



## GreenGuard® Type VII XPS Insulation Board

FOR USE AS INSULATION FOR HIGH LOAD-BEARING ENGINEERED APPLICATIONS  
REQUIRING 60 PSI MINIMUM COMPRESSIVE STRENGTH



- Designed for high-load applications requiring insulation with minimum compressive strength of 60 psi
- R-value of 5.0 per inch of thickness
- Meets ASTM C578 Type VII requirements
- Lightweight, durable...easy to use
- Does not absorb moisture
- Retains insulating properties over time
- Excellent for low-temperature freezer floors, cold storage facility floors, ice rinks, parking decks



# GreenGuard® Type VII XPS Insulation Board

## Description

Kingspan **GreenGuard**® Type VII XPS Insulation Board comprises closed-cell extruded polystyrene (XPS) with a minimum compressive strength of 60 psi. It has high water resistance and R-value of 5.0 per inch of thickness. It is available in a square edge board or a drainage channel board.

## Compliance

Intertek CCRR 1021;  
CA BEARHFTI Lic. No. T 1506;  
CCMC 12722-L;  
MN Dept. of Energy – Chapter 7640;  
FM Approvals – see RoofNav Roof System Listings;  
Miami-Dade County, FL – NOA No. 14-0916.07;  
UL LLC® – See Classification Certificate A183.

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

Kingspan **GreenGuard**® Type VII XPS Insulation Board is HCFC free.

This 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 ½" 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.

## Product Data

Property	Test Method	Result
General		
Nominal Thickness (in)		1½, 2, 3
Nominal Board Width (ft)		2
Nominal Board Length (ft)		8
Edge Profile		Square <sup>1</sup>
Property Type	ASTM C 578	VII
Compressive Strength, Min. (psi@10% deflection)	ASTM D 1621	60
Water Absorption, Max. (% by volume)	ASTM C 272	0.1
Water Vapor Permeance (perm)	ASTM E 96 (Desiccant Method)	<1.0
Density, Min. (lb/ft <sup>3</sup> )	ASTM C 303	2.2
Service Temperature, Max. (°F)		165
Thermal		
Thermal Resistance, R-value <sup>2</sup> (°F·ft <sup>2</sup> ·hr/Btu per in thick)	ASTM C 518 (@75°F Mean Temperature)	5.0
Thermal Conductivity, k-value (Btu·in/hr·ft <sup>2</sup> ·°F)	ASTM C 518 (@75°F Mean Temperature)	0.2
Fire & Smoke		
Flame Spread <sup>3</sup>	ASTM E 84 / UL723	15 (Class A)
Smoke Developed <sup>3</sup>		140

<sup>1</sup> Also available with drainage channels.

<sup>2</sup> Specimens are aged and tested in accordance with FTC Rule (16 CFR, Part 460) and ASTM C578.

<sup>3</sup> These numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by this material under actual fire conditions. All applicable building codes must be followed.

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](http://www.kingspaninsulation.us)

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