

## SECTION

09500

### Commercial Floor Covering

#### Part 1 GENERAL

##### 1.01 DESCRIPTION OF WORK

A. Work under this section shall consist of furnishing everything necessary for and incidental to the execution and completion of all Industrial Floor coating equipment flooring assembly and protection course work, as indicated on the drawings and specified herein.

B. Related work:

1. Concrete
2. Plywood
3. Sheet Metal Flashings
- 4.
- 5.
- 6.
- 7.

##### 1.02 QUALITY ASSURANCE

A. All work performed under this specification shall meet the current standard of care for the items as specified and in conjunction with manufacturer's specification and applicable local building codes.

B. Manufacturer of Acrylic Polymer Flooring shall be regularly engaged in the manufacturer of Industrial flooring materials for the past ten years and submit a list of at least five projects of equal complexity and scope. Installations submitted shall have been in place for the past five years with no sign of failure.

C. Acceptable Manufacturer: Materials of Mer-Kote Products Inc., 501 South Van Ness Ave. Torrance California USA 90501 800.851.6303. Fax.310.320.9438

D. Use only materials from a single manufacturer to ensure compatibility or as approved in writing by the membrane manufacturer.

E. Qualification of installers:

1. Use only manufacturers pre-qualified and approved subcontractors employing skilled and experienced workers. Applicators shall have at least 5 years experience applying these types of materials in projects of equal size and complexity.
2. Helpers and apprentices used for such work shall be under full and constant supervision at all times by thoroughly skilled installers.
3. In the acceptance or rejection of installed work, no allowance will be made for the lack of skill on the part of the installer.

F. Instructions: Request the service of a representative of the manufacturer for initial instructions in preparation, mixing and application of the materials. The manufacturer shall supply such service as required. Notify manufacturer in writing 30 days prior to requiring his services.

1.03 SUBMITTALS

Submit catalog data which includes specification and installation details. Installation instructions and recommendation of manufacturer shall be submitted for this application.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver materials to the project site in manufacturer's unopened, undamaged, original packaging.
- B. Store materials on site in enclosures or under protective covering that assure materials are kept clean and dry.
- C. Store material off ground.

1.05 JOB CONDITIONS:

A. Environmental Conditions: Work shall be performed within range of temperatures, and in climatic conditions recommended by the manufacturer.

## Part 2 PRODUCTS

### 2.01 MATERIALS:

- A. Industrial Flooring material shall be Mer-Ko Commercial Floor II as manufactured by Mer-Kote Produces Inc., Torrance California USA
- B. 800. 851.6303
  
- B. The composition when properly blended and cured should exhibit the following physical characteristics and properties:
  - 1. Rubber emulsion for this elastomeric membrane shall be comprised with Acrylic polymers and shall have a minimum total solids content of 40% when tested by the dry cup method.
  - 2. Adhesion to Concrete: > 325 (in Shear)
  - 3. Compressive strength: ASTM C-109 >5,500 psi
  - 4. Indentation Resistance: Mil-D-3134 <1.02%
  - 5. The average thickness of the overlay shall be 3/16"-1/4" (4.7mm-6.35mm)
  - 6. Tensile Strength: ASTM C-109 >970 psi minimum
  - 7. Surface Hardness: ASTM D-2240, Durometer D scale >84
  - 8. Tabor Abrasion: H-22 Wheel 1000/1000 cycles <1.5 grams
  - 9. Flexural Strength: ASTM C-256 1275 psi
  - 10. Fire Rating: ASTM E-162 Non-combustible
  - 11. Mil-D-3134: Complies
  - 12. Water Absorption: ASTM C-267 <1.8%
  
- C. Sealant: Single or two component urethane as required and indicated on drawings. Mer-Krete PUC 1000

D. Underlayments: To smooth uneven surfaces or when slopping is required, use only Mer-Ko Underlay-L as specified by the manufacturer.

### PART 3 EXECUTION:

#### 3.01 VERIFYING SURFACE CONDITIONS

A. Inspection:

1. Prior to work of this section, carefully inspect the installed work of other trades and verify that all such work is complete to the point where this installation may properly commence. All substrate surfaces shall be as per manufacturer requirements.
2. Verify that this work may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.

B. Discrepancies:

1. In the event of discrepancy, immediately notify the architect, General Contractor or his agent.
2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

#### 3.02 INSTALLATION

A. This floor covering shall be installed in strict accordance with the manufacturers printed instructions, details and any special conditions covered under this specification.

1. Trowel apply a prime coat comprised of 2 parts filler powder to 1 part acrylic emulsion to all base and edge flashing areas. Prime all flat areas in the same manor.
2. Trowel apply commercial body coat over the cured primer. Body coat shall be mixed at a ratio of 1 sack to  $\frac{3}{4}$ gallon emulsion. Allow to cure a minimum of 12 hours.
3. Sand entire surface to remove all imperfections and trowel marks.

4 Grout using Mer-Ko commercial grout and commercial emulsion. Allow to cure a minimum of 12 hours and sand smooth.

5 Apply two coats of Mer-Ko Commercial Sealer in color selected by the architect add texture as indicated and cure a minimum of 48 hours before allowing light foot traffic.

Optional Where positive waterproofing is required install Mer-Krete BFP waterproof membrane before application of floor overlay. To ensure compatibility there will be no substitution on this item.

### 3.03 FLOOD TEST: (as required)

- A. Give each cavity a 24 hour flood test. Plug any drains to contain the water. Notify Architect, General Contractor, owner's agent and manufacturer of the membrane no less than 72 hours prior to performing test.

### 3.04 PROTECTION:

- A. After successful completion of the flood test, waterproof membrane covering shall be adequately protected by the prime contractor against damage or misuse by other trades until final acceptance of the building.

### 3.05 SPECIAL CONDITIONS:

- A. All existing metal surfaces (Pipes, I-Beams, Drains, etc.) shall be thoroughly cleaned and primed with Mer-Ko Wood and Metal Seal prior to adhering base membrane.

### 3.05 WARRANTY:

- A. Warrantee material and workmanship to the owner insuring waterproof membrane performance of the system is as per manufacturers specifications and all work has been per applicable industry standards and as per standard of care issues for the industry involved. Warranty shall be -5- years material and labor, per manufacturers standard warranty.

**END OF SECTION**