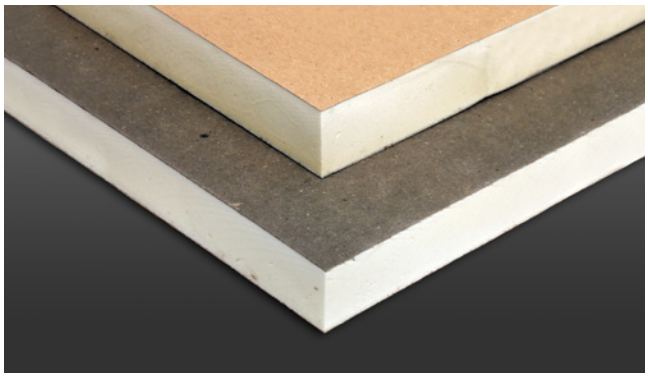
WeatherBond **Polyiso**
XP



Overview

XP polyiso is a rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt (GRF). ReadyFlash® Technology is a standard feature of XP polyiso that allows the contractor to manipulate flash-off times by choosing which side of the insulation board to apply membrane adhesives. ReadyFlash features a dark glass-reinforced felt (GRF) on one side of the insulation board and a light glass-reinforced felt on the other.

ReadyFlash TECHNOLOGY

- Increases surface temperature of the dark facer up to 25°F above ambient temperature and provides up to 30% faster adhesive flash-off.
- Decreases surface temperature of the light facer up to 5°F below ambient temperature.

Features and Benefits

- XP polyiso insulation provides the highest R-value per inch of commercially available insulation products
- Zero ozone-depleting components, HFC- and HCFC-free formulation
- Approved for direct application to steel decks

Panel Characteristics

- Available in 4′ x 4′ (1220 mm x 1220 mm) and 4′ x 8′ (1220 mm x 2440 mm) panels in thickness of 0.5″ (13 mm) to 4.5″ (115 mm)
- Available in 4′ x 12′ (1220 mm x 3660 mm) panels in the following thickness: 1.5″, 1.75″, 2.0″, 2.2″, 2.5″, 2.6″, 3.0″, 3.3″, and 3.5″

Applications

- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

WEATHERBOND
ROOFING SYSTEMS

Sustainable Attributes

WeatherBond Roofing Systems' focus has always been innovation - Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. WeatherBond is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Zero ozone-depleting components, HFC- and HCFC-free formulation
- CDPH Compliant for maximum allowable concentrations of target VOCs
- Up to 56.9% recycled content by weight (36.6% post-consumer/20.3% pre-consumer)
- Contributes to LEED® and Green Globes certification requirements
- End-of-life jobsite disposal options available for re-use/re-purposing
- WeatherBond Polyiso Roof Insulation and HD Cover Board EPDs available
- PIMA Quality Mark℠ Certification Program participant for Long-Term Thermal R-values (LTTR)
- Highest R-value per inch providing maximum energy savings and CO_2 emissions avoidance

Polyiso Eco Ready (Optional)

- 5% bio-content option available (for 2.0″ and 2.6″ thicknesses)
- Contributes to carbon reduction initiatives via mass balance approach under ISCC PLUS compliance

Installation

Ballasted Single-Ply Systems
Each XP panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to WeatherBond's installation instructions.

Mechanically Attached Single-Ply Systems
Each XP panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to the WeatherBond's installation instructions.

Fully Adhered Single-Ply Systems
XP panels must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to WeatherBond's specifications.

XP 4′ x 8′ and 4′ x 12′ panels can be secured to the roof deck with WeatherBond's Flexible DASH Adhesive, either full coverage or bead spacing.

XP 4′ x 4′ panels may be adhered to prepared concrete deck with a full mopping of Type III or IV asphalt.

REVIEW CURRENT WEATHERBOND INSTALLATION INSTRUCTIONS FOR SPECIFIC INSTALLATION REQUIREMENTS.

XP Polyiso Thermal Values

Thickness (inches)	LTTR R-value	Thickness (inches)	LTTR R-value
0.5	2.8	2.75	15.9
0.75	4.2	2.8	16.2
1	5.7	2.9	16.8
1.1	6.3	*3.0	17.4
1.2	6.8	3.1	18.0
1.25	7.1	3.2	18.6
1.3	7.4	3.25	18.9
1.4	8.0	*3.3	19.2
*1.5	8.6	3.4	19.9
1.6	9.1	*3.5	20.5
1.7	9.7	3.6	21.1
*1.75	10.0	3.7	21.7
1.8	10.3	3.75	22.0
1.9	10.8	3.8	22.3
*2	11.4	3.9	23.0
2.1	12.0	4	23.6
*2.2	12.6	4.1	24.2
2.25	12.9	4.2	24.9
2.3	13.2	4.25	25.2
2.4	13.8	4.3	25.5
*2.5	14.4	4.4	26.1
*2.6	15.0	4.5	26.8
2.7	15.6	–	–

Codes and Approvals

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- UL Standard 790, 263 and 1256: Component of Class A Roof Systems (refer to UL Roof Materials' system directory)
- FM® Standards 4450/4470: Class 1 approval for steel roof-deck constructions (refer to FM RoofNav℠)
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- Third-party certification with the PIMA QualityMark℠ for Long-Term Thermal Resistance (LTTR) values
- CAN/ULC S704, Type 2, Class 3 (20 psi), Type 3, Class 3 (25 psi)
- Florida Building Code Approval
- International Building Code (IBC) Section 2603
- CDPH compliant for maximum allowable concentrations of target VOCs

Precautions

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof-covering material. Protect installed product from excessive foot traffic. WeatherBond will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the jobsite or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call WeatherBond for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Typical Properties and Characteristics

Property	Test Method	Value
Compressive Strength	ASTM D1621	20 psi* minimum (138kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E96	<1 perm (57.5ng/(Pa•s•m²))
Water Absorption	C1763	<1% volume
Flute Spanability	FM 4451	2⅜" for less than 1" 5.25" for 1" to 1.9" 7.5" for 2" and greater

*Also available in 25 psi minimum, Grade 3

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no.(s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory. 99DL.

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ROOFING SYSTEMS
Single-Ply Simplified

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