MILITARY SPECIFICATION

WALKWAY COMPOUND, NONSLIP, AND WALKWAY MATTING, NONSLIP

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers nonslip walkway materials.

1.2 Classification. Walkway materials shall be of the following types, as specified (see 6.2).

TYPE I	Coating, smooth texture (without grit) (primarily for brush application).
TYPE II	Coating, rough texture (with grit) (primarily for brush application)
TYPE III	Matting (for use with separate liquid adhesive)

Class I - Fine Grade
Class II - Medium Grade
Class III - Coarse Grade

TYPE IV	Conformable matting (pressure sensitive adhesive applied)

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 the specification to the extent specified herein.

SPECIFICATIONS

Federal

KK-L-165	Leather, Cattlehide, Vegetable-Tanned, and Soles, Leather
QQ-A-250/5	Aluminum Alloy Plate and Sheet, Alclad 2024
TT-M-261	Methyl-Ethyl-Ketone (for Use in Organic Coatings)
TT-S-735	Standard Test Fluids, Hydrocarbon
UU-P-268	Paper, Kraft, Untreated, Wrapping
PPP-B-585	Boxes, Wood, Wirebound
PPP-B-601	Boxes, Wood, Cleated-Plywood
PPP-B-621	Boxes, Wood, Nailed and Lock-Corner
PPP-T-45	Tape, Gummed, Paper, Reinforced and Plain, for Sealing and Securing
PPP-C-96	Cans, Metal, 28 Gage and Lighter

Military

MIL-W-1511	Wire Rope, Steel (Carbon) Flexible, Preformed
MIL-A-5092	Adhesive, General Purpose, Synthetic and Reclaimed, or Natural Rubber Base
MIL-P-6808	Primer Coating, Zinc Chromate, for Aircraft Use; Application of
MIL-R-6855	Rubber, Synthetic, Sheet, Molded and Extruded, for Aircraft Application
MIL-C-8507	Coating, Wash Primer (Pretreatment), for Metals, Application of
MIL-C-8514	Coating Compound, Metal Pretreatment, Resin-Acid
MIL-P-8585	Primer Coating, Zinc Chromate, Low Moisture Sensitivity
MIL-A-8625	Anodic Coatings for Aluminum and Aluminum Alloys

STANDARDS

Federal

FED TEST METHOD STD NO 141	Paint, Varnish, Lacquer and Related Materials, Methods of Inspection, Sampling and Testing
FED-STD-595	Colors
FED TEST METHOD STD NO 601	Rubber: Sampling and Testing

Military

MIL-STD-129	Marking for Shipment and Storage

(Copies of specifications, standards, drawings and publications required by suppliers 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.

Air Pollution Control District - County of Los Angeles, Calif.

Rule 66

(Application for copies should be addressed to Air Pollution Control District, County of Los Angeles, 434 San Pedro Street, Los Angeles, Ca 90013.)

3. REQUIREMENTS

* 3.1 Preproduction. This specification makes provisions for preproduction testing.

3.2 Materials. Materials shall be as specified herein. Materials not specified shall be selected by the contractor and shall be subject to all provisions of this specification. The nature of the grit used in the material shall be such that it will not, during use, be forced through the coating to the underlying metal and scratch the surface thereof.

* 3.2.1 Types I and II. Type I and II coatings shall be of brushable consiste cy. The Type I coating shall be free from grit, whereas Type II coating shal contain grit as an integral part of the coating.

* 3.2.2 Type III. The Type III matting shall consist of a uniformly coated fabric with an abrasive grit bonded to the upper surface of the fabric. The back of the matting shall be precoated with a suitable oil and fuel-resistant adhesive. The matting shall be capable of being applied with a separate liquid adhesive conforming to MIL-A-5092, Type III. Solvent used for wetting the adhesive coating for bonding shall be methyl-ethyl-ketone conforming to TT-M-261.

* 3.2.3 Type IV. The Type IV matting shall consist of a uniformly coated shee with an abrasive grit bonded to the upper surface. The back of the matting shall be precoated with a pressure sensitive adhesive and protected with an easily removable protective paper liner.

* 3.3 Thinning (Types I and II). The coating compound's consistency for satis factory application and specified coverage shall be controllable with adequat thinner meeting Government specifications.

3.4 Physical characteristics. The physical characteristics of the walkway material shall conform to the requirements specified in Table I.

* 3.4.1 Color. The color of the compound shall match a color chip as specifie in FED-STD-595, and shall be designated as, but not limited to the following: 37038, Black; 36231, Gray; 30109, Red; 36440, Gray; 34087, Olive Drab; 36081, Gray; 37875, White. Type IV matting shall be black only (see 6.2).

