

F.S.P.M.A. PAINT SPECIFICATION
DIVISION 9 - FINISHES
SECTION 09910 EXTERIOR PAINT
FOR GENERAL EDUCATION FACILITIES USE

MP-34.1

EXTERIOR/INTERIOR, ANTI-SLIP, WATER BORNE COATING, WHITE, TINTS AND COLORS

I. SCOPE, USE AND CLASSIFICATION

- A. SCOPE: This specification covers a water borne anti-slip coating which has been designed for use on concrete, wood, and primed metal surfaces. This coating provides a tough, abrasive anti-slip surface for ramps, walkways, steps, decks, treads, docks and locker room floors. This coating significantly reduces the chances of slipping, but cannot totally prevent slipping.
- B. USE: Glossy finishes should be dulled either by sanding or abrading prior to application of the paint. May be applied by brush, roller, squeegee or trowel. Containers shall have labels, meeting ANSI standards and giving adequate use instructions, firmly secured to each container. Labels shall meet all federal regulation requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard in CFR 1910.1200.
- C. CLASSIFICATION: The following types of paint are included:
 - 1. Type I. White or factory-custom colors with reflectance of 75 or above.
 - 2. Type II. Other ready-mixed colors and factory-custom colors with reflectance less than 75.

II. REQUIREMENTS

- A. MATERIALS. The paint shall be formulated from materials as specified herein. Materials not specified shall be selected by the supplier and shall be subject to all the provisions of this specification. The paint shall be free from material which is known to be toxic to personnel under normal conditions of use.
 - 1. PIGMENT. Suitable lightfast and alkali resistant pigments shall be used. Extender pigments, shading pigments, and exterior grade titanium dioxide may be used when necessary to match the color desired provided the paint complies with all the requirements specified herein.
 - 2. VEHICLE. The vehicle shall be a mechanically stable aqueous dispersion of binder with the end result being a water borne polymer with excellent performance characteristics resulting in a coating with excellent wet and dry adhesion, durability and anti-slip properties.
 - 3. RESTRICTED METALS. The paint shall comply with the latest requirements of the Federal, Florida State, City or Local Governments for maximum allowable restricted metals content.

4. VOC COMPLIANCE. The paint shall comply with the latest requirements of the Federal, Florida State, City or Local Governments for the maximum allowable VOC content at the time of purchase.
- B. QUANTITATIVE REQUIREMENTS. The paint shall conform to the quantitative requirements as specified in Table I.

TABLE I. QUANTITATIVE REQUIREMENTS

Characteristic	Tolerance Requirements	
	Minimum	Maximum
1. Total solids, % by wt. of paint.	50	-
2. Non-volatile vehicle, % by wt. of paint.	11.0	-
3. Consistency, K.U.	100	140
4. Dry time:		
a. Set-to touch, hours.	-	4
b. Dry hard for recoat, hours.	-	18
5. Nonvolatile matter, % by volume of paint*.	38	-

** In order to confirm compliance with this requirement the vendor shall submit either a formal report from an independent laboratory or a confidential, notarized, legally-binding manufacturer's report indicating the method used and the laboratory results obtained for the specific brand submitted for certification.*

C. QUALITATIVE REQUIREMENTS:

1. COLOR. The color of the paint specified in the contract or purchase order shall match that of the standard color chip. If a color other than white is required, the color shall match that of the standard color chip submitted by the purchaser with the bid.
2. STORAGE STABILITY IN A PARTIALLY FULL CONTAINER. The paint shall show no skinning after 48 hrs when tested as specified in III B.
3. STORAGE STABILITY IN UNOPENED CONTAINER. All containers shall have sufficient preservatives to prevent spoilage for one year.
4. APPEARANCE OF DRIED PAINT. When properly applied, the paint shall dry to uniform appearance with laps and brush marks not being conspicuous.
5. ODOR. The odor shall not be putrid during or after application.
6. MATERIAL SAFETY DATA SHEET (MSDS). An MSDS clearly identifying this product, filled out completely according to the Florida Right-to-Know Law, Chapter 442, Florida Statutes, MUST BE submitted with each sample submitted for certification.
7. CONDITION IN CONTAINER. The paint, when tested as specified in Table II, shall be free from grit, seeds, skins, lumps, and livering, and shall show no more pigment settling or caking than can be reincorporated into a smooth homogenous state. In a freshly opened container, there shall be no rusting of the container.

8. RECOATING PROPERTIES. When tested as specified in IV.C.1, when the painted surfaces are recoated, no film irregularity shall be observed after four (4) hours of air drying under conditions. There shall be no picking or rolling up of the previous coat.
9. ANTI-SLIP. When tested as specified in IV.C.2. the surface shall have a static coefficient of friction of a minimum of 0.5 This test shall be performed in accordance with ASTM D 4518 Method B, to determine if the product should be classified as slip resistant, anti-slip, or terms of similar import.
10. WATER RESISTANCE. When tested as in IV.C.3., the integrity of the film shall remain the same as that of the dry area with no blisters or loss of adhesion.
11. ALKALI RESISTANCE. The paint film, tested as in IV.C.4., shall show no evidence of blistering, loss of adhesion, cracking or flaking.

