



Material Performance Specification

Five Star® Elastomeric Grout

- A. Elastomeric grout shall be a 100% solids, pre-packaged system containing thermosetting elastomer resins, expansive additives, and inert fillers. It shall have the capability to be used neat (without aggregate filler) for lower project durometer requirements / thin applications or filled with aggregate filler for higher project durometer requirements.
- B. The manufacturer shall be ISO 9001 certified and have a minimum of 25 years of experience in the manufacture of epoxy grouts.
- C. The manufacturer shall provide an experienced technical representative to be present during a pre-placement 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.	Shore A Hardness , ASTM D2240	Neat: 70+/-10; Filled: 85+/-10
2.	Volume Resistivity , ASTM D257	> 1E12 Ohm-cm
3.	Tensile Properties , ASTM D638 Ultimate Tensile Strength (UTS)	450 psi
4.	Elongation	200%
5.	Tear Resistance , ASTM D1004	200 lbs. per inch
6.	Bond to Concrete , ASTM C882	No shear failure, deflection to concrete
7.	Bond to Steel , ASTM C882	No shear failure, deflection to steel
8.	Compression Modulus , ASTM D575B	7%
9.	Compression Set , ASTM D395	< 1% Incremental set, third test
10.	Dynamic Deflection , ASTM D2231	No failure
11.	Fatigue Resistance , Testing at 1.6E7 Cycles 20 Hz, 5-250 psi	< 10% Deflection
12.	Height Change , ASTM C827, 90 °F (32 °C)	Positive expansion
13.	Working Time	30 minutes
14.	Tack Free Time	3 hours
15.	Cure Time	12 hours

- E. An acceptable product which meets the above criteria is **Five Star® Elastomeric Grout** 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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