

L-P-377b
February 28, 1966
SUPERSEDING
Fed. Spec. L-P-377a
May 22, 1963

FEDERAL SPECIFICATION

PLASTIC SHEET AND STRIP, POLYESTER

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

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers polyester type plastic film.

1.2 Classification.

1.2.1 Types. Polyester film shall be of the following types, as specified (see 6.2):

I—General purpose film.

II—Highly transparent film.

III—Highly transparent film with good dimensional stability.

IV—High tensile film with the greatest strength in the longitudinal direction.

V—Weatherable film possessing good transparency and resistance to outdoor aging.

VI—Heat shrinkable film.

2. APPLICABLE SPECIFICATIONS, STANDARDS, AND OTHER PUBLICATIONS

2.1 Specifications and standards. The following specifications and standards, of the issue 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:

FF-C-436—Clip, Paper, Wire.

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

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

PPP-B-576—Box, Wood, Cleated, Veneer, Paper Overlaid.

PPP-B-591—Boxes, Fiberboard, Wood-Cleated.

PPP-B-601—Boxes, Wood, Cleated-Plywood.

PPP-B-636—Box, Fiberboard.

PPP-D-723—Drums, Fiber.

PPP-T-60—Tape: Pressure-Sensitive Adhesive Paper (For Carton Sealing).

Federal Standards:

Fed. Std. No. 102—Preservation, Packaging, and Packing Levels.

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

Fed. Test Method Std. No. 406—Plastics: Methods of Testing.

(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 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 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 Specification:

MIL-L-10547—Liners, Case and Sheet, Overwrap; Water-Vaporproof or Waterproof, Flexible.

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 officer.)

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:

American Society for Testing and Materials (ASTM) Standards:

D 374-57T—Methods of Tests for Thickness of Solid Electrical Insulation.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa., 19103.)

3. REQUIREMENTS

3.1 Material. The film covered by this specification shall be manufactured from a polyester type polymer.

3.2 Dimensions and tolerances.

3.2.1 Thickness. The film thickness shall be as specified in table I when measured in accordance with 4.2.3.

TABLE I. Thickness and tolerances

Thickness, nominal inch	Thickness, inch		Type availability
	Minimum	Maximum	
0.00015	0.00012	0.00018	II
.00025	.00017	.00033	II, III
.00035	.00023	.00046	II, III
.00050	.00035	.00064	I, II, III, IV
.00065	.00052	.00078	VI
.00075	.00052	.00097	II, III, IV
.00100	.0007	.0012	I, II, III, IV
.00150	.0011	.0017	I, III, IV
.00200	.0016	.0024	I, III, V
.00300	.0027	.0033	I, III, V
.00500	.0040	.0059	I, III, V
.00750	.0061	.0089	I, III
.01000	.0083	.0115	I, III
.01400	0.118	.0162	I

3.2.2 Roll sizes. The film shall be furnished in rolls conforming to the requirements in tables II, III, and IV. Tolerance shall be +/- 1/16 inch. For roll cores of 1-1/8 inch O.D., a plastic tube may be used in lieu of a paper-board tube, for durability.

TABLE II. Roll cores*

Film thick- ness nominal, inch	Film type					
	I	II	III	IV	V	VI
0.00025	—	A, B, C	—	—	—	—
.00035	—	A, B, C	—	—	—	—
.00050	A, B, C	A, B, C	—	A, B, C	—	—
.00065	—	—	—	—	—	A, B, C
.00075	—	A, B, C	—	A, B, C	—	—
.00100	A, B, C	A, B, C	—	A, B, C	—	—
.00150	A, B, C	—	A, B, C	—	—	—
.00200	A, B, C	—	A, B, C	—	A, B	—
.00300	A, B, C	—	A, B, C	—	B, C	—
.00500	B, C	—	B, C	—	B, C	—
.00750	B, C	—	B, C	—	—	—
.01000	B, C	—	—	—	—	—
.01400	B, C	—	—	—	—	—

* Roll core inside diameters: A = 1-1/8 inches, B = 3 inches, C = 6 inches.

