.2	20.8	22.2	23.5	24.7	25.8	26.8	27.7	28.5	29.3	30.0	30.6	31.3	31.9	32.4	
50	17.3	19.1	20.7	22.1	23.4	24.6	25.7	26.7	27.6	28.5	29.2	30.0	30.6	31.3	31.9	32.4	
51	17.1	18.9	20.6	22.0	23.4	24.6	25.7	26.7	27.6	28.4	29.2	29.9	30.6	31.2	31.9	32.4	
52	16.9	18.8	20.5	22.0	23.3	24.5	25.6	26.6	27.6	28.4	29.2	29.9	30.6	31.2	31.8	32.4	

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BETA
YARN BULK DENSITY =2.95
OXFORD FABRICS

WARP COVER FACTOR (K1)	BETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	1.1	48.4
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.5	45.3	39.9
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9	43.0	40.0	38.7	39.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2	41.3	38.7	37.6	37.1	36.9
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.1	39.9	37.6	36.6	36.2	36.1	36.1
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.2	38.8	36.5	35.7	35.3	35.3	35.4	35.6
34	0.0	0.0	0.0	0.0	0.0	0.0	47.8	37.8	35.5	34.7	34.5	34.5	34.6	34.6	34.9	35.1
35	0.0	0.0	0.0	0.0	0.0	51.8	37.0	34.6	33.8	33.6	33.7	33.9	34.2	34.5	34.5	34.8
36	0.0	0.0	0.0	0.0	0.0	36.6	31.7	32.9	32.7	32.8	33.1	33.4	33.8	34.2	34.6	34.6
37	0.0	0.0	0.0	0.0	0.0	36.6	32.8	31.9	31.8	32.0	32.3	32.7	33.1	33.5	34.0	34.4
38	0.0	0.0	0.0	0.0	38.0	32.1	31.0	30.8	31.0	31.4	31.9	32.3	32.8	33.3	33.8	34.2
39	0.0	0.0	0.0	46.1	31.6	30.0	29.8	30.1	30.5	31.0	31.5	32.1	32.6	33.1	33.6	34.1
40	0.0	0.0	0.0	31.6	29.1	28.8	29.1	29.5	30.1	30.7	31.3	31.9	32.4	33.0	33.5	34.0
41	0.0	0.0	33.4	28.2	27.7	28.0	28.5	29.1	29.8	30.5	31.1	31.7	32.3	32.9	33.4	33.9
42	0.0	0.0	27.7	26.6	26.8	27.4	28.1	28.8	29.6	30.3	30.9	31.6	32.2	32.8	33.3	33.8
43	0.0	28.1	25.5	25.5	26.2	26.9	27.8	28.6	29.4	30.1	30.8	31.5	32.1	32.7	33.3	33.8
44	40.0	24.5	24.2	24.8	25.7	26.6	27.5	28.4	29.2	30.0	30.7	31.4	32.0	32.6	33.2	33.7
45	24.3	22.9	23.4	24.3	25.4	26.4	27.3	28.2	29.1	29.9	30.6	31.3	32.0	32.6	33.2	33.7
46	21.6	21.9	22.9	24.0	25.1	26.1	27.1	28.1	29.0	29.8	30.5	31.2	31.9	32.5	33.1	33.7
47	20.2	21.2	22.4	23.7	24.9	26.0	27.0	28.0	28.9	29.7	30.5	31.2	31.9	32.5	33.1	33.6
48	19.4	20.7	22.1	23.4	24.7	25.8	26.9	27.9	28.8	29.6	30.4	31.1	31.8	32.5	33.0	33.6
49	19.8	20.4	21.9	23.3	24.5	25.7	26.8	27.8	28.7	29.6	30.4	31.1	31.8	32.4	33.0	33.6
50	19.4	20.1	21.7	23.1	24.4	25.6	26.7	27.7	28.7	29.5	30.3	31.1	31.8	32.4	33.0	33.6
51	19.1	19.9	21.5	23.0	24.3	25.6	26.7	27.7	28.6	29.5	30.3	31.0	31.7	32.4	33.0	33.5
52	17.9	19.7	21.4	22.9	24.3	25.5	26.6	27.7	28.6	29.5	30.3	31.0	31.7	32.4	33.0	33.5

