

SS-W-40a  
 March 28, 1966  
 SUPERSEDING  
 Int. Fed. Spec. SS-W-0040  
 March 31, 1964

FEDERAL SPECIFICATION

WALL BASE: RUBBER, AND VINYL PLASTIC

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 both rubber and vinyl plastic wall base used to provide a functional as well as decorative border between walls and floors.

1.2 Classification.

1.2.1 Tapes. Wall base shall be of the following types as specified (see 6.1).

Type:

- I--Rubber.
- II--Vinyl plastic.

1.2.2 Styles. Wall base shall be of the following styles as specified (see 6.1).

Style:

- A--Straight.
- B--Cove.

1.2.3 Dimensions. Wall base shall be furnished in any combination of the following thicknesses, heights, and lengths as specified (see 6.1).

	Inches
Thicknesses .....	0.080 and 0.125
Height .....	2-1/2, 4, and 6
Lengths .....	36, 48, and 72

2. APPLICABLE DOCUMENTS

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

Federal Specifications:

- O-S-642---Sodium Phosphate, Tribasic, Technical; Anhydrous, Dodecahydrate, and Monohydrate.
- TT-P-30--Paint, Alkyd, Odorless, Interior, Flat, White and Tints.
- PPP-B-585--Boxes, Wood, Wirebound.
- PPP-B-591--Boxes, Fiberboard, Woodcleated.
- PPP-B-601--Boxes, Wood, cleated-Plywood.
- PPP-B-621--Boxes, Wood, Nailed and Lock-Corner.
- PPP-B-636--Box, Fiberboard.

PPP-B-640--Boxes, Fiberboard, Corrugated, Triple-Wall.

PPP-T-76--Tape, Pressure-Sensitive Adhesive Paper, (For Carton Sealing).

Federal Standards:

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

Fed. Test Method Std. No. 501--Floor Coverings, Resilient, Nontextile Sampling and Testing.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standard, 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 include. 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 Office 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

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books 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 officer.)

### 3. REQUIREMENTS

#### 3.1 Material.

3.1.1 Rubber. The rubber compound used in the manufacture of type I wall base shall be composed of natural rubber, synthetic rubber, or a combination of natural and synthetic rubber, together with any necessary ingredients required for vulcanization into a functional material. The rubber compound shall be free from offensive odor.

3.1.2 Vinyl plastic. The vinyl plastic compound used in the manufacture of type II wall base shall be a thoroughly blended composition of thermoplastic binder, filler, and pigments stabilized against heat and light deterioration. The binder shall consist of plasticizer and resin; the resin portion shall be polyvinyl chloride or a copolymer of vinyl chloride having a chlorine content of not less than 45 percent (see 6.2). The material shall be free from offensive odor.

#### 3.2 Surface characteristics.

3.2.1 Exposed surface. Unless otherwise specified (see 6.1), the face or exposed surface of the wall base shall be smooth.

3.2.2 Bonding surface. The back or bonding surface of the wall base shall be buffed, roughened, ribbed, or grooved to improve application and adhesion to the wall surface, but in no case shall the thickness of the wall base be decreased to the extent that any depression or groove on the bonding surface is perceptible under any circumstances on the exposed surface.

3.3 Surface finish. Waxes, lacquers, or plastic finishes, when used, shall be compatible and the finished product shall conform to all the provisions of this specification.

#### 3.4 Color (see 6.3).

3.4.1 Unless otherwise specified (see 6.1), the wall base shall be plain black in color.

3.4.2 Plain colors. Plain colors shall be uniform throughout the full thickness of wall base.

3.4.3 Mottling or marbling. Mottling or marbling shall be worked throughout the full thickness of the wall base.

#### 3.5 Design.

3.5.1 Style A. The exposed surface of straight wall base shall be

rounded at the top edge only, as shown in figure 1.

3.5.2 Style B. The exposed surface of cove wall base shall be rounded at the top edge and curved at the bottom edge to form what is known as the toe, as illustrated by the cross-sectional profile in figure 1. The bottom surface of the toe shall be curved or have planar surfaces with obtuse angles to permit the wall base to fit snugly against the floor and wall.

### 3.6 Dimensions.

3.6.1 Thickness. When determined as described in 4.3.1, the overall thickness of wall base shall be 0.080 or 0.125 inch as specified (see 1.2.3 and 6.1). The tolerances on overall thickness shall be as follows:

	Inch	
0.080	+0.015	-0.005
.125	+ .015	- .015

3.6.2 Height (width). When measured as described in 4.3.2, the height of wall base shall be 2-1/2, 4, or 6 inches as specified (see 1.2.3 and 6.1). A tolerance of +/-1 percent of the specified height is permitted, but within these limits the difference between the maximum and minimum measurements on the sample for inspection shall not exceed 0.03 inch.

