

SECTION 07 18 13
PEDESTRIAN TRAFFIC COATINGS

SPEC WRITER NOTE: Delete between // // if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. This section specifies a surface applied elastomeric and composition waterproofing type membrane suitable for light pedestrian traffic and recreation areas, but not intended for heavy industrial use.

1.2 RELATED WORK:

- A. Plywood underlayment: Section 06 10 00, ROUGH CARPENTRY.
- B. Metal flashing: Section 07 60 00, FLASHING AND SHEET METAL.
- C. Color and Texture of Finish Coat: Section 09 06 00, SCHEDULE FOR FINISHES.

1.3 TEST AREA:

- A. Before start of general application, apply the elastomeric coating as specified in a representative test area. Provide a test area not less than 9.29 square meters (100 square feet). The area to be covered by the coating to include all site conditions such as flashings bases, corners and projections through the coating. Provide test area in location determined by the Contracting Officer Representative (COR). After COR approval, area will serve as an example for the remaining work.

1.4 SUBMITTALS:

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturers Literature and Data: Each material, indicating compliance with specification requirements.
- C. Samples: Each finish color on 101 by 203 mm (4 by 8 inch) substrate, layered to show each coat and finish.
- D. Installer qualifications.
- E. Manufacturer warranty.

1.5 WARRANTY:

- A. Construction Warranty: Comply with FAR clause 52.246-21 "Warranty of Construction".

- B. Manufacturer Warranty: Manufacturer shall warranty their pedestrian traffic coating for a minimum of five (5) // // years from the date of installation and final acceptance by the Government. Submit manufacturer warranty.

1.6 DELIVERY AND STORAGE:

- A. Deliver materials to the site in original sealed containers, clearly marked with manufacturer's name and brand, and type of material.
- B. Store materials in weathertight and dry storage facility. Protect from damage from handling, weather and construction operations before, during and after installation. Store materials at temperatures and under conditions recommended by the manufacturer.

1.7 ENVIRONMENTAL REQUIREMENTS:

Do not proceed with application of materials when ambient temperature is less or greater than that recommended by the coating material manufacturer. Do not apply traffic coatings to damp or wet substrates, when relative humidity exceeds 85 percent, or when temperatures are less than 3 deg C (5 deg F) above dew point.

1.8 SAFETY REQUIREMENTS:

Keep products away from heat, sparks and flame. Do not permit use of spark-producing equipment during application of flammable products or where explosive fumes are present.

1.9 QUALITY ASSURANCE:

- A. Manufacturer's Qualifications: Obtain products from single manufacturer or from sources recommended by manufacturer for use with pedestrian traffic coatings system and incorporated in manufacturer's warranty.
- B. Installer's Qualifications: Work to be performed by installer having three (3) years' experience for work relating to this section and approved in writing by traffic coating manufacturer.

1.10 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by basic designation only.
- B. ASTM International (ASTM):
 - C794-10.....Adhesion-in-Peel of Elastomeric Joint Sealants
 - D412-06a(R2013).....Vulcanized Rubber and Thermoplastic Elastomers-Tension
 - D2240-05(R2010).....Rubber Property - Durometer Hardness
 - E96/E96M-13.....Water Vapor Transmission of Materials

PART 2 - PRODUCTS

SPEC WRITER NOTE: Make material requirements agree with applicable requirements specified in the referenced Applicable Publications. Update and specify only that which applies to the project.

2.1 PRIMER:

- A. Type required by the elastomeric coating manufacturer.

2.2 ELASTOMERIC BASE AND TOP COAT:

- A. Provide elastomeric base and topcoat materials to meet or exceed the following requirements:

| Property | Test Method | Base Coat | Top Coat |
|--|---------------|--|-----------------------------------|
| Tensile Strength | ASTM D412 | 2068 kPa (psi) | 4136 kPa (600 psi) |
| Elongation, percent (of original benchmark distance) | ASTM D412 | 550 | 200 |
| Hardness, Shore A | ASTM D2240 | 20 | 45 |
| Peel Strength (on concrete) | ASTM C794 | 13.6 kg (30 lb.), 100 percent cohesion | 100 percent cohesion to base coat |
| Permeability | ASTM E96/E96M | 12 metric perms | 0.06 metric perms |

2.3 AGGREGATE:

- A. Thoroughly washed, clean, medium-grained sharp indigenous stone granules, graded between 1 mm (.04 inch) and 4 mm (.16 inch) in size, and having a hardness of 6.5 or greater on the Moh's scale.

PART 3 - EXECUTION**3.1 SURFACE PREPARATION:**

- A. Apply to clean, dry surfaces. Smooth rough spots and tool marks.
- B. Fill holes, depressions and cracks with fillers compatible with the coating material and recommended by the coating manufacturer.
- C. Subsurface imperfections that telegraph through the finish coating surface are not acceptable.

3.2 WORK COORDINATION:

- A. To provide a watertight installation, coordinate this work with flashing and drains required to be installed before the coating work begins and be completed after the coating is in place.

3.3 APPLICATION:

- A. Prime surfaces to receive elastomeric waterproofing materials as recommended by the product manufacturer.
- B. Where horizontal surfaces intersect vertical surfaces, provide a sealant type fillet as recommended by the manufacturer.
- C. Apply elastomeric base coat at a rate that will ensure a dry film thickness of not less than 0.9 mm (35 mils).
- D. Uniformly disperse aggregate topping at the rate of 0.5 Kg per sq. m (10 lbs./100 sq. ft.); inter-bond and vulcanize granules within the fluid elastomeric topping in accordance with manufacturer's instructions.
- E. Apply elastomeric top coat at a rate which will ensure a dry film thickness of 0.4 mm (15 mils) for the top coat and a total combined dry film thickness for the base and top coats of not less than 1.3 mm (50 mils).
- F. Complete the base to a uniform established line as shown.

3.4 CLEANING:

- A. Remove smears of elastomeric material from other work.

3.5 PROTECTION:

- A. Protect the finished coating from traffic until the coating cures and afterward until final acceptance.

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