

CCC-C-00540 (GSA-FSS)

June 18, 1964

## INTERIM FEDERAL SPECIFICATION

## CLOTH, UPHOLSTERY

This Interim Federal Specification was developed by the General Services Administration, Federal Supply Service, Washington, D.C. 20407, based on currently available technical data. It is recommended that Federal agencies use it in procurement and forward recommendations for change to the preparing activity at the address shown above. The General Services Administration has authorized the use of this Interim Federal Specification as a valid exception to Federal Specification CCC-F-66a.

## 1. SCORE AND CLASSIFICATION

1.1 Scope. This specification covers requirements for upholstery cloth primarily intended for use in upholstery furniture, and for use as draperies.

## 1.2 Classification.

1.2.1 Types. Cloth covered by this specification shall be of the following types (see 6.1 and 3.19):

TYPE I.	-	Matelasse.
TYPE II.	-	Tapestry.
TYPE III.	-	Frise.
TYPE IV.	-	Velvet.
TYPE V.	-	Dobby.
TYPE VI.	-	Cretonne.
TYPE VII.	-	Duck.
TYPE VIII.	-	Flat.
TYPE IX.	-	Rib.

## 2. APPLICABLE SPECIFICATIONS, STANDARDS, AND OTHER PUBLICATIONS

2.1 Specifications and standards. The following specifications and standards, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

## Federal Specifications:

CCC-T-197	-	Textile Test Method.
PPP-P-51	-	Packaging, Packing, and Marking of Textile Fabrics (Woolens, Worsteds, Cottons, Silks, and Synthetics).
CCC-C-428	-	Cloth, Cotton, Duck; Fire, Water, Weather, and Mildew Resistant.
DDD-B-421	-	Blanket, Bed, Other Than All Wool.

## Federal Standards:

Fed. Std. No. 4	-	Glossary of Fabric Imperfections.
Fed. Std. No. 102	-	Preservation, Packaging, and Packing Levels.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards and Handbooks as outlined under General Information in the Index of Federal Specifications and Standard at the prices indicated in the Index. The index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.)

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Service Administration Regional Offices in Boston, New York, Washington, D.C., Atlanta, Chicago, Kansas City, Mo., Dallas, Denver, San Francisco, Los Angeles, and Seattle, Wash.)

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

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Military Standard:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this Specification. to the extent specified herein. Unless otherwise indicated, the issues in effect on date of invitation for bids shall apply.

Federal Trade Commission Publication:

Rules and Regulations Under the Textile  
Fiber Products Identification Act.

(Copies may, be obtained without charge from the Federal Trade Commission, Washington, D.C. 20580.)

ASTM D-276-61T - Identification of Fibers in Textiles.  
ASTM D-1375-59T - Pilling, Resistance of Textile Fabrics.  
ASTM D-1910-59T - Construction Characteristics of Woven Fabrics.

(Application for copies should be addressed to the American Society for Testing and Material 1916 Race Street, Philadelphia, Pennsylvania.)

### 3. REQUIREMENTS

3.1 Preproduction sample. When specified, before production is commenced, a finished sample one yard in length by width of the cloth specified in the contract or order shall be submitted, to the contracting officer for approval. Approval of the preproduction sample authorized production. Such authorization does not relieve the contractor of the responsibility for compliance with all provisions of this specification.

3.2 Materials. The materials used in the construction of the finished cloth shall be of virgin quality and shall meet the requirements specified hereinafter.

3.2.1. Fibers. Fibers used in the construction of yarn shall be of staple or continuous multi-filament, shall be thoroughly cleaned, and of the following basic types: cotton, liner, wool, silk, rayon, nylon, modacrylic, polyester, and olefin (see 4.3.3.2).

3.2.1.1 Yarns constructed of fibers or any blend thereof, 3.2.1, shall meet the physical and chemical requirements of this specification and may include any type novelty yarns, except metallic yarns which will not be acceptable.

#### 3.2.2 Coating compound.

3.2.2.1 Back of cloth. The coating compounds applied to the tack of cloths shall be of either synthetic resin, or natural latex, or synthetic latex (see 4.3.3.2).

3.2.2.2 Face of cloth. When a decorative coating is used for the face of type VIII cloth it shall be a polyvinyl chloride, and shall cover not more than 50 percent of the cloth area (see 4.3.3.2).

