

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 Shear 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 ≥ 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 |

Length Change (ASTM C157)

| | |
|----------------|----------|
| 28 days, air | ≥ -0.06% |
| 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)

Visual < 2.5

Split Tensile Strength (ASTM C496)

28 days ≥ 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.