

P-F-430C
October 26, 1978
SUPERSEDING
Fed. Spec. P-F-430B
October 30, 1975

FEDERAL SPECIFICATION

FINISH, FLOOR, WATER-EMULSION (FOR USE ON LIGHT COLORED FLOORS)

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. The detergent-resistant floor finish covered in this specification is intended for use on all non-wood floors, and for sealed wood floors.

1.2 Classification. This specification covers two types of floor finish (see 6.6):

- Type I - High Durability, for general use
- Type II - High Scrub Resistance, for hospital use.

2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

Federal Specifications:

- PPP-C-96 - Cans, Metal, 28 Gage and Lighter.
- PPP-D-729 - Drums, Shipping and Storage 55-GALLON.
- PPP-P-704 - Pails: Metal, Shipping, Steel (1 through 12 Gallon).

(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 and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from General Services Administration Business Service Centers in Boston; New York; Philadelphia; Washington, DC; Atlanta; Chicago; Kansas City, MO; Fort Worth; Houston; 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 of Inspection by Attributes.

(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.

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Traffic Department, 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, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

American Society for Testing and Materials (ASTM) Standards:

- D 1290 - Sediment in Water-Emulsion Waxes by Centrifuge.
- D 1455 - Gloss, 60-Deg Specular, of Emulsion Floor Polish.
- D 1792 - Potential Long-Term Removability Properties of Conventional Type Water-Emulsion Floor Polishes.
- D 1793 - Water Spotting of Emulsion Floor Polishes.
- D 2047 - Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
- E 70 - pH of Aqueous Solutions with the Glass Electrode.

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

3. REQUIREMENTS

3.1 Qualification. Floor finish furnished under this specification shall be a product which has been tested and has passed the qualification tests specified herein (see 6.2).

3.1.1 Standard samples. Standard samples of type I and type II represent the performance acceptable for Government use with respect to all performance factors including slip resistance and durability, and will serve as the reference standards for qualification and the examination of deliveries (see 6.3).

3.1.2 Identification of samples. The qualification sample submitted by the manufacturer will be identified for the purpose of comparing with material subsequently submitted for acceptance. Within experimental limits, qualification and acceptance samples should be identical. Any lot or lots found not to be identical with the qualified sample shall be rejected.

3.1.2.1 Infra-red spectroscopy. The infra-red spectra shall be measured according to 4.4.11. The spectra of qualification and acceptance sample should be identical with respect to the number location of infra-red absorption peaks. The peak heights may vary and within +/- 2 percent.

3.1.2.2. Color. Color, expressed as the Whiteness Index, shall be measured according to 4.4.12.

3.1.2.3 Resistance to soiling. Resistance to soiling shall be measured according to 4.4.13.

3.2 Performance. Performance consists of slip resistance, durability, dirt retention, and general appearance in use. When tested in accordance with 4.5, the product shall equal or surpass the performance of the standard sample.

3.3 Composition.

3.3.1 Total solids. The total solids (nonvolatile content) shall be not less than 18.0 percent for type I and 17.0 percent for type II when tested as specified in 4.4.1.

3.3.2 Sediment. Any sediment present in the floor wax shall be soft and free from grit. The amount of sediment present shall not exceed 0.2 percent by volume when tested as specified in 4.4.2.

3.3.3 Alkalinity. The pH of the floor finish shall not be greater than 10.0 when tested as specified in 4.4.3.

3.3.4 Stability. When tested as specified in 4.4.4, the floor finish shall develop no offensive odor, exhibit no creaming, gelling or separation, and display less than 10 percent loss of 60-deg specular gloss.

3.4 Film characteristics.

3.4.1 Removability. When tested as specified in 4.4.5, the dried film of type I shall be completely removed after 75 oscillations, on a substrate of black Official Test Vinyl Asbestos Tile (OTVAT) [1].

3.4.2 Water spotting. When tested as specified in 4.4.6, the dried film shall show an appearance comparable to that of the standard sample, on a substrate of black OTVAT [1].

