

**DDD-C-641b**

June 20, 1964

**SUPERSEDING**

Fed. Spec. DDD-C-441a

April 20, 1964

**FEDERAL SPECIFICATION****CURTAIN, AIRPORT; CURTAIN, DOORWAY;  
AND CURTAIN FIXTURES**

*This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.*

**1. SCOPE AND CLASSIFICATION**

**1.1 Scope.** This specification covers curtains and curtain fixtures primarily intended for airports (portholes) and doorways.

**1.2 Classification.****1.2.1 Types and classes**

**1.2.1.1 Curtains.** Curtains shall be of the following types, as specified (see 6.2)

Type I—Doorway curtains

Type II—Airport curtains

**1.2.1.2 Fixtures.** Fixtures shall be of the following types and classes, as specified (see 6.2).

Type I—Curtain rods:

Class 1—For door curtains

Class 2—For airport curtains

Type II—Curtain rings:

Class 1—For door curtains

Class 2—For airport curtains

Type III—Drapery hooks

Type IV—Brackets for curtain rods:

Class 1—For door curtains

Class 2—For airport curtains

**1.2.2 Color.** The color of the curtain material shall be as specified (see 6.2).

**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:**

V-T-276—Thread, Cotton.

QQ-Z-363—Zinc-Base Alloy; Die Castings

UU-P-268—Paper, Kraft, Untreated, Wrapping

UU-P-553—Paper, Wrapping, Tissue

UU-T-111—Tape, Paper, Gummed (Sealing and Securing)

CCC-C-525—Cloth, Synthetic, Curtain

PPP-B-566—Boxes, Folding, Paperboard

PPP-B-636—Box, Fiberboard

PPP-B-676—Boxes, Set-Up, Paperboard

PPP-T-60—Tape, Pressure Sensitive Adhesive, Waterproof—For Packaging and Sealing

**Federal Standards:**

Fed Std No 102—Preservation, Packaging and Packing Levels

Fed Std. No. 123—Marking for Domestic Shipment (Civilian Agencies).

Fed Std No 751—Stitches, Seams, and Stitchings

(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 Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly sup-

**FSC 7230**

## DD-C-641b

ments as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20540

(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 Services 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.)

#### Military Standards:

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

MIL-STD-129—Marking for Shipment and Storage

(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 firm.)

**2.2 Other publications.** The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

#### Federal Trade Commission

Rules and Regulations Textile Fiber Products Identification Act (Effective March 3, 1960)

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

### 3. REQUIREMENTS

#### 3.1 Material.

**3.1.1 Cloth, synthetic, curtain.** The synthetic curtain cloth shall conform to CCC-525.

**3.1.2 Thread, cotton.** The cotton thread shall conform to type IA3, 6-ply, ticket no. 30 of V-T-276. The color of the thread shall suitably match the color of the curtain (see 1.2.2 and 6.2)

**3.1.3 Materials.** The materials shall conform to the applicable specifications and standards referenced hereinafter. Materials not definitely specified shall be of a quality normally used in the manufacture of items of this type.

#### 3.2 Curtains.

##### 3.2.1 Type I, door curtains.

**3.2.1.1 Construction.** Door curtains shall be provided with a 3-inch  $\pm$  1/4-inch single-turn hem at the top and bottom with raw edges turned under. The sides shall be hemmed by one of the following methods to provide a smooth and straight hem. The sides with selvage shall be turned to form a 1-inch hem and sewn with stitching type EFa-1 of Fed Std No 751. The sides with selvage removed shall be turned over 1/2-inch  $\pm$  1/8-inch and sewn in accordance with stitching type EFa-1, then folded to form a 1-inch  $\pm$  1/8-inch hem and sewn with stitching type EFb-1 of Fed Std No 751 through the three plies of fabric. The top and bottom hems shall be machine stitched under no tension. The top hem shall be finished with 5 pinch pleats, allowing approximately 4-1/2 inches for each pleat. Pleats shall be equally spaced with the first and last pleat 5 inches from each edge. Each pleat shall be triple folded with each fold being 3/4-inch  $\pm$  1/8-inch wide and sewn as shown on figure 1. The finished curtain shall measure 30  $\pm$  1.0 inches across the top and 77  $\pm$  1-inch long. There shall be not more than one strip of material per curtain. On the inside of the upper hem shall be sewn an inconspicuous cloth tag, 1 1/2 by 1-1/2 inches, bearing the caution "DO NOT IRON" in 1/8-inch letters.