* 3.4.2 Appearance in container (Types I and II). There shall be no evidence of surface skins. Settled particles shall easily be incorporated on stirring to form a homogeneous mixture (see 4.7.4).

* 3.4.3 Mat roll size. Unless otherwise specified (see 6.2), Type III and Typ IV matting shall be furnished in rolls 60 feet long, width as specified.

3.5 Storage life. Walkway materials shall be satisfactory for use after 1 year storage under laboratory conditions. After storage, the walkway materia shall be capable of passing all specification requirements (see 4.6). Types and II coating compounds shall be capable of being thinned in accordance wit the manufacturer's instructions.

3.6 Workmanship. The compounds and mats shall be free of extraneous or harm ful materials. Containers of compound shall be completely filled and rolls o mat shall be of the width specified.

* 3.7 Rule 66. Types I and II shall comply with the applicable provisions of Air Pollution Control District - County of Los Angeles, California, Rule 66 (see 4.8).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contra or purchase order, the supplier is responsible for the performance of all

TABLE I
PHYSICAL CHARACTERISTICS

Property		Type I	Type II	Type III Class I	Type III Class II	Type III Class III	Type IV
Total solids	percent (min)	60	50	--	--	--	--
Weight	oz/sq yd	15 to 20	20 to 25	1/ 30 (max)	1/ 40 (max)	1/ 55 (max)	25 (max)
Thickness	inch (max)	--	--	0.032	0.047	0.066	0.039
Drying time							
Tack-free	minutes (max)	15	15	--	--	--	--
Dry for recoating	minutes (max)	30	30	--	--	--	--
Dry through	hours (max)	6	6	--	--	--	--
Full hardness	hours (max)	24	24	--	--	--	--
Water extraction	percent extraction (max)	5	5	--	--	--	--
Water resistance	percent change in weight	--	--	± 5	± 5	± 5	± 1
Adhesion	lb/in width, (min)	--	--	5	5	5	6
Factor of sliding friction (leather)							
Dry	(min)	0.45	0.50	0.60	0.60	0.60	0.60
Watered	(min)	0.60	0.80	1.00	1.00	1.00	1.00
Oiled	(min)	0.20	0.45	0.60	0.60	0.60	0.60
Factor of sliding friction (rubber)							
Dry	(min)	0.80	0.90	0.80	0.80	0.80	0.80
Watered	(min)	0.80	0.80	0.80	0.80	0.80	0.80
Oiled	(min)	0.35	0.60	0.60	0.60	0.60	0.60

Elevated temperature resistance	Shall not soften, or slip more than 1/16 inch
Flexibility and adhesion	Shall not crack, flake, or lose adhesion
Hydrocarbon fluid resistance	Shall not soften, blister, deteriorate, or lose adhesion
Oil resistance	Shall not soften, blister, deteriorate, or lose adhesion
Accelerated weather resistance	Shall not crack, check, discolor, or lose adhesion
Wear resistance	Shall not deteriorate or wear through the surface to the primer or metal at any point
Impact resistance	
Room temperature 70°F (24°C)	Shall not crack or lose adhesion
Low temperature -20°F (-29°C)	Shall not crack or lose adhesion

1/ Weight of MIL-A-5092, Type III adhesive included.

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 supplies and services conform to prescribed requirements.

* 4.2 Classification of tests. The testing of walkway materials shall be classified as follows:

a. Preproduction tests. Preproduction tests are tests performed on samples submitted for acceptance prior to production.

b. Acceptance tests. Acceptance tests are those tests performed on individual lots which have been submitted for acceptance.

4.3 Test conditions. Unless otherwise specified, test conditions for Types I and II coating materials shall be in accordance with Federal Test Method Standard No 141. Test conditions for Type III and IV matting shall be as specified herein.

* 4.4 Preproduction tests.

* 4.4.1 Sampling instructions. The test samples of each type of walkway material shall consist of the following amounts:

a. Types I and II - Four one-quart samples of each type.

b. Type III - A roll of matting 8 inches wide by 30 feet long and 1 quart of MIL-A-5092, Type III adhesive.

c. Type IV - A roll of matting 8 inches wide by 30 feet long

* 4.4.2 Tests. The tests of the walkway material shall consist of all the tests described under 4.6 for the applicable type of material.

4.5 Acceptance tests.

4.5.1 Inspection lot. For purpose of sampling, a lot shall consist of all walkway material of the same type, offered for delivery at the same time and place. A lot of Type I or II coating material shall consist of material manufactured as one batch.

4.5.2 Tests. The acceptance tests of the walkway materials shall consist of all the applicable tests of 4.6 except the wear resistance test (4.6.15).

