

Kingspan® Extruded Polystyrene Insulation

Commercial Product Data Sheet



Description:

Kingspan® Extruded Polystyrene (XPS) Insulation Boards comprise closed-cell extruded polystyrene available in compressive strengths of 40 psi and 60 psi.

Contact Siplast for additional information on approved product uses.

Uses:

Vegetated roofing

Split slab waterproofing

Inverted roof membrane assemblies

Board Width (nom.)	4 ft. (48 in.)
Board Length (nom.)	8 ft. (96 in.)
Edge Profile	Square Edge or Drainage Channel
Recommended Maximum Service Temp.	165°F (73.89°C)

Application:

Refer to the Kingspan Installation Guide for detailed application information.

Storage and Handling:

When stored outdoors, XPS should be protected from exposure to direct sunlight using the original packaging or an opaque, light-colored tarp. XPS that has been unwrapped should be covered or rewrapped. XPS left exposed should be covered within 60 days to minimize UV damage. Once the exposed XPS is covered, the damage stops and is limited to the thin layer of cells on the surface that was exposed to the UV. XPS cells below the UV exposed surface layer are generally undamaged and the XPS overall performance remains intact.

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

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging:

Factory packaging not adequate for outdoor protection.

Listings, Approvals, & Certifications:



- Classified by UL in accordance with ANSI/UL 790. Refer to UL Product iQ for specific assemblies.
- FM Approved — Refer to RoofNav.com for specific assemblies.
- Florida Product Approval

Kingspan® Extruded Polystyrene Insulation

Commercial Product Data Sheet

Physical and Mechanical Properties				
Property (As Manufactured)	GreenGuard Type IV*	GreenGuard 40*	GreenGuard 60*	Test Method
Nominal Thickness	1 [†] in., 1 ½ [†] in., 2 in., 2 ½ in., 3 in.w	2 in., 3 in., 4 in.	1 ½ in., 2 in., 3 in.	—
Property Type	IV	VI	VII	ASTM C578
Compressive Strength (min.) @10% deflection	25 psi	40 psi	60 psi	ASTM D1621
Water Absorption (max.)	0.3%	0.3%	0.3%	ASTM C272
Water Vapor Permeance (max.) [‡]	1.5 perm	1.1 perm	1.1 perm	ASTM E96 (Desiccant Method)
Density (min.)	1.50 lb./ft ³	1.80 lb./ft ³	2.20 lb./ft ³	ASTM C303
Thermal Resistance (R-value) [§] @75°F Mean Temp. (per in. thick)	5.0°F·ft ² ·hr/Btu	5.0°F·ft ² ·hr/Btu	5.0°F·ft ² ·hr/Btu	ASTM C518
Thermal Conductivity (k-value) @75°F Mean Temp.	0.2 Btu·in./hr·ft ² ·°F	0.2 Btu·in./hr·ft ² ·°F	0.2 Btu·in./hr·ft ² ·°F	ASTM C518
Surface Burning Characteristics • Smoke Developed** • Flame Spread**	25 (Class A) 140	25 (Class A) 140	25 (Class A) 140	ASTM E84/UL723

*Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide.

[†]16 in. wide board — Made to Order Sizes.

[‡]Permeance shown is for 1 in. thick board. Permeance typically decreases as board thickness increases.

[§]Specimens are aged and tested in accordance with FTC Rule (16 CFR, Part 460) and ASTM C578.

**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.