3.4.3 Specular gloss. The 60-deg specular gloss of the floor finish shall be equal or superior to the 60-deg specular gloss of the standard sample when tested as specified in 4.4.7.

3.4.4 Scrub resistance. When tested as specified in 4.4.8, the dried film shall withstand 200 strokes (100 oscillations), without exposing the substrate of black OTVAT [1].

3.4.5 Film forming temperature. When tested as specified in 4.4.9, the floor finish shall form an intact film at 50 deg. F (10 deg. C).

3.4.6 Slip resistance. When tested as specified in 4.4.10, the floor finish shall have a slip resistance of 0.5 or greater (see 6.5).

3.5 Odor. The product shall have no offensive odor.

3.6 Workmanship. Products under this specification shall be produced by the application of skillful and modern techniques, utilizing the proper blending of high-grade materials with suitable and adequate manufacturing facilities to effectively control the optimum balance of all desirable floor finish properties, as defined herein.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein.

4.2 Sampling procedures.

4.2.1 For inspection lots. For purpose of sampling, a lot shall consist of all floor finish of one type offered for delivery at one time. The sample shall consist of ten 1-gallon subdivisions of floor finish taken in accordance with 4.2.2.

All tests in 4.4 shall be run on samples taken for acceptance.

4.2.2 Method of sampling for acceptance.

(a) From 1-gallon original containers. Select at random ten 1-gallon containers. Retain all, if no code marks are present. If cans or containers are coded, or production identified, retain all of the same mark and attempt to fill back with containers from the same production so that the sample will consist of ten 1-gallon containers of the same code or mark.

[1] Official Test Vinyl Asbestos Title (OTVAT) is available from the Chemical Specialties Manufacturer's Association, 1001 Connecticut Avenue, NW, DC 20036.

(b) From original unopened 5-gallon pails. Select at random two pails (same identifying code, if possible). Make five 1-gallon representative subdivisions from one pail and return the other pail.

(c) From original unopened 55-gallon drums. Select a drum at random. Make ten 1-gallon representative subdivisions from the same drum.

4.2.3 Identification and disposition. All subdivisions of the sample taken in accordance with 4.2.2 shall be properly identified, including any code or batch numbers, and numbered 1 to 10 inclusive (not applicable to the reserve 5-gallon drum). Subdivisions 1 to 5 inclusive shall be distributed as directed by the procuring agency or authorized representative. The remaining subdivisions shall be set aside and retained at the site of sampling pending further instructions.

4.2.4 Sampling for qualification. The samples offered for qualification by the manufacturer shall be from production batches of the same size used in producing floor finish in commercial quantities. Small pilot plant and experimental formulations will not be considered as complying. The inspector shall take sufficient 1-gallon containers for qualification (see 3.1). Each container shall be labeled as follows:

DATE OF MANUFACTURE
CODE NUMBER (TO BE ENTERED BY INSPECTOR)
"KEEP FROM FREEZING" (CAN AND CONTAINER)

All tests in 4.4.and 4.5 shall be run on samples for qualification.

4.3 Inspection of deliveries. Inspection shall be made by the procuring agency or a duly authorized representative at the time and place designated by the procuring agency (see 6.4).

4.3.1 Examination of preparation for delivery. An examination shall be made to determine compliance with the requirements of section 5. The sample unit shall be one shipping container fully repaired for delivery. Sampling shall be in accordance with MIL-STD-105. The inspection level shall be S-2 with an AQL of 4.0 expressed in terms of percent defective.

4.4 Laboratory tests. The following tests which apply to both type I and type II shall be made on one 1-gallon sample selected as specified in 4.2.2.

4.4.1 Nonvolatile matter (total solids). Weigh to the nearest milligram approximately 2 grams of the sample, in duplicate, by using a weighing burette into tared, dried, flat bottom dishes of approximately 6 cm in diameter. Place in a forced draft drying oven and heat in 105 deg. - 110 deg. C. for 4 hours. Cool, weigh, and calculate results. Duplicate samples shall check within 0.1 percent and the average shall be within the concentration specified.

