

# Deck Pro 7101



## Repair Mortars

### Fiber Reinforced Polymer Repair Mortar

Deck Pro 7101 Repair Mortar is a shrinkage-compensated, fiber-reinforced, cement based mortar. Deck Pro 7101 contains polymers and special additives which improve the properties and offer high strength and superior performance for structural concrete repair. Deck Pro 7101 is specially designed for concrete or masonry substrates and can be applied vertically or overhead by hand troweling or low pressure spray.

Deck Pro 7101 can be used on:

- Bridges & Tunnels
- Parking Decks
- Manholes & Sewers
- Piers
- Elevated Concrete Slabs
- Roadways



- Advantages:**
- High Build
  - Use on Horizontal, Vertical or Overhead Repairs
  - Excellent finishing characteristics.
  - Low Permeability
  - High Compressive, Tensile, Flexural, and Bond Strengths

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### Technical Data

	1 day	7 days	28 days
Compressive Strength	4000 psi	7500 psi	8000 psi
Bond Strength	1000 psi	1250 psi	2000 psi
Flexural Strength		900 psi	1000 psi
Splitting Tensile		500 psi	700 psi
Unit Weighth	135 lb./ft. <sup>3</sup> (2.275 kg/m <sup>3</sup> )		
Drying Shrinkage	-.035% ( Dry Cured )		
Scaling Resistance, 50 Cycles	None		
Pot Life	45 Minutes		
Initial Set Time	2 hours		
Final Set Time	4 hours		

**Surface Preparation: Concrete**

Perform surface preparation in compliance with ICRI Technical Guideline No. 03730 "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion". Remove all unsound or delaminated concrete providing a minimum of 1/4" (6 mm) substrate profile and 3/4" (20 mm) clearance behind corroded reinforcing steel. The perimeter of the area to be patched should sawcut to a minimum depth of 1/4" (6 mm) to prevent feathered edges. After concrete removal and prior to placement, mechanically abrade the concrete surface to remove all bond-inhibiting materials from the concrete substrate and to provide additional mechanical bond. Presoak the prepared concrete surface to provide a saturated, surface dry (SSD) condition.

**Corroded Reinforcing Steel**

Remove all oxidation and scale from the exposed reinforcing steel in accordance with ICRI Technical Guideline No. 03730 "Guide to Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion". For additional protection from future corrosion, coat the prepared reinforcing steel with rebar coatings.

**Mixing:** Add 100 to 105 ounces of potable water per 50 lb. (22.7 kg) bag of Deck Pro 7101 Repair Mortar. Mechanically mix using a mixer of an appropriate size. Pour approximately 75% of the mix water into the mixing container then charge the mixer with the bagged material. Add the remaining mix water as required. Mix for 3 to 5 minutes until a homogeneous consistency is achieved.

**Application:** If applying by hand, scrub a bond coat of Deck Pro 7101 Repair Mortar into the prepared surface with a stiff bristle broom or brush. Gunitite 7100 Repair Mortar must be placed before the bond coat dries. When applying with multiple lifts, scratch the preliminary lift before initial set. Apply the next lift after the preliminary lift has reached final set. If the succeeding lift is not to be immediately placed, keep the surface continually moist. Cut-off or level as required matching the original concrete elevation. For spray applications, confirm with pump supplier suitability of equipment to spray Deck Pro 7101 Repair Mortar. Remove all excess water from the saturated substrate and apply while taking proper consideration for compaction around reinforcing steel. Finish the final surface as required.

**Application Thickness:** Vertical & Overhead: 3/8 to 2" (10 to 50 mm) per lift

**Curing:** Proper curing is extremely important and should be conducted in accordance with ACI 308 "Standard Practice for Curing Concrete". Apply a curing compound that complies with the moisture retention requirements of ASTM C 309 or moist cure for a minimum of 7 days.

**Limitations:** Deck Pro 7101 should be used when ambient temperatures are 40°F (4°C) and rising. Lower temperatures produce a slower set; higher temperatures produce a faster set. For temperatures below 40°F (4°C) consult with the manufacturer for special cold weather placement provisions included but are not limited to conditioning of the materials, use of heated mix water and thermal protection. In hot weather use chilled water for mixing.