#### 3.2.3 Dyes. Dyestuffs used in coloring yarns shall be of my class

meeting the colorfast requirements of this specification, except that when rayon and cotton yarns are colored, the use of sulphur dyes or dyes containing elementary sulphur or compounds capable of oxidation to sulfuric acid is prohibited (see 4.3.3.2).

3.3 Weave. Cloth covered by this specification shall be of the weaves indicated for types I through IX (see 3.19 and 4.3.3.2).

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3.4. Breaking strength. The breaking strength of cloth in both the warp and filling directions shall not be not less than, 70 pounds when tested in accordance with 4.3.3.2.

3.5 Tearing strength. The tearing strength of cloth shall be not less than 8.5 pounds when tested in accordance with 4.3.3.2. Each direction of the cloth (warp and filling) shall be tested for tearing strength, and the results of the weaker direction shall be used for determining the, tearing strength.

3.6 Seam efficiency. The seem efficiency of cloth shall be not less than 60 percent when tested in accordance with 4.3.3.2.

3.7 Colors. Cloth shall be of the color or colors specified (see 6.1 and 6.2).

3.7.1 Colorfastness. The cloth shall show good colorfastness to light, drycleaning and crocking (wet end dry) when tested in accordance with 4.3.3.2.

3.7.2 Color, shade, and finish. The color, shade, and finish shall approximate standard samples when standard samples are available. When standard samples are not available, the color, shade, and finish shall approximate the pre-award samples which have been approved by the contracting officer as conforming to the desired color shade, and finish (see 6.2).

3.8 Pilling. The pilling resistance of the cloth shall have a rating of not less than 4-good resistance (slight pilling) when tested in accordance with 4.3.3.2.

3.10 Patterns. Patterns or designs (woven or printed) shall be as specified (see 6.1).

3.11 Skewness and bow. The skewness and bow of the finished cloth shall be not more then .75 percent each, base on 54 inch width cloth when tested in accordance with 4.3.3.2.

3.12 Moth repellency. Cloth containing amounts of animal fiber in excess of 15 percent by weight of cloth shall have a properly applied silicofluoride moth-repellent treatment so that the animal fiber will have a minimum 0.5 percent fluorine when tested in accordance with 4.3.3.2 and 4.3.3.4. Fibers or yarns of animal origin may be treated in lieu of the woven cloth.

3.13 Water resistance (type VII). Type VII cloth shall conform to the applicable water resistant requirements specified in Specification CCC-C-428 (see 4.3.3.2 and 4.3.3.5).

3.14 Mildew resistance (type VII). Type VII cloth shall conform to the applicable mildew resistant requirements, for type I cloths specified in Specification CCC-C-426 (see 4.3.3.2 and 4.3.3.6).

3.15 Fire resistance. When specified, cloth composed of face yarns consisting of more then 50 percent rayon and/or cotton shall be treated fire retardency. The average time of flaming of specimens tested for each sample unit shall not exceed 2 seconds after the burner flame is withdrawn. The average length of char shall not exceed 4.5 inches for finished cloth which weights under 10.0 ounces per square yard in the gray; and 2.0 inches for cloth over 20.0 ounces per square yard in the gray. Tests shall be conducted in accordance with 4.3.3.2. Test method 5906 shall be used for type IV cloths.

3.16 Lengths and cuts. For orders of less than 30 yards, cloth shall be delivered in one piece. For orders of more than 30 yards, each cloth

shall be rolled in minimum lengths of 30 yards, with not more than 3 pieces per roll or bolt and with no piece shorter than 5 yards length. Cuts shall not contain partial repeats of the pattern, if a pattern is involved. Seams and splices will not be acceptable.

3.17 Width. When cloths are required for delivery to Government installations, the width of cloths, inside selvage, shall as specified by the procuring activity.

3.18 Fiber identification. Each piece or roll shall be labeled, ticketed, or invoiced for fiber content in accordance with the Rules and Regulations Under the Textile Fiber Products Identification Act.

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3.19 Cloth identification. The types of cloth, 1.2.1, shall be classified in accordance with the following descriptions and definitions:

Type I. - Matelasse. Shall be woven on a jacquard loom and is characterized, of quilted, wadded, puckered and blistered styles, woven as a double cloth with separate sets of warp and filling yarns.

Type II. - Tapestry. Shall be woven on a jacquard loom, consisting of two or more sets of warp and filling yarns that are dyed. Yarns shall be single or plied. The surface warp shall form the design.