TABLE III. Roll dimensions and tolerances

Roll core I.D., inches	Film Thickness nominal, inch	Roll O.D. inches*	Roll width, inches		
			Minimum	Maximum	Tolerance
1-1/8	0.0005 & below	6	1/2	18	1/32
3	.0005 & below	9-1/2	1/2	18	1/32
6	.0005 & below	11 & 14	1/2	18	1/32
3	.0005 & below	9-1/2	18-1/16	60[1]	1/16
6	.0005 & below	11 & 14	18-1/16	60[1]	1/16
3	.00075 & over	9-1/2	1/2	60[1]	1/32
6	.00075 & over	11 & 14	1[2]	60[1]	1/32

* Roll O.D. tolerances are +/- 1/4 inch.

[1] Maximum width: Type IV, 52"; type III, 0.0015" and 0.002", 57".

[2] Below 0.001 inch thickness, minimum roll width is 1-1/2 inch.

TABLE IV. Roll splices

Film thickness, nominal, inch	Roll core inside diameter, inches			
	1-1/8	3	6 (11" O.D.)*	6 (14" O.D.)*
0.00035 & below	Maximum splices per roll			
0.0005 through	4	6	6	8
0.001	3	4	4	6
0.0015 & over	1	2	2	4

* Outside diameter of roll in conjunction with six inch roll core inside diameter.

3.2.3 Flat cuts. The film shall be furnished in flat cuts conforming to the requirements in table V:

TABLE V. Flat cut requirements

Film type and film thickness nominal, inch	Flat cut size (a)	
	Minimum	Maximum
I, II, III, IV	One dimension equal equal to 2 inches and/or the sum	43 inches in length by 43 inches in

TABLE V. Flat cut requirements (cont'd)

Film type and film thickness nominal, inch	Flat cut size (a)	
	Minimum	Maximum
0.0005 through 0.010	of two dimensions equal to 12 inches.	width.

(a) Any size between these limits may be obtained.
Tolerances are +/- 1/6 inch.

3.3 Property values. The film shall meet the property values specified in table VI when tested as specified in 4.2.3.

3.3.1 Tensile strength and elongation. The tensile strength and elongation of the film shall conform to the requirements in table VI.

TABLE VI. Tensil strength and elongation

Film thickness nominal, inch	Type	Tensile strength, pounds per square inch, minimum	Elongation percent minimum
0.00015	II	17,000	45
.00025, 0.00035	II, III	18,000	55
.00050	I, II, III	20,000	75
.00050	IV	34,000[1]	15[1]
.00065	VI	18,000	70
.00075	II, III	20,000	75
.00075	IV	34,000[1]	15[1]
.00100	I, II, III	20,000	80
.00100	IV	34,000[1]	15
.00150	I, III	20,000	90
.00150	IV	34,000	15[1]
.00200, 0.00300	I, III, V[2]	20,000	90
.00500, 0.00750	I, III, V	20,000	90
.01000	I, III	20,000	100
.01400	I	16,000	100

[1] This requirement applies only to the longitudinal direction (machine direction) of the film.

[2] Not available in type V at 0.00200 thickness.

3.3.2 Dimensional stability. The dimensional stability of the film shall conform to the requirements in table VII, when tested as specified in 4.2.3.

TABLE VII, Dimensional stability

Film thickness nominal, inch	Type	Shrinkage, percent, maximum	
		At 150 deg. C.	At 200 deg. C.
0.00015 through 0.001	II	4.0	—
.00025, 0.00035	III	—	7.0
.0005, 0.00075	I, III	—	9.0
.0005, 0.00075, 0.001	IV	13.0[1]	—
.001	I, III	—	8.0
.0015 through 0.010	I, III, V	—	7.0
.014	I	—	10.0

[1] This requirement applies only to the longitudinal direction (machine direction) of the film.

3.3.2.1 Heat shrinkage (type VI only). The shrinkage of type VI film shall be 35 percent minimum and 60 percent maximum when tested as specified in 4.3.

3.3.3 Haze. The haze of the film shall conform to the requirements in table VIII when tested as specified in 4.2.3.

TABLE VIII. Haze

Film thickness nominal, inch	Type	Haze, percent light scattered, maximum
0.00025	II, III	5.0
.00035	II, III	5.0
.0005	I	12.3
.0005	II, III	4.0
.00075	II, III	4.2
.001	I	18.1
.001	II, III	4.3
.0015	I	28.0
.0015	III	4.3
.002	I	37.5
.002	III	4.0
.003	I	60.0
.003	III	6.0
.005	I	76.0
.005	III	6.0
.0075	I	87.0
.0075	III	9.2
.0100	I	100.0
.0100	III	20.0

3.3.4 Optical transmittance (applies only to type V film). The optical transmittance of light through type V shall be not greater than 50 percent.

