



Material Performance Specification

Five Star® Bonding Adhesive

- A. The epoxy adhesive shall be a two component, 100% solids, moisture insensitive structural epoxy suitable for bonding of new concrete to existing concrete or steel.
- B. The manufacturer shall be ISO 9001 certified and have a minimum of 25 year's experience in the manufacture of epoxy systems. The manufacturer shall offer technical services and provide a representative at the jobsite upon request with sufficient notice (5 working days).
- C. The epoxy adhesive shall meet all the following typical performance criteria when cured at 70 °F (21 °C): ¹

1.	Viscosity , ASTM D2393	6,000 cps
2.	Tensile Strength , ASTM D638	7,000 psi (48.3 MPa)
3.	% Elongation at Break	3.8%
4.	Water Absorption , ASTM D570	0.10%
5.	Heat Deflection Temperature , ASTM D648	125 °F (52 °C)
6.	Bond Strength , ASTM C882, Grade 2 2 Day 14 Day	4,300 psi (29.6 MPa) 5,200 psi (35.8 MPa)
7.	Compressive Properties , ASTM D695 Compressive Strength Compressive Modulus	10,000 psi (68.9 MPa) 2.3 x 10 ⁵ (1,580 MPa)
8.	Gel Time , ASTM C881	25 minutes
Meets ASTM C881, Types I, II, IV and V Grade 2, Classes B & C		

An acceptable product which meets these criteria is: **Five Star® Bonding Adhesive** as manufactured by Five Star Products, Inc., Shelton, CT [203-336-7900].

- D. The epoxy adhesive shall be installed in accordance with the epoxy adhesive manufacturer's installation instructions. Any deviations to the epoxy adhesive 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.