**3.2.1.1.1** Odd-size curtains shall be fabricated in similar fashion with pleats placed

DDD-C-641b

5 inches apart and spaced evenly across the heading.

3.2.1.1.2 For curtains wider than 30 inches there shall be not more than two strips of material per curtain. The finished curtain shall contain an overlap seam,  $3/4$ -inch  $\pm$   $1/8$ -inch wide, conforming to type LSc-2 of Fed Std. No. 751.

3.2.1.2 *Drapery hooks.* Drapery hooks (see 3.3.3) shall be sewn along the inside of the top hem line opposite each pleat, and approximately 1 inch from each side.

### 3.2.2 *Type II, airport curtains.*

3.2.2.1 *Construction.* Airport curtains shall be made in two pieces. Each piece shall have a  $3$ -inch  $\pm$   $1/4$ -inch single turn hem at the top and a  $2$ -inch single turn hem at the bottom with raw edges turned under. The sides shall be hemmed by one of the following methods to provide a smooth and straight hem. The sides with selvage shall be turned to form a one-inch hem and sewn with stitching type EFa-1 of Fed. Std. No. 751. The sides with selvage removed shall be turned over  $1/2$ -inch and sewn in accordance with stitching type EFa-1 of Fed. Std. No. 751 then folded to form a  $1$ -inch hem and sewn with stitching type EFb-1 of Fed. Std. No. 751 through the three plies of fabric. The hems shall be machine stitched under no tension. The top hem shall be finished with  $3$ -pleat pleats allowing approximately  $4\frac{1}{2}$ -inches for each pleat. Pleats shall be equally spaced with the first and last pleats  $1\frac{3}{4}$ -inches from each edge. Each pleat shall be triple folded with each fold being  $3/4 \pm 1/8$ -inch wide and sewn as shown on figure 1. The finished curtain shall measure  $10\frac{1}{2} \pm 1$ ,  $0$  inches wide and  $21\frac{1}{2} \pm 1$ -inches long. There shall be not more than two strips of material per curtain. On the inside of the upper hem shall be sewn an inconspicuous cloth tag,  $1/2$  by  $1\frac{1}{2}$ -inches, bearing the caution "DO NOT IRON" in  $1/8$ -inch letters.

3.2.2.1.1 Odd-size curtains shall be fabricated in similar fashion with pleats placed

$8\frac{1}{2}$  inches apart and spaced evenly across the heading.

3.2.2.1.2 There shall be not more than two strips of material per curtain. The finished curtain shall contain an overlap seam,  $3/4$ -inch  $\pm$   $1/8$ -inch wide, conforming to type LSc-2 of Fed. Std. No. 751.

3.2.2.2 *Drapery hooks.* Drapery hooks (see 3.3.3) shall be sewn along the inside of the top hem line opposite each pleat, and approximately 1-inch from each side.

3.2.2.3 *Tie-backs.* Curtain material shall be double-folded and stitched to form a draping loop measuring approximately  $1\frac{1}{2}$  by  $12$ -inches. At each end shall be sewn one brass ring made of hard-drawn brass wire, approximately  $0.110 \pm 0.008$ -inch in diameter, circular in shape with an inside diameter of  $1/2$ -inch. Two complete tie backs shall be provided with each set of airport curtains.

3.2.3 *Stitching.* Stitching shall conform to type 301 of Fed. Std. No. 751. There shall be not less than 8 stitches per inch.

3.3 *Fixtures.* The fixtures shall be cleaned, highly polished, and lacquered.