4.5.3 Sampling. At least two 1-quart samples of Types I and II coating material shall be selected from each lot in accordance with Federal Test Method No 141, Method 1021. At least 2 square yards of Types III and IV matting shall be selected from each 500 square yards of material in the same lot or from any lot of less than 500 square yards.

* 4.5.4 Rejection criteria. Failure of any sample of walkway material to conform to any of the requirements of this specification shall be cause for rejection of the lot represented.

4.6 Test methods.

4.6.1 Preparation of test panels.

4.6.1.1 Condition of panels prior to application of walkway material. Unless otherwise specified, all panels of the size specified for the particular tests, shall be aluminum-clad alloy conforming to QQ-A-250/5 and anodized in accordance with MIL-A-8625. The panels shall be given one coat of wash primer conforming to MIL-C-8514, applied in accordance with MIL-C-8507. The panels shall then be coated with two coats of zinc-chromate primer conforming to MIL-P-6808.

4.6.1.2 Application of Types I and II coating. The coating shall be applied by brushing (not to exceed two coats) to attain a desired weight. If two coats are used, there shall be no more than a 30 minute waiting period between coats. Coated panels shall be conditioned for 72 hours prior to testing.

4.6.1.3 Application of Type III matting. Two brush coats of MIL-A-5092, Type III adhesive shall be applied to the panels allowing sufficient time for the adhesive to dry after each coat. The adhesive coating shall then be wetted with a small amount of methyl-ethyl-ketone conforming to TT-M-261, and when tacky, the surface shall be bonded with the matting and rolled down with a hand roller. Matting panels shall be conditioned for 72 hours prior to testing.

* 4.6.1.4 Application of Type IV matting. Remove protective paper liner and apply to panel. Position as a piece of tape, and use a rubber hand roller to firmly press material into tight contact with surface. When the surface is irregular as with diamond plate steel, a soft rubber mallet should be used to firmly bond the material. Matting panels shall be conditioned for 72 hours prior to testing.

4.6.2 Total solids (Types I and II). Total solids shall be determined in accordance with Method 4041 of Federal Test Method Standard No 141.

4.6.3 Weight (Types I and II). The difference of the weight of the primed panel and the finished panel shall be the weight of the walkway material expressed as ounces per square yard.

4.6.4 Appearance in container (Types I and II). This test shall be conducted in accordance with Method 4262 of Federal Test Method Standard No 141.

4.6.5 Drying time (Types I and II). This test shall be conducted in accordance with Method 4061 of Federal Test Method Standard No 141.

4.6.6 Water extraction (Types I and II) Four 2 by 3 inch panels shall be prepared as described in 4.6.1. Prior to the preparation of test panels, weight of primed panels shall be taken. The finished panel shall be placed in a desiccator for 16 to 24 hours and weighed. The panels shall then be immersed in distilled water for 24 hours at 75° ± 5° F (24° ± 3° C). The panels shall then be wiped dry with a soft, lintless cloth and placed in a desiccator until a constant weight is reached. The percentage extraction of the walkway material shall be calculated as follows:

$$\text{Percent extraction} = \frac{b - c}{b - a} \times 100 \qquad (1)$$

Where:

a = weight of primed panel
b = weight of finished panel before immersion
c = weight of finished panel after immersion

All weights shall be made to the nearest decigram and the average of two determinations reported.

4.6.7 Water resistance (Types III and IV).

4.6.7.1 Test specimens. Four 4 by 4 inch test specimens of matting material shall be cut and numbered 1 to 4. Specimens 1 and 2 shall be used for the solubility test, and specimens 3 and 4 shall be used as controls for determination of weight change, if any, owing to drying. Any weight change in controls shall be used for correcting weight of immersed specimens.

4.6.7.2 Procedure. The four specimens shall be dried in a Geer oven at 158° ± 2° F (70° ± 1° C) for 4 hours, cooled in a desiccator, and weighed to the nearest milligram. The weight of each specimen shall be recorded as W_o. Specimens 1 and 2 shall be immersed in distilled water for 24 hours. They shall then be dried at 158° ± 2° F (70° ± 1° C) for 4 hours in a Geer oven, cooled in a desiccator, and reweighed and the weight recorded as W_1. Type IV specimens shall be tested without the paper liner. Percent change in weight (uncorrected) shall be calculated as follows:

$$\text{Percent change in wt. (uncorrected)} = \frac{W_1 - W_o}{W_o} \times 100 \qquad (2)$$

Where:

W_o = initial weight
W_1 = final weight

To obtain corrected change in weight, average percent change of the two control specimens is subtracted algebraically from percent change in weight (uncorrected) as follows:

$$\text{Percent change in weight (corrected)} = A - B \qquad (3)$$

Where:

A = percent change in weight (uncorrected)
B = percent change in weight of control specimen

4.6.8 Adhesion (Types III and IV).

4.6.8.1 Specimen. Two 1/16 by 6 by 8 inch zinc chromate primed, anodized aluminum panels, with 2 by 12 inch matting specimens bonded to the panel, as described in 4.6.1, shall be used. The 2 inch matting strips shall be so bonded on the panels, 1/2 inch apart in the longer direction. that a 4 inch end shall be free (see Figure 1).

