FEDERAL SPECIFICATION
TILE, FLOOR: ASPHALT, RUBBER, VINYL
VINYL-ASBESTOS

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

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers four types of resilient non-textile floor tiles.

1.2 Classification. The floor tile shall be of the following types, as specified (see 6.2):

   Type I - Asphalt.
   Type II - Rubber.
   Type III - Vinyl.
   Type IV - Vinyl-asbestos.

2. APPLICABLE DOCUMENTS

2.1 The following documents, 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:

   PPP-B-636 - Box, Shipping, Fiberboard.
   PPP-B-640 - Boxes, Fiberboard, Corrugated, Triple-Wall.

Federal Standards:

   Fed Std. No. 123 - Marking for Domestic Shipment (Civil Agencies).
(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, DC 20402.

(Single copies of this specification are other Federal 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, DC, Atlanta, Chicago, Kansas City, MO, Dallas, Denver, San Francisco, Los Angeles, and Seattle, WA.

(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.
MIL-STD-147 - Palletized and Containerized Unit Loads.

(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 a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM):

F142 - Indentation of Resilient Floor Coverings (McBurney Test).

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

National Motor Freight Traffic Association, Inc. Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Association, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)
Uniform Classification Committee, Agent:

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Tariff Publishing Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.

3. REQUIREMENTS

3.1 Material.

3.1.1 Type I - asphalt. The tile shall be composed of a thermoplastic binder, asbestos fibers, mineral fillers, and pigments. The binder shall consist of asphaltic or resinous type materials.

3.1.2 Type II - rubber. The tile shall be a compound of natural rubber or synthetic rubber, alone or in combination. The coloring matter shall be of good quality, insoluble in water, and resistant to alkali, cleaning agents, and light.

3.1.3 Type III - vinyl. The tile shall be a vinyle plastic consisting of a blended composition of a binder, fillers, and pigments stabilized against heat and light deterioration. The binder shall consist of one or more vinyl resins and plasticizer which shall be not less than 34 percent by weight of the tile. The vinyl resins shall be a polyvinyl chloride or a copolymer of vinyl chloride not less than 85 percent of which is vinyl chloride. The vinyle resin shall be not less than 60 percent by weight of the binder. A clear protective coating not exceeding 0.0005 inch (.0127 millimeter (mm)) thick may be applied to the floor covering. When exposed to the solvents specified in 3.12.2, the protective coating shall not lessen the action of the solvents on the floor covering.

3.1.4 Type IV - vinyl-asbestos. The tile shall be composed of a thermoplastic binder, asbestos fibers, mineral fillers, and pigments. The binder shall consist of polyvinyl chloride resins or a copolymer resin compounded with suitable plasticizers and stabilizers.

3.2 Color, pattern, and wearing surface. The color, pattern, and wearing surface, as applicable shall be as specified in the contract or order (see 6.2).

3.2.1 Plain color tile. The color of the wearing layer of plain color tile shall be uniform throughout. Plain color tile may be through pattern or surface pattern.
SS-T-312B

3.2.2 Through pattern tile. In through pattern tile, the patterning shall be distributed and worked throughout the thickness of the tile. In mottled and marbleized tile (see 6.3), the marbleizing and mottling shall be worked throughout the thickness of the tile.

3.2.3 Surface pattern tile. The pattern of this tile need not extend through the entire thickness of the tile, and may be decorated, embossed, or both (see 6.4).

3.2.3.1 The appearance of the tile, when the wearing layer is removed to a depth of 0.010-inch (0.25 mm), shall compare favorably for decoration with the tile’s original appearance. The removal of the wear layer may be accomplished by any suitable means.

3.2.3.2 The depressed areas of embossed tile shall involve no more than one-third of the original, flat tile surface area prior to embossing as measured on a full tile. On embossed tile, there shall be no depressed area into which a 5/8-inch (15.875 mm) diameter circle can be placed, except that this shall not apply to tiles that have an overall embossed surface, such as brick, slate, or other textures.

3.3 Size. Unless otherwise specified (see 6.2), the tile shall be 9 inches by 9 inches (228.6 by 228.6 mm) or 12 inches by 12 inches (305 by 305 mm). A tolerance of +/-0.016 inch (0.406 mm) per foot shall be permitted.