### 3.3.1 *Type I, curtain rods*

3.3.1.1 *Class 1, for door curtains.* Rods for door curtains shall be made of brass tubing  $0.045$  inch thick having an outside diameter of  $1 (\pm 1/64)$  inch.

3.3.1.2 *Class 2, for airport curtains.* Rods for airport curtains shall be made of solid hard-drawn brass rod  $3/8 (\pm 1/64)$  inch in diameter.

### 3.3.2 *Type II, curtain rings.*

3.3.2.1 *Class 1, for door curtains.* Ring for door curtains shall be made of hollow brass having a wall thickness approximately  $0.012 \pm 0.003$  inch, and shall have a small eye for attaching to the drapery hook. The shape and dimensions are shown on figure 2.

## DDD-C-641b

**3.3.4.2 Class 2, for airport curtains.** Rings for airport curtains shall be made of hard-drawn brass, or a brass-plated zinc alloy conforming to alloy AG40A of QQ-Z-363, except that the copper content shall be a maximum of 0.25 percent, and shall have a small eye for attaching to the drapery hook. The shape and dimensions are shown on figure 2

**3.3.3 Type III, drapery hooks.** Drapery hooks shall be made of brass wire approximately  $0.1055 \pm 0.003$  inch, and shall be U-shaped with an eye on one end for sewing to curtain

**3.3.4 Type IV, brackets for curtain rods.**

**3.3.4.1 Class 1, for door curtains.**

**3.3.4.1.1** Brackets for door curtain rods shall be made of brass, and shall conform to the shape and dimensions shown on figure 3

**3.3.4.1.2** The male part of the brackets for door curtain rods may be supplied in two pieces, having the threaded stub attached to the back plate by two No 6-32, round-head, brass, machine screws, instead of in one piece (see figure 3).

**3.3.4.1.3** A tolerance of  $\pm 1/8$ -inch will be permitted in the dimension from the bottom of the base plate to the center of the curtain rod, a plus tolerance of  $1/4$ -inch in the long dimension of the base plate; and a plus tolerance of  $1/16$ -inch in the shorter dimension of the base plate

**3.3.4.1.4** Each door curtain bracket shall be furnished with two  $3/4$ -inch No 8, brass machine screws.

**3.3.4.2 Class 2, for airport curtains.**

**3.3.4.2.1** Brackets for airport curtains shall be made of brass, and shall conform to the shape and dimensions shown on figure 4.

**3.3.4.2.2** Unless otherwise specified (see 6.2), bracket for airport curtains shall be furnished without securing screws.

**3.4 Marking for identification.** A tag shall be attached to each door curtain and to each pair of airport curtains, upon which shall be plainly marked the width, length, and name of the manufacturer. As specified in 3.2.1.1 and 3.2.2.1, each curtain shall bear a permanent tag stating "DO NOT IRON".

**3.5 Figures.** The figures are furnished for dimensional purposes only. To the extent of any inconsistencies between the written specification and the figures, the written specification shall govern.

**3.6 Fiber identification.** Each curtain shall be labeled, ticketed or invoiced for fiber content in accordance with the Rules and Regulations of the Textile Fiber Products Identification Act.

**3.7 Workmanship.** The finished curtains shall conform to the quality of product established by this specification. The finished fixtures shall be clean, highly polished and lacquered and shall have no sharp edges or burrs which may cause personal injury. The occurrence of defects shall not exceed the limits set by the applicable 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 or any other inspection facilities and services acceptable to the Government. 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.

DDQ-C-641b

4.2 Inspection of components and materials. In accordance with 4.1 above, the supplier is responsible for insuring that components and materials used were manufactured, examined, and tested in accordance with this specification and referenced subsidiary specifications and standards.

4.3 Inspection for end item lot acceptance. Sampling for inspection and lot acceptance shall be determined in accordance with MIL-STD-105.