4.6.8.2 Apparatus. The apparatus shall consist of an autographic power driven inclination, pendulum, or strain-gage type testing machine. If an inclination or pendulum type is used, it shall be of such capacity that the tension during test shall not exceed 85 percent nor be less than 15 percent of the rated capacity. In the pendulum type machine, the weight lever shall swing as a free pendulum without engagement of pawls.

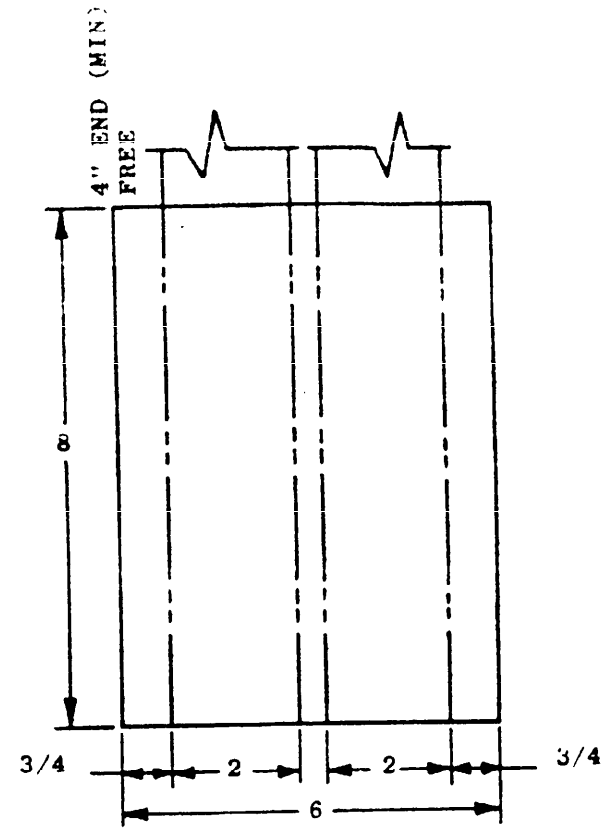
4.6.8.3 Procedure. The free end of the walkway material shall be clamped in the upper stationary jaw of the tensile machine and pulled at 90 degrees to the surface of the panel. The panel shall be held in the lower movable jaw with a suitable jig, as shown in Figure 1, devised to maintain the direction of the pull essentially perpendicular to the panel. The rate of travel of the power actuated grip shall be 1 inch per minute. The adhesive strength shall be reported as the numerical average of the specimens tested.

4.6.9 Factors of sliding friction.

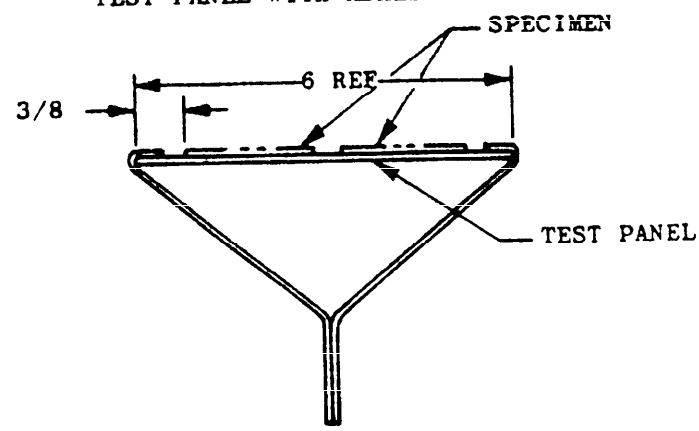
4.6.9.1 Specimen. Three 1/16 by 8 by 18 inch panels of each type, prepared as described in 4.6.1 shall be used.