4.4.2 Sediment. The sediment of the floor finish shall be determined according to ASTM D 1290.

4.4.3 Alkalinity. The pH of the floor finish shall be determined according to ASTM E70.

4.4.4 Stability. The stability of the floor finish shall be determined over a period of 30 days in an oven maintained at 125 deg. +/- 2 deg. F (54 deg. +/- 1.1 deg. C). One hundred ml of floor finish shall be placed in a 4-oz glass bottle with a polyethylene-lined screwcap. The cap shall be hand tightened and the bottle and floor finish shall be placed in the oven in an inverted position. Observe the sample daily for the first 14 days, and thereafter twice weekly for the duration of the 30-day test period. Samples should be examined as rapidly as possible, with the minimum of agitation. Do not loosen the cap. The specular gloss shall be measured as described in 4.4.7.

4.4.5 Removability. The ease of removability of floor finish shall be determined according to ASTM D 1792, except that a solution of 2 percent potassium cleate and 2.5 percent monoethanolamine shall be substituted for the standard soap solution.

4.4.6 Water spotting. Concurrent testing of the floor finish and the standard sample shall be carried out according to ASTM D 1793.

4.4.7 Specular gloss. Concurrent testing of the floor finish and the standard sample shall be carried out according to ASTM D 1455, using a black glass substrate.

4.4.8 Scrub resistance. Scrub resistance shall be determined according to ASTM D 1792, except that in 4.1, the 5 ml of ammonium hydroxide is not added.

4.4.9 Film forming temperature. Spread 0.2 ml of floor finish over 52 cm (8 sq in) on a black OTVAT substrate, and place in a refrigerator maintained at 50 deg. +/- 1 deg. F (10 deg. +/- 0.5 deg. C) for a period of 4 hours. Examine the film visually and by touch.

4.4.10 Slip resistance. Slip resistance shall be tested according to ASTM D 2047.

4.4.11 Infra-red spectra.

4.4.11.1 Preparation of sample. Cut a 2-1/2 inch square of aluminum foil of 3 ml thickness (minimum) having one side mirror bright [1]. Wash the square with absolute alcohol, and air dry. The mirror bright side should give a spectra that differs less than 2 percent transmittance from the standard front surface test mirror used in the specular reflectance accessory [2]. Apply approximately 1 ml of floor finish with an eye dropper in a zig-zag pattern, and produce a uniform layer by means of a 2 inch doctor blade with 0.0008 in gap. The sample thus prepared is allowed to dry overnight before use.

4.4.11.2 Measurement of sample. The spectra of the coated foil is run on an infra-red spectrophotometer equipped with a specular reflectance accessory. The base line of the spectra should show approximately 90 percent transmittance, and the most intense band should show approximately 10 percent. It may be necessary to move the coated aluminum foil slightly to approach these conditions as nearly as possible.

4.4.12. Color.

4.4.12.1 Apparatus. The apparatus used for determining the whiteness index is a tristimulus colorimeter [3], 3 inch by 6 inch strips of Whatman No. 1 filter paper and paper clamps. The tristimulus colorimeter is normally furnished with an instrument standard of suitable white or light grey calibrated vitreolite. Calibrate and operate the tristimulus colorimeter in accordance with manufacturer's instruction.

4.4.12.2 Procedure. Prepare duplicate samples by saturating the filter paper strips with floor finish and allowing to dry. This is done by the total immersion of the filter paper strip in the floor finish for at least 60 seconds. The saturated strip is then removed and hung in a vertical position with a paper clamp, where it is allowed to dry for 24 hours at room temperature. Back each sample with five layers of plain white filter paper when dry and take four reflectance readings (tristimulus values) on each sample.