3.4 Thickness. Unless otherwise specified (see 6.2), type I and II shall be furnished in 1/8-inch (3.175 mm) thinkness. Type III shall be furnished in 1/16-inch (1.58 mm), 0.080-inch (2.03 mm) and 1/8-inch (3.175 mm) thickness. Type IV shall be furnished in 1/16-inch (1.58 mm), 3/32-inch (2.381 mm), and 1/8-inch (3.175 mm) thickness. A tolerance of +/-0.005-inch (0.127 mm) shall be permitted.

3.5 Indentation.

3.5.1 Type I. When tested in accordance with 4.4.2, at a temperature of 77 deg Fahrenheit (F) (25 deg centigrade (C)), the indentation at the end of 1 minute shall be not less than 0.006 inch (0.152 mm), and not more than 0.015 inch (0.381 mm).

3.5.1.1 When tested in accordance with 4.4.2, the indentation at the end of 10 minutes shall be as required in table I, and shall correspond to the indentation recorded at the end of 1 minute.
Table I. Ten minute indentation (type I)

<table>
<thead>
<tr>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.006</td>
<td>.152</td>
<td>0.0100</td>
<td>.254</td>
<td>0.011</td>
<td>.279</td>
<td>0.0166</td>
<td>.422</td>
</tr>
<tr>
<td>.007</td>
<td>.178</td>
<td>.0114</td>
<td>.289</td>
<td>.012</td>
<td>.304</td>
<td>.0178</td>
<td>.452</td>
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<tr>
<td>.008</td>
<td>.203</td>
<td>.0127</td>
<td>.322</td>
<td>.013</td>
<td>.330</td>
<td>.0190</td>
<td>.482</td>
</tr>
<tr>
<td>.009</td>
<td>.228</td>
<td>.0140</td>
<td>.355</td>
<td>.014</td>
<td>.355</td>
<td>.0202</td>
<td>.513</td>
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<tr>
<td>.010</td>
<td>.254</td>
<td>.0153</td>
<td>.389</td>
<td>.015</td>
<td>.381</td>
<td>.0214</td>
<td>.543</td>
</tr>
</tbody>
</table>

3.5.1.2 When tested in accordance with 4.4.2, at a temperature of 115 deg F (46.1 deg C), the indentation shall be less than 0.036 inch (0.914 mm) at the end of 30 seconds.

3.5.2 Type III. When tested as described in 4.4.2, the average residual indentation at the end of 60 minutes recovery shall not exceed 8 percent, and the maximum residual indentation of any single specimen shall not exceed 10 percent.

3.5.3 Type IV. When tested in accordance with 4.4.2, at a temperature of 77 deg F (25 deg C), the indentation at the end of 1 minute shall be not less than 0.006 inch (0.152 mm), and not more than 0.015 inch (0.381 mm).

3.5.3.1 When tested in accordance with 4.4.2, the indentation at the end of 10 minutes shall be as required in table II, and shall correspond to the indentation recorded at the end of 1 minute.

Table II. Ten minute indentation (type IV)

<table>
<thead>
<tr>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
<th>Inch</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.006</td>
<td>.152</td>
<td>0.0100</td>
<td>.254</td>
<td>0.011</td>
<td>.279</td>
<td>0.0162</td>
<td>.411</td>
</tr>
<tr>
<td>.007</td>
<td>.178</td>
<td>.0112</td>
<td>.284</td>
<td>.012</td>
<td>.304</td>
<td>.0174</td>
<td>.442</td>
</tr>
<tr>
<td>.008</td>
<td>.203</td>
<td>.0124</td>
<td>.314</td>
<td>.013</td>
<td>.330</td>
<td>.0186</td>
<td>.472</td>
</tr>
<tr>
<td>.009</td>
<td>.228</td>
<td>.0137</td>
<td>.348</td>
<td>.014</td>
<td>.355</td>
<td>.0197</td>
<td>.500</td>
</tr>
<tr>
<td>.010</td>
<td>.254</td>
<td>.0149</td>
<td>.378</td>
<td>.015</td>
<td>.381</td>
<td>.0209</td>
<td>.531</td>
</tr>
</tbody>
</table>

3.5.3.2 When tested in accordance with 4.4.2, at a temperature of 115 deg F (46.1 deg C), the indentation shall be less than 0.032 inch (0.813 mm) at the end of 30 seconds.

3.6 Hardness, type II. The tile shall have a durometer hardness of not less than 90 when subjected to the test specified in 4.4.2.
3.7 Modulus at 10 percent elongation, type II. When tested in accordance with 4.4.2, the tensile stress at 10 percent elongation shall be not less than 400 pounds per square inch, (2.757 MN/m²).