3.4 Workmanship. The finished film shall be clean, well finished and shall conform to the quality and grade of product established by this specification. The occurrence of defects shall not exceed the applicable acceptable quality levels (AQLs) established herein.

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. 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 Inspection. Inspection shall be performed in accordance with the provisions set forth in MIL-STD-105, except where otherwise indicated herein.

4.2.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected and tested in accordance with all the requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase documents.

4.2.2 Inspection of the end item. The end item shall be examined for defects listed in 4.2.2.1, 4.2.2.2, 4.2.2.3, and 4.2.2.4. The inspection levels and AQLs shall be as specified in 4.2.2.6. Each roll or package of flat cuts shall constitute one unit of the lot for purposes of determining lot size for sampling for examination in 4.2.2.1 thru 4.2.2.5.

4.2.2.1 Examination of the end item for defects in workmanship. The sample unit for this examination shall be one sheet full size for flat cuts, or one yard full width for rolls.

Examine	Defect
Workmanship	Any dirt, oil, or foreign matter affecting appearance or usability. Any deep gouge or scratch. Any holes including pinholes. Any rough or sharp edge. Any cut, blister, bubble, tear, scuff, crack, or crease. Any pimple or pit. Any chipping. Any spot, stain, or other discoloration affecting appearance or usability. Not clear or clarity not uniform. Not uniformly transparent.

4.2.2.2 Examination of the end item for defects in dimensions. The sample unit for this examination shall be one sheet full size, or one complete roll.

Examine	Defect
Size of sheets	Any variation greater than tolerances specified in contract or order.
Width of roll	Any width deviation greater than shown in table III.

4.2.2.3 Examination of the end item for defects in packaging of sheets and unrolling of rolls. The sample unit shall be one package of flat cut sheets or one complete roll.

Examine	Defect
Unrolling of rolls	Not suitably restrained from unwinding. Material blocks to the extent that unrolling causes damage or tearing rendering material unserviceable. Any splice beyond specified limits. Roll weight exceeds specified limits. Diameter less than specified. Diameter more than specified.
Separation of sheets	Flat cut sheets not slip sheeted. Sheets block to the extent that separation causes damage or tearing, rendering material unserviceable.

4.2.2.4 Examination of the end item for average contents. The sample unit shall be one roll or one package of flat cut sheets as applicable. The average count per package for sheets (flat cuts) and the average length per roll shall not be less than specified or indicated.

4.2.2.5 Examination for preparation of delivery requirements. An examination shall be made to determine that packaging, packing, marking requirements of section 5 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.

Examine	Defect
Markings Exterior and interior, as applicable	Incorrect, illegible, omitted, of improper size, location, sequence, or method of application.

Examine	Defect
Precautionary	Missing or not as specified (see 5.3.3).
Materials	Any nonconforming components, component missing, damaged, or otherwise defective.
Workmanship	Inadequate application of components, such as incomplete closure of case liners, loose, or inadequate sealing, strapping, or stapling. Bulged or distorted containers.
Contents (as applicable)	Number of end items per shipping container is less than required.
Count	Number of packages of sheets or rolls less than specified or indicated quantity.

4.2.2.6 Inspection levels and AQLs for examinations. The inspection levels, for determining the sample size, and the AQLs expressed in defects per one hundred units shall be as follows:

Examination paragraph[1]	Inspection levels	AQLs
4.2.2.1	I	2.5
4.2.2.2	S-2	2.5
4.2.2.3	S-2	2.5
4.2.2.4	S-2	—
4.2.2.5	S-2	2.5

[1] The same rolls or packages of sheet or sheets as applicable of the specified material shall be used for examination under 4.2.2.2 through 4.2.2.4 inclusive and shall be within the rolls or packages of sheets randomly selected for examination under 4.2.2.1.

4.2.3 Testing of the end item. The end item shall be tested for applicable characteristics listed in table IX. The sample unit quantity for each type shall be 21 square feet of material. Discard a minimum of three turns of film from a roll before selecting a sample. In cutting test specimens, no portion of the sample shall be taken closer than 10 percent of the width of the film, from either edge. The lot size shall be expressed in units of single rolls or single packages of flat cuts, for sampling purposes. The inspection level shall be S-2. All requirements are applicable to the lot average. There shall be no evidence of failure to meet the requirements as specified. All test reports shall contain the individual values utilized in expressing the final result.