Type III. - Frise. Shall be woven on a plain or jacquard loom, consisting on regular tension warp yarns and slack tension, warp yarns. The filling is woven with one or two-picks in a shed. The cloth may be piece or yarn dyed, and shall consist of uncut pile yarns except when a pattern cloth is required the pile may be cut to form the pattern.

Type IV. - Velvet. Velvets shall interpreted to include plush, velours, and velveteens. Cloth shall be woven with one or more warp and filling sets of yarns, and may be single or double cloths of warp or filling piles woven on cam, box, or jacquard looms. Weave shall be "W" or "V" type.

Type V. - Dobby. Shall be woven on plain or box looms with a dobby-head. Cloth of this type shall be restricted to the weaving of figured patterns necessitating the use of many harnesses.

Type VI. - Cretonne. Shall consist of basic cloths of print cloth, sheeting osnaburgs, twills and reps which have been converted by roller printing or may have yarns printed prior to weaving. The prints may be printed on one or both sides of cloth.

Type VII. - Duck. Shall be of any type duck consisting of not less than 2 ply yarns in both warp and filling. Duck shall be dyed or printed with vat colors. Duck shall weight not less than 12 ounces per linear yard based on 54 inches width.

Type VIII - Flat. Shall be of any of the following type weaves: plain, modified plain, twill, basket, dobby (without figures). Upholstery cloths known in the trade as tweeds and meeting the above requirements of weaves are acceptable under this type cloth. Cut pile facecloths are not acceptable under this type cloth. This type cloth, may include cloth which has been coated 50 percent of the cloth area with a polyvinyl chloride.

Type IX. - Rib. Shall be of any weave forming a definite pattern of warp of filling uncut ribs by use of groups of either warp of filling yarns composed of not less than 2 yarns for each rib. Examples of rib cloths are as follows: poplin, rep, Bedford cord, pique, etc.

3.20 Back-coated cloth. Cloth containing loop pile yarns, boucle yarns, textured yarns, and other novelty yarns susceptible to snagging shall be coated with materials as described in 3.2.2.1. There shall be not less than 2.0 ounces of coating material per linear yard based on 54 inches in width, when tested in accordance with 4.3.3.2. Coating compounds are acceptable but not required for back-coating of other types of cloth covered by this specification.

3.21 Finish. Cloth shall be finished in accordance with good commercial practice.

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3.22 Workmanship. The cloth conform to the quality and grade of product established by this specification. Occurrence of defects shall not exceed the acceptable quality levels.

#### 4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

##### 4.2 Pre-acceptance inspection.

4.2.1 Preproduction sample inspection. The preproduction sample submitted in accordance with 3.1 shall be visually inspected for appearance, color, and finish. The samples shall be tested for the applicable physical and chemical properties in accordance with the methods shown in table II and in section 4.

##### 4.3 Inspection for acceptance.

4.3.1 Sampling for inspection and acceptance. Sampling for inspection and acceptance shall be performed in accordance with the provisions set forth in MIL-STD-105 except where otherwise indicated. For purposes of sampling, an inspection lot shall consist of all end items made with the same components and submitted for acceptance and delivery at one time.

4.3.2 Inspection of materials and components. In accordance with 4.1, the supplier is responsible for insuring that materials and components used in the end item were manufactured, tested and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified or, if none, in accordance with this specification. In the event of conflict, this specification shall govern.

4.3.2.1 Inspection of components. In addition to the quality assurance provisions of the subsidiary specification, components and material listed in Section 3, and as indicated in Section 4, will be accepted on the basis of a contractor's certificate of compliance with the requirement specified for such characteristics.

##### 4.3.3 Inspection of the end item.

4.3.3.1 Examination of the end item. The end item shall be examined for the defects listed in 4.3.3.1.1, 4.3.3.1.2, 4.3.3.1.3, and 4.3.3.1.4.

4.3.3.1.1 Yard-by-yard examination. The required yardage of each roll or bolt shall be inspected on the face side for the defects shall be counted regardless where two or more defects represent a single local condition of the cloth, in which case only one defect shall be counted. A continuous defect shall be counted as one defect for each warp wise yard or fraction thereof in which it occurs. The sample unit for this examination. Shall be 1 linear yard. The sample size shall be in accordance with inspection level II of MIL-STD-105. The acceptable quality level shall be 1.5 defects per 100 units (yards). The lot size shall be expressed in units of one yard each and shall not be larger than 22,000 units. An approximate equal number of yards shall be examined from each roll or bolt selected. The number of rolls or bolts over which the sample yardage shall be distributed shall be in



accordance with table I.