4.6.9.2 Apparatus. Two pieces of sole leather conforming to KK-L-165, 1/4 by 1/2 by 10 inches, shall be so bonded to a block of maple wood 1 by 5 by 10.5 inches that the leather strips extend lengthwise symmetrically and 4 inches apart on the 5 by 10.5 inch face of the block. A thin brush coat of fuel and oil resistant adhesive conforming to MIL-A-5092, Type III, shall be applied to the 1/2 inch width of the leather skin surface and to the wood block and allowed to dry to the touch. A second coat shall be applied and dried. Both cement coated surfaces shall be wetted with the adhesive solvent and the surfaces bonded together when tacky. The adhered sections shall be rolled, and the assembly clamped firmly in a vise for 24 hours before use. The friction surfaces (flesh) shall be lightly buffed to assure uniformity. Five additional block assemblies, two with leather strips and three with rubber strips conforming to MIL-R-6855, Class II, Grade 80, shall be prepared similarly. Before each test run, the leather strips shall be sanded with 2/0 garnet paper and wiped clean of sanded particles with a cloth; the rubber strips shall not be sanded but wiped clean with a cloth. The table on which the test runs are made shall be level in all directions.

4.6.9.3 Procedure. The wooden block shall be weighted to a total load of 20 pounds, and a sufficient length of flexible steel cable conforming to MIL-W-1511 shall be attached to the wood block. The cable shall be so connected to the testing machine that it applies the load parallel to the walkway panel. Figure 2 shows schematically the apparatus used. The 20 pound weighted block shall be placed at the far end of the test panel, and the load required to pull it 7 inches across the panel at a speed of 20 inches per minute shall be recorded autographically. It shall be noted that load oscillations between static and dynamic friction could be minimized by momentarily holding the pendulum arm at the approximate average load and then releasing the arm. This usually produces more uniform recorded values. Friction tests shall be conducted on dry, watered and oiled surfaces. Oil used shall be Medium No 1 of Federal Test Method Standard No 601, Method 6001. Water and oil treating of the walkway surface shall consist of wetting the walkway and the friction block surfaces with approximately 200 to 300 milliliters of liquid, depending upon the type of surface. Separate panels shall be used for dry, watered, and oiled surface conditions. Friction blocks and dry conditions shall not be interchanged



TEST PANEL WITH ADHESIVE SPECIMENS



SPECIMEN HOLDER

DIMENSIONS IN INCHES.

FIGURE 1. Adhesive test jig.

