

GreenGuard® Applications

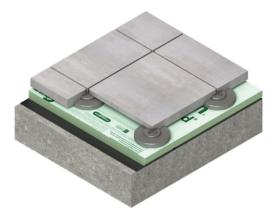
XPS INSULATION BOARD FOR PMR ROOFING SYSTEMS

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



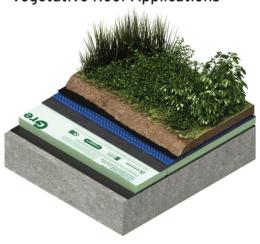
Stone Ballast Applications



Concrete 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 ½" 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/ft³)	ASTM C 303	1.8	2.2
Recommended Service Temp., Max. (°F)		165	165
Thermal			
Thermal Resistance, R-value ¹ (°F·ft²·hr/Btu per in thick)	ASTM C 518 (@75°F Mean Temperature)	5.0	5.0
Fire & Smoke			
Flame Spread ² Smoke Developed ²	ASTM E 84 / UL723	15 (Class A) 140	15 (Class A) 140

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

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.

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. 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.

Kingspan Insulation LLC believes the information and recommendations herein to be accurate and reliable. However, since use conditions are not within its control, Kingspan Insulation LLC does not guarantee results from use of such products or other information herein and disclaims all liability from any resulting damage or loss. No warranty, express or implied, is given as to the merchantability, fitness for particular purpose, or otherwise with respect to the products referred to.



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² 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.

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