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
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
Before start of general application, apply the elastomeric coating as specified in a representative test area. The area shall be approximately 9 m² (100 square feet). The area to be covered by the coating shall include all site conditions such as flashings bases, corners and projections through the coating. Location of test area shall be determined by the Resident Engineer, and after approval, shall 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 100 by 200 mm (4 by 8 inch) substrate, layered to show each coat and finish.

1.5 WARRANTY
Warranty surfaces, where elastomeric coating has been applied, against leaks and other failures, over and above normal wear and failure of substrate, and subject to the terms of the "Warranty of Construction", FAR clause 52.246-21, except that the warranty period is two years.
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.

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 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. American Society for Testing and Materials (ASTM):
   C794-10 ............... Adhesion-in-Peel of Elastomeric Joint Sealants
   D412-06 ............... Vulcanized Rubber and Thermoplastic Elastomers-
       Tension
   D2240-05(R2010) ....... Rubber Property - Durometer Hardness
   E96-10 ............... 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
Type required by the elastomeric coating manufacturer.

2.2 ELASTOMERIC BASE AND TOP COAT
Elastomeric base and top coat materials shall meet or exceed the following requirements:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Base Coat</th>
<th>Top Coat</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Base Coat</th>
<th>Top Coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>ASTM D412</td>
<td>300 pounds per square inch</td>
<td>600 pounds per square inch</td>
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<tr>
<td>Elongation</td>
<td>ASTM D412</td>
<td>550 percent</td>
<td>200 percent</td>
</tr>
<tr>
<td>Hardness, Shore A</td>
<td>ASTM D2240</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>Peel Strength (on concrete)</td>
<td>ASTM C794</td>
<td>30 pounds, 100 percent cohesion</td>
<td>100 percent cohesion to base coat</td>
</tr>
<tr>
<td>Permeability</td>
<td>ASTM E96</td>
<td>12 metric perms</td>
<td>0.06 metric perms</td>
</tr>
</tbody>
</table>

2.3 AGGREGATE

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

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

A. Surfaces to be coated shall be clean and dry. 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 will not be accepted.

3.2 WORK COORDINATION

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 all surfaces to receive elastomeric waterproofing materials as recommended by the products manufacturer.
B. Where horizontal surfaces intersect vertical surfaces provide a sealant type fillet as recommended by the manufacturers.
C. Apply elastomeric base coat at a rate that will ensure a dry film thickness of not less than 35 mils.
D. Uniformly disperse aggregate topping at the rate of 0.5 Kg per m² (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 15 mils for the top coat and a total combined dry film thickness for the base and top coats of not less than 50 mils.

F. Complete the base to a uniform established line as shown.

3.4 CLEANING

Remove smears of elastomeric material from other work.

3.5 PROTECTION

Protect the finished coating from traffic until the coating cures.