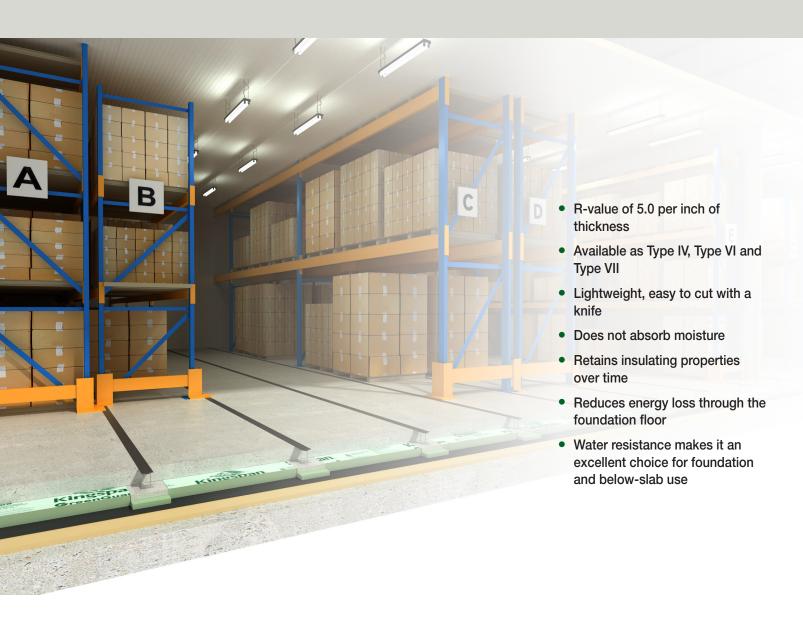


Insulation

Fifth Revision April 2018

GreenGuard® Applications

XPS INSULATION BOARD FOR COLD STORAGE APPLICATIONS





GreenGuard®XPS Insulation Board

Description

Kingspan GreenGuard® Type IV, Type VI and Type VII Insulation Board comprises 1" to 3" thick closed-cell polystyrene (XPS) with a minimum compressive strength of 30 psi. It has high water resistance and an R-value of 5.0 per inch of thickness. It is available in a square edge board, ship-lap edge board or score-board.

Compliance

Intertek CCRR 1021;

Intertek CCRR 1022:

CA BEARHFTI Lic. No. T 1506;

CCMC 12722-L;

MN Dept. of Energy Chapter 7640;

FM Approvals- see RoofNav Roof System Listings (25 & 40psi);

UL LLC - See Classification Certificate A184;

UL LLC - Canada, File R11183.

Handling & Storage

When stored outdoors, all product should be protected from exposure to direct sunlight using the original packaging or an opaque, light-colored tarp. Material that has been unwrapped should be covered and rewrapped.

WARNING: This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code. Protect it from exposure to open flame or other ignition sources during shipping, storage and installation.

Health & Safety

Kingspan GreenGuard® XPS Insulation Board is made of synthetic materials that are generally not recognized as providing a food source for insects, fungus, mold or mildew. It should always be properly installed and stored.

The product should not be used as an exposed interior surface in buildings where people can be expected to be present. An approved fire protection barrier, such as 1/2" gypsum wallboard or equivalent, should be applied between this product and the interior of such buildings. Fire and building codes should be followed. All assemblies should be evaluated for effectiveness and location of vapor retarders to avoid condensation and subsequent damage to structures (ASHRAE Handbook of Fundamentals). Since foam sheathings are non-structural, they must be installed over adequately braced framing in accordance with local building codes.

WARNING: Do not stand on or otherwise support your weight on this product unless it is fully supported by a load bearing surface. All assemblies should be evaluated for effectiveness and location of vapor retarders to avoid condensation and subsequent damage to structures (ASHRAE Handbook of Fundamentals). Since foam sheathings are non-structural, they must be installed over adequately braced framing in accordance with local building codes.

Product Data

Property	Test Method		Value	
General				
Thickness	Millimeter	25, 38, 50, 76, 101	50 76, 101	38 50, 76
Thickness	Inch	1, 1½, 2, 3, 4	2, 3, 4	1½ 2*, 3
Type ¹	ASTM C 578	IV	VI	VII
Compressive Strength Min. (kPa @ 10% Deflection) (psi @ 10% Deflection)		210 30	276 40	276 60
Water Absorption Max. (% by volume)	ASTM C 272	0.1	0.1	0.1
Water Vapor Permeance ² Perm	ASTM E 96	1.5	<1	<1
Dimensional Stability Max. (Linear % Change)	ASTM D 2126	1.5	1.5	1.5
Limiting Oxygen Index Min. %	ASTM D 2863	24	24	24
Flexural Stength (kPa) (psi)	ASTM C 203	350 50	414 60	414 60
Service Temperature Max. °F		165	165	165
Thermal				
Thermal Resistance R-value ¹ (°F-ft² hr/Btu)	ASTM C 518 (@75° Mean Temperature)	5.0 per inch	5.0 per inch	5.0 per inch

¹ Specimens are aged and tested in accordance with the FTC Rule (16 CFR, Part 460) and ASTM C 578.
² Permeance is shown for 1" thick board. Permeance typically decreases as board thickness increases.

For more information on specific building product recommendations and installation guidelines, contact your Kingspan Insulation LLC representative.

For the most current product and compliance information go to www.kingspaninsulation.us.

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Custom thicknesses available

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