

FGI – 4440 H Insulation Coating

Unique Coatings – Extreme Results

Description

FGI – 4440H is an extremely unique ultimate performance insulation, corrosion and moisture protection coating. FGI-4440 is an epoxy ceramic based coating that is impervious to heat and water providing for extreme insulation value equivalent to R-30 at 10 mil thickness. Also provides for up to 68% sound reduction. Because it is “wetter than water”, FGI-4440H can even be applied under salt water. Applied properly, FGI-4440H warrants against damage from standing water. Can be applied directly over rust and offers unmatched protection against heat and cold extremes, mildew, alkali, UV, oils and grease. Adheres to practically all surfaces, including EPDM, with remarkable flexibility. The product maintains flexibility to prevent cracking. Very easy to use with long pot life, high insulation, high reflectivity, high emissivity,, encapsulates friability of virtually all roof material, chemically inert finish, withstands acids, alkalis, animal fats, grease and oils, encapsulates asbestos, so no tear off or landfill waste. Withstands 2.5 inch hail at 140 mph. Stops Thermal shock thus extending roof life.

ASTM Test Battery:

ASTM B117 500 hour Salt fog test –Passed

ASTM 518 Thermal Conductance 2.61 BTU/ (h) (ft²) (F) Excellent

ASTM 518 Thermal Conductivity 0.0139 Btu(in)/(h)(ft²)(F), metric 0.002 w/m/K, Excellent

ASTM D-2240 Hardness 85 Shore Durometer

ASTM E108-91A UBC32-7 Class A Fire Rated

ASTM D-638 Tensile Strength 1393 PSI

ASTM E-96 Water Vapor Transmission 0.7 perms

ASTM G-53 500 hour accelerated weathering test, bend double with no cracking, highly flexible

ASTM 1640, D-92, D-1644A, D-2196, D-696, D-570, C-836, D-1652, D-1259, D-664

Flexibility is retained in sub-zero conditions (down to –92 F)

Another great benefit to the FGI-4440H is the unique properties that are incorporated into the product such as the following: The FGI-4440H is a 100% solids version of the FGI-4440. The FGI-4440H is best applied with a plural component spray pump, such as the Graco Extreme Mix or Hydra Cat systems. By using this type spray system the product will have a 10 to 15 minute cure time, thus making a short working time frame, typically imposed by the customer, very advantageous to the applicator, and thus being able to sell and finish projects you otherwise would have to walk away from. This works extremely well in production line or assembly line applications where long cure time has previously been a problem, but not any more. Fast cure time translates into a direct positive effect to your bottom line.

Features & Benefits

- **Easy to Apply with Plural Component System for extremely fast cure time on Dry or Wet substrates**

- Very High Insulation Capacity
- Can be applied over Wet Surface
- Very Little Prep Work over Rusty Metal
- UV, Weather, Chemical, Salt and Abrasion Resistant
- Extreme Adhesion to Substrate
- Extremely Durable Wear Surface
- No Top-Coat necessary
- Contains No Zinc, Lead or Chromates
- Typical Applications: Roofs, metal buildings, ducts, concrete walls, basements, etc.

Application Methods

Surfaces should be free of loose rust, mill scale, paint, grease, oil and of any other film-forming foreign material. All surfaces must be water blasted with high-pressure (3,000 psi MIN) water to thoroughly clean off all debris, dirt, and other contaminants. Optimum results are obtained if the surface is dry although entirely satisfactory protection is obtained if the surface is damp and/or wet. Surplus water should be removed to prevent excessive bubbling of the coating. The FGI-4440H is best applied with a plural component spray pump, such as the Graco Extreme Mix or Hydra Cat system. Mixing is done in the plural component system. The FGI-4440H has a mixing ratio of 2 to 1. Two parts BASE (part "B") and One part ACTIVATOR (part "A"). Use of thinner increases possibility of sag and reduces dry film thickness. Thinner also retards cure time. For best results, use just as it comes from the can.

If surface to be coated has chlorine ions, these must be neutralized with Chlor-Rid mixed into the pressure wash water. This is a rare occurrence but usually occurs around salt water. Chlorine ion test will verify.

Any overspray and equipment must be cleaned immediately with acetone, toluene, xylene, or MEK.

FGI-4440H is 100% solids. Pot Life: Not applicable to plural component system. Cure time 10 to 15 minutes. Mileage will depend on the particular application. Apply 10 mils (.010 inches or 0.254 mm) wet to achieve a final dry mil thickness of 10 mils (0.010 inches or 0.254 mm). FGI-4440H will cover approximately 160 square feet (14.9 sq meters) per gallon at 10 mils (0.254 mm) thickness. If second coat is needed. This second coat will cover any voids in the surface due to a very rough surface. Max of 10 mils (0.010 inches or 0.254 mm) can be applied per coat without runs if necessary.

Use in well ventilated area; if not possible, use a NIOSH approved self contained breathing apparatus or vapor filters on a mask. Protective gloves and safety glasses must be worn at all times. Only very high abrasion will remove the coating. Caution: With the extreme adhesion characteristics of this product all safety procedures must be followed.

Customers should consult FGI on all special requirement installations.

Storage Stability & Shelf Life

The shelf life of FGI – 4440H is one year when stored in original, unopened container. Store cans in a well ventilated and covered area away from extreme heat and moisture. Please contact your FGI representative if you have any questions about product usability.

Additional information is available at www.fginternational.net

Health, safety and environmental information are provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products. Before using the product other than directed, please contact FGI for consultation.