III. TEST PROCEDURES FOR LABORATORY ANALYSIS

The failure of any test in this section shall constitute a failure of the product to conform to the specification. Unless otherwise noted, all test methods cited are the latest published revisions.

- A. PHYSICAL AND CHEMICAL PROPERTIES. The following tests shall be conducted in accordance with the methods specified in Table II.

TABLE II. TEST AND METHODS

Test	Methods
1. Total solids, % by wt. of paint.	ASTM D 2369
2. Consistency, Krebs-Stormer.	ASTM D 562
3. Storage stability in partially full container.	FTM Std. 141C, Meth. 3021.1
4. Condition in container.	FTM Std. 141C, Meth. 3011.2
5. Nonvolatile Vehicle, % by wt. of paint.	FTM. Std.141C, Meth. 4053.1
6. Drying time.	ASTM D 1640
7. Nonvolatile matter (% by volume)	ASTM D 2697

- B. STORAGE STABILITY IN PARTIALLY FULL CONTAINER. Determine skinning after 48 hours in accordance with Federal Test Method Standard No. 141C, Method 3021.1, except use a 3/4 filled pint, multiple friction top can. Check for compliance with II.C.2.

IV. METHODS OF SAMPLING, INSPECTION AND OTHER TESTS

- A. SAMPLING: At the option of the purchaser, representative samples shall be taken from deliveries made under this invitation and submitted for quality control testing. If the purchaser's sample fails, the manufacturer shall pay for the actual cost of testing. Failure of any sample so taken to comply with the specification requirements shall invalidate any purchase contract made under this invitation unless the manufacturer requests a repeat quality control test. This second sample shall be from the same batch. The manufacturer shall pay for the second quality control test should the sample fail, and this invalidates any purchase contract made under this invalidates. If the second sample passes, the manufacturer is not responsible for paying the actual cost of the test, and results obtained from the second quality control test shall prevail.

B. INSPECTION: Physical inspection of package, condition, quantity, and labeling shall be made at point of delivery by the purchaser. MSDS shall be submitted with each shipment in accordance with the Florida Right-to-Know Law, Chapter 442, Florida Statutes, and shall be identical to the MSDS supplied for initial certification.

C. OTHER TESTS.

1. RECOATING PROPERTIES AND APPEARANCE. Conduct the test under standard laboratory air-drying conditions. Apply the paint with a 2-inch nylon brush to the 6" x 12" masonry panels over non-asbestos fibered cement board at a rate of approximately 100 square feet per gallon. Rinse the brush with water and remove the excess water by shaking the brush vigorously. Apply the paint by brushing across the panel using back-and-forth strokes using the tip of the brush. During application, note the working properties of the paint. After 1 hour of air-drying, apply the second coat in the manner as the first coat. During application, examine the paint film for picking and rolling up of the first coat. After 24 hours examine the dried film for smoothness and uniformity. Check for compliance with II.C.4 and II.C.8.
2. SLIP RESISTANCE. For purposes of certification only, the manufacturer will be required to submit a copy of an independent laboratory report showing the results of the test for Anti-Slip. The test should be performed in accordance with ASTM D 4518 Method B for compliance with Anti-Slip criteria II.C.9.
3. WATER RESISTANCE. Apply paint film to a masonry panel. Allow to dry for 7 days, minimum, at 77 (± 3) F and 50(± 5)% relative humidity. In one area of the panel, place enough water on the painted surface to form a layer and immediately cover the layer with a 50 mm watchglass. After 24 hours, remove the watchglass and blot the surface dry. Examine for compliance with II.C.10.
4. ALKALI RESISTANCE. Prepare concrete panels from a mix of 1 part of type 1 portland cement and 1 part of graded Ottawa silica sand. Mix thoroughly with water to obtain a trowelling consistency and cast into panels measuring (76 X 76 X 13mm). The top surface of the panel to be coated shall be trowelled smooth. Allow the panel to cure for 1 week and immediately apply the paint at a spreading rate of 100 sq. ft. per gallon. Allow to cure for 24 hours. Immerse the test panels into water to such depths as to have the prepared surface about 4mm above the surface of the water for 28 days. Remove, let dry for 2 hours, and immediately examine for compliance with II.C.11.

NOTE: TESTING TO MEET THIS SPECIFICATION DOES NOT INCLUDE AN IN-USE PERFORMANCE TEST. ALL EDUCATIONAL AGENCIES SHOULD CONSIDER AN IN-USE PERFORMANCE TEST BEFORE PURCHASING THIS PRODUCT.

ORIGINAL MP-34.0 - APPROVED February 22, 1996
REVISION MP-34.1 - EFFECTIVE September 16, 2008

PRESIDENT FLORIDA SCHOOL PLANT MANAGEMENT ASSOCIATION

CHAIR FSPMA PAINT SPECIFICATIONS COMMITTEE