

## FASTRAC 246 CONCRETE

Rapid-Setting Concrete

### DESCRIPTION

FasTrac 246 Concrete is a one-component, shrinkage compensated, proprietary blend of cements, aggregates, and performance enhancing chemical additives. This rapid setting concrete is mixed with water on site, used for large-scale horizontal concrete repairs, and form and pour vertical applications that require high early-strength gain.

### WHERE TO USE

- Airport runways
- Concrete slab replacement
- Bridge deck repair
- Parking decks
- Horizontal concrete surfaces
- Dowel Bar Retrofit
- Interior or exterior

### FEATURES/BENEFITS

- Very rapid setting; allows structures to be opened to vehicular traffic in 3 hours
- Non-gypsum based with volume stability
- Excellent resistance to freeze/thaw with outstanding durability
- Shrinkage compensation minimizes cracking from drying shrinkage
- Structural repair material
- Low thermal profile

### YIELD

Approx. .5 cubic yards per 1800 lb. bulk-bag/super-sack and approximately .45 cubic feet per 60-lb bag.

### PACKAGING

- 60 lb bags
- 1,800 lb bulk bags
- 2,000 lb bulk bags
- 3,000 lb bulk bags

### SHELF LIFE

12 mos. properly stored

### STORAGE

Store and transport in clean, dry conditions

### APPLICATION TEMPERATURE RANGE

40°F to 90°F (Hot weather placement procedures recommended above 90°F; Cold weather placement procedures recommended below 50°F)

### HOW TO APPLY

#### **Surface Preparation** (See ICRI guidelines)

1. Concrete must be sound and fully cured (28 days).
2. Saw cut the perimeter of the area being patched into a square with a minimum depth of 1" (25mm).
3. Remove all unsound concrete and roughen the surface to min. 1/4" profile amplitude.
4. Remove all laitance, oil, grease, curing compounds, and other contaminants that could prevent adequate bond.
5. The concrete substrate should be saturated surface-dry (SSD), without standing water, before application.
6. Apply the mixed material onto the prepared saturated surface-dry (SSD) substrate by trowel or screed. Ensure proper consolidation of the mortar and compaction around reinforcing steel. Minimum application thickness is 1" based on a 3/8" max. coarse aggregate. Maximum application thickness is 12". Finish the completed repair, as required, taking care not to overwork the surface.

#### **Reinforcing Steel**

Remove all oxidation and scale from the exposed reinforcing steel in accordance with ICRI Technical Guideline No. 03730 "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion."

#### **Mixing**

Mix with required amount of cool, potable water for desired application characteristics, from 2.20 to 2.375 U.S. qts (2.08 to 2.25L) per 60lbs. (27.2kg) bag. Conduct field trials to verify proper slump, (approx 8") yield and a thoroughly mixed product.

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### FasTrac Accelerator

The addition of FasTrac Accelerator is recommend at temperatures below 50°F.

Pour the recommended volume of clean, potable water [ $> 34^{\circ}\text{F}$  ( $1^{\circ}\text{C}$ )] into the mixing container.

Add the appropriate amount of FasTrac Accelerator into the water and mix until it has dissolved.

For quicker opening times, FasTrac Accelerator may be used between 50°F-60°F.

Use of the recommended amount of FasTrac Accelerator, at temperatures lower than 60°F, will ensure that both the designed 3 hour compressive strength and 3 hour open time to vehicular traffic are achieved.

### Working time

Approx. 15-25 min

### Set time – min, at 72°F (22°C), ASTM C266

Initial.....20-30 minutes

Final.....30-40 minutes

### Shrinkage – ASTM C157

Air Cure.....-0.04

Water Cure.....0.02

### RCP – ASTM 1202

28 Day.....700 coulombs

### Compressive strength – 3" x 6" cylinders, ASTM C39

2 hr.....2,000 psi (13.8 MPa)

3 hr.....3,500 psi (24.1 MPa)

1 day.....5,000 psi (34.5 MPa)

7 day.....7,500 psi (51.7 MPa)

28 days.....8,500 psi (58.6 MPa)

### Shear Bond Strength – ASTM C882

1 day.....2,500 psi (17.2 MPa)

7 day.....3,000 psi (20.7 MPa)

### Freeze Thaw – ASTM C666 Procedure A

300 Cycles.....97.2

### Curing

Protect finished concrete from rapid moisture loss by covering with wet burlap or water mist as soon as concrete is set. Keep burlap wet or water mist for a minimum of 2 hours. Alternatively, utilize an ASTM C-309 curing compound. Do not use wax based curing compounds.

### Clean Up

Clean tools and equipment with clean water immediately after use. Cured material must be removed mechanically.

### Health and Safety

Make certain the most current versions of product data sheet and SDS are being used

### Risks

Product contains portland cement and sand (crystalline silica); it can cause skin and eye irritation. Ingestion or inhalation of dust may cause tract irritation. This contains free respirable quartz, which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin and eyes. Prevent inhalation of dust. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or is used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes, and seek medical attention. In case of skin contact, wash affected areas with soap and water. If the irritation persists, seek medical attention. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If the discomfort persists, breathing difficulty occurs, or if swallowed seek medical attention. Refer to Safety Data Sheet (SDS) for further information.



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### **Proposition 65**

This product contains material listed by California as known to cause cancer, birth defects, or other reproductive harm.

### **VOC Content**

0 lbs/gal or 0 g/L

### **Limited Warranty Notice**

Every reasonable effort is made to apply exacting standards both in the manufacture of "FasTrac 246 Concrete" product and in the information, which we issue concerning these products and their use. We warrant our products to be good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only on quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, Western Material and Design, LLC makes no warranty or guarantee, express or implied, including warranties of fitness for a particular purpose or merchantability, respecting its products, and Western Material and Design, LLC shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Western Material and Design, LLC technical manager.