3.6.3 Length. When determined as described in 4.3.3, the length of wall base shall be not less than 36, 48, or 72 inches as specified (see 1.2.3 and 6.1).

3.7 Squareness. Each vertical end of wall base shall form an angle of 90 deg. +/- 0.50 with the top edge, and shall fit against the vertical end of another length, when measured as described in 4.3.4, so that a 0.010-inch feeler gage cannot be inserted between the sections at any point.

3.8 Hardness. The hardness of wall base shall be 85 +/- 5 for type I and 90 +/- 5 for type II when determined by the method specified in table I.

3.9 Flexibility. Wall base shall show no cracks, breaks, or other evidence of weakness when tested for flexibility by the method specified in table I, using a 1-inch mandrel.

3.10 Resistance to heat aging. Wall base shall contain no ingredient which will cause staining of the finished surfaces adjacent to it when aged as described in 4.4.1.

3.11 Resistance to light. Wall base shall contain no ingredient which will cause staining of the finished surface adjacent to it or fading on the exposed surface when exposed to light as described in 4.4.2. The colorfastness rating shall be "fair" or better.

3.12 Resistance to detergents. Wall base shall not fade or soften when immersed in a detergent solution in accordance with the method specified in table I except that the detergent solution shall not contain carbon black.

3.13 Resistance to alkalis. Wall base shall not fade or soften when immersed in a 5 percent solution of trisodium phosphate conforming to O-S-642 using the method specified in table I.

3.14 Dimensional stability. Wall base shall not change in length by more than +/- 0.25 percent when tested by the method specified in table I.

3.15 Workmanship. The wall base shall be free from defects which affect its appearance or may impair its serviceability and shall conform to the quality of product established in this specification.

#### 4. QUALITY ASSURANCE PROVISIONS

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

##### 4.2 Sampling.

4.2.1 Lot. Unless otherwise specified in the invitation for bids, a lot

shall consist of all wall base of the same type, style, height, thickness, and color formed as described in 3.2 of section 5 of Fed. Test Method Std. No. 501, except that the lot size shall be expressed in linear feet instead of square feet.

4.2.2 Sampling for inspection. Unless otherwise specified in the invitation for bids, a random sample of wall base shall be taken from the lot as described in 4.2.3.1 of section 5 of Fed. Test Method Std. No. 501.

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4.2.3 Sampling for test. Unless otherwise specified in the invitation for bid, a random sample of wall base shall be taken from the lot as described in 4.2.3.2 of section 5 of Fed. Test Method Std. No. 501. For the purpose of tests, a test unit shall consist of sufficient material to make all the tests in this specification. Not more than one test unit shall be taken from a single unit.

4.3 Inspection. Wall base shall be inspected for type; design; color; thickness, 4.3.1; height, 4.3.2; length, 4.3.3; squareness, 4.3.4; surface characteristics, 3.2.1 and 3.2.2; finish; odor; and workmanship.

4.3.1 Thickness. The overall thickness of wall base shall be determined as described in method 2111 or 2131 of Fed. Test Method Std. No. 501. Each measurement shall fall within the limits specified in 3.6.1.

4.3.2 Height (width). The height of wall base shall be determined as described in method 2211 of Fed. Test Method Std. No. 501. When measuring the height of style B wall base, the unit shall be placed on a flat horizontal surface with the toe in contact with a vertical surface. Each measurement shall fall within the limits specified in 3.6.2.

4.3.3 Length. The length of wall base shall be determined as described in method 2311 of Fed. Test Method Std. No. 501.

4.3.4 Squareness. The angle formed by the top edge and each vertical end of the wall base shall be measured with a protractor calibrated to 15 minutes of angle. Each end of a length shall be fitted against the end of another length and the joint thus formed tested with a 0.010-inch feeler gage for conformance with the requirement in 3.7.

4.4 Test. Tests shall be made in accordance with table I. The test methods specified in table I are contained in Fed. Test Method Std. No. 501. The paragraphs referred to are contained in this specification.

TABLE I. Methods of testing

Characteristic	Requirement paragraph	Tests	
		Method No.	Paragraph reference
Hardness[a]	8.8	3511 or 3531	--
Flexibility in length direction[b]	3.9	3111	--
Resistance to:			
Heat aging	3.10	--	4.4.1
Light aging	3.11	--	4.4.2
Detergents	3.12	9341	--
Alkalies	3.13	9341	--
Dimensional stability in length direction[c]	8.14	6211	--

[a] In case of dispute, method 3531 shall be used.

[b] Two specimens in the length direction shall be tested.

[c] Two specimens not less than 9 inches in the length direction shall be tested.

4.4.1 Resistance to heat aging.

4.4.1.1 Specimen. The specimen shall be a portion of the test unit 1 by

1/2 inch.

4.4.1.2 Apparatus. The apparatus shall consist of the following: (a) A circulating air oven that is capable of being maintained at a temperature of 70 deg. +/- 1 deg. C. (158 deg. +/- 1.8 deg. F.), and (b) metal panels, 2 inches square, of approximately No. 20 gage, that have been finished with white, nonlead pigment paint conforming with the requirements of TT-P-30.

4.4.1.3 Procedure. The specimens shall be taken from the material as received, but extraneous contamination may be removed with mild soap solution or by mechanical means without surface abrasion. Two specimens of wall base from the same test unit shall be placed between two finished metal plates with the finished surfaces of the panels in contact with the specimen. The panel-specimen sandwich thus formed shall be placed in the oven maintained at a temperature of 70 deg. +/- 1 deg. C. (158 deg. +/- 1.8 deg. F.). A 1-pound weight shall be supported on top of the sandwich. The assembly shall be exposed to the required temperature for 166



+/- 1 hour. Care shall be taken that no other materials that might produce stain are in the oven. After the aging period, the assembly shall be removed from the oven, the specimen separated cleanly from the sandwich, and the panels washed with mild soap solution. A control panel without wall base shall be tested simultaneously to check the effect of the test conditions on the finish itself. No panel shall be exposed more than once. Any staining of the panel, beyond the specimen location greater than the discoloration of the control panel shall be considered migration stain.

4.4.2 Resistance to light. Resistance to light shall be determined by method 5421 of Fed. Test Method Std. No. 501. In order that migration stain and fading after exposure may be determined simultaneously, the following changes shall be made.

(1) The specimen shall be a 2-1/2 by 1/2-inch portion of the test unit.

(2) Metal panels, as described in 4.4.1.2 shall be provided, except that the size of the panels shall be 2-5/8 by 2-1/2 inches.

(3) The specimen of wall base shall be placed on the finished panel in a manner simulating its position in service. The specimen assembly shall be mounted in the specimen holder so that approximately 3/4 inch of the finished metal panel is exposed on each side of the specimen for determining migration stain. A control panel shall be exposed at the same time, preferably in the same specimen holder, for checking the effect of test conditions on the finish itself. The remainder of the procedure shall be as described in method 5421. In addition to evaluation of the specimen for fading, the area of the panels beyond the specimen location shall be examined for migration stain. Any staining of this area which is greater than the discoloration of the control panel shall be considered migration stain.

4.5 Compliance criteria. Compliance of the lot, with respect to inspection and tests, shall be in accordance with 6 of section 5 of Fed. Test Method Std. No. 501.

4.6 Inspection of preparation for delivery requirements. An inspection shall be made to determine that the packaging, packing, and marking comply with the requirements in section 5. Defects shall be scored in accordance with table II. For examination of interior packaging, the sample unit shall be one shipping container fully prepared for delivery, selected at random just prior to the closing operations. Sampling shall be in accordance with MIL-STD-105. Defects of closure listed 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 with an acceptable quality level (AQL) of 4.0 defects per hundred units.

TABLE II. Classification of preparation for delivery defects

Examine	Defects
Markings (exterior and interior)	Omitted; incorrect; illegible; improper size, location, sequence, or method of application.
Materials	Any component missing or damaged.
Workmanship	Inadequate application of components such as incomplete closure of container flaps, loose strapping, inadequate strapping. Distortion of container.

5. PREPARATION FOR DELIVERY

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

5.1.1 Level A. Unless otherwise specified (see 6.1), wall base of like description shall be packaged flat in quantities in accordance with the supplier's commercial practice in a close-fitting box conforming to PPP-B-636, class weather-resistant. The box shall be closed in accordance with the appendix to the box specification.

5.1.2 Level B. Unless otherwise specified

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(see 6.1), wall base of like description shall be packaged flat in quantities in accordance with the supplier's commercial practice in a close-fitting box conforming to PPP-B-636, class domestic. The box shall be closed with two strips of tape conforming to PPP-T-76, on top and bottom seams.

5.1.3 Level C. The wall base shall be packaged in accordance with the supplier's commercial practice.

5.2 Packing. Packing shall be level A, B, or C as specified in the invitation for bids (see 6.1).

5.2.1 Level A. Wall base of like description shall be packed in close-fitting boxes conforming to PPP-B-585, class 3; PPP-13-591, class II; PPP-B-601, overseas type; PPP-B-621, class 2; or PPP-B-640, class 2, grade A. The gross weight of the triple wall fiberboard box and the wood boxes shall not exceed 200 pounds. Strapping shall be in accordance with the appendix to the applicable box specification.

5.2.2 Level B. Wall base of like description shall be packed in close-fitting boxes conforming to PPP-B-585, class 1; PPP-B-591, class 1; PPP-B-601, domestic type; or PPP-B-621, class 1. The gross weight shall not exceed 150 pounds.

5.2.3 Level C. The wall base shall be packed to insure carrier acceptance and safe delivery to destination in containers complying with the rules and regulations applicable to the mode of transportation.

5.3 Marking.

5.3.1 Civil agencies. In addition to markings 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 activities. In addition to markings required by the contract or order, the packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents (see 3.2.1, 3.4.1, 4.1, 4.2, 5.1.1, and 5.1.2).

- (a) Title, number, and date of specification.
- (b) Type, style, height, thickness, and length (see 1.2 and 3.6).
- (c) Exposed surface, if other than specified.
- (d) Color, if other than specified.
- (e) Levels of packaging and packing (see 5.1 and 5.2) and marking (see 5.3).

6.2 In case of dispute, chlorine content of vinyl plastic wall base, type II, should be determined by ASTM D 1303-55.

6.3 Color. Wall base is commercially available in a variety of colors and the purchasing officer may specify the color if other than black is

desired. There is no practical method of obtaining the color desired except that of having the material delivered match the color of a sample mutually agreed upon by the purchaser and supplier. This may be accomplished by requiring bidders to submit a sample of each color.