4.3 Test procedures.

4.3.1 Standard conditioning. Unless otherwise specified, samples for test shall be conditioned at a temperature of 73.5 deg. +/- 2 deg. F. (23.1 deg. +/- 1.1 deg C.) and a relative humidity of 50 +/- 4 percent in accordance with Fed. Test Method Std. No. 406 except that the time of conditioning shall be 16 hours minimum.

4.3.2 Thickness. Thickness of the film shall be determined in accordance with ASTM D 374-57T method A or C. For films of nominal thickness of 0.00015, 0.00025, and 0.00035, the thickness shall be measured by the above method, however; the film shall be built up by using the below number of plies and dividing by the readings by the number of plies used.

Thickness (nominal)	Number of plies used to determine thickness
0.00015	4
.00025	2
.00035	2

Measure at 10 randomly selected points from a minimum area of 12 square inches. The average of the ten readings shall fall within the specified herein.

TABLE IX. Testing requirements

Characteristic	Reference to requirement	Reference to test	Number of determinations per sample unit	Results reported numerically to nearest
Thickness.....	3.2.1	4.3.2	10	0.00001 inch
Tensile strength.....	3.3.1	Method A of method 1013 of Fed. Test Method Std. No. 406[1]	5	500 lbs. per square inch
Elongation.....	3.3.1	Method A of method 1013 of Fed. Test Method Std. No. 406[1]	5	5 percent
Dimensional stability.	3.3.2	4.3.3	5	0.1 percent
Haze (types, I, II, & III only).		Method 3022 of Fed. Test Method St. No. 406	1	0.1 percent
Optical transmittance (type V only).	3.3.4	4.3.4	1	1 percent

- [1] (a) Specimen size shall be 1 by 5 inches.
 (b) Separation between jaws shall be 2 inches.
 (c) Thickness of specimens shall be determined before testing.

4.3.3 Dimensional stability. The film shrinkage shall be determined on five specimens conditioned according to 4.3.1 before and after test. The specimens shall be 10 by 10 inches by width of slit roll if this dimension is less than 10 inches. Three measurements shall be made in the longitudinal direction (machine direction) and in the transverse

direction. All measurements shall be accurate to 1/32 inch. Specimens shall be tested by freely suspending them in an oven controlled to 150 deg. +/- 1. deg. C for types II and V film and 200 deg. +/- 1 deg. C for types I and III. The test period shall be 30 minutes. Specimens are to be cooled and conditioned in accordance with 4.3.1 before measurements are made. The percent shrinkage shall be computed from the 3 measurement average before and after test.

4.3.3.1 Dimensional stability (type IV film only). Type IV film shrinkage shall be determined on five specimens conditioned in accordance with 4.3.1. Before testing, the specimens shall be 1/4 by 15 inches and cut so that the long dimension is parallel to the longitudinal direction (machine direction) of the film. Mark a pair of lines 12 inches apart on each sample. Measure the distance between the lines on specimens conditioned according to 4.3.1 to the nearest 0.01 inch before and after test. Specimens shall be tested by placing a paper clip conforming to Gem pattern, type I, FF-C-436, capacity 1/16 inch at each end and freely suspending the assembly in an oven controlled to 150 deg. +/- 1 deg. C. The test period shall be 5 minutes. The percent shrinkage shall be computed from the 5 measurement average before and after test.

4.3.3.2 Heat shrinkage (type VI only). Five specimens 5 by 5 inches shall be measured to the nearest 0.1 inch and then immersed in boiling water (100 deg. C.) for 30 seconds. Remove, cool, lay flat, and smooth out wrinkles. Measure the samples to the nearest 0.1 inch. The percent shrinkage shall be calculated as follows:

$$\frac{(\text{Original dimension} - \text{Final dimension})}{\text{Original dimension}}$$

Original dimension

X 100 = Percent shrinkage

4.3.4 Optical transmittance. The optical transmittance shall be determined in accordance with the following procedure. The test equipment shall be a Bausch & Lomb Spectronic "20" Colorimeter or equivalent. Five test specimens, randomly selected from the roll, shall be cut to 3/4 by 2 inches. The procedure is to allow the instrument to warm up. The wavelength control shall be set to 400 millimicrons. Adjust the instrument to read zero transmittance. Insert an empty specimen holder into the 1 inch test tube adapted and adjust the needle to read 100 percent transmittance. Place a specimen between the holder halves and read percent transmittance.