4.3.1 *Examination of the end items.* The curtains and fixtures shall be examined for visual and dimensional defects

4.3.1.1 *Visual examination.* Defects found during this examination shall be classified in accordance with the table of defects listed herein. The lot size shall be expressed in terms of curtains each (including fixtures). The unit of product shall be one curtain each (with fixtures). The inspection level shall be level 1 and the acceptable quality level shall be 2.5 defects per hundred units in accordance with MIL-STD-105

	Table of Defects
Door Curtains	30 inches or less in width more than one strip of material per curtain Over 30 inches in width more than two strips of material per curtain
Airport curtains	Less than or more than two strips of material for curtain.
Hems	Any hem twisted, pleated or puckered, affecting appearance Irregular, affecting appearance
Material defects and damages	Any hole Any weakening defect such as smashes multiple floats, or loose and weakening slubs, etc. expected to develop into a hole Shade bars, unsightly slubs, etc. definitely affecting appearance. Any needle chews which may develop into a hole. Scissors or knife cuts, tear, mend or burn.

	Table of Defects
Seams and stitching	Seams twisted, puckered or pleated, affecting appearance. Thread breaks on ends of stitching when not caught in other stitchings, not backstitched. Less than 8 stitches per inch. Open seam 1/4 inch or more. Raw edge 1/4 inch or more. Run offs 1/4 inch or more. Wrong seam type. Wrong stitch type.
Identification marking	Omitted, illegible or incorrect.
Hardware	Any hardware or component thereof omitted or other than type specified. Other than highly polished, clean and smooth. Any burr, tool mark or sharp edge. Corroded. Tacky

4.3.1.2 *Dimensional examination.* The curtains and fixtures for dimensional defects shall be taken from those of 4.3.1.1. The unit of product shall be one curtain each, with fixtures. Any dimension that is not within the established tolerances stated herein and shown on the figures shall be classified as a defect. The acceptable quality level for this examination shall be 2.5 defects per 100 units. The sample size shall be selected in accordance with inspection level S-3 of MIL-STD-105

4.3.2 *Examination of preparation for delivery requirements.* An examination shall be made to determine that packaging, packing and marking requirements of the applicable specifications are complied with. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully prepared for delivery with the exception that it need not be sealed. Defects of closure listed below shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 and the AQL shall be 4.0 defects per 100 units.

## DD-C-641b

Examine	Defect
Working (exterior and interior)	Omitted, incorrect, illegible, of improper size, location, sequence, or method of application.
Materials	Any component missing. Any component damaged, affecting serviceability. Any component not as specified.
Workmanship	Inadequate application of components, such as incomplete closure of container flaps, loose strapping, inadequate stapling, incorrect application of tape. Bulging or distortion of containers.
Content	Number of packages is more or less than specified. Number of items per package is less than specified. <sup>1</sup>

For this defect, two packages from each shipping container in the sample shall be examined.

## 5. PREPARATION FOR DELIVERY

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

5.1 Packaging Packaging shall be level A or C (see 6.2).

### 5.1.1 Level A

5.1.1.1 *Curtains* Each door curtain; or each pair of airport curtains, shall be neatly packed and completely wrapped with a 30 lb minimum basis weight kraft paper conforming to grade B of UU-P-268. The wrapped package shall be secured with a 2-inch minimum width gummed paper tape conforming to class 2 of UU-T-111; or each end of the wrapped package tied with cotton rope or twine.

5.1.1.2 *Curtain rods* The curtain rods shall be packaged in accordance with the industry's practice.

5.1.1.3 *Curtain rings* Fifty door curtain rings; or two hundred airport curtain rings shall be packaged in a snug-fitting, two-piece, telescope style, paperboard box conforming to type I, grade A, class A, style 4 of PPP-B-676; or a two-piece, telescope

style, paperboard box conforming to style III, type B, class A of PPP-B-566. The boxes shall be securely sealed with gummed paper tape, 2-inch minimum width conforming to class 2 of UU-T-111.

5.1.1.4 *Drapery hooks* Two hundred drapery hooks shall be packaged in a snug-fitting, two-piece, telescope style, paperboard box conforming to type I, grade A, class A, style 4 of PPP-B-676; or in a two-piece, telescope style, paperboard box conforming to style III, type B, class A of PPP-B-566. The boxes shall be securely sealed with gummed paper tape, 2-inch minimum width conforming to class 2 of UU-T-111.