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Glossary number Federal Std. No. 4	Defect
55, 56, 90, 91, 92	Hole, cut or tear--Any, including selvage.
78	Smash--Any.
11, 33	Broken or missing yarns--Two or more contiguous missing more than 2 inches in length, or single, more than 30 inches missing.
9	Fine filling bare or light, or weak place--clearly visible*
12	Open place or crack-opening at widest point four or more normal yarn diameters.
35	Hitchback--More than 3/4 inch in combined warp and filling dimension.
13, 34	Floats or skips--Multiple, 1/2 inch or more in combined warp and filling directions or sequence of skips. Not applicable to the type cloths requiring floats or skips.
51	Selvage scalloped--Deepest indentation more than 1/2 inch.
74, 75, 76**	Spot, stain, or streak (other than dye or finishing compound)--Clearly visible* and exceeding 1 inch in combined length and width dimensions.

\* At normal inspection distance (approximately 3 feet).

\*\* Except defects of spots, stains and Streak shall be counted regardless of cause, i.e., not restricted to rust, oil or grease.

TABLE I

Lot size in yards	Sample size in rolls or bolts	Acceptance No.
Up to 1,300 [1]	5	0
1301 to 3200	7	0
3201 to 8000	10	0
8001 to 22,000	15	1

[1] If a lot contains fewer than 5 rolls or bolts, each shall be examined.

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4.3.3.1.2. Overall examination. The pieces for this examination shall be those selected for yard-by-yard examination. Each defect listed below shall be counted not more than once in each piece examined. The unit of product shall be one piece. The number of defects acceptable shall be as shown in table I for the appropriate number of pieces in the sample.

#### Defects

Width--less than minimum specified, continuously or intermittently throughout the piece.  
 Dye or treatment stains throughout.  
 Rancid or other objectionable odor.  
 Unclean throughout  
 Off shade.  
 Poor dye penetration.  
 Color not as specified.  
 Color not uniform, i.e., mottled, blotchy, or spotted.  
 Tackiness (back coating or type VIII face coating adheres to opposite surface upon unrolling).  
 Dimensional distortions and waviness.

4.3.3.1.3. Examination for length. Each individual roll or bolt in the sample shall be need for the defects listed below. the sample unit for this examination shall be one roll or The sample size and acceptance number shall be as shown in table I.

Example	Defect
Roll or bolt for length	Length of roll or bolt more or less than specified (see 3.16). Length of roll or bolt less or than bolt length than indicated on roll ticket.
Roll or bolt for number and length of pieces	Roll or bolt contains more pieces than permitted, and pieces are of less length than required.
Roll or bolt for gross length	Actual gross length of rolls or bolts less than the total gross yards marked on piece ticket.

4.3.3.1.4 Examination of preparation for delivery. An examination shall be made to mine that packaging, packing, and marking requirements of section 5 of this specification are complied with. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully packed, selected just prior to the closing operation. Closed shipping containers shall be examined for closure defects. The lot size shall be the number of shipping container in the end item inspection lot. The inspection level shall be L-4 and the AQL 4.0 defects per 100 units.

Examination	Defect
Marking	Omitted, incorrect, illegible, or improper  (exterior and interior sizes, location, sequence, or method of application.
materials	Any non-conforming component, component

Workmanship	missing or seriously damaged. Inadequate application of components, such as: incomplete closure of case liners, adequate stapling. Bulged or distorted containers.
Weight	Gross weight exceeds requirements.

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4.3.3.2 Testing of the end item. Whenever applicable, the methods of testing specified in CCC-7-191, and those listed in table II herein shall be followed. The requirements specified in Section 3 apply to the average of the determinations made on a sample unit for test purposes as specified in the applicable test method. The acceptable quality level for each characteristic shall be 4.0 defects per 100 units. The sample size shall be in accordance with inspection level L-2 of MIL-STD-105. The lot size shall be expressed in units of 1 linear yard and shall be not larger than 22,000 units. The sample unit for test purposes shall be 3 yards, full width of finished cloth.

