



# FIVE STAR® WATERPROOFING

High Performance Waterproofing

## PRODUCT DESCRIPTION

Five Star® Waterproofing is a patented cementitious waterproofing material that creates a rigid barrier which resists very high water pressures on either the negative or positive sides of a structure. This high performance product is self-curing for greater reliability and has a very high resistance to the penetration of chloride ions. Five Star Waterproofing is applied in one coat by trowel or dry process shotcrete method, or in a multi-coat brush application.

## ADVANTAGES

- Effective on negative and positive side
- Excellent resistance to chloride ion penetration
- Self-curing
- Brush, trowel or shotcrete applied
- High freeze/thaw resistance

## USES

- Concrete and masonry surfaces
- Vertical and horizontal applications
- Base for moisture sensitive coatings
- Elevator/escalator pits
- Foundations
- Manholes
- Vaults
- Tanks

## TECHNICAL SUPPORT

Five Star Products maintains the industry's foremost Technical Support Group:

- Over 30 years of experience in waterproofing
- Technical Center staffed with field experienced application specialists
- Design-A-Spec™ for engineering specification assistance
- Experienced representatives for field service
- Corporate research laboratory available to customize products for unique applications

## PACKAGING AND YIELD

Five Star Waterproofing is a two component system consisting of 50 lb (22.7 kg) of dry material and a one-half gallon (1.9 liters) plastic container of Five Star Waterproofing Liquid packaged inside a plastic pail. The 54.2 lb (24.6 kg) unit will cover 42 square feet (3.9 sq m) when troweled to a 1/8 inch (3 mm) thickness and 85 square feet (7.9 sq m) when brushed to a 1/16 inch (1.6 mm) thickness. No allowance has been made for surface roughness, irregularities, waste, or spillage.

## SHELF LIFE

One year when stored in original unopened packaging above 45°F (7°C). Higher humidity will reduce shelf life. Protect from freezing.

TYPICAL PROPERTIES AT 73°F (23°C)	
Compressive Strength, ASTM C 109	
4 Hours	3000 psi (20.7 MPa)
28 Days	7000 psi (48.3 MPa)
Bond Strength, ASTM C 882	
7 Days	2400 psi (16.5 MPa)
Permeability, CRD-C 48 1/8 inch (3 mm) Thickness	7.16 x 10 <sup>-13</sup> cm/sec (negative side)
	7.96 x 10 <sup>-14</sup> cm/sec (positive side)
Chloride Ion Permeability, ASTM C 1202 1/8 inch (3 mm) Thickness	Very Low ( <1000 Coulombs)



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.

## PLACEMENT GUIDELINES

1. SURFACE PREPARATION: All surfaces must be clean, structurally sound, free of oil, grease, laitance, loose materials and other contaminants. Mechanically roughen smooth surfaces to a medium sandpaper profile or rougher. Soak surfaces thoroughly with liberal quantities of potable water, leaving surface damp but free of excess water. Surfaces must be between 45°F and 90°F (7°C and 32°C) at time of application.
2. MIXING: Condition materials to between 45°F and 80°F (7°C and 27°C). Thoroughly mix Five Star® Waterproofing with a mortar mixer or drill and paddle, using all the Five Star Waterproofing Liquid provided and only enough water to reach desired consistency. Never exceed the maximum allowable mixing water as stated on the container or add an amount that will cause segregation. Do not mix more material than can be applied in 20 minutes.
3. METHODS OF PLACEMENT:  
Brush Application: Apply a minimum of two thick brush coats. Total application thickness should be a minimum of 1/16 inch (1.6 mm) with no pinholes or voids. Allow Five Star Waterproofing to completely harden (four to eight hours) before applying next coat. Thoroughly dampen hardened waterproofing before applying additional coats.  
**Maximum Protection** - Trowel or Shotcrete Application: Apply waterproofing in one coat by trowel or shotcrete to at least 1/8 inch (3 mm) thickness, completely filling all holes, pores and voids.
4. POST-PLACEMENT PROCEDURES: Five Star Waterproofing is a self-curing product under normal field conditions. Five Star Waterproofing must be protected from freezing, rain, hydrostatic pressure, and traffic until it reaches its normal 24 hour strength.
5. CLEAN UP: All tools and equipment may be cleaned with water before material hardens.  
NOTE: PRIOR TO APPLICATION, READ ALL PRODUCT PACKAGING THOROUGHLY. For more detailed placement procedures, refer to Design-A-Spec™ or call the Five Star Products Technical Center at (800) 243-2206.

## LIMITATIONS

- Not for use over moving cracks.
- Never exceed the maximum water content as stated on the package or add an amount that will cause segregation.
- Substrate must be saturated but free of excess surface water at time of application. Surface should appear dull, not glossy.
- Temperature of substrate must be between 45°F and 90°F (7°C and 32°C) at time of installation.
- For applications thicker than 1/4 inch (6 mm), call the Five Star Products Technical Center.
- Do not store below 45°F (7°C). Protect from freezing.

## CAUTION

Contains cementitious material and crystalline silica. International Agency for Research on Cancer has evaluated that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica to humans. Take appropriate measures to avoid breathing dust. Avoid contact with eyes and contact with skin. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Immediately call a physician. Wash skin thoroughly after handling. Keep product out of reach of children. PRIOR TO USE, REFER TO MATERIAL SAFETY DATA SHEET.

For worldwide availability, additional product information and technical support, contact your local Five Star distributor, local sales representative, or you may call Five Star's Technical Center at (800) 243-2206.

**WARRANTY:** "FIVE STAR PRODUCTS, INC. (FSP) PRODUCTS ARE MANUFACTURED TO BE FREE OF MANUFACTURING DEFECTS AND TO MEET FSP'S CURRENT PUBLISHED PHYSICAL PROPERTIES WHEN APPLIED IN ACCORDANCE WITH FSP'S DIRECTIONS AND TESTED IN ACCORDANCE WITH ASTM AND FSP STANDARDS. HOWEVER, SHOULD THERE BE DEFECTS OF MANUFACTURING OF ANY KIND, THE SOLE RIGHT OF THE USER WILL BE TO RETURN ALL MATERIALS ALLEGED TO BE DEFECTIVE, FREIGHT PREPAID TO FSP FOR REPLACEMENT. THERE ARE NO OTHER WARRANTIES BY FSP OF ANY NATURE WHATSOEVER, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH THIS PRODUCT. FSP SHALL NOT BE LIABLE FOR DAMAGES OF ANY SORT, INCLUDING PUNITIVE, ACTUAL, REMOTE OR CONSEQUENTIAL DAMAGES, RESULTING FROM ANY CLAIMS OF BREACH OF CONTRACT, BREACH OF ANY WARRANTY, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FROM ANY OTHER CAUSE WHATSOEVER. FSP SHALL ALSO NOT BE RESPONSIBLE FOR USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT HELD BY OTHERS."



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