First Revision September 2015

GreenGuard® Type 4 XPS Insulation Board

FOR RESIDENTIAL APPLICATIONS



- R-Value of 0.88/25mm (5.0 per inch) of thickness
- Available with compressive strength of 210 kPa (30 psi) or 276 kPa (40 psi)
- Meets or exceeds Type 4 and Types 1, 2, and 3 specifications
- Lightweight, easy to cut with a knife
- Does not absorb moisture
- Retains insulating properties over time
- Can be used to meet code requirements for continuous insulation when installed directly over studs or over wood sheathing
- Reduces energy loss through the foundation and helps control moisture inside the basement
- Water resistance makes it an excellent choice for foundation and below-slab use

Kingspan®

GreenGuard® Type 4 XPS Insulation Board

Description

Kingspan **GreenGuard®** Type 4 XPS Insulation Board comprises 1/2" 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 0,88 /25 mm (5.0 per inch) of thickness. It is available in a square edge board or ship-lap edge board.

Compliance

Intertek CCRR-1021;
CCMC 12722-L;
MN Dept. of Energy Chapter 7640;
FM Approvals- see RoofNav Roof System Listings;
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®** Type 4 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.

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.

PS-TYPE 4 RES

Product Data

Property	Test Method	Value		
General				
Thickness	Millimeter	13, 20, 25, 38, 50, 76	50	76
Thickness	Inch	1/2, 3/4, 1, 1 1/2, 2, 3	2	3
Type[1]	CAN/ULC-S701	4	4	4
Compressive Strength Min. (kPa @ 10% Deflection) (psi @ 10% Deflection)		 210 30	 276 40	 276 40
Water Absorption Max. (% by volume)	ASTM C 272	 0.1	 0.1	 0.1
Water Vapor Permeance ng/Pa·s·m² Perm	ASTM E 96 (Desiccant Method)	 60 1	 60 1	 60 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[2] (m· °C/W)	ASTM C 518 (@75° Mean Temperature)	 .88 per 25mm	 1.76	 2.64
(°F·ft² hr/Btu)		5.0 per inch	10.0	15.0

[1] Kingspan GreenGuard Type 4 XPS Insulation Board meets or exceeds Types 1, 2, and 3.

[2] Specimens are aged and tested in accordance with the FTC Rule (16 CFR, Part 460) and ASTM C 578.

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