TABLE II. Instructions for testing

Characteristic	Requirement	Test method	Number of determinations per sample unit	Results reported as numerically to nearest:
Identification of:				
Cotton	3.2.1	1200[2]	1	Pass or fail
Linen (flax)	3.2.1	1210[2]	1	Pass or fail
Wool	3.2.1	1100[2]	1	Pass or fail
Silk	3.2.1	1110[2]	1	Pass or fail
Rayon	3.2.1	1520[2]	1	Pass or fail
		1500		
Nylon	3.2.1	1530[2]	1	Pass or fail
Modacrylic	3.2.1	Comm.Std[2]	1	Pass or fail
Polyester	3.2.1	Comm.Std[2]	1	Pass or fail
Olefin:				
Polyethylene		ASTM		
Polypropylene	3.2.1	D-276-61T[2]	1	Pass or fail
Coating compound:				
Type	3.2.2	Comm.Std.[1]	1	Type-Pass or fail
Weight	3.20	Comm.Std.[1]	1	Wgt.- 0.1 ounce
Dyes	3.2.3	Comm.Std[3]	1	Pass or fail
Weave	3.3	Visual	-----	1.0 pound
Breaking strength	3.4	5100	-----	1.0 pound
Tearing strength	3.5	5136	-----	0.1 pound
Seam efficiency	3.6	5110[4]	-----	1.0 percent
Colorfastness to:				
Light	3.7.1	5660[5]	1	Good, fail, or poor
Drycleaning	3.7.1	5621	1	Good, fair, or poor
Crocking	3.7.1	5651[6]	1	Excellent, good, fair or poor
Pilling	3.8	ASTM, D-1375 59T Method "C "	----	Excellent, good, medium, poor, and very poor
Stretch	3.9	4.3.3.3	6	0.1 inch
Skewness and bow	3.11	ASTM D-1910- 59T	3	0.1 percent
Moth resistance	3.12	4.3.3.4[7]	----	-----
Water resistance	3.13	4.3.3.5[8]	----	-----
Mildew resistance	3.14	4.3.3.6[9]	----	-----
Fire resistance:				

Flame time	3.15	5906		
		5903T	----	1/5 sec.
Char length	3.15	5906		
		5903T	----	0.1 inch

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[1] The contractor shall certify that the type coating compounds and the weight of back-coating meet the requirements herein.

Continued.

- [2] This requirement may be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.
- [3] The contractor shall certify that no dyes used contain elementary or sulphur compounds capable of oxidation.
- [4] Needle and thread size shall be as follows:
  - Needle size - 0.049 inch, plus or minus 0.001 inch across the blades, round point.
  - Thread size - top 24/3 - -looper 60/3
- [5] In the event of dispute resulting from the test with method 5660, or as a result of suspected anomalous behavior of certain dye type or formulation, the contracting officer may authorize the exposure to natural light in accordance with method 5662 of CCC-T-191.
- [6] Method B of 5651 shall be used.
- [7] This requirement may be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.
- [8] This requirement may be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.
- [9] This requirement may be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.

4.3.3.3 Stretch. A Scott Tensile Tester, Model "J", with a recorder shall be used. The machine shall be slowed down by change of pulleys to reduce the rate of travel of the lower jaw from 12 inches to 6 inches per minute. The measurement for the upper and lower jaws shall be 3 inches, and shall be 12 inches apart in order to determine the inches of stretch per foot of cloth. A 10 pound pull shall be used. Three specimens each, cut 3 x 16 inches, both down the roll or bolt and across the roll or bolt shall be used for testing. The specimen is clamped in the upper jaw first. A small weight of 6 ounces is clamped on the lower end of the cloth so that the weight hangs below the lower jaw. This weight, swinging free, puts only a slight tension on the cloth and removes the slack which ensures an accurate reading. The lower jaw is set exactly 12 Inches from the upper jaw and tightened, and the 6 ounce weight removed. The machine is started and the force of approximately 15 to 20 pounds is applied and recorded on the chart, which is somewhat beyond the 10 pounds required for this test. Where the line on the chart, traced by the recording pin on the Scott Tester, crosses the 10 pound line, a corresponding reading is noted in inches showing the elongation per foot of cloth. The average stretch of specimens tested in both the warp and filling directions shall be reported to the nearest 0.1 inch.

4.3.3.4 Moth resistance. Cloth treated for moth-resistance shall be tested in accordance with Section 4 of Specification DDD-B-421.

4.3.3.5 Water resistance. Cloth treated for water resistance shall be tested in accordance with Section 4 of Specification CCC-C-428.

4.3.3.6 Mildew resistance. Cloth treated for mildew resistance shall be tested in accordance with Section 4 of specification CCC-C-428.



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## 5. PREPARATION FOR DELIVERY

(Applicable only when purchased by the Government).

