# **Durex**. Insulite Select Graphite Insulation Board

# **Drained Graphite Enhanced Insulation Board**

# Description

Durex\* Insulite Select Graphite Insulation Board is an Innovative rigid insulation board with maximum R-value enhanced with Graphite (as per ULC-S701 and ASTM-C-578) featuring geometrically defined drainage cavities on the back side of the insulation board, intended for use in Durex\* Insulite Select family of EIFS Systems. Durex\* Insulite Select Grapite Insulation is supplied in sheets which are 610 mm (2ft) x 1220 mm (4 ft), in thicknesses from 50.8 mm (2") to 152 mm (6") in increments of 12.5 mm (1/2"). Durex\* Insulite Select GRAPHITE Insulation can be applied over any substrate approved for our Insulite Select family of EIFS Systems and attached by chemical adhesive bond or by mechanical fasteners as specified. The sheets are not to be applied directly to framing members when part of any Durex\* Insulite Select family of EIFS Systems. All test results given herein, or any of those in our EIFS Systems are specific to use Durex\* Insulite Select Graphite Insulation. Substitution voids all tests results and systems warranties offered. Special aesthetic shapes supplied by others are not incorporated in the Durex\* EIFS System warranty.

#### Uses

For use as the exterior insulation in all Durex\* Insulite Select family of EIFS Systems. The use of the expanded polystyrene is governed by the applicable building codes.

#### **Features**

- · High Thermal Resistance
- . GDDC Factor 25% (Geometrically Defined Drainage Cavity)
- . CI factor 0.88 RSI (R 5.0) per inch (Continuous Insulation)
- . 10mm drainage cavity
- · Moisture Resistant and Vapour-open
- · Graphite contains no CFC's, HCFC's or HFC's
- Chemically inert
- · Graphite is a recyclable material

## **TECHNICAL DATA**

PHYSICAL PROPERTIES	
<b>Dimensional Tolerances</b>	± 1.6 mm (1/16")
<b>Bowing Tolerances</b>	± 0.8 mm (1/32")
Available Thicknesses	50.8 mm (2") to 152 mm (6") in 12.5 mm (1/2") increments
Material	Graphite - 1.0 lb/ft³ (Virgin) Density Graphite enhanced Expanded Polystyrene
Coverage	0.74 m² (8 ft²) per board

PERFORMANCE PROPERTIES	METHOD	RESULT
Density	ASTM C303	1.25 lb/ft³ (20.0 Kg/m³)
Thermal Resistance	ASTM C518	5.0 ft $^2$ ·h·°F/BTU – (R-Value / 1" @ 75°F) 0.88 m²·°K/W – (RSI / 25mm @ 24°C) 5.2 ft $^2$ ·h·°F/BTU – (R-Value / 1" @ 40°F) 0.92 m²·°K/W – (RSI / 25mm @ 5°C)
Flame Spread &	ASTM E84	< 25 Flame Spread Index
Smoke Developed		< 450 Smoke Developed Index
Compressive Strength	ASTM D1612	13 psi (90.0 kPa) at 10% Strain
Flexural Strength	ASTM C203	32 psi (220.0 kPa)
Water Absorption	ASTM C272	1.1 % (% by volume) (total immersion)
Water Vapour Permeance	ASTM E96	178.0 ng/Pa.s.m² (3.1 perms)
Dimensional Stability	ASTM D2126	-1.5 % (linear change)
Maximum use Temperature		165°F (74°C)

## **Packaging**

Durex\* Insulite Select Graphite Insulation Board is supplied by the sheet. Individual sheets are bundled in polyethylene bags, to a volume of approximately 480 board feet per bundle. (One board foot is the nominal quantity of insulation derived from a piece of Gphite 1 inch thick and 1 foot wide by 1 foot long). Dimensionally, each bundle is 1220 mm (4 ft) x 1200 mm (4 ft) x 762 mm (2 ½ ft). All packaging shall be UV resistant, clearly have the name Durex\* printed on the bags and be labeled indicating conformance to the

governing codes and tolerances required by Durex\*. All insulation products for use in a Durex\* EIFS System shall be purchased from Durabond Products Limited or one of its authorized distributors. Insulation boards which are purchased from non-approved sources will void any applicable product or system warranties. Consult with Durabond for a list of approved distributors and manufacturers.

Storage

Store Durex\* Insulite Select Graphite Insulation Board in a dry, vented, waterproof location and stacked off the ground. Keep materials dry, protected from rapid temperature changes, dampness and moisture and away from direct sunlight.

**Application** 

Durex\* Insulite Select Graphite Insulation Board is always installed with the 610 mm (2 ft) side running vertically and the 1220 mm (4 ft) side running horizontally and in a running bond pattern. All corners are to utilize an interlocking pattern. Follow specific procedures as outlined in the system specification. Do not place insulation onto an uncured water-resistive barrier (WRB). Any mechanical fasteners shall be of a type and size approved by Durabond Products Limited for use with the specific EIFS System being used.

Limitations

- . Is not recommended for uses where sustained temperatures will exceed 165°F
- · Avoid contact with chimneys, steam pipes, electrical or sauna heaters or other such surfaces
- Precautions should be taken when insulation is in contact with the soil to prevent hidden entry through the foam by vermin or insect pests

**Health and Safety** 

For information and advice on the safe handling, storage and disposal of chemical products, refer to the most recent SDS sheet containing physical, environmental, toxic and other safety/materials handling data. For industrial use only. Keep out of reach of children.

Warranty

Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.

**Technical Services** 

Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Products Ltd. sales representative.