5.1.1.5 *Curtain rod brackets* Each pair of brackets shall be completely wrapped in tissue paper conforming to type I, grade A, class 1 or 2 of UU-P-553. Twenty pairs of brackets, of one class only, shall be packaged in a snug-fitting, two-piece, telescope style, paperboard box conforming to type I, grade A, class A, style 4 of PPP-B-676, or in a two-piece, telescope style, paperboard box conforming to style III, type B, class A of PPP-B-566. The boxes shall be securely sealed with gummed paper tape, 2-inch minimum width conforming to class 2 of UU-T-111.

5.1.2 *Level C* Items shall be packaged in accordance with the industry's practice.

5.2 *Packing* Packing shall be level A, B, or C (see 6.2).

### 5.2.1 Level A

5.2.1.1 *Curtains* Twenty packages of curtains, of one type, size and color only, packaged as specified in 5.1.1.1, shall be packed in a snug-fitting shipping container conforming to class 2, V3c or V3s, style RSC-L of PPP-B-636. The inside panels of each fiberboard shipping container shall be fitted with a one-piece, double faced, A or C flute corrugated fiberboard liner having a minimum bursting strength of 200 p.s.i. The fiberboard containers shall have all seams, corners and manufacturer's joints sealed by



DDD-C-641b

the application of a 3-inch minimum width olive drab cloth tape conforming to type III, class 1 of PPP-T-60. Each shipping container shall be closed and reinforced with flat steel strapping or tape banding in accordance with the appendix of the container specification.

**5.2.1.2 Curtain rods.** The curtain rods shall be packed for overseas shipments in accordance with the industry's practice.

**5.2.1.3 Curtain rings; drapery hooks; curtain rod brackets.** Ten paperboard boxes of items, of one type and class only, packaged as specified in 5.1.1.3, 5.1.1.4, and 5.1.1.5, shall be packed in a snug-fitting shipping container conforming to class 2, V3c or V3s style RSC of PPP-B-636. The fiberboard containers shall have all seams, corners and manufacturer's joints sealed by application of a 3-inch minimum width olive drab cloth tape conforming to type III, class 1 of PPP-T-60. Each shipping container shall be closed and reinforced with flat steel strapping or tape banding in accordance with the appendix of the container specification.

#### **5.2.2 Level B.**

**5.2.2.1 Curtains.** Twenty packages of curtains, of one type, size and color only, packaged as specified in 5.1.1.1, shall be packed in a snug-fitting shipping container conforming to type I, class 1, style RSC-L of PPP-B-636. The minimum bursting strength of the fiberboard shall be 275 p.s.i. The inside panels of each fiberboard shipping container shall be fitted with a one-piece, double-faced, A or C flute corrugated fiberboard liner having a minimum bursting strength of 200 p.s.i. All flaps of the fiberboard shipping containers shall be securely sealed with an adhesive (glue) applied throughout the entire area of contact between the flaps; or by a combination of metal stitching the bottom flaps and sealing the top flaps with adhesive (glue).

**5.2.2 Curtain rods.** The curtain rods, packaged as specified in 5.1.1.2, shall be packed

for domestic shipments in accordance with the industry's practice.

**5.2.2.3 Curtain rings; drapery hooks; curtain rod brackets.** Ten paperboard boxes of items, of one type and class only, packaged as specified in 5.1.1.3, 5.1.1.4, and 5.1.1.5, shall be packed in a snug-fitting shipping container conforming to type I, class 1, style RSC of PPP-B-636. The minimum bursting strength of the fiberboard shall be 275 p.s.i. All flaps of the fiberboard shipping containers shall be securely sealed with an adhesive (glue) applied throughout the entire area of contact between the flaps; or by a combination of metal stitching the bottom flaps and sealing the top flaps with an adhesive (glue).

