



FX-70[®]-10

Field Formed Protective System

DESCRIPTION:

FX-70[®]-10 Field Formed Protective System consists of three coats of **FX-70[®]-9 Hydro-Ester[®] Coating** and two layers of **FX-Inorganic Fiber Reinforcement**. Concrete to be treated with **FX-70-10 FFS** should be 28 days old min.

ADVANTAGES:

The **FX-70[®]-9 Hydro-Ester[®] Coating** is a 100% solids, moisture-insensitive system containing no solvents. When mixed at a 2:1 ratio by volume at 75°F (24°C), it has a 30-minute pot life.

The low viscosity characteristics permit the penetration and ease of application to the FX-Inorganic Fiber Reinforcement.

PHYSICAL PROPERTIES:

Color	Gray (also available in other colors)
Viscosity	12000 cps ± 1000
Solids Content	100%
Pot Life	30 minutes at 75°F (24°C)
Tack-Free Time	3 hours at 75°F (24°C) 8 mil film

The mixed **FX-70[®]-9 Hydro Ester Coating**, when cured for 14 days at 75°F (24°C), has the following minimum physical properties:

Tensile Strength ASTM D-638	5000 psi in 14 days
Compressive Strength ASTM C-109	7500 psi in 7 days
Tensile Elongation ASTM C-638	5% in 14 days
Abrasion Resistance ASTM D-968	60 liters per mil

The **FX-70[®]-10 Field-Formed Protective System** shall exhibit the following physical properties when cured for 14 days at 75°F (24°C):

Ultimate Tensile Strength, psi ASTM D-638-68	11,000 min.
Ultimate Flexural Strength, psi ASTM D-790-66	20,000 min.
Flexural Modulus of Elasticity ASTM D - 790	800,000 psi min
Izod Impact Strength ft./lb. ASTM D-256	14.0 per inch, notched

WHERE TO USE:

Concrete, steel, or wood piles or other marine structural elements; steel and concrete tanks, WWTP digester tanks, where abrasion resistance is of importance.

SURFACE PREPARATION:

New Steel Surfaces: New steel surfaces should be abrasive blasted to a commercial gray metal finish as specified by the Steel Structures Painting Council SP-6. All work blasted shall be coated the same day with **FX-408 Zinc Rich Primer**.

New Concrete Surfaces: Concrete surfaces shall be cleaned to remove dirt; curing compounds, existing coatings, or laitance to provide a clean, sound bonding surface. Cleaning may be accomplished with masonry cleaner and water blasting, acid etching and water blasting, aggregate blasting or other methods that would achieve a similar result.

Damaged or deteriorated concrete and steel surfaces shall be repaired prior to application of **FX-70-10 FFS**.

MIXING:

The **FX-70-9[®] Hydro Ester[®] Coating** shall be mixed thoroughly with a low-speed drill motor and **FX-Mixing Paddle** for a minimum of 3 minutes, and until a uniform color is obtained.

The **FX-70-9[®] Hydro Ester[®] Coating** may be applied by brush, roller, or spray.

The **FX-70[®]-10 Field-Formed Protective System**, after installation, shall be allotted a minimum curing time of 12 hours before immersion.

The first coat of **FX-70-9[®]** shall be applied at the rate of 50 sq. ft. (2.79m² to 4.65m²) per gallon (3.8L). The reinforcement shall be firmly seated into the wet **FX-70-9[®]** using a grooved aluminum or pvc roller. Splices in reinforcement, where required, shall be lapped 2 inches (50mm). When first coat of **FX-70-9** becomes tack free, apply second coat of **FX-70-9** at a rate of ± 50 sq ft/gal, the second layer of reinforcement shall be firmly seated into the wet **FX-70-9** using a grooved aluminum or pvc roller. Lap all splices 2" min. When 2nd coat of **FX-70-9** coating becomes tack free, apply top coat of **FX-70-9** at a rate of ± 80 sq ft/gal.

(continued on back)

LIMITATIONS:

The **FX-70-9**[®] shall not be applied when concrete surface temperatures are less than 40°F (4°C). Applications at lower temperatures should utilize **FX-70-9**[®] "**W**" (winter grade) .

CAUTION:

WARNING! A Component contains epoxy resin. DANGER! "B" Component contains alkaline amines; strong sensitizer. May cause skin sensitization or other allergic responses. Use with good ventilation, particularly if material is heated or sprayed. Prevent all contact with skin or eyes. Wear protective clothing, goggles, gloves and/or barrier creams. Keep container closed when not in use. Wash thoroughly after handling.

FIRST AID:

In case of skin contact, immediately wash with soap and water. In case of eye contact, flush eyes with copious amounts of water for at least fifteen (15) minutes. Remove contaminated clothing and shoes. If irritation persists, seek medical attention. Wash clothing before reuse.