3.8 Impact, types I and IV. The tile shall not break or crack when subjected to the impact test specified in 4.4.2.

3.9 Deflection.

3.9.1 Type I. When tested in accordance with 4.4.2, the tile shall deflect not less than 0.4 inch (10.16 mm), both across and with the grain, without breaking.

3.9.2 Type IV.

3.9.2.1 Before heating. When tested in accordance with 4.4.2, the tile shall deflect not less than 1.0 inch (25.4 mm), both across and with the grain, without breaking.

3.9.2.2 After heating. The tile, after having been subjected to heat as described in method 6211, of Fed. Std. No. 501, and then after being tested in accordance with 4.4.2 shall meet the requirements of 3.9.2.1.

3.10 Flexibility.

3.10.1 Type III.

3.10.1.1 Before heating. When tested in accordance with 4.4.2, the tile shall not crack, break, or show any indication of weakness.

3.10.1.2 After heating. The tile, after having been subjected to heat as described in method 6211, Fed. Std. No. 501, and then after being tested as described in 4.4.2 shall meet the requirements of 3.10.1.1.

3.11 Dimensional stability, types III and IV. When tested in accordance with 4.4.2, type III shall not change in linear dimensions more than 0.020 inch (0.508 mm) per linear foot. Type IV shall not change in linear dimensions more than 0.024 inch (0.609 mm) per linear foot.

3.12 Resistance to reagents.

3.12.1 Type I. When tested in accordance with 4.4.2, the width of the scratch shall not exceed 0.10 inch (2.54 mm) after immersion in a 5 percent solution of sodium hydroxide.

3.12.2 Type III. When tested in accordance with 4.4.2, the width of the scratch shall not exceed 0.10 inch (2.54 mm) after immersion in 95 percent ethyl alcohol, tallow, mineral oil, and cotton seed oil, and shall not exceed 0.125 inch (3.175 mm) after immersion in a 5 percent solution of sodium hydroxide.
3.12.2.1 The specimens of tile exposed to the reagents enumerated in 3.12.2, as specified in 4.4.2, shall show no appreciable change in hue when compared visually with unexposed material.

3.12.3 Type IV. When tested in accordance with 4.4.2, the width of the scratch shall not exceed 0.10 inch (2.54 mm) after immersion of specimens in 95 percent ethyl alcohol, tallow, mineral oil, vegetable oil, kerosene and 5 percent solution of sodium hydroxide.

3.13 Volatility, type IV. When tested in accordance with 4.4.2, the loss of volatile materials shall not exceed 0.5 percent.

3.14 Curl, type I. When tested in accordance with 4.4.2, the curl in the tile shall not exceed 0.030 inch (0.762 mm).

3.15 Squareness. When tested in accordance with 4.4.2, the out-of-squareness of the tile shall not exceed 0.010 inch (0.254 mm).

3.16 Workmanship. The floor tile shall be smooth, where applicable, and free of cracks, embedded foreign matter, and broken edges. It shall have no delamination of layers.

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 requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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 supplies and services conform to prescribed requirements.

4.1.1 Terms and definitions. Terms and definitions for the examinations and tests described herein shall be in accordance with the definitions of Fed. Test Method Std. No. 501.

4.2 Lot. Unless otherwise specified (see 6.2), the lot shall be formed as described in section 5 of Fed. Test Method Std. No. 501.

4.3 Sampling.

4.3.1 Sampling for examination. Unless otherwise specified (see 6.2), the sample for examination shall be selected as described in section 5 of Fed. Test Method Std. No. 501.
4.3.1.1 Samples selected in accordance with 4.3.1 shall be subjected to a visual examination for requirements; such as length, width, thickness, color, and surface characteristics.

4.3.2 Sampling for tests. Unless otherwise specified (see 6.2), the samples for testing shall be selected as described in section 5 of Fed. Test Method Std. No. 501.

4.4 Tests. Each sample selected in accordance with 4.3.2 shall be tested as indicated in table III for the applicable type involved.