**5.2.3 Level C.** Items shall be packed in a manner to insure carrier acceptance and safe delivery at destination at the lowest transportation rate for such supplies. Containers shall be in accordance with the rules or regulations of carriers applicable to the mode of transportation.

#### **5.3 Marking**

**5.3.1 Civil agencies.** In addition to any special marking required by the contract or order, the packages and shipping containers shall be marked in accordance with Fed Std. No. 123.

**5.3.2 Military requirements.** In addition to any special marking required by the contract or order, the packages and shipping containers shall be marked in accordance with ~~MTL-STD-123~~.

#### **6. NOTES**

**6.1 Intended use.** The curtains and curtain fixtures are primarily intended for use with airports (portholes) and doorways.

**6.2 Ordering data.** Procurement documents should specify the following and purchasers should exercise any desired options offered herein:

(a) Title, number, and date of this specification.

## DDD-C-641b

- (b) Type, class and color required (see 1.2.1 and 1.2.2).
- (c) Height and width, in inches, of openings for curtains.
- (d) Exact width, in inches or fractional part thereof, of openings for rods and rollers.
- (e) Level of packaging and packing required (see 5.1 and 5.2).
- (f) If brackets shall be furnished with securing screws (see 3.3.4.2.2).

6.3 Transportation description. Transportation descriptions and minimum weights applicable to this commodity are:

*Curtains, Types I and II*

*Rail:*

Dry goods, not otherwise indexed by name.

Carload minimum weight 20,000 pounds, subject to Rule 34, Uniform Freight Classification.

*Motor:*

Dry goods, not otherwise indexed  
Truckload minimum weight—any quantity

*Fixtures, Type I*

*Rail:*

Curtain poles or rods, metal

Carload minimum weight 30,000 pounds.

*Motor:*

Curtain poles or rods, metal.

Truckload minimum weight 30,000 pounds, subject to Rule 115, National Motor Freight Classification.

*Fixtures, Types II, III, and IV*

*Rail:*

Curtain pole or rod fixtures, metal.

Carload minimum weight 30,000 pounds.

*Motor:*

Curtain pole or rod fixtures, metal.

Truckload minimum weight 24,000 pounds, subject to Rule 115, National Motor Freight Classification.

MILITARY CUSTODIANS:

Air Force—MOAMA

Navy—S&A (NAVSUPRANDFAC)

Preparing Activity:

Navy—S&A (NAVSUPRANDFAC)