STYLE A  
STRAIGHT WALL BASE

STYLE B  
COVE WALL BASE

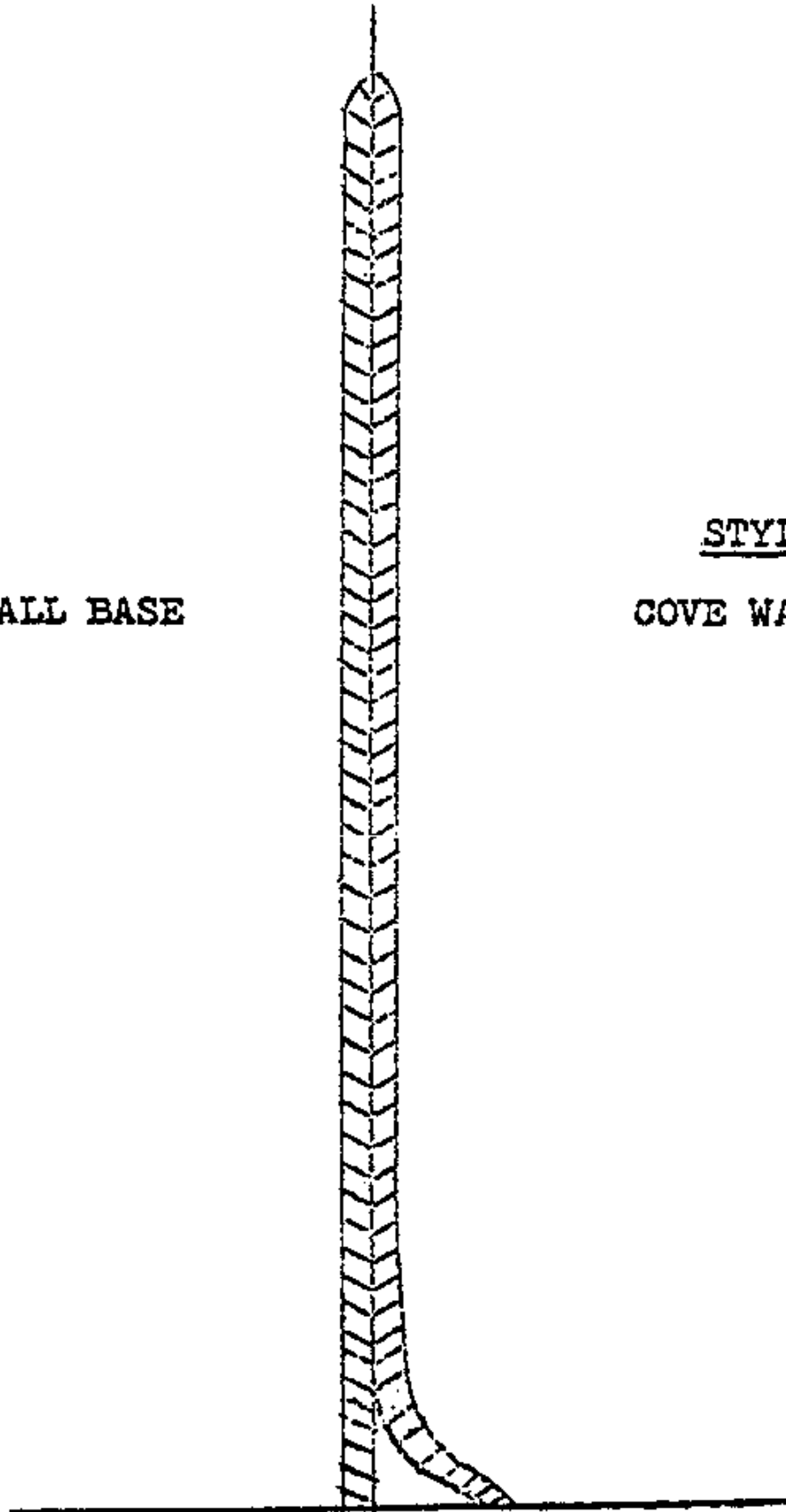


FIGURE 1. Typical profiles of wall base

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 5 cents each.

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SS-W-40A  
Interim Amendment-1 (GSA-FSS)  
September 25, 1970

INTERIM AMENDMENT

TO

FEDERAL SPECIFICATION

WALL BASE: RUBBER, AND VINYL PLASTIC

This Interim Amendment was developed by the Standardization Division, Federal Supply Service, General Services Administration, Washington, D. C. 20406, based on 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 Services Administration has authorized Federal agencies to use this amendment as a valid exception to Federal Specification SS-W-40A, dated March 28, 1966.

PAGE 1

Paragraph 1.2.1 - delete in its entirety and substitute:

1.2.1 Types and classes. Wall base shall be of the following types and classes, as specified (6.1).

Type I - Rubber.

Type II - Vinyl plastic.

Class 1 - Vinyl chloride.

Class 2 - Vinyl acetate.

PAGE 2

Paragraph 3.1.2 - delete in its entirety and substitute:

3.1.2 Vinyl plastic.

3.1.2.1 Vinyl chloride. The vinyl plastic compound used in the manufacture of type II, class 1, wall base shall be a thoroughly blended composition of thermoplastic binder, filler, and pigments stabilized against heat and light deterioration. The binder shall consist of plasticizer and resin; the resin portion shall be polyvinyl chloride or a copolymer of vinyl chloride having a chlorine content of not less than 45 percent (6.2). The material shall be free from offensive odor.

3.1.2.2 Vinyl acetate. The vinyl plastic compound used in the manufacture of type II, class 2, wall base shall be made from resins made by the polymerization of vinyl acetate or copolymerization of vinyl acetate with other unsaturated compounds, the vinyl acetate being the greatest amount by weight. The material shall be free from offensive odor.

PAGE 3

Paragraph 4.2.1 - line 3 - after "type," insert "class,".

PAGE 4

TABLE I - add the following in the columns specified:

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Characteristic	Requirement paragraph	Method No.	Paragraph reference
Material identification	3.1.1, 3.1.2.1, and 3.1.2.2	[4]	-

TABLE I - Change footnote references in and below table from "a", "b", and "c" to "[1]", "[2]", and "[3]", respectively.

TABLE I - add new footnote [4] below table as follows:

[4] Acceptance of this characteristic shall be based on a supplier's certificate of compliance.

PAGE 5

Paragraph 4.5 - delete in its entirety and substitute:

4.5 Compliance criteria. Compliance of the lot, with respect to inspection and tests, shall be as follows:

A lot is considered to meet the requirements of this specification and should be accepted if both of the following conditions are met.

- a. The lot is acceptable with respect to visual and dimensional requirements.
- b. The lot is found to meet the requirements for tests under application of table II, Section 5 of Fed. Test Method Std. No. 501.

A lot is considered as having failed to meet the requirements of this specification if one or both of the conditions in subparagraphs a and b listed above fails to be fulfilled.

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Paragraph 6.1 - subparagraph (b) - after "Type," insert "class (as applicable),".

&lt;UT&gt;

SS-W-40A  
NOTICE-1  
June 7, 1974

FEDERAL SPECIFICATION

WALL BASE: RUBBER, AND VINYL PLASTIC

This notice was approved by the Commissioner, Federal Supply Service, General Services Administration.

This notice is issued to correct the Federal Supply Class on Federal Specification SS-W-40A, dated March 28, 1966, and Interim Amendment-1 (GSA-FSS), dated September 25, 1970.

On page 1, change FSC 7220 to FSC 5680.

FSC 5680