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 3.25

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MIL-HDBK-741(GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND BFTA

YARN BULK DENSITY ≈ 3.75

OXFORD FABRICS

WARP COVER FACTOR (K1)	BFTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.4	47.4	44.6	43.3	42.7
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.5	46.3	43.5	42.3	41.8	41.6
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	45.4	42.6	41.4	40.9	40.8	40.8
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.9	44.8	41.7	40.5	40.1	39.9	39.9	40.0	40.2
38	0.0	0.0	0.0	0.0	0.0	0.0	72.4	44.4	40.9	39.7	39.2	39.1	39.2	39.5	39.7	39.7
39	0.0	0.0	0.0	0.0	0.0	0.0	44.6	40.2	38.8	38.3	38.3	38.5	38.7	39.0	39.4	39.4
40	0.0	0.0	0.0	0.0	0.0	46.0	39.6	37.9	37.5	37.4	37.6	37.9	38.3	38.7	39.1	39.1
41	0.0	0.0	0.0	0.0	51.2	39.3	37.1	36.6	36.5	36.8	37.1	37.5	38.0	38.4	38.9	38.9
42	0.0	0.0	0.0	0.0	39.5	36.4	35.6	35.6	35.9	36.3	36.7	37.2	37.7	38.2	38.7	38.7
43	0.0	0.0	0.0	0.0	41.1	35.8	34.7	34.6	34.9	35.4	35.9	36.4	37.0	37.5	38.1	38.6
44	0.0	0.0	0.0	50.6	35.5	33.8	33.6	33.9	34.4	35.0	35.6	36.2	36.8	37.3	37.9	38.4
45	0.0	0.0	0.0	36.1	33.0	32.6	32.8	33.4	34.0	34.6	35.3	36.0	36.6	37.2	37.8	38.3
46	0.0	0.0	40.8	32.4	31.5	31.7	32.2	32.9	33.7	34.4	35.1	35.8	36.5	37.1	37.7	38.3
47	0.0	0.0	32.5	30.4	30.5	31.1	31.8	32.6	33.4	34.2	34.9	35.7	36.3	37.0	37.6	38.2
48	0.0	35.9	29.6	29.2	29.8	30.6	31.4	32.3	33.2	34.0	34.8	35.5	36.2	36.9	37.5	38.1
49	0.0	29.4	28.0	28.4	29.2	30.2	31.2	32.1	33.0	33.9	34.7	35.4	36.2	36.8	37.5	38.1
50	33.0	26.9	27.0	27.8	28.8	29.9	30.9	31.9	32.9	33.7	34.6	35.4	36.1	36.8	37.4	38.0
51	26.4	25.5	26.2	27.3	28.5	29.7	30.7	31.8	32.7	33.6	34.5	35.3	36.0	36.7	37.4	38.0
52	24.1	24.5	25.7	27.0	28.2	29.5	30.6	31.7	32.6	33.6	34.4	35.2	36.0	36.7	37.3	37.9
53	22.8	23.9	25.3	26.7	28.0	29.3	30.5	31.5	32.6	33.5	34.4	35.2	35.9	36.6	37.3	37.9
54	21.9	23.4	25.0	26.5	27.9	29.2	30.3	31.5	32.5	33.4	34.3	35.1	35.9	36.6	37.3	37.9
55	21.3	23.0	24.7	26.3	27.7	29.0	30.3	31.4	32.4	33.4	34.3	35.1	35.9	36.6	37.2	37.9
56	20.9	22.8	24.5	26.1	27.6	28.9	30.2	31.3	32.4	33.3	34.2	35.0	35.8	36.5	37.2	37.8
57	20.5	22.5	24.3	26.0	27.5	28.9	30.1	31.3	32.3	33.3	34.2	35.0	35.8	36.5	37.2	37.8
58	20.3	22.3	24.2	25.9	27.4	28.8	30.0	31.2	32.3	33.2	34.2	35.0	35.8	36.5	37.2	37.8

