

FIVE STAR® SHOTCRETE

PERFORMANCE SPECIFICATION

- A. The concrete repair material shall be a preblended, prepackaged cement-based mortar suitable for application by dry process shotcrete requiring only the addition of potable water. The material shall not contain any chlorides or lime other than amounts contained within the hydraulic composition. The manufacturer shall be ISO 9001 certified and have at least five years experience in the manufacture of cement-based concrete repair materials.
- B. The concrete repair material shall meet all the following performance criteria when cured at 73°F (23°C):

1.	Compressive Strength, ASTM C 109	
	1 Day	3000 psi (20.7 MPa)
	28 Days	7500 psi (51.8 MPa)
2.	Compressive Strength, ASTM C 42 in accordance with ACI 506R-90	
	3 Days	5500 psi (38.0 MPa)
	7 Days	7000 psi (48.3 MPa)
	28 Days	8000 psi (55.2 MPa)
3.	Bond Strength, ASTM C 882	
	7 Days	2000 psi (13.8 MPa)
4.	Chloride Ion Permeability, ASTM C 1202	
	28 Days	Very Low
5.	Coefficient of Thermal Expansion, ASTM C 531	
		5.0 x 10 ⁻⁶ in/in/°F
		(9.0 x 10 ⁻⁶ mm/mm/°C)

he 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. The concrete repair material shall be Five Star Shotcrete, as manufactured by Five Star Products, Inc., Fairfield, Connecticut.