

**SF-112-MR STRONGFLOOR WATERPROOF FLOORING SYSTEMS
FOR MECHANICAL EQUIPMENT ROOMS CSI # 09700**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Fluid applied, attractive, waterproof, traffic bearing flooring system, which also bridge cracks and forms flashings.

1.02 RELATED SECTIONS

- A. Section 07900: Sealants
- B. Section 03700 Strongcrete Latex Modified Mortars and Overlayments

1.03 REFERENCES

- A. Submit two samples of each coating system(s), applied to ¼" plywood or similar rigid base.
- B. Submit two copies of manufacturer's literature for all products furnished, including appropriate Material Safety Data Sheets (MSDS).

1.04 QUALITY ASSURANCE

- A. Applicator: Trained and Certified by Manufacturer
- B. Manufacturer: The manufacturer of the specified products shall have in existence, for a minimum of ten years, a program of training and technical support for certified applicators.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to job site in sealed, undamaged containers with labels intact and legible, indicating the material name, date of manufacture and lot number.
- B. Store materials indoors, in a dry location, at temperatures not exceeding 90°F or lower than 35°F.

1.07 PROJECT CONDITIONS

- A. Install materials in accordance with all safety and weather conditions required by manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction.
- B. Project conditions involve only inspection and preparation of the substrate surface to be coated.

C. Environmental Conditions:

1. All materials individually or mixed shall have zero volatile organic content (VOC).
2. Do not apply materials if rain is anticipated within three hours of application.
3. Substrate and air temperature must remain above 40°F for at least 4 hours after application of materials and remain above freezing for 24 hours.
4. All materials are non-hazardous and Class A fire-rated.

1.08 GUARANTEE

- A. The Certified Applicator and the manufacturer shall provide the Owner with a five-year joint guarantee on the products and systems covered by this specification.
- B. The Manufacturer of the specified products shall be under no obligation to provide a guarantee on the specified products in this specification, should a contractor be selected other than a Certified Applicator of the manufacturer.

1.09 MAINTENANCE

- A. Wash traffic membrane with soap and water using a bristle brush or pressure washer of 300 psi. Periodic cleaning extends the life of the membrane and enhances its appearance.
- B. Chemical spills should be removed to avoid possible damage.

PART 2 – PRODUCTS

2.01 MATERIALS

SF-112-MR WATERPROOF FLOORING SYSTEM

- 1 8 -mil coat EM-100N and water mix 50/50
- 1 40-mil coat EM-100N waterproofing component
- 2 25-mil coats minimum traffic bearing component
- 2 8-mil coats resicolor#4 (color to be selected)

ACCEPTABLE MANUFACTURERS

- A. Strongwall Industries, Inc. 107 Chestnut Street, Ridgewood, NJ 07450
Telephone 201 445 4633 Fax 201 447 2317 email: strongwall@strongwall.com

2.02 COMPONENTS

- A. Waterproofing component is a fluid applied rubber emulsion.

Traffic bearing component is a latex vinyl copolymer emulsion and a factory apportioned catalyst with abrasion resistant aggregates.

- B. Flashing reinforcement (when required) is a spray bonded non-woven fabric with 5x5 polypropylene web.
- C. Various decorative and chemical-resistant topping components.

2.03 MIXES

A. Material

1. Waterproofing component
EM-100-N, a rubber emulsion, packaged in 5-gallon pails.
Mixing Ratio: Apply directly from pail
Yield: 200 sq. ft. at 40 mils wet per 5-gallon pail
2. Traffic-bearing component
Strongcote #3 Liquid, a latex vinyl copolymer, 5 gallons of liquid packaged in 6-gallon pails, and Strongcote #3 Powder, an aggregate catalyst, packaged in 55-pound bags.

Mixing Ratio: Two 55-lb bags of Strongcote #3 Powder and one 5-gallon pail of Strongcote #3 Liquid form one unit.