DDD-C-441b

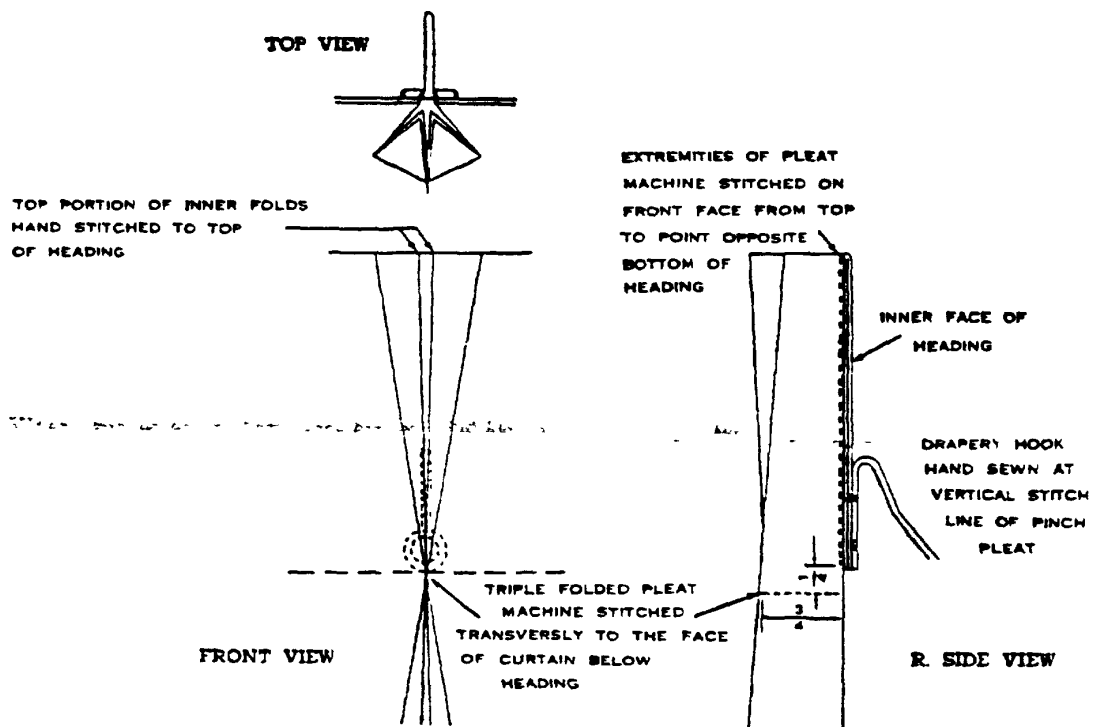
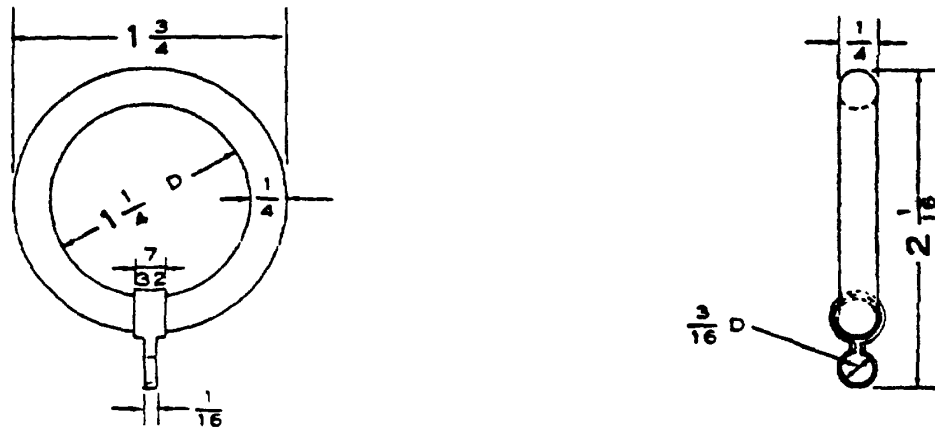
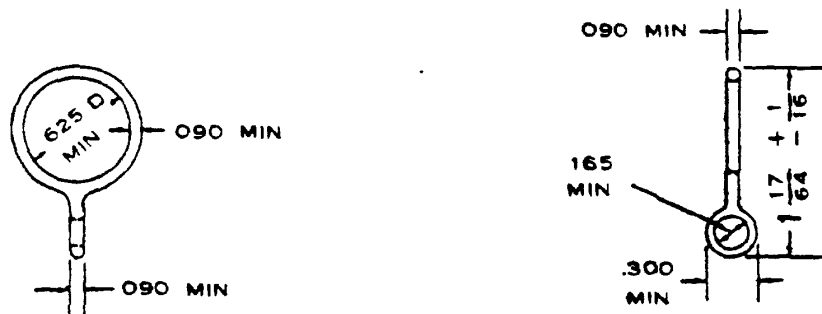


FIGURE 1—Construction of pinch pleats for door and airport curtains.

