

## FIVE STAR® VERTICAL PATCH

### PERFORMANCE SPECIFICATION

- A. The concrete repair material shall be a preblended, prepackaged cement-based mortar 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       |                     |
|    | 3 Hours                                | 2000 psi (13.8 MPa) |
|    | 1 Day                                  | 3000 psi (20.7 MPa) |
|    | 28 Days                                | 6000 psi (41.4 MPa) |
| 2. | Bond Strength, ASTM C 882              |                     |
|    | 1 Day                                  | 2000 psi (13.8 MPa) |
| 3. | Length Change, ASTM C 157              |                     |
|    | 28 Days Wet                            | +0.05%              |
|    | 28 Days Dry                            | -0.08%              |
| 4. | Chloride Ion Permeability, ASTM C 1202 |                     |
|    | 28 Days                                | Low                 |

*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. The concrete repair material shall be Five Star Vertical Patch, as manufactured by Five Star Products, Inc., Fairfield, Connecticut.