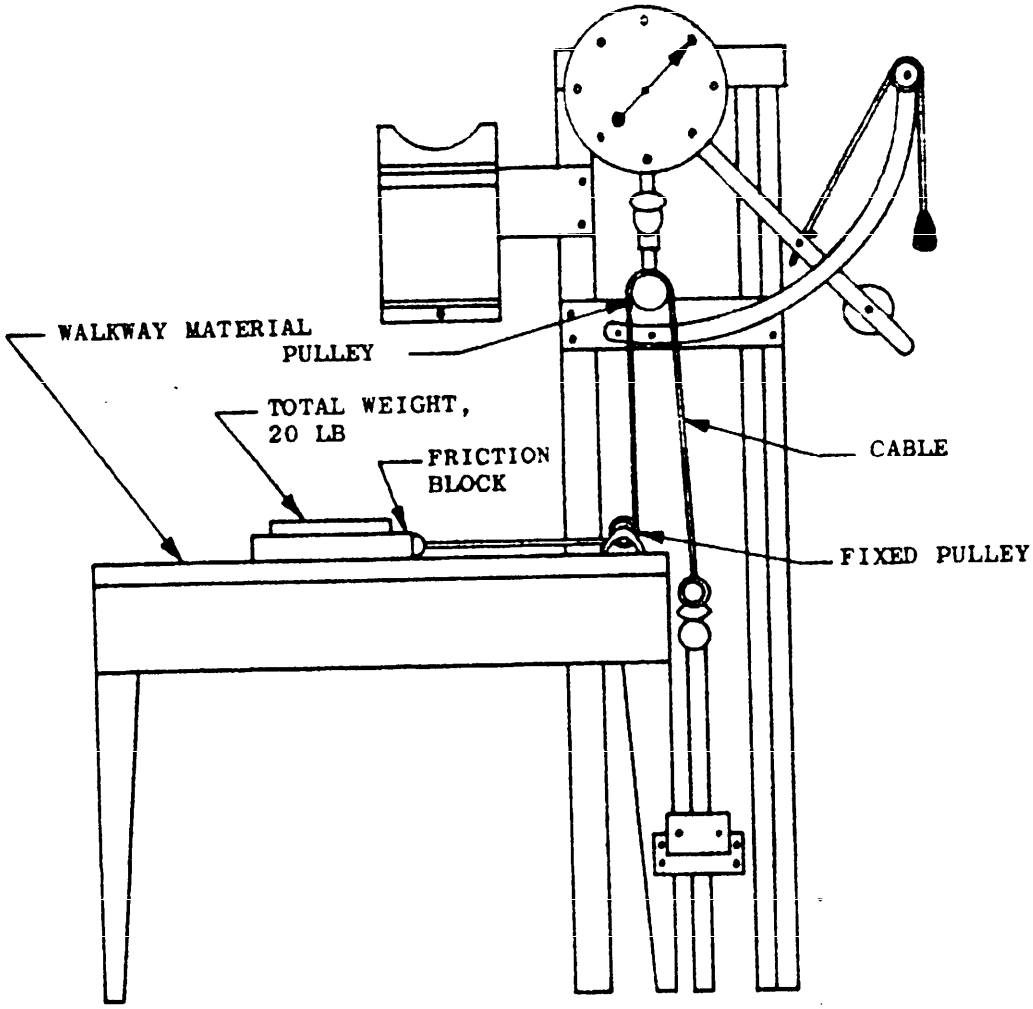


FIGURE 2. Sliding friction apparatus.

because of oil and water absorbed by the leather and rubber. Three runs shall be made on each specimen and averaged. Each run shall be made on an unused portion of surface of the test specimens.

4.6.9.4 Calculation. The starting load or static coefficient of friction shall not be considered in the test. The average dynamic load shall be determined from the autographic load recorded by the testing machine. Apparent factor of sliding friction shall be calculated as follows:

$$\text{Apparent factor of sliding friction} - \frac{\text{Average load recorded by testing machine}}{\underline{1}/\quad 20 \times 2}$$

1/ Factor of 2 is used to correct for mechanical advantage of pulley system.

Value of 20 is total weight in pounds of the block and added load.

4.6.10 Elevated temperature resistance (Types I and II). Two 3 by 6 inch panels shall be prepared as described in 4.6.1. The panels shall be scribed with a line parallel to and approximately 1 inch from a 3 inch edge used as a reference. The panel shall then be suspended vertically from the end opposite the reference and in an oven maintained at a temperature of 158° ± 2° F (70° ± 1° C) for 5 hours. After the panels have cooled to room temperature, the distance between the reference edge and the scribe line shall be measured. The difference between the original and after oven test shall be reported as flow or slip. The panels, immediately after removal from the oven, shall be examined for signs of softening.

4.6.11 Flexibility and adhesion (Types I and II). Two 0.032 by 1 by 6 inch panels, prepared as described in 4.6.1, shall be bent through an arc of 180 degrees around a 2 inch diameter mandrel and examined while in the bent condition for surface cracks and loss of adhesion.

4.6.12 Hydrocarbon-fluid resistance.

* 4.6.12.1 Specimen. Two 3 by 6 inch panels of each type shall be prepared as described in 4.6.1 except that types I and II shall be air dried for 7 days at room temperature and then baked for 2 hours at 150° ± 2° F (66° ± 1° C).

4.6.12.2 Procedure. The panels shall be tested using hydro-carbon fluid, medium, no 6, specified in Method 6001 of Federal Test Method Standard No 601 (see 6.4).

* 4.6.12.2.1 Types I and II. The test panels shall be immersed in the hydrocarbon fluid for 2 hours, then removed from the fluid and allowed to recover for 24 hours. The panels shall then be inspected and any softening, blistering, deterioration, or loss of gloss shall be noted.

4.6.12.2.2 Types III and IV material. Types III and IV materials shall be immersed in the hydrocarbon test fluid for 4 hours at 75° ± 5° F (24° ± 3° C) When dry, materials shall be inspected for deterioration, exudation of the adhesive compound along the edges of the sealed panel, and any loss of adhesion.

4.6.13 Oil resistance. Two 3 by 6 inch panels of each type shall be prepared as described in 4.6.1. The panels shall then be immersed in petroleum base oil, medium no 1, specified in Method 6001 of Federal Test Method Standard No 601 (see 6.4) for 24 hours at 75° ± 5° F (24° ± 3° C). The specimens, after removal from the oil, shall be wiped free of excess oil and inspected for signs of softening, deterioration, blistering, or loss of adhesion.

4.6.14 Accelerated weather resistance. Two 2 by 6 inch panels of each type prepared as described in 4.6.1, shall be tested in accordance with Method 6151 of Federal Test Method Standard No 141. If failure appears before 336 hours, the test shall be terminated.

4.6.15 Wear resistance.

4.6.15.1 Preparation of panels. In order to verify the severity of the test site, a control panel prepared from material that has been known to pass all the requirements of this specification shall be run concurrently with the material under test. The control panel and test panel, each 1/16 by 8 by 36 inches, shall be prepared as described in 4.6.1.