DDD-C-641b

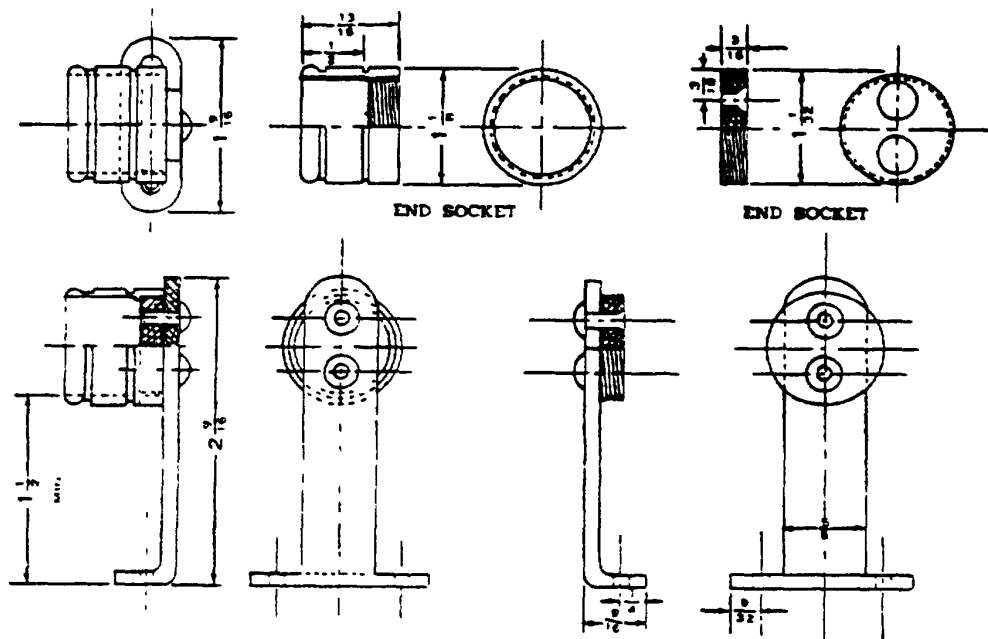


HOLLOW CONSTRUCTION - CURTAIN RING CLASS 1



SOLID CONSTRUCTION - CURTAIN RING CLASS 2

FIGURE 2.—Fixtures, type II, curtain rings



DOOR BRACKET

FIGURE 3 — Fixtures, type IV, class 1

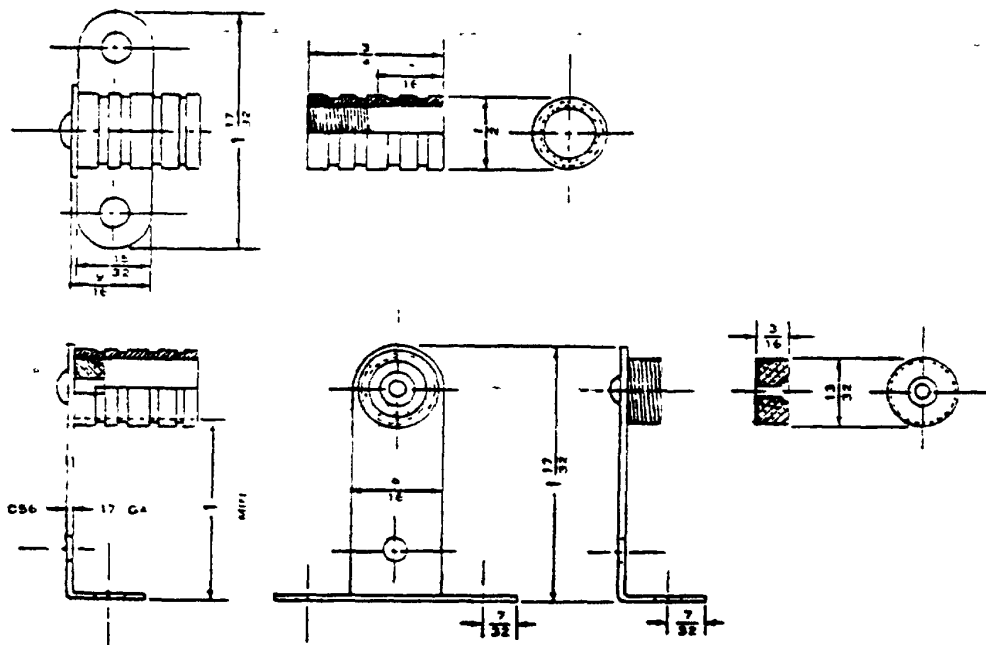
**AIRPORT BRACKET**

FIGURE 4.—Fixtures, type IV, class 2.

Copies of this specification may be purchased for 10 cents each