Average Yield: 600 sq. ft. per unit at 25 mils, per coat. Apply to the specified thickness, depending on use

3. Color topping component
Resicolor #4, packaged in 5 gal pails
Mixing ratio: Apply directly from pail
Yield: 1200sq. ft

B. Mixing

1. Waterproofing component
 - a. Stir for 30 seconds in its container.
2. Traffic-bearing component
 - a. Stir Strongcote #3 Liquid in its shipping container for about 30 seconds and pour one-half its contents into a clean container.

- b. Gradually add one bag of Strongcote #3 Powder into the shipping container, mixing continuously as the powder is added, using a ½" varispeed drill with mounted Jiffy blade.
 - c. After all powder is added, continue to mix for 3 minutes until the materials form a lump-free mixture. The mixture has a pot life of 30 minutes at 70°F.
3. Color Topping Component
 - a. Stir in its container for 2 minutes.

2.04 SUPPLEMENTAL MATERIALS

- A. Underlayment: Strongcrete SW-26 mortar as manufactured by Strongwall Industries. Use for minor repairs and to profile concrete surface for drainage. Minimum pitch to be 1/8" per linear foot.

PART 3-EXECUTION

- 3.01 Acceptable installers shall be trained and certified by the manufacturer.

3.02 EXAMINATION

A. Concrete:

1. Before the membrane is applied, inspect the top surface of the substrate, perform all required structural and surface repairs, profile to eliminate ponding and treat as necessary to remove laitance, loose material on the surface, grease, oil, paint and other contaminants, which will affect the bond of the membrane.
2. Verify that curing methods used for concrete are compatible with the top surface requirements for the SF-112-MR Flooring System.
3. Commencement of coating installation implies acceptance of the top surface of the substrate area only, as suitable to accept deck-coating system.

3.03 PREPARATION

A. Equipment Options:

1. Shot blast to clean and vacuum concrete surface.
2. Waterblast machine capable of delivering minimum water pressure of 4,000 psi to the substrate.

B. Procedure:

1. Make as many passes with shot blasting machine as required and vacuum surface clean
2. Pretreat areas of oil drippings with a penetrating oil remover and rinse. Spray concrete deck with HD concrete cleaner, allow to soak for 30 minutes without drying, and waterblast with 4,000 psi.

3.04 APPLICATION

A. Crack treatment component:

1. Structural cracks: Sawcut to 3/8" maximum and fill with HPL sealant following manufacturer's recommendations and details.
2. Apply primer coat using EM-100N mixed with potable water to a 50/50 ratio. Apply over entire surface and allow to cure.
3. Apply One coat EM-100N @ 40 mils (total wet thickness) onto all horizontal surfaces and to form flashings on vertical surfaces. Use thickener to increase material viscosity for the second coat only. Broadcast dry medium quartz sand while second coat is still wet.
4. Allow first coat to cure for approximately 2 hours before applying the second coat. Allow 6 additional hours at 70°F before applying the traffic-bearing component.

B. Traffic bearing component:

1. Mix and apply in the specified thickness over the entire surface by squeegee, brush, roller or spray. Control thickness by covering a measured section with each unit. Allow to cure for 2 hours (minimum) before applying an additional coat if required.
2. Allow to cure for 12 hours (minimum) before opening to traffic.

C. **Topping Component:**

1. Resicolor #4 color topping: Apply to enhance color and surface cleanability.
 - a. Materials:
Resicolor #4, a color topping, packaged in 5-gallon pails
Mixing Ratio: Apply directly from pail
Average Yield: 1200 square feet per 5-gallon pail per coat

- b. Mixing:
 Stir for 30 seconds

- c. Application:
 Apply on a clean, dry surface using a short nap roller. Apply in two coats.
 Allow to cure 12 hr. Minimum before opening up to traffic.

C. Optional topping Component:

If chemical resistance is required, ET-1000-CR HEAVY DUTY CHEMICAL RESISTANT TOPPING: Refer to ET-1000-CR Brochure.

END OF SECTION