

TECHNICAL DATA

DESCRIPTION: **Deck Mix UW** is single component, shrinkage compensated concrete designed for use underwater. **Deck Mix UW** features air entrainment and special cements, aggregates, microsilica, anti-washout agents and an integral corrosion inhibitor to protect reinforcing steel. Additional admixtures allow for easy placement and added bond strength. Air Entrainment gives **Deck Mix UW** excellent durability and freeze thaw resistance. It's easy to use, requiring only potable water at the jobsite.

USE ON: Tunnels, bulkheads, dams and culverts

- ADVANTAGES:**
- Anti-washout agents allow for placement underwater
 - Excellent compressive and bond strengths
 - Normal set time with continuous strength gain past 28 days
 - Shrinkage compensated
 - Easy placement by hand or pump
 - Air entrained for resistance to freeze thaw cycling
 - Formulated to inhibit alkali silica reaction
 - Excellent bond to concrete substrates

| | 3 DAYS | 7 DAYS | 28 DAYS |
|---|------------------------|------------------------|------------------------|
| Compressive Strength (ASTM C 39 Modified) | 3000 psi (20.5 MPa) | 4000 psi (27.4 MPa) | 6000 psi (41.0 MPa) |
| Flexural Strength (ASTM C 293) | | | 1000 psi (6.9 MPa) |
| Bond Strength (ASTM C 882 Modified) | | | 1800 psi (12.3 MPa) |
| Splitting Tensile (ASTM C 496) | | | 850 psi (5.8 MPa) |
| Length Change (ASTM C 157 Dry Cured) | | | -0.023% |
| Freeze Thaw Resistance (ASTM C 666) | 99.2% @ 300 cycles | | |
| Air Content | 7% (+/- 1.5 %) | | |
| Designed Slump | 6" (+/- 1") | | |

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APPLICATION: Add potable water to **Deck Mix UW** at a maximum rate of 3.45 quarts per 80lb bag. Use normal mechanical mixer appropriate for mixing concrete with a coarse aggregate. Mix Deck Mix UW with measured water for no more than 3 minutes. Pre-dampen substrate to a surface saturated, dry condition with clean water for a good bond. No special curing is required. Always follow ACI guidelines for application and curing methods. For detail application instructions refer to U.S Concrete Guide Specification Guide.uw

LIMITATIONS: **Deck Mix UW** should be used when ambient temperatures are at 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 which include 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. **Deck Mix UW** should not be applied at less than 1" (12.7 mm) thickness.

**PACKAGING/
YIELD:** **Deck Mix UW** is packaged in 50 lb or 80 lb Kraft paper bags. Each 80 lb bag yields approximately .63 cubic feet when mixed with 3.45 quarts of potable water.

CAUTION: **WARNING! CONTAINS FREE SILICA & PORTLAND CEMENT. DO NOT BREATHE DUST.** May cause delayed lung injury (silicosis). Follow OSHA safety and health standards for crystalline silica (quartz). Cement powder or freshly mixed concrete grout or mortar may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with water. If any cement powder or mixture gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention.