



Material Performance Specification

Five Star® SP Epoxy Grout PG

- A. Non-shrink epoxy grout shall be 100% solids, low exotherm, pre-packaged system containing thermosetting epoxy resins, expansive additives, and inert fillers.
- B. The manufacturer shall be ISO 9001 certified and have a minimum of 25 years of experience in the manufacture of non-shrink epoxy grouts.
- C. The manufacturer shall provide an experienced technical representative to be present during a pre-grout meeting and during the initial mixing and placement of the materials with sufficient notice (5 working days).
- D. The grout material shall meet all the following typical performance criteria when cured at 70 °F (21 °C) ¹:

1.	Compressive Strength , ASTM C 579B at Load Rate II (0.25 inches per minute)	
	1 Day	16,500 psi (113.8 MPa)
	7 Days	17,500 psi (120.7 MPa)
	28 Days	20,000 psi (138 MPa)
	Post-cured at 140 °F (60 °C)	22,000 psi (151.7 MPa)
2.	Height Change , ASTM C827	Positive expansion
3.	Effective Bearing Area (EBA) , ASTM C1339/1339M-18	95%
4.	Creep , ASTM C1181, 1 Year, 400 psi (2.8 MPa), 140 °F (60 °C)	1.0 x 10 ⁻³ in/in (mm/mm)
5.	Tensile Strength , ASTM C307	2,300 psi (15.9 MPa)
6.	Flexural Strength , ASTM C580	5,500 psi (37.95 MPa)
7.	Coefficient of Thermal Expansion , ASTM C531	17 x 10 ⁻⁶ in/in/°F (30.6 x 10 ⁻⁶ mm/mm/°C)
8.	Bond to Concrete , ASTM C882	Concrete Failure
9.	Working Time	30 minutes
10.	Placement Depth (in a single/monolithic pour)	1 inch – 4 inches (25 mm – 10 mm)
11.	Application Temperature	55 °F – 95 °F (13 °C – 35 °C)

- E. An acceptable product which meets the above criteria is **Five Star® SP Epoxy Grout PG** as manufactured by Five Star Products, Inc., Shelton, CT [203-336-7900].
- F. The grout shall be installed in accordance with the grout manufacturer's installation instructions. Any deviations to the grout manufacturer's handling, mixing, and/or installation instructions that are required shall be approved in advance by the project engineer and/or the project manager.

¹ The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result in the field. Test methods are modified where applicable.

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