(Fed. Std. No. 102 shall be referred to for definitions and application of the various levels of packaging and packing for civil agency procurement.)

5.1 Packaging. Packaging shall be level A, B, or C as specified (see 6.1 and 6.3).

5.1.1 Levels A and B. The cloth shall be packaged in accordance with the applicable requirements for class 3 fabrics of Specification PPP-P-51.

5.1.2 Level C. The cloth shall be packaged in accordance with industry's practice.

5.2 Packing. Packing shall be level A, B, or C as specified (see 6.1 and 6.3).

5.2.1 Levels A and B. The cloth shall be packed in accordance with the applicable requirements of Specification PPP-P-51.

5.2.2 Level C. The cloth, packaged as specified in 5.1.2, shall be packed in a manner which will insure acceptance and safe delivery at destination. Shipping containers shall conform to carrier rules and regulations applicable to the mode of transportation.

5.3 Marking. In addition to any special marking required by the contract or order, shipments shall be marked in accordance with the applicable requirements of Specification PPP-P-51.

## 6. NOTES

6.1 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Type of cloth required (see
- (c) Color of cloth required (see 3.7).
- (d) Pattern or design of cloth required (see 3.10).
- (e) Responsibility for inspection (see 4.1).
- (f) Applicable levels of packaging and packing (see 5.1 and 5.2).
- (g) Pre-award sample requirements (see 6.2.1).

6.2 Samples. For access to standard shade samples, address the procuring office issuing the invitation for bids (see 3.7).

6.2.1 Pre-award samples. The procuring activity should require the submission of pre-award samples with invitations to bid when standard samples are not available for use in determining conformance with shade, grain and finish requirements. The contracting officer should arrange for the evaluation of the pre-award samples, which upon approval by the contracting officer, should be used as standards for shade, color and finish.

6.3 In the preparation of contracts or orders, it must be noted that various options, choices, and alternatives as indicated in PPP-P-51 may be exercised in the preparation for delivery of cloth.

6.4 Any questions raised regarding toxicity should be referred by the

procuring agency, through channels, to the departmental medical authority. In the case of Army procurement, the Surgeon General will act as advisor to the procuring agency.

6.5 Level B packaging and packing should be used by ordering agencies only when shipment is known to be made to a holding supply depot or warehouse from which partial shipments will be made to ultimate consumers.

6.6 Supersession data. This specification supersedes the following GSA Purchase Descriptions:

CCC-1-2	-	Fabric, Upholstery, Rough Texture Tweed.
CCC-1-24	-	Fabric, Upholstery, Flat, Nylon.
CCC-1-1	-	Fabric, Upholstery, boucle.
(No symbol)	-	Fabric, Upholstery, Nylon Face dated October 14, 1957.

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AMENDMENT-4  
February 19, 1971  
SUPERSEDING  
AMENDMENT-3 (GSA-FSS)  
November 30, 1966

AMENDMENT

TO

INTERIM FEDERAL SPECIFICATION

CLOTH, UPHOLSTERY

This Amendment was developed by General Services Administration, Federal Supply Service, Washington D. C. 20406, based upon currently available technical information. It is recommended that Federal agencies use it in procurement and forward recommendations for changes to the preparing activity at the address shown above.

The General Service Administration has authorized the use of this amendment as a valid exception to Interim Federal Specification CCC-C-000540 (GSA-FSS) dated June 18, 1964.

PAGE 1

Paragraph 1.2.1: Following "Type IX" add "Type X - Boucle."

Paragraph 2.1, under "Federal Specifications:" , delete "CCC-T\_191 - Textile Test Methods." Under "Federal Standards:", insert "Fed. Std. No. 191 - Textile Test Methods."

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Paragraph 2.2: Delete listing of ASTM test methods and substitute:

"ASTM D-276-62T -- Identification of Fibers in Textiles.  
ASTM D-1910-64 -- Construction characteristics of Woven Fabrics."

Paragraph 3.2: At the end of paragraph, insert "(see 6.6)".

Paragraph 3.2.1: Delete and substitute:

3.2.1.1 Yarns. Yarns constructed of fibers, 3.2.1, shall meet the physical and chemical requirements of this specification and may include any type novelty yarns, except metallic yarns which will not be acceptable. When specified, and except as indicated in 3.2.1, yarns may consist of specific percentages of generic fibers in staple or continuous filaments, as required.