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RFTA

YARN BULK DENSITY = 3.75

OXFORD FABRICS

WARP COVER FACTOR (K1)	RFTA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.4	47.4	44.6	43.3	42.7
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.5	46.3	43.5	42.3	41.8	41.6
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	45.4	42.5	41.4	40.9	40.8	40.8
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.9	44.8	41.7	40.5	40.1	39.9	40.0	40.2	40.2
38	0.0	0.0	0.0	0.0	0.0	0.0	72.4	44.4	40.9	39.7	39.2	39.1	39.2	39.5	39.7	39.7
39	0.0	0.0	0.0	0.0	0.0	0.0	44.6	40.2	38.8	38.3	38.3	38.5	38.7	39.0	39.4	39.4
40	0.0	0.0	0.0	0.0	0.0	46.0	39.6	37.9	37.5	37.4	37.6	37.9	38.3	38.7	39.1	39.1
41	0.0	0.0	0.0	0.0	51.2	39.3	37.1	36.6	36.5	36.8	37.1	37.5	38.0	38.4	38.9	38.9
42	0.0	0.0	0.0	0.0	39.5	36.4	35.6	35.6	35.9	36.3	36.7	37.2	37.7	38.2	38.7	38.7
43	0.0	0.0	0.0	41.1	35.8	34.7	34.6	34.9	35.4	35.9	36.4	37.0	37.5	38.1	38.6	38.6
44	0.0	0.0	0.0	50.6	35.5	33.8	33.6	33.9	34.4	35.0	35.6	36.2	36.8	37.3	37.9	38.4
45	0.0	0.0	0.0	36.1	33.0	32.6	32.8	33.4	34.0	34.6	35.3	36.0	36.6	37.2	37.8	38.3
46	0.0	0.0	40.8	32.4	31.5	31.7	32.2	32.9	33.7	34.4	35.1	35.9	36.5	37.1	37.7	38.3
47	0.0	0.0	32.5	30.4	30.5	31.1	31.8	32.6	33.4	34.2	34.9	35.7	36.3	37.0	37.6	38.2
48	0.0	35.9	29.6	29.2	29.8	30.6	31.4	32.3	33.2	34.0	34.8	35.5	36.2	36.9	37.5	38.1
49	0.0	29.4	28.0	28.4	29.2	30.2	31.2	32.1	33.0	33.9	34.7	35.4	36.2	36.8	37.5	38.1
50	33.0	26.4	27.0	27.8	28.8	29.9	30.9	31.9	32.9	33.7	34.6	35.4	36.1	36.8	37.4	38.0
51	26.4	25.5	26.2	27.3	28.5	29.7	30.7	31.8	32.7	33.6	34.5	35.3	36.0	36.7	37.4	38.0
52	24.1	24.5	25.7	27.0	28.2	29.5	30.6	31.7	32.6	33.6	34.4	35.2	36.0	36.7	37.3	37.9
53	22.8	23.9	25.3	26.7	28.0	29.3	30.5	31.5	32.6	33.5	34.4	35.2	35.9	36.6	37.3	37.9
54	21.9	23.4	25.0	26.5	27.9	29.2	30.3	31.5	32.5	33.4	34.3	35.1	35.9	36.6	37.3	37.9
55	21.3	23.0	24.7	26.3	27.7	29.0	30.3	31.4	32.4	33.4	34.3	35.1	35.9	36.6	37.2	37.9
56	20.9	22.8	24.5	26.1	27.6	28.9	30.2	31.3	32.4	33.3	34.2	35.0	35.8	36.5	37.2	37.8
57	20.5	22.5	24.3	26.0	27.5	28.9	30.1	31.3	32.3	33.3	34.2	35.0	35.8	36.5	37.2	37.8
58	20.3	22.3	24.2	25.9	27.4	28.8	30.0	31.2	32.3	33.2	34.2	35.0	35.8	36.5	37.2	37.8

TIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN RULK DENSITY = 4.00

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 4.13

OXFORD FARRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.8	50.5 48.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3	49.3	46.9 45.8
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	48.2	45.9 44.4
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.3	45.0 43.4
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.6	45.1	42.7 42.6
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.3	43.3	41.9 41.8 42.1
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	41.0	41.1 41.4 41.7
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	40.3	40.4 40.9 41.3
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.6	39.3	39.5 40.2 40.6 41.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	37.6	37.7 38.4 39.0 40.8
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.2	36.3	36.4 37.1 37.8 38.5 40.6
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.5	34.9	35.0 35.7 36.4 37.1 37.8 38.5 40.5
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.8	33.2	33.3 34.0 34.7 35.4 36.1 36.8 38.8 40.4
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.1	31.5	31.6 32.3 33.0 33.7 34.4 35.1 35.8 37.8 40.3
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4	29.8	29.9 30.6 31.3 32.0 32.7 33.4 34.1 34.8 36.8 40.2
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	28.1	28.2 28.9 29.6 30.3 31.0 31.7 32.4 33.1 33.8 35.8 39.1
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	26.4	26.5 27.2 27.9 28.6 29.3 30.0 30.7 31.4 32.1 32.8 34.8 38.1
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	24.7	24.8 25.5 26.2 26.9 27.6 28.3 29.0 29.7 30.4 31.1 33.1 36.4
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	23.0	23.1 23.8 24.5 25.2 25.9 26.6 27.3 28.0 28.7 29.4 31.4 34.7
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9	21.3	21.4 22.1 22.8 23.5 24.2 24.9 25.6 26.3 27.0 27.7 29.7 33.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	19.6	19.7 20.4 21.1 21.8 22.5 23.2 23.9 24.6 25.3 26.0 28.0 31.3
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	17.9	18.0 18.7 19.4 20.1 20.8 21.5 22.2 22.9 23.6 24.3 26.3 29.6
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	16.2	16.3 17.0 17.7 18.4 19.1 19.8 20.5 21.2 21.9 22.6 24.6 27.9
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	14.5	14.6 15.3 16.0 16.7 17.4 18.1 18.8 19.5 20.2 20.9 22.9 26.2
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	12.8	12.9 13.6 14.3 15.0 15.7 16.4 17.1 17.8 18.5 19.2 21.2 24.5

MIL-HDBK-741 (GL)

MAXIMUM FILLING COVER FACTORS (K2) IN TERMS OF WARP COVER FACTOR AND RETA

YARN BULK DENSITY = 4.60

OXFORD FABRICS

WARP COVER FACTOR (K1)	RETA															
	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1 DOCUMENT NUMBER		2 DOCUMENT TITLE	
3a NAME OF SUBMITTING ORGANIZATION		4 TYPE OF ORGANIZATION (Mark one)	
b ADDRESS (Street City State ZIP Code)		<input type="checkbox"/> VENDOR	
		<input type="checkbox"/> USER	
		<input type="checkbox"/> MANUFACTURER	
		<input type="checkbox"/> OTHER (Specify) _____	
5 PROBLEM AREAS			
a Paragraph Number and Wording			
b Recommended Wording			
c Reason/Rationale for Recommendation			
6 REMARKS			
7a NAME OF SUBMITTER (Last First MI) - Optional		b WORK TELEPHONE NUMBER (Include Area Code) - Optional	
c MAILING ADDRESS (Street City State ZIP Code) - Optional		8 DATE OF SUBMISSION (YYMMDD)	

(TO DETACH THIS FORM, CUT ALONG THIS LINE)