

COSTAR THERMAL B12

Low Density High Performing Spray Insulation



PRODUCT DESCRIPTION

Costar thermal B12 is a premium spray polyurethane foam 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.

Costar thermal B12 is a low density based polyurethane foam recommended for roofing and other exterior insulation because it is applied in a continuous manner, in addition to thermal resistance properties.

BENEFITS

- Good thermal resistance
- Provides load support to structure
- Help to reduce energy cost
- Environmentally Friendly.
- Does not contain blowing agent.
- Provides excellent protection against heat and water infiltration.
- Increase building resistance to wind uplift

APPLICATION AREA

Costar thermal B12 is recommended for use as insulation foam on the following areas:

- Exterior Roof Insulation
- Interior Under ceiling Roof Insulation
- Wall and floor Insulation
- Cold room Insulation

APPLICATION

Surface Preparation and Application

For optimum results, surfaces receiving Costar thermal B12 should be clean and dry, free of dirt, oil, solvent, grease, loose particulate, peeling

coating or other foreign matter. Costar thermal B12 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 wash primer or adhesive prior to application of Costar thermal B12

SPECIFICATION

Costar thermal B12 is specified for use for the insulation of external roof floors, under ceiling areas, 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

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

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



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TECHNICAL PROPERTIES

Packaging	210L
Basis	Polyurethane prepolymer
Curing system	Moisture cure
Specific gravity	17 - 18kg/m ³ (ASTM D1622)
Tack-free time	4minute (ASTM C1620)
Yield	3m ² for 1.5cm thickness
Fire class of the cured foam	B3 (DIN 4102)
Thermal conductivity	0.025w/m.k (at 20C) (DIN 52612)
R value	5.66/inch
Compression strength	0.1MPa (DIN 53421)
Pull off strength	2.5MPa
Full cure	24hours
Application temperature	Min 5°C, max +30°C
Can temperature	Min 5°C, max +30°C
Temperature resistance	-75°C to +115°C
Shelf life	12month from date of production
VOC content	15 g/l max
Water vapour transmission	0.97 (ASTM E96-00 method A desiccant pe-irrch)
Dimensional stability	Pass (ASTM D212-698, <15%, 168hrs at 7°C, 97% humidity)
Sound transmission	27/24



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STORAGE AND SHELF LIFE

Store in a cold dry place. With proper storage material can be stored and used within 12 months.

STANDARD

Conform to the requirement of ASTM D1622, ASTM E96-00, DIN 53421

CLEANING AND HEALTH

Tools used in the preparation and application of Costar thermal B12 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.

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.