4.4.12.3 Calculations. The whiteness index, WI, is calculated from the equation:

$$WI = L - 3b.$$

The value for L represents reflectivity or lightness, being 100 for perfect white, and 0 for perfect black. Depending on the instrument used, the value for L may be measured directly, or calculated from the value of Y, which is measured directly by the equation:

$$[\text{retrieve: equation } L = 10 Y].$$

- [1] Such a foil is available from Alu-Foil Company, 1143 Conklin Street, Farmdale, Long Island, NY 11735.
- [2] Individual spectrophotometers have different accessories. For a Perkin-Elmer Model 2S7 Spectrophotometer, a Model 220-0036 Specular Reflectance attachments was used, while for a Perkin-Elmer Model 180 Spectrophotometer a Model 186-0324 Micro Specular Reflectance accessory was used.
- [3] Gardner Automatic Color Difference Meter, Model AC-3, or equal.

The value of b is related to the hue of the floor finish, being positive when the hue is yellow or yellowish, negative when the hue is blue or bluish, and zero when the hue is a neutral grey. The value for b may be measured directly, or calculated from the values of Y and Z , which are measured directly by the equation:

$$[\text{retrieve: equation } b = 7.0 (Y - 0.847z) /].$$

The test specimen prepared in this manner consists of 0.2 ml of floor finish spread over an area 2 in by 4 in. Scrubbing shall take place along the 4 in length, and in the evaluation of the test specimen, 3/4 in at each end shall be disregarded.

4.4.13 Soil resistance test.

4.4.13.1 Apparatus. Gardner Washability Machine [1], or equal, Gardner Roller [2], or equal, CSMA standard soil and white Official Test Vinyl Asbestos Tile (OTVAT) [3].

4.4.13.2 Procedure. Cut the tile to fit the washability machine, and clean the cut tiles thoroughly. Apply the sample with cotton gauze or lamb's wool in two thin coats, allowing at least 3 hours before the application of the second coat. Age the tiles for 48 hours before use.

It is advisable to break in the roller by running it on a blank sample before conducting the actual test. Spread 2.00 grams of standard soil as evenly as possible over the portion of the tiles where the roller will track. Run the machine 300 cycle (600 passes), brushing the soil back on the track as necessary. At the end of the cycle, remove any loose soil by wiping the surface with a facial tissue..

4.4.13.3 Evaluation. Prepare a tile using the qualification sample, and store it in a box so that nothing touches the soiled face. Visually compare this tile with the tile prepared using the acceptance sample. The acceptance sample should show equal or less dirt retention than the qualification sample.

4.5 Floor test procedure for slip-resistance and durability. (Except as noted, all paragraphs apply to types I & II.).

4.5.1 Selection and preparation of test floor.

4.5.1.1 Light colored (such as buff or light yellow), vinyl-asbestos tile floor of new or like new quality should be selected. The floor should be free from abnormal bumps and irregularities. Floors surrounding the test panels should not be unreasonably dirty. The surrounding floors need not be cleaned or stripped at the sample time as the test panels but they should be normal with respect to cleanliness.

4.5.1.2 Relatively heavy and as nearly equal as possible traffic conditions should prevail on all test panels. Test panels should not be selected in areas of abnormal traffic conditions such as in or adjacent to elevators, heavy traffic main doorway entrances, etc.

4.5.1.3 Size of test panels. Each test panel should be not less than 12 feet in length along the normal line of traffic and should not be smaller than 60 square feet.

4.5.1.4 Preparation of test floor. The test floor should be cleaned and thoroughly stripped of old polish by use of an effective stripper. Before application of finish, each test panel should be rinsed three times with clear water so as to remove all traces of cleaner or detergent. The effectiveness of good cleaning can be measured by gloss readings which should be not greater than 10 and many floors go as low as 4 or 5. More than one treatment may be necessary on floors which have a "built-up" film of polish.

[1] Available from Gardner Laboratory Inc., 5521 Landy Lane, Bethesda, MD. Catalog No. WG-2000.

[2] Catalog No. WG-2000-R.

[3] Standard soil and white OVAT available from The Chemical Specialties Manufacturer's Association, 1001 Connecticut Ave., N.W., Washington, DC 20036.

4.5.2 Application of finish. Samples for qualification and standard samples in the correct concentration should be applied at the same time adjacent to each other if possible, but in no case more than one panel removed.

4.5.2.1 Equipment. A clean pail and a 16- to 24-ounce mop, new, or like new, should be provided for each sample. The identification of the pail and mop with the respective code numbers of the samples will reduce the possibility of any mix-up or contamination. Mop should be very clean, wrung almost dry of clear rinse water, and dried before it is used to apply finish.

4.5.2.2 Application. Apply the first thin coat of each sample of finish to the test panel which has previously been marked with its code number. Uniformity of application on all panels is essential. Allow 20 minutes for drying, and apply the second thin coat on top of the first as lightly as possible.

4.5.2.3 Maintenance, type I. The test panels should be swept daily with a soft bristle brush and damp mopped weekly with new, or like new mops and clean, cold water. Mop should only be sufficiently damp and dirt pick-up and should not leave water on the floor.

4.5.2.4 Maintenance, type II. The test panels should be scrubbed daily, using a scrubbing machine with a vacuum pick-up, and a scrubbing solution containing 2 ounces of detergent per gallon.

4.5.3 Evaluation of samples. The floor finish shall be evaluated against the standard sample for period of 6 weeks. Evaluation shall be made immediately after application of the samples to the test floor and thereafter weekly, after maintenance but prior to traffic. Known variables from one test panel to another, such as traffic conditions or floor surfaces should be carefully translated to insure there is neither compromise in quality of samples, nor unfair elimination due to imposing extraordinary conditions. It is in order to retest on another panel against the standard for confirmation. At any time the sample under test is considered inferior to the standard, it shall be rejected. For acceptance, the samples shall be equal to or better than the standard at all times for every quality considered.

4.5.3.1 Slip resistance. Determine the relative slip-resistance by comparison against the standard sample by exerting an angular foot pressure on the floor panel using clean, dry leather soles. Any finish accumulation on the sole should be removed. Small differences in slip-resistance are magnified by use of a clean, smooth sheet of paper under the foot.

4.5.3.2 Durability. Durability is determined by observing dirt retention general appearance, gloss, and buffability.

4.5.3.2.1 Dirt retention. Determine the degree of dirt retention by comparison against the standard sample by visual examination, noting particularly discoloring traffic marks.

4.5.3.2.2 General appearance, gloss. Determine the general appearance, including gloss, by comparison against the standard sample by visual examination, noting particularly nondiscoloring traffic scuff marks.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A or commercial as specified (see 6.4).

5.1.1 Level A. The floor finish shall be furnished in 1-gallon, 5-gallon, or 55-gallon quantities as specified (see 6.4). The 1-gallon quantity shall be packaged in an oblong metal container conforming to PPP-C-96, type V, class 4 with exterior coating plan B. Alternatively, leakproof plastic screwcaps or leakproof plastic nozzle and screwcap closure shall be used. The 5-gallon quantity shall be packaged in a pail conforming in PPP-P-704, type I, class 3, 4, or 5 or type II, class 3 or 4 with pouring device alternatively, leakproof plastic nozzle and screwcap closure shall be used. The 55-gallon quantity shall be packaged in a drum conforming to PPP-D-729, type II or IV.

5.1.2 Commercial. The floor finish of one type only, in quantity specified shall be packaged in accordance with normal commercial practice. The complete package shall be designed to protect the item against damage during shipment, handing, and storage.

5.2 Packing. Packing shall be level A or commercial, as specified (see 6.4).

5.2.1 Level A.

5.2.1.1 One-gallon metal containers. Six 1-gallon metal containers shall be packed in accordance with level A requirements of appendix to PPP-C-96.

5.2.1.2 Five-gallon pail or 55-gallon drums. Five-gallon or 55-gallon drums shall not require any packing for shipment or storage.

