

ARMOR INSULATOR 200

POLYURETHANE SPRAY FOAM INSULATION SYSTEM

PRODUCT DESCRIPTION

ARMOR INSULATOR 200 is premium heavy duty, fire retardant, two component closed cell polyurethane Spray foam for building insulation system. The product is generated on site by combining an isocyanate and a polymeric resin through a dual-component proportioner. Fast, easy and adaptable, it can achieve an R-value of 20 at 3 inches. ARMOR INSULATOR 200 is a high density based polyurethane foam recommended for roofing and other exterior insulation because it is applied in a continuous manner.

BENEFITS

- **Superior Thermal Resistance** - The R-value of ARMOR INSULATOR 200 is higher than traditional insulation products resulting in reduced conductive heat loss and lower energy consumption.
- **Excellent Air Sealing Ability** - ARMOR INSULATOR 200 is a closed cell insulation that expands while being installed creating an effective air barrier, reducing air leakage, resulting in improved comfort and energy savings.
- **Durability**- INSULATOR 300 is a highly durable and lasting insulation product. It extends building life
- **Joint less** - ARMOR INSULATOR 200 insulating material produces a seamless insulating layer with no joints or gaps and reduces energy loss due to thermal bridging
- **Seamless**- Liquid" installation means that critical, inaccessible or curved areas can be insulated without any problem

- **Fast and Easy Installation** - no need for laborious cutting and fitting.
- **Excellent Adhesion**- Because ARMOR INSULATOR 200 is applied in situ, it has the advantage of fitting like a second skin and is suitable for virtually all substrates such as concrete, timber boards, corrugated fibre cement and profiled metal sheet.

TYPICAL APPLICATION

ARMOR INSULATOR 200 is recommended for use as insulation foam on the following areas:

- Exterior Roof Insulation
- Wall and floor Insulation

DIRECTION FOR USE

Surface Preparation and Application

For optimum results, surfaces receiving ARMOR INSULATOR 200 should be clean and dry, free of dirt, oil, solvent, and grease, loose particulate, peeling coating or other foreign matter. ARMOR INSULATOR 200 adheres well without primer to expanded polystyrene, extruded polystyrene, foil-faced insulation boards, CMU and cured concrete. Ferro metallic substrates (especially mild steel) should be sand-blasted in accordance with SSPC-SP6. Sand-blasted surfaces should be immediately primed with an epoxide primer as recommended by the primer manufacturer. Galvanized and stainless steel and aluminum substrates should be treated with an appropriate ARMOR Primer or adhesive prior to application of ARMOR INSULATOR 200



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THERMAL INSULATION

SPECIFICATION

ARMOR INSULATOR 200 is specified for use for the insulation of external roof floors depending on irregularities in the substrates. Below are the general consumption guides, 0.7kg to 1.5 kg depending on the roughness or smoothness of the surface per layer of coatings depending on thickness of application so desired.

PROTECTIVE EQUIPMENT

Spraying of polyurethane foam results in the atomizing of the components to a fine mist, Inhalation and exposure to the atomized droplets must be avoided. Applicators must use personal protective equipment recommended by the Center for Polyurethanes Industry for use in high pressure spray foam application.

Precautions include, but are not limited to:

- a. Full-face mask or hood with fresh air source
- b. Fabric coveralls
- c. Fabric gloves
- d. Rubber gloves when handling new materials and cleaning solvents.

WARNING: Exposure may occur even when no noticeable odor is encountered

TECHNICAL DATA

Property	Value Metric (Imperial)	Test Method
Density (Core)	42 kg/m3 (2.6 lb/ft3)	ASTM D1622
Compressive Strength	186 kPa (27.0 psi)	ASTM D1621
Tensile Strength	241 kPa (35.0 psi)	ASTM D1623
Open Cell Content	8.0%	ASTM D2856
Water Absorption	1.2 % by volume	ASTM D2842
Water Vapour Permeance 50mm sample	42 ng/Pa·s·m (0.70 perms)	ASTM E96
Dimensional Stability	Volume Change (%) after 28 days -0.0 @ -20°C (-29°F) 1.5 @ 70°C (158°F) @ 97± 3% RH 0.4 @ 80°C (176°F)	ASTM D2126
Flame Spread Classification	Flame Spread <500 Smoke Developed <500	CAN/ULC-S102 Including S127
Time to Occupancy	24 Hours	CAN/ULC-S774
Initial Thermal Resistance (50 mm)	RSI: 2.45 m2·K/W (R: 13.9 ft2·hr·°F / BTU)	ASTM C518
Hot-Surface Performance	Passed when exposed to 93°C for 96 hours	ASTM C 411
Fungi Resistance	After 28 day incubation - no fungal growth exhibited	ASTM C1338





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PACKAGING AND SHELF LIFE

ARMOR INSULATOR 200 is packed in 210kg and 225kg drums. Store in a cold dry place. With proper storage material can be stored and used within 12 months.

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Tools used in the preparation and application of ARMOR INSULATOR 200 must be cleaned with solvents immediately after use. It contains epoxy resin and amine and therefore toxic irritant. Do not inhale. Provide adequate ventilation. Protect against contact with skin and eyes. Wear rubber gloves, long sleeve shirt, goggles and side shields. In case of contact with eyes flush repeatedly with water and contact physician.

LIMITED WARRANTY

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

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