* 4.6.15.2 Procedure. The test and control panels shall be installed in an area where heavy foot traffic is encountered for a period not to exceed 4 weeks. At the end of this period, panels shall be removed, cleaned with water and detergent, and examined for wear through the surface to the primer or metal and for deterioration such as loss of adhesion, smoothness of surface, and other defects that render the panels unsuitable for the intended use. During the 4 week period, panels shall be checked at weekly intervals. Panels that show premature failure shall be removed at that time. If the test panel fails before the control, the test shall be terminated and the material under test considered unsatisfactory. If the control should fail first, the test panel shall be continued under exposure, and if found satisfactory at the end of the test, shall be considered as conforming. However, if both fail, the test shall be repeated.

4.6.16 Impact resistance.

4.6.16.1 Test panels. Two 1/16 by 3 by 6 inch panels of each type shall be prepared as described in 4.6.1.

4.6.16.2 Apparatus. The apparatus for this test shall consist of a 5.0 ± 0.05 pound steel ball and a 1/2 by 8 by 12 inch steel plate.

4.6.16.3 Procedure.

4.6.16.3.1 Room temperature. A test panel shall be mounted on the steel plate and the steel ball allowed to drop from a height of 24 inches on two adjacent points of the panel. The specimens shall then be examined for surface cracks. Specimens shall be bent through an arc of 10 degrees, and while bent examined for cracks.

4.6.16.3.2 Low temperature. The test panels, steel plate and steel ball shall be conditioned simultaneously in a cold chamber for 5 hours at - 20° ± 2° F (-29° ± 1° C). While in the cold chamber, the steel ball shall be dropped from a height of 24 inches on two adjacent points of the panel. Specimens shall be removed from the cold chamber, allowed to come to room temperature, and then bent through an arc of 10 degrees, and while bent, examined for cracks.

4.7 Examination of product. The walkway material shall be carefully exami to determine conformance with respect to packaging, packing, labeling, work manship, and with requirements for which no tests are specified herein.

* 4.8 Rule 66. The supplier shall certify that Types I and II walkway compo complies with the provisions of Rule 66 (see 3.7).

5. PREPARATION FOR DELIVERY

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

5.1.1 Level A.

5.1.1.1 Types I and II coating. Unless otherwise specified in the contrac order, the coating shall be furnished in 1 gallon, multiple friction top co tainers conforming to PPP-C-96, Type V. The covers shall be spot soldered at least three places, equally spaced about the cans.

5.1.1.2 Types III and IV matting. Matting shall be tightly rolled on a hea spiral fiber tube, having an outside diameter of not less than 8 inches, and strapped to prevent unrolling. Rolls of matting shall then be individually wrapped in not less than two thicknesses of 60 pound minimum basis weight kr paper conforming to grade B of UU-P-268, secured with not less than 2 inch width, 60 pound minimum basis weight kraft gummed tape, conforming to PPP-T-

5.1.2 Level C. Unless otherwise specified in the contract or order, Types II, III, and IV material shall be packaged in accordance with good commercia practice.

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

5.2.1 Level A.

5.2.1.1 Types I and II coating. Types I and II coating compounds, packaged as specified in 5.1.1.1, shall be packed in accordance with the appendix of PPP-C-96 for overseas shipment.

5.2.1.2 Types III and IV matting. Matting packaged as specified in 5.1.1.2 shall be packed in overseas type or class shipping containers conforming to the requirements of PPP-B-585, PPP-B-601, or PPP-B-621. Containers shall be uniform shape and size, be of minimum cube and tare consistent with the protection required and contain identical quantities. The gross weight of each pack shall be limited to approximately 200 pounds. Containers shall be clos and strapped in accordance with applicable container specification or appendix thereto.

5.2.2 Level B.

5.2.2.1 Type I and II coatings. The coating compound, packaged as specified in 5.1.1.1, shall be packed in accordance with the appendix of PPP-C-96 for domestic shipment.

5.2.2.2 Types III and IV matting. Rolls of matting, packaged as specified in 5.1.1.2, may be shipped individually, in which case each shall be complete ly overpacked in burlap, or they may be overpacked singly or in multiples

in substantial commercial containers so constructed as to insure acceptance by common or other carrier for safe transportation, at the lowest rate, to the point of delivery. Except as specified herein, the container shall conform to the requirements of the bureau or agency concerned. When burlap or cotton cloth is used as a wrap, seams shall be securely sewn with suitable thread, or equivalent. The use of corrugated or solid fiberboard having a minimum Mullen Test of 275 pounds is prohibited. Containers shall be able to withstand storage, rehandling, and reshipment without the necessity of repacking.

5.2.3 Level C. Unless otherwise specified, Types I, II, III, and IV walkway materials shall be packed in accordance with good commercial practices.

