

## **Insulfoam DB**



## **Overview**

Insulfoam DB (Drainage Board) is a high-performance, rigid insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). Insulfoam DB is available with compression strengths of 25, 40, or 60 psi and features  $\frac{1}{4}$ " x  $\frac{1}{4}$ " drainage channels every 2" on center. Insulfoam DB has excellent dimensional stability, as well as drainage and insulation properties. Additionally, Insulfoam DB can contribute toward LEED<sup>®</sup> credit requirements. Available in standard 4' x 4' and 4' x 8' board sizes with thicknesses ranging from 1" to 40" or in custom sizes, Insulfoam DB can be cut to meet virtually any size or shape.

Insulfoam DB is designed to be used as an above-membrane insulation in IRMA-type roofing assemblies in which water drainage is a concern. Excellent for use with Roof Garden assemblies, Insulfoam DB allows water that has passed through the Roof Garden components to flow quickly to the roof drains. Insulfoam DB is a two-in-one product that eliminates the need for flat-stock EPS or XPS insulation over a drainage board.

#### **Features and Benefits**

- » Multiple standard and virtually unlimited custom sizes available
- » Integrated drainage channels  $\frac{1}{4}$ " x  $\frac{1}{4}$ " channels allow for quick drainage of water from the roof
- » Stable R-value thermal properties will remain stable over the entire service life
- » Environmentally friendly contains no formaldehyde or ozonedepleting gases, may contain recycled material and foam core is 100% recyclable
- » Cost-effective typically less expensive than XPS or flat-stock EPS used in conjunction with a separate drain board
- » Water resistance does not readily absorb moisture
- » Added protection of the roofing membrane acts as an added layer of protection between the roofing membrane and Roof Garden assembly

### Installation

Insulfoam DB shall be loose-laid directly over the waterproofing membrane with the channeled side facing down. Insulation boards shall be butted up to one another with no gaps greater than 1/4".

#### Precautions

- » Keep away from high heat and flame
- » Keep away from liquid adhesives and solvents
- » Cannot be in direct contact with PVC membrane
- » When used in conjunction with PVC membrane, use a protection fabric such as 300HV to separate the two components



# **Insulfoam DB**

Typical Properties and Characteristics				
Physical Property	Test Method	25 PSI	40 PSI	60 PSI
Density (nom. pcf)	ASTM C303	2.00	2.50	3.0
C-Value (Conductance) - per inch BTU/(hr∙ft²•°F) @ 25°F @ 40°F @ 75°F	ASTM C518 or ASTM C177	0.200 0.210 0.230	0.198 0.206 0.222	0.196 0.198 0.217
R-value (Resistance) - per inch BTU/(hr•ft2•°F)/BTU @ 25°F @ 40°F @ 75°F	ASTM C518 or ASTM C177	5.00 4.76 4.35	5.05 4.85 4.50	5.10 5.05 4.60
<b>Compressive Strength</b> (psi, 10% deformation)	ASTM D1621	25-33	40	60
Flexural Strength (min psi)	ASTM C203	50	60	75
<b>Dimensional Stability</b> (max %)	ASTM D2126	2.0	2.0	2.0
Water Vapor Permeance (max per., 1 inch)	ASTM E96	2.0	2.5	2.5
Water Absorption (max % vol)	ASTM C272	2.0	2.0	2.0
Capillarity	_	none	none	none
Flame Spread	ASTM E84	<20	<20	<20
Smoke Developed	ASTM E84	150-300	150-300	150-300

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED <sup>®</sup> Information	
Pre-consumer Recycled Content	Up to 25%
Post-consumer Recycled Content	Up to 25%
Manufacturing Location(s)	Anchorage, AK Aurora, CO Chino, CA Dixon, CA Puyallup, WA Lakeland, FL Mead, NE Phoenix, AZ Tooele, UT Smithfield, PA
Solar Reflectance Index (SRI)	N/A