

Commercial Grade

FastSet® DOT Mix

Neat: 1244-56, -53 (with Corrosion Inhibitor), -59, Extended: 1244-81, -88, -89

Fiber Reinforced, rapid-setting repair material designed for use in structural concrete repair, bridge decks and roadways

DIVISION 32

Rigid Paving Repair 32 01 29







QUIKRETE® Commercial Grade FastSet® DOT Mix and **FastSet® DOT Mix Extended** are high performance, fiber-reinforced, rapid-setting repair materials designed for use in structural concrete repair, bridge decks, roadways and parking deck applications from ½ in to 24 in thick. Both products exceed the requirements of ASTM C 928 R3 for concrete repair materials. **QUIKRETE® Commercial Grade FastSet® DOT Mix** may be extended with up to 25 lb (11.3 kg) of gravel per 55 lb (24.9 kg) bag, for repairs to roads and bridges at a minimum thickness of 2 in (50 mm). **QUIKRETE® Commercial Grade FastSet® DOT Mix Extended** pre-blended with the recommended amount of coarse aggregate. Both mixes are also available with an integral corrosion inhibitor. in cases where maximum corrosion protection is desired.

Applications:

- Bridge Decks
- Parking Decks
- Roadways
- Structural Concrete Repair

Product Features:

- Fiber Reinforced
- · Rapid-Hardening
- · Rapid Strength Gain
- High Strength
- Freeze Thaw Resistant
- Very High Sheer Bond Strength

Performance Data:

QUIKRETE® Commercial Grade FastSet® DOT Mix

Compressive Strength (ASTM C109-Modified)

1.5 hours 3000 PSI (20.6 MPa) 3 hours 4500 PSI (31.0 MPa) 24 hours 6500 PSI (44.8 MPa) 7 days 8000 PSI (55.1 MPa) 28 days 9000 PSI (62.0 MPa)

Setting Time (ASTM C191)

Initial 15 to 30 minutes Final 25 to 45 minutes

Length Change (ASTM C157) 28 days, air ≥-0.07% 28 days, water ≤0.04%

Slant Shear Bond Strength (ASTM C882)
24 hours 2000 PSI (13.7 MPa)
7 days 2500 PSI (17.2 MPa)
Freeze Thaw Resistance (ASTM C666)

After 300 cycles ≥ 95% Durability Factor

Scaling Resistance after 25 Cycles (ASTM C672)
Scaled Material < 0.5 lb/ft² (2.5 kg/m²)

Split Tensile Strength (ASTM C496) 28 days \geq 400 (2.7)

QUIKRETE® Commercial Grade FastSet® DOT Mix Extended

Compressive Strength (ASTM C39)

 1.5 hours
 3000 PSI (20.6 MPa)

 3 hours
 4500 PSI (31.0 MPa)

 24 hours
 5500 PSI (37.9 MPa)

 7 days
 6500 PSI (44.8 MPa)

 28 days
 8000 PSI (55.1 MPa)

Setting Time (ASTM C191)

Initial 15 to 30 minutes Final 25 to 45 minutes

Slant Shear Bond Strength (ASTM C882)
24 hours 2000 PSI (13.7 MPa)
7 days 2500 PSI (17.2 MPa)
Freeze Thaw Resistance (ASTM C666)

After 300 cycles ≥ 95% Durability Factor
Scaling Resistance after 25 Cycles (ASTM C672)

Visual < 2.5<u>Split Tensile Strength</u> (ASTM C496)
28 days $\geq 400 (2.7)$

Yield:

- Each 55 lb (24.9 kg) bag of QUIKRETE® Commercial Grade FastSet® DOT Mix will yield approximately 0.44 cu ft (12.5 L) at a mortar consistency.
- Each 80 lb (36.2 kg) bag of **QUIKRETE® Commercial Grade FastSet® DOT Mix Extended** will yield approximately 0.57 cu ft (16.1 L) at a concrete consistency.