<table>
<thead>
<tr>
<th>Test</th>
<th>Reference</th>
<th>Method No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of wearing surface</td>
<td>3.1.3</td>
<td>Certificate of compliance [4]</td>
</tr>
<tr>
<td>Proportion of depressed area</td>
<td>3.2.3.2</td>
<td>Certificate of compliance</td>
</tr>
<tr>
<td>Size</td>
<td>3.3</td>
<td>2231</td>
</tr>
<tr>
<td>Thickness</td>
<td>3.4</td>
<td>2111, 2131 (see 4.4.3)</td>
</tr>
<tr>
<td>Indentation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Types I and IV (77 deg F)</td>
<td>3.5.1 and</td>
<td>3211, 3221, or ASTM F142</td>
</tr>
<tr>
<td></td>
<td>3.5.3</td>
<td></td>
</tr>
<tr>
<td>Types I and IV (115 deg F)</td>
<td>3.5.1.2</td>
<td>6311, 3221, or ASTM F142</td>
</tr>
<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5.3.2</td>
<td></td>
</tr>
<tr>
<td>Type III (residual)</td>
<td>3.5.2</td>
<td>3221</td>
</tr>
<tr>
<td>Hardness - type II</td>
<td>3.6</td>
<td>3511</td>
</tr>
<tr>
<td>Modulus - type II</td>
<td>3.7</td>
<td>4211</td>
</tr>
<tr>
<td>Impact - type I and IV (4.4.5) [1]</td>
<td>3.8</td>
<td>3311</td>
</tr>
<tr>
<td>Deflection - types I and IV</td>
<td>3.9</td>
<td>3131</td>
</tr>
<tr>
<td>Flexibility - type III (using 1-inch mandrel)</td>
<td>3.10</td>
<td>3111</td>
</tr>
<tr>
<td>Dimensional stability:</td>
<td>3.11</td>
<td>6211</td>
</tr>
<tr>
<td>Resistance to reagents:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Types I, III, and IV [2]</td>
<td>3.12</td>
<td>7711</td>
</tr>
<tr>
<td>Volatility - type IV</td>
<td>3.13</td>
<td>9211</td>
</tr>
<tr>
<td>Curl - type I</td>
<td>3.14</td>
<td>3411</td>
</tr>
<tr>
<td>Squareness [3]</td>
<td>3.15</td>
<td>2411 or 2421</td>
</tr>
</tbody>
</table>

[1] The zinc oxide paste specified in method 3311 of Fed. Std. No. 501 shall not be used on embossed tiles. Instead a 3 +/-1/8-inch (76 +/-3.175 mm) diameter circle shall be inscribed centrally on each specimen with a felt pen, pencil, or other suitable marker.

[2] Where there is sufficient raised flat area on an embossed tile for at least a 2-inch (50.8 mm) scratch, method 7711 of Fed. Std. No. 501.
shall be used on the embossed tile. Otherwise, resistance to reagents for embossed tile shall be determined on unembossed stocks with the same formulation as the embossed tile and covered by the manufacturer’s certificate of compliance.


[4] The certificate shall be accompanied by verifiable quality data.

4.4.1 Conditioning of specimen for physical tests. Unless otherwise specified in the method of the test, the sample shall be conditioned as specified in method 1041 of Fed. Std. No. 501.

4.4.2 The test methods shall be conducted in accordance with Fed. Std. No. 501 and ASTM F142.

4.4.3 Thickness. The thickness of embossed or textured patterned tile shall be determined by method 2121 of Fed. Std. No. 501 with the following exceptions; the anvil shall not be less than 1.0 inch (25.4mm) in diameter and the total force to be applied shall be 4.0 ounces (1.11 N). No measurement shall be made nearer than 3/4 inch (19.05 mm) to a cut edge and at least five points should be measured and averaged.

4.4.3.1 Conditions for depth of depressed areas. When specified (see 6.2), the depth of the depressed areas shall be measured by means of a depth gage. The bearing point of the pin shall be hemispherical in shape, approximately 0.0312 inches (7.938 mm) in diameter. The gage shall be zeroed on a smooth steel or glass plate. Five measurements shall be made in the deepest area on each test unit allowing for a minimum of one measurement per side; the largest reading obtained shall be the maximum depressed depth of that test unit.

4.4.4 Conditions for indentation test. If the conditions given in 4.4.4.1 and 4.4.4.2 cannot be met, indentation tests for embossed tile shall be determined on unembossed stocks and covered by the manufacturer’s certificate of compliance.

4.4.4.1 In the spherical indentation test for type I and type IV embossed materials, tile should be tested only on raised, flat portions of the surface. The areas tested must be large enough so that a circle at least 5/16 inch (7.93 mm) in diameter can be drawn thereon. When method 3211 is selected, use exactly as written in Fed. Std. No. 501. If method 3221 is selected, a hemispherical point, 0.25 +/-0.0005 inch (6.35 +/-0.0127 mm) in diameter shall be used at the lower end of the indenter; a total dead weight load of 30.00 +/-0.25 pounds (13.60 kilograms (kg) +/-0.1134 kg) shall be used; readings shall be taken at 60 +/-1 second and 600 +/-5 seconds at a temperature of 77 deg F (25 deg C), and at 30 +/-1 second at a temperature of 115 deg F (46.1 deg C). If ASTM F142 is used, all other conditions are given in that test method.
4.4.4.2 Type III shall be tested for residual indentation using a total of 140 pound (63.5 kg), and a time of 10 minutes with a recovery of 60 minutes. Embossed the III floor tile shall be tested only on the raised flat portion of the surface. The flat bottom surface of the indentation tip must rest completely on the flat surface of the tile. The areas tested must be large enough so that a circle with at least a 3/8-inch (9.525 mm) diameter can be drawn thereon.

4.4.5 Conditions for impact test. Type I tile shall be tested with a 0.143 pound (.065 kg) weight dropped twice from a height of 4-1/4 inches (107.95 mm). Type IV tile, one-eighth (3.175 mm) shall be tested with a 0.143 pound (.065 kg) weight dropped four times from a height of 20 inches (508 mm). For tiles less than one-eighth, the height shall be 10 inches (254 mm). When testing embossed tile, the embossed surface shall be placed face-up, and the back of the tile shall be examined for breaks and cracks.

4.5 Inspection of preparation for delivery. An inspection shall be made to determine whether the packing and marking comply with the requirements in section 5 of this specification. Defects shall be scored in accordance with table IV. 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 lot shall be S-2 with an Acceptable Quality Level of 4.0 defects per hundred units.

Table IV. Classification of preparation for delivery defects

<table>
<thead>
<tr>
<th>Examine</th>
<th>Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking</td>
<td>Omitted; incorrect; illegible, improper size, location, sequence, or method of application.</td>
</tr>
<tr>
<td>Material</td>
<td>Any component missing or damaged.</td>
</tr>
<tr>
<td>Workmanship</td>
<td>Inadequate application of components, such as incomplete closure of container flaps, loose strapping, or distortion of container.</td>
</tr>
<tr>
<td>Contents</td>
<td>Number of tiles per container is more or less than required. Gross weight exceeds box specification requirements.</td>
</tr>
</tbody>
</table>

5. PREPARATION FOR DELIVERY

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

5.1.1 Level A. The tile shall be packed in quantities as specified (see 6.2), in close-fitting boxes conforming to PPP-B-636, grade V2s or PPP-B-640, class 2. The boxes shall be closed, waterproof sealed, and strapped in accordance with the applicable box specification and appendix thereto.
5.1.2 Level B. The tile shall be packed in quantities as specified (see 6.2), in close-fitting boxes conforming to PPP-B-636, grade V3c or PPP-B-640, class 1. Closure of boxes shall be in accordance with the applicable box specification and appendix thereto.

5.1.3 Level C. The tile shall be packed in a manner which will insure arrival at destination in satisfactory condition and be acceptable to the carrier at lowest rates. Containers and packing shall comply with Uniform Freight Classification rules or National Motor Freight Classification rules.

5.2 Palletization. When specified (see 6.2), the tile packed as specified in 5.1 shall be palletized in accordance with MIL-STD-147.

5.3 Marking. Marking shall be in accordance with 5.3.1 or 5.3.2 as specified (see 6.2).

5.3.1 Civil agencies. In addition to the special markings required by the contract, each box shall be marked in accordance with Fed. Std. No. 123 and shall include the size, gage, number of pieces, coverage in square feet, and pattern.

5.3.2 Military agencies. In addition to the special markings required by the contract, each box shall be marked in accordance with MIL-STD-129, and shall include the size, gage, number of pieces, coverage in square feet, and pattern.

5.3.3 Special markings. In addition to the markings required by 5.3.1 or 5.3.2, each box shall be marked "THIS SIDE UP" or such other appropriate markings to prevent stacking tile on edge while in transit or in storage.

6. NOTES

6.1 Intended use. The tiles covered by this specification are intended primarily as floor covering, but may also be used for wall covering.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

(a) Title, number, and date of this specification.
(b) Type, color pattern, and wearing surface (see 1.2 and 3.2).
(c) Size required (see 3.3).
(d) Thickness required (see 3.4).
(e) Lot formation if other than as specified (see 4.2).
(f) Sampling if other than as specified (see 4.3.1 and 4.3.2).
(g) Depth of depressed areas if required (see 4.4.3.1).
(h) Level of packing required (see 5.1, 5.1.1, and 5.1.2).
(i) When palletization is not required (see 5.2).
(j) Marking required (see 5.3).

6.3 Marbleized and mottled floor tile that meet the requirements of this specification refer to any tile that is veined, spotted, or clouded with irregular or random markings similar to the imitation of marble. The terms marbleized and mottled tile do not include tile with chip or chip-like markings of a relatively uniform or repeated geometric pattern.

6.4 When specifying Surface Pattern Tile (smooth or embossed), the tile should be selected based on the following: Standard or service (1/16-inch) gage is for use in light traffic areas; 3/32-inch and 1/8-inch tile are for use in commercial areas, or in household and residential quarters.

MILITARY CUSTODIANS:                               Preparing activity:

Navy - YD
Air Force - 84

Project No. 7220-0072

User activities:

Civil Agency Coordinating Activities:

Army - CE
Navy - MC, CG

GSA - FSS
HEW
AGR
NBS
INTERIM AMENDMENT

TO

FEDERAL SPECIFICATION

TILE, FLOOR: ASPHALT, RUBBER, VINYL, VINYL-ASBESTOS

This interim amendment was developed by the Naval Facilities Engineering Command, Naval Construction Battalion Center, Port Hueneme, CA 93043, based upon current 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 the use of this interim amendment as a valid exception to Federal Specification SS-T-312B, dated October 10, 1974.

PAGE 1

TITLE: Delete title and substitute: "TILE, FLOOR: ASPHALT, RUBBER, VINYL, AND VINYL COMPOSITION".

1.2: Delete lines 3 through 6 and substitute:

"Type I - Asphalt.

Type II - Rubber.

Type III - Vinyl.

Type IV - Vinyl composition.
  Composition 1 - Asbestos-free.
  Composition 2 - With asbestos fibers."

PAGE 3

3.1.4: Delete paragraph and substitute:

"3.1.4 Type IV - vinyl composition. The tile shall be composed of binder, mineral fillers, and pigments (see 1.2). The binder shall consist of one or more resins of polyvinyl chloride or vinyl chloride copolymers, compounded with plasticizers and stabilizers."

PAGE 6

3.8: Delete "break or crack", and substitute "break or crack, beyond the prescribed limit, ".

FSC 7220
Table III, footnote 1, line 3: After "centrally on", add "the back of".

4.4.5: last line" After "cracks", add "beyond the prescribed limit".

5.3.1 and 5.3.2: In line 3, delete "gage" and substitute "dimensional gage". In line 4, delete "and pattern", and substitute "pattern, and specification designation, type, and composition (as applicable)."

6.2(b): Delete paragraph and substitute:

"(b) Type, color, pattern, and wearing surface, and for type IV, composition, or whether either composition is acceptable (see 1.2 and 3.2)."

Preventing activity:

Navy - YD Project No. 7220-N215
NOTICE OF VALIDATION

FEDERAL SPECIFICATION

TILE, FLOOR: ASPHALT, RUBBER, VINYL, VINYL-ASBESTOS

SS-T-312B INTERIM AMENDMENT 1(YD), dated 14 November 1979, has been reviewed and determined to be valid for use in acquisition.

MILITARY INTERESTS:
Army - CE
Navy - YD
Air Force - 99

Civil Agency Coordinating Activity:
GSA-FSS

Preparing Activity:
Navy - YD

User activities:
Navy - MC, CG

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.
FEDERAL SPECIFICATION

TILE, FLOOR; ASPHALT, RUBBER VINYL, VINYL-ASBESTOS

SS-T-312B INT. AMENDMENT 1(YD), dated 14 November 1979, has been reviewed and determined to be valid for use in acquisition.

MILITARY INTERESTS: CIVIL AGENCY COORDINATING ACTIVITY:

Custodians: GSA-FSS

Army - CE
Navy - YD
Air Force - 99

PREPARING ACTIVITY:
Navy - YD

User Activities:
Navy - CG, MC

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.