Paragraph 3.2.2.2: Delete and substitute:

3.2.2.2 Face of cloth. When a decorative coating is required for the face of cloth included under type VIII cloth, the coating shall be polyvinyl chloride, and shall not cover more than 90 percent of the cloth area (see 4.3.3.2 and [10]).

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AMENDMENT-4

Paragraph 3.3, last line: Delete "IX" and substitute "X".

PAGE 3

Paragraph 3.8: Delete and substitute:

3.8 Weight. Cloth of the types specified in 1.2.1 shall be of the following, nominal weights, based on 54 inches in width, with an allowable weight tolerance of minus 2 percent, and any plus tolerance. The weight indicated are exclusive of back coating (see 3.20).

Type I.	-- 22.0 ounces.
Type II.	-- 20.0 ounces.
Type III.	-- 18.0 ounces.
Type IV.	-- 19.0 ounces.
Type V.	-- 19.0 ounces.
Type VI.	-- 10.0 ounces.
Type VII.	-- 12.0 ounces.
Type VIII.	-- 18.0 ounces and 21.0 ounces.
*Type IX.	-- -----
Type X.	-- 18.0 ounces.

\* The nominal weight may be specified by the procurement officer.

3.9 Stretch. Cloth shall stretch not less than .10 inch and not more than 30 inch in both the warp and filling directions, except cloth having a nylon content of 60 percent, or more shall stretch not less than .10 inch and not more than 80 inch in both the warp and filling directions, when tested in accordance with 4.3.3.3.

Paragraph 3.15: Delete and substitute: 3.15 Flame resistance. When specified, cloth intended for upholstering shall be inherently flame-resistant or shall be treated for flame-resistance. Cloth intended for use as curtain, or drapery material shall be inherently flame-resistant or shall be treated for flame-resistance. The average time of flaming of specimens tested for each sample unit shall not exceed 2.0 seconds after the flame has been withdrawn. The average length of char shall not exceed 4.5, inches for finished cloth which weighs under 10.0 ounces per square yard in the gray; 3.5 inches for cloth 10.0 to 20.0 ounces inclusive. per square yard, in the gray; and 2.0 inches for cloth 20.0 or more ounces per square yard in the gray. Tests shall be conducted initially and following 15 launderings as described in 4.3.3.2 and 4.3.3.7 (see 6.1).

Paragraph 3.18: - Delete and substitute: "3.18 Fiber identification. When cloth is intended for use as drapery material, each piece or roll shall be labeled, ticketed, or invoiced for fiber content in accordance with the Rules and Regulations Under the Textile fiber products Identification Act."

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Paragraph 3.19, Type III. - Frise: Delete and substitute:

Type III - Frise. Shall be woven on a plain or jacquard loom, consisting of regular tension warp yarns and slack tension warp yarns; or one set of warp yarns woven over wire and a set of ground warp yarns. The filling shall be woven with one or two picks in a shed. the cloth shall be piece or yarn dyed, and shall consist of uncut wiry (curled ) pile yarns forming, a distinct loop, except when a pattern cloth is required portions of the pile may be cut to form the pattern. File yarns shall consist of not less than 50

percent, by weight, of wool, nylon, or polyester, or combination thereof.

Paragraph 3.19, Type VII. Duck: last sentence: Delete in its entirety.

Paragraph 3.19, Type VIII. Flat: Delete and substitute:

Type VIII. - Flat. Shall be of any one of the following weaves that exclude cut or loop pile face yarns: plain, twill, basket, and dobby (without figures). All flat cloths, except as specified below for decorative face coated cloth, shall weigh 18.0 ounces (see 3.8). When flat cloth of nylon is required it shall contain not less than 60 percent nylon by weight (see 6.7).

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When cloth with a decorative face coating is required, 3.2.2.2, it shall weigh 21.0 ounces (see 3.8). The air permeability for the face coated cloth shall be not less than 7.5 cubic feet of air per minute per square foot of cloth.

Paragraph 3.19: Following "Type IX. - Rib", insert the following new type:

Type X. - Boucle. Shall be of any type weave of not less than 5 boucle yarns per inch in the warp or 5 boucle yarns per inch in filling. Boucle yarn shall be constructed of not less than 3 yarns, one of which must be an "effect" yarn.