5.3 Marking for shipment.

5.3.1 Unit containers.

* 5.3.1.1 Types I and II. Each can shall be durably and legibly marked with the following information in such manner that the marking will not become damaged when any of the containers are opened:

WALKWAY COATING AND MATTING, NONSLIP, AIRCRAFT
MIL-W-5044C
Type_____Color_____
Quantity
Stock No **
Name of Manufacturer
Name of Contractor (if different from manufacturer)
Batch No
Lot No
Contract or Order No
Date of Manufacture
Thinning directions (thinner specified must be covered by Government specification)
Precautions to be used
Manufacturer's instructions for use
PRECAUTION: REPLACE TOP TIGHTLY AFTER USE

** See NOTE following 5.3.2.

* 5.3.1.2 Types III and IV. Each roll shall be durably and legibly marked by means of a tag, securely attached to the roll in such a manner that it remains in place until the last bit of material is used. The following information shall be contained on each tag:

WALKWAY COATING AND MATTING, NONSLIP, AIRCRAFT
MIL-W-5044C
Type _____Color_____
Width
Actual Yardage
Manufacturer's Identification Number for the Material
Stock No **
Name of Manufacturer
Name of Contractor (if different from manufacturer)
Contract or Order No

** See NOTE following 5.3.2

Date of Manufacture
Precautions to be Used
Manufacturer's instructions for use

5.3.2 Exterior shipping container. Each exterior shipping container shall marked as required for unit packaging (exclusive of use instructions and the marking "Replace top tightly after use") and in accordance with MIL-STD-129.

NOTE: The contractor shall enter the Federal Stock No specified in the purchase document or as furnished by the procuring activity. When the Federal Stock No is not provided or available from the procuring activity, leave space therefor and enter the Stock No or other identification as provided by the procuring activity.

6. NOTES

6.1 Intended use. Materials covered by this specification are intended to provide nonslip surfaces on aircraft wing walks.

6.1.1 Type I coatings possess a smoother surface than Type II coatings and Types III and IV matting; hence it is preferable where aerodynamic properti. are a major factor.

6.1.2 Type II coatings and Types III and IV matting materials have superior nonslip properties to Type I coatings and are preferred where maximum nonsli. properties are a major factor.

6.1.3 Type III matting is preferable to coating types where a minimum wait! period before use after application is desired and maximum nonslip and wear resistance are desired.

6.1.4 Type III matting is not suitable for application on surfaces containi projections, such as raised rivets and wing areas containing compound curvatures owing to application difficulties. Types I, II, and IV coatings are more suitable in these applications.

6.1.5 Type IV matting is especially suited for applications on diamond trea and other irregular surfaces.

6.2 Ordering data. Procurement documents should specify the following:

(a) Title, number, and date of this specification
(b) Type and color of material desired (see 1.2 and 3.4.1)
(c) Length and width of roll, Types III and IV (see 3.4.3)
(d) Quantity
(e) Level of packaging required (see 5.1)
(f) Level of packing required (see 5.2)
(g) For special dimensions of Types III and IV, specify drawings or dimensional details

6.3 Standard panels. Standard panels showing the texture desired may be obtained upon application to the Director, Aeronautical Materials Laboratory Naval Air Engineering Center, Philadelphia, Pa. 19112. The request should specify whether the standard for Type I, II, III, or IV walkway material is required.

* 6.4 Mediums No 1 and No 6 described in Method 6001 of Federal Test Method Standard No 601 are equivalent to ASTM No 1 oil and TT-S-735, Type III fuel, respectively.

6.5 The margins of this specification are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:
Army - ME
Navy - AS
Air Force - 84

Preparing activity:
Air Force - 84

Review activities:
Army - MI, AV
DSA - CS

Project number:
5610-0075

NOTE: Review/user 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 DODISS.

☆U.S. GOVERNMENT PRINTING OFFICE: 1976-703-020/177

NSTRUCTIONS: In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (*DO NOT STAPLE*), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(*s*) or to amend contractual requirements.

(Fold along this line)

(Fold along this line)

DEPARTMENT OF THE AIR FORCE

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO 73236 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE AIR FORCE

[illegible]
Federal Center
Battle Creek, MI [illegible]

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
	☐ USER
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ MANUFACTURER
	☐ OTHER *(Specify)*: _____

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI - Optional)*	7b. WORK TELEPHONE NUMBER *(Include Area Code) - Optional*
c. MAILING ADDRESS *(Street, City, State, ZIP Code) - Optional*	8. DATE OF SUBMISSION *(YYMMDD)*

(TO DETACH THIS FORM, CUT ALONG THIS LINE)

DD FORM 82 MAR 1426

PREVIOUS EDITION IS OBSOLETE