

FIVE STAR® RAPID EPOXY GROUT

PERFORMANCE SPECIFICATIONS

- A. Nonshrink epoxy grout shall be a 100% solids, premeasured, prepackaged system containing thermosetting epoxy resins, expansive additives and inert fillers. The manufacturer shall be ISO 9001 certified and have at least five years experience in the manufacture of precision epoxy-based machinery grouts.
- B. The grout material shall meet all the following typical performance criteria when cured at 73°F (23°C):

1. Compressive Strength, ASTM C 579 B*

Compressive Strength	
8 Hours	8000 psi (55.2 MPa)
1 Day	13000 psi (89.7 MPa)
7 Days	15000 psi (103.5 MPa)
Tested at 180°F (82°C)	11000 psi (75.9 MPa)
Compressive Modulus	
8 Hours	1.3 x 10 ⁶ psi (0.9 x 10 ⁴ MPa)
1 Day	1.6 x 10 ⁶ psi (1.1 x 10 ⁴ MPa)
7 Days	1.7 x 10 ⁶ psi (1.2 x 10 ⁴ MPa)
Tested at 180°F (82°C)	1.2 x 10 ⁶ psi (0.8 x 10 ⁴ MPa)
2. Height Change, ASTM C 827, 90°F (32°C) Positive Expansion
3. Effective Bearing Area 95%
4. Tensile Strength, ASTM C 307 2400 psi (16.5 MPa)
5. Creep, ASTM C 1811, 1 Year, 600 psi (4.1 MPa), 140°F (60°C) 1.8 x 10⁻³ in/in/°F (mm/mm/°C)
6. Flexural Strength, ASTM C 580 7 Days 5000 psi (34.5 MPa)
7. Bond to Concrete, ASTM C 882 Concrete Failure
8. Coefficient of Thermal Expansion, ASTM C 531 17 x 10⁻⁶ in/in/°F (30 x 10⁻⁶ mm/mm/°C)

* Rate of loading 0.25 inches per minute.

The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result. Test methods are modified where applicable.

- C. Aggregate reduction in the field shall not be allowed.
- D. The rapid strength gain nonshrink epoxy grout shall be Five Star Rapid Epoxy Grout manufactured by Five Star Products, Inc., Fairfield, Connecticut.