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Paragraph 4.3.3.2, table II: Delete and substitute:

TABLE II. Instructions for testing

Characteristic	Requirement	Test Method	Number of determina- tions per as sample unit	Results reported numerically to nearest:
Identification of:				
Wool	3.19 (type III)	1100[2]	1	Pass or fail
Acetate	3.2.1	1510[2]	1	Pass or fail
Rayon	3.2.1	1500[2]	1	Pass or fail
Nylon	3.19 (type III)	1530[2]	1	Pass or fail
Polyester	3.19 (type III)	ASTM D-276 62T[2]	1	Pass or fail
Synthetics (other)	3.2.1	1534[2]	1	Pass or fail
Coating compound:				
Type	3.2.2	Comm Std.[1]	1	Type-Pass or fail
Weight	3.20	Comm. Std.[1]	1	Wgt. - 0.1 ounce
Dyes	3.2.3	Comm. Std.[3]	1	Pass or fail
Weave	3.3	Visual	1	Pass or fail
Breaking strength	3.4	5100	---	1.0 pound
Tearing strength	3.5	5136	---	0.1 pound
Seam efficiency	3.6	5110[4]	---	1.0 percent
Colorfastness to:				
Light	3.7.1	5660[5]	1	Good, fair, or poor
Drycleaning	3.7.1	5621	1	Good, fair, or poor
Crocking	3.7.1	5651[6]	1	Excellent, good, fair or poor
Weight of				

cloth	3.8	5041	---	0.1 ounce
Stretch	3.9	4.3.3.3	6	0.1 inch
Skewness and bow	3.11	ASTM D-1910- 64	3	0.1 percent
Moth resistance	3.12	4.3.3.4[7]	---	-----
Water resistance	3.13	4.3.3.5[8]	---	-----
Mildew resistance	3.14	4.3.3.6[9]	---	-----

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TABLE II. Instructions for testing (con.)

Characteristic	Requirement	Test Method	Number of determina- tions per as sample unit	Results reported numerically to nearest:
Fire resistance:				
Flame time	3.15	5903 and 4.3.3.7	-----	1/5 sec.
Char Length	3.15	5903 and 4.3.3.7	-----	0.1 inch.
Permeability to air	3.19 (type VIII)	5450[10]	-----	0.1 cu. ft.

- [1] The contractor shall certify that the type coating compounds and the weight of back-coating meet the requirements herein.
- [2] The contractor shall certify that the fiber identification and content meet the requirements of this specification.
- [3] The contractor shall certify that no dyes used contain elementary sulphur or sulphur compounds capable of oxidation.
- [4] Needle and thread size shall be as follows:  
Needle size - 0.049 inch, plus or minus 0.001 inch across the blades, round point.  
Thread size - top 24/3 - looper 60/3.
- [5] In the event of dispute resulting from the test with method 5660, or as a result of suspected anomalous behavior of certain dye types or formulation, the contracting officer may authorize the exposure to natural light in accordance with method 5662 of Fed. Std. No. 191.
- [6] Method B of 5651 shall be used.
- [7] This requirement shall be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.
- [8] This requirement shall be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of results.
- [9] This requirement s shall be accepted on the basis of contractor's certification of compliance with specification requirements in lieu of test results.
- [10] This is applicable to type VIII cloth requiring a partial vinyl face coating.

Following paragraph 4.3.3.6, insert new paragraph 4.3.3.7 as follows:  
4.3.3.7 Laundering of fire resistant cloth. The launderings, 3.15, shall be conducted in accordance with method 5556 of Fed. Std. No. 191 with sufficient ballast in similar size pieces as the test specimens to effects the required 20 pound load. Test specimens shall be conditioned for a minimum of 16 hours



at standard atmospheric conditions for textiles.

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Paragraph 6.1: Add the following "(h) Whether cloth for upholstery is required to be flame-resistant (see 3.15)."

Paragraph 6.2.1, line 3: Delete the word "grain" and substitute the word "color".

Paragraph 6.6: Delete in its entirety.

Insert the following new paragraphs:

6.6 The term "virgin quality", paragraph 3.2 when applied to fibers shall be interpreted as being fibers that have never been utilized in any way by the ultimate consumer.

6.7 Flat nylon cloth as covered by type VIII cloth includes that which is commonly known as tweed.

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Paragraph 6.2.1, line 3: Delete the word "grain" and substitute the word "color".

Paragraph 6.6: Delete in its entirety.

Insert the following new paragraphs:

6.6 The term "virgin quality", paragraph 3.2, when applied to fibers shall be interpreted as being fibers that have never been utilized in any way be the ultimate consumer.

6.7 Flat nylon cloth as covered by type VIII cloth includes that which is commonly known as tweeds.