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. Packing shall be level A or C as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 Rolls. Each roll shall be uniformly wound on a convolute or spiral wound paperboard or plastic tube as specified in 3.2.2. Each roll shall be restrained from unwinding and warped with at least one thickness of 30-pound minimum basis weight kraft wrapping paper conforming to grade B of UU-P-268. The wrap shall be lapped approximately six inches and secured the entire length of the roll with 3-inch minimum width pressure-

sensitive adhesive or gummed kraft paper tape conforming to PPP-T-76; class 2 or 3 of PPP-T-60; or class 2 of UU-T-111. The width of the wrapper shall be such that the wrapper can be foled over the ends of the roll. The folded ends of wrapper shall be fastened either by tucking into the tub and placinng a restraining device into the tube or by gluing a circular piece of paper over the foled wrapper ends. Alternative to wrapping in kraft paper, each roll may be wrapped in polyester film identical to that on the roll and the wrap secured with pressure-senisitive tape specified herein.

5.1.1.2 Flat cuts. Five hundred flat cuts of polyester film of one type, thickness and size only, shall be slip sheeted and placed on a fiberboard pad. The bundle shall be wrapped and secured as specified for rolls.

5.1.2 Level C. The polyester film shall be packaged to afford adequate protection against deterioration and damage during shipment from the supply source to the first receiving activity. The supplier may use his standard practice when it meets these requirements.

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

5.2.1 Level A. Polyester film of one type, thickness and size only, packaged as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, V3c OR V3s of PPP-B-636; class II of PPP-B-591; overseas type of PPP-B-601; style A or B, class 2 of PPP-B-576; or type III, grade D of PPP-D-723. Each fiberboard container shall be waterproofed in accordance with the appendix of the container specification. When specified (see 6.2), all other shipping containers shall be provided with a type I or II, grade C sealed cae liner conforming to MIL-L-10547, except when the plastic film is wrapped in polyester and waterproof taped as specified in 5.1.1.1, or packed in fiber drums, the case liner shall not be required. Each shipping container shall be closed and reinforced with flat steel strapping or tape banding in accordance with the appendix of the applicable container specification.

5.2.2 Level B. Polyester film of one type, thickness and size only, packaged as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, type CF or SF, class domestic, variety SW, grade 275 of PPP-B-636; class I, style A or B of PPP-B-591; domestic type, style A or B of PPP-B-601; style A or B, class 1 of PPP-B-576; or type I, grade D of PPP-D-723. Each shipping container shall be closed in accordance iwth the appendix of the applicable container specification.

5.2.2.1 When specified, shipping containers shall be fabricated from V3c or V3s fiberboard (see 6.2).

5.2.3 Level C. Polyester film, packaged as specified in 5.1, 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 rules or regulations of carriers applicable to the mode of transportation.

5.3 Marking.

5.3.1 Civil agencies. In addiiton to any special marking required by the contrct or order, interior 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, interior packages and shipping containers shall be marked in accordance with MIL-STD-129.

5.3.3 Precautionary marking.

5.3.3.1 Rolls. The following precautionary marking shall appear in letters not less than 3/4-inch in height on at least one side and wherever practical on two sides of each fiber drum or shipping container containing rolls.

5.3.3.2 Flat cuts. Each shipping container for flat cut sheets shall be marked in letters not less than 3/4-inch in height on at least one side and wherever practical on two opposite sides with the following:

KEEP COOL AND DRY

6. NOTES

6.1 The polyester film covered by this specification is intended for general usage in packaging and industrial applications.

6.2 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 required (see 1.2)
- (c) Whether rolls or flat cuts are required.
 - (1) Rolls: Thickness and width required.
 - (2) Flat cuts: Thickness, applicable dimensions and tolerances.
- (d) Roll core size (see 3.2.2).
- (e) Roll O.D. (see table III).
- (f) Selection of applicable levels of packaging and packing (see 5.1 and 5.2).
- (g) Whether case liners are required for waterproofing the contents of the shipping containers (see 5.2.1).
- (h) Whether V-board shipping containers are required for level B shipments (see 5.2.2.1).

CUSTODIANS:

Army--GL

Navy--SA

Air Force--69

Review activities:

Army--GL, EL, SM, MU, MO, MD

Navy--SA

Air Force--69

Preparing activity:

Army--GL

Review information is current as of the date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current Federal Supply Classification Listing of DOD Standardization Documents.

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein. Price 10 cents each.