



## GreenGuard® Applications

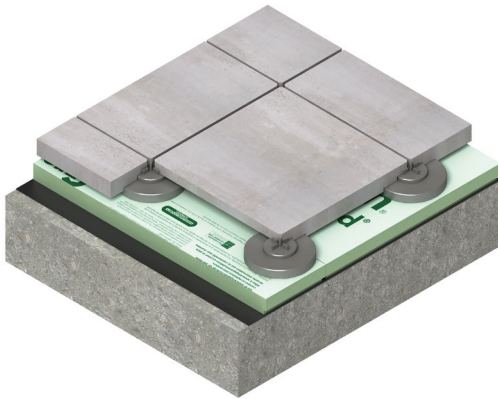
### XPS INSULATION BOARD FOR PMR ROOFING SYSTEMS

#### *Kingspan* GreenGuard® XPS Insulation Board for Commercial Roofing & Waterproofing

In buildings with Protected Membrane Roofing (PMR) systems, extruded polystyrene rigid foam insulation board is the leading choice. The roof becomes an active space, either as a landscaped green roof or as a terrace or plaza level that occupants can use. *Kingspan* GreenGuard® XPS Insulation Board provides high compressive strength, water impermeability and durability, protecting the roof membrane from physical and weather damage during and after construction.

- Extruded Polystyrene is the industry standard for insulation specifications in these systems
- Compatible with all major waterproofing systems
- Available in 40 psi and 60 psi
- Edge treatments: drainage channel, square edge & ribbed
- Wind uplift warranty program available

#### Plaza Deck Applications



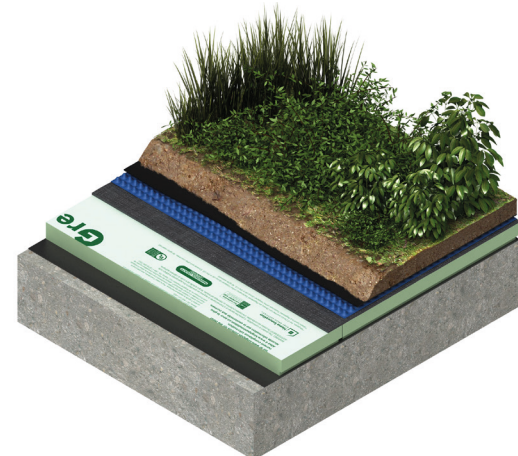
#### Concrete Ballast Applications



#### Stone Ballast Applications



#### Vegetative Roof Applications



# GreenGuard® XPS Insulation Board

## Product Data

Size Availability		Kingspan GreenGuard® Type VI 40 psi XPS Insulation Board	Kingspan GreenGuard® Type VII 60 psi XPS Insulation Board
(Edge Profile, Nominal Thickness (in) x Nominal Board Width (ft) x Nominal Board Length (ft))	Square Edge	2" x 2' x 8', 3" x 2' x 8', 2" x 4' x 8', 3" x 4' x 8'	1 1/2" x 2' x 8', 2" x 2' x 8', 3" x 2' x 8', 2" x 4' x 8', 3" x 4' x 8'
	Drainage Channel	2" x 2' x 8', 3" x 2' x 8'	1 1/2" x 2' x 8', 2" x 2' x 8', 3" x 2' x 8'
	Ribbed	2" x 2' x 8', 3" x 2' x 8'	
Property	Test Method		
Property Type	ASTM C 578	VI	VII
Compressive Strength, Min. (psi@ 10% deflection)	ASTM D 1621	40	60
Water Absorption, Max. (% by volume)	ASTM C 272	0.1	0.1
Water Vapor Permeance (perm)	ASTM E 96 (Desiccant Method)	<1.0	<1.0
Density, Min. (lb/ft <sup>3</sup> )	ASTM C 303	1.8	2.2
Recommended Service Temp., Max. (°F)		165	165
Thermal			
Thermal Resistance, R-value <sup>1</sup> (°F-ft <sup>2</sup> -hr/Btu per in thick)	ASTM C 518 (@75°F Mean Temperature)	5.0	5.0
Fire & Smoke			
Flame Spread <sup>2</sup> Smoke Developed <sup>2</sup>	ASTM E 84 / UL723	15 (Class A) 140	15 (Class A) 140

<sup>1</sup> Specimens were aged and tested in accordance with FTC rule (16 CFR, Part 460) and ASTM C578.

<sup>2</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.

## Compliance

Intertek CCRR 1021;  
 CA BEARHFTI Lic. No. T 1506;  
 Florida Product Approval – No. FL14164-R5;  
 CCMC 12722-L;  
 MN Dept. of Energy – Chapter 7640;  
 FM Approvals – see RoofNav Roof System Listings (40psi Only);  
 Miami-Dade County, FL  
 UL – See Classification Certificate A183;  
 UL – Canada, File R11183.

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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## 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:** Kingspan GreenGuard® XPS Insulation Board is combustible. A protective barrier or a 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

**WARNING:** Do not stand on or otherwise support your weight on this product unless it is fully supported by a load bearing surface.



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