5.2.2 Commercial. The floor finish of one type only shall be packed in containers to insure delivery at destination, to provide redistribution by the initial receiving activity, and shall be acceptable by common carrier under National Motor Freight Classification and Uniform Freight Classification.

5.3 Marking. Marking shall be as specified in the contract or order (see 6.4).

6. NOTES

6.1 To obtain the performance which this floor finish can give, reasonable care should be exercised in its use. Before initial application, the old finish should be removed completely, and the floors rinsed with clear water to remove all traces of detergent or cleaner. Likewise, the factory finish on new floors should be removed. Successive applications of the floor finish may be made until buildup along the walls and in corners requires removal. If difficulties are encountered in stripping the floor finish, add one or two cups of household ammonia per gallon of cool (room temperature) cleaning solution.

6.2 The attention of suppliers and procuring activities is called to the requirements for qualification as provided in section 3 of this specification GSA Reg. 1-II-201.03 which provides that solicitations for bids by advertising shall contain, in substance, the following statement: In the procurement of products requiring qualification, bids secured through formal advertising will be considered only for such products as have, prior to the bid opening date, been tested and approved for inclusion in the qualified products list whether or not such products have actually been so listed by that date. Manufacturers are urged to communicate with the Chemicals and Paints Division, Federal Supply Service, General Services Administration, Washington, DC 20406, and arrange to have the product they propose to offer tested for qualification. (Time may not permit qualification for eligibility under this invitation, but products which qualify would be eligible under future invitations.)

6.3 Standard samples of type I and type II are available at cost in 1-gallon cans. Inquiry should be addressed to the Director, Chemicals and Paints Division, Federal Supply Service, General Services Administration, Washington, DC 20406.

6.4 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) Packaging and packing required (see 5.1 and 5.2).
- (c) Quantity required.
- (d) Type required (see 1.2).
- (e) Marking required (see 5.3).

6.5 Slip resistance is measured with the James machine in 4.4.10 to assure that the test floor finish forms an acceptably slip-resistant surface. Slip resistance is also measured under foot on the test floor in 4.5.3.1 to assure that this slip resistance does not degrade in use. Both tests must be passed for the test floor finish to be included on the QPL.

6.6 Comparison of type I and type II standard samples under maintenance specified in par. 4.5.2.4 shows that the type II material is more resistant to scuffing, and has higher gloss.

MILITARY INTEREST:

DOD has waived coordination
on revisions or amendments of
this specification until further
notice.

Preparing Activity:

GSA-FSS

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA-FSS, PBO

VA-DMS

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.

P-F-430C
AMENDMENT-1
April 15, 1983

FEDERAL SPECIFICATION

FINISH, FLOOR, WATER-EMULSION(FOR USE ON LIGHT
COLORED FLOORS)

This amendment, which forms a part of P-F-430C, dated
October 26, 1978, is approved by the Assistant Administrator,
Office of Federal Supply and Services, General Services
Administration, for the use of all Federal agencies.

PAGE 1

Paragraph 1.2, line 1, delete "two types", add "one type".

Paragraph 1.2, line 4, delete "Type II - High Scrub Resistance, for Hospital
Use", and all further references to type II therein.

PAGE 2

Paragraph 2.1, under ASTM standards, add "D 2834 - Nonvolatile Matter (Total Solids) in
Water-Emulsion Floor Polish, Solvent-Based Floor Polishes, and Polymer-Emulsion Floor
Polishes".

Paragraph 3.3.1, line 2, delete "15.0", and add "18.0".

PAGE 4

Delete paragraph 4.4.1 in its entirety and substitute the following:

"4.4.1 Nonvolatile Matter (Total Solids). The nonvolatile matter of the
floor finish shall be determined according to ASTM D 2834.

MILITARY INTERESTS:

DoD has waived coordination
on revisions or amendments
of this specification until
further notice.

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA-FSS, PBO
VA-OSS

PREPARING ACTIVITY:

GSA-FSS

FSC 7930