# WeatherBond Polyiso

**XFP** 





## **Overview**

XFP Polyiso is a rigid, roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded during the manufacturing process to premium-performance coated glass facers (CGF). ReadyFlash\* Technology is a standard feature of XFP Polyiso that allows the contractor to manipulate flashoff times by choosing which side of the insulation board to apply membrane adhesives. ReadyFlash features a dark coated-glass facer (CGF) on one side of the insulation board and a light coated-glass facer on the other. Utilizing the sun's energy, the dark facer accelerates adhesive flash-off while the light facer slows it down.

#### **Features and Benefits**

- Achieves a UL Class A combustible deck rating at a 1" thickness without
  the use of a fire-rated slip sheet or the presence of a gypsum coverboard

   - \*Maximum roof slope ½":12"
- Premium facer improves fire resistance, moisture resistance and dimensional stability
- Superior bond to the foam core enhances wind-uplift performance
- Highest R-value per inch of commercially available insulation



## **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 11.2% pre-consumer recycled content by weight
- 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<sup>CM</sup> Certification Program participant for Long-Term Thermal R-values (LTTR)
- Highest R-value per inch providing maximum energy savings and CO<sub>2</sub> 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

## **Product Characteristics**

Available in 4' x 4' (1220 mm x 1220 mm) and 4' x 8' (1220 mm x 2440 mm) panels in thickness of ½" (13 mm) to 4" (102 mm)

#### Installation

#### **Mechanically Attached Single-Ply Systems**

Each XFP Polyiso 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 WeatherBond's specifications.

#### **Fully Adhered Single-Ply Systems**

Each XFP Polyiso panel 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.

XFP 4' x 8' panels can be secured to the roof deck with Flexible DASH Adhesives, with either full coverage or bead spacing of no less than 6" on center.

REVIEW CURRENT WEATHERBOND INSTALLATION INSTRUCTIONS FOR SPECIFIC INSTALLATION REQUIREMENTS.



## **Codes and Compliances**

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603
- 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<sup>SM</sup>)
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- CAN/ULC S704, Type 2, Class 3 (20PSI), Type 3, Class 3 (25PSI)
- Florida Building Code Approval

NOTE: Please be aware the Federal Specification HH-I-1972/GEN has been replaced.

### **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<br>ASTM 1289 | 20 psi*** minimum<br>(138kPa, Grade 2) |
| Dimensional Stability       | ASTM D2126              | 2% linear change<br>(7 days)           |
| Moisture Vapor Transmission | ASTM E96                | <1 perm<br>(57.5ng/(Pa•s•m²))          |
| Water Absorption            | ASTM C209               | <1% volume                             |
| Service Temperature         |                         | -100°F to 250°F<br>(-73°C to 122°C)    |

<sup>\*\*\*</sup>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.

# **XFP Polyiso Thermal Values**

| Thickness<br>(Inches) | LTTR R-value | Thickness<br>(inches) | LTTR R-value |
|-----------------------|--------------|-----------------------|--------------|
| 0.50                  | 2.8          | 2.75                  | 15.9         |
| 0.75                  | 4.2          | 2.80                  | 16.2         |
| 1.00                  | 5.7          | 2.90                  | 16.8         |
| 1.10                  | 6.3          | 3.00                  | 17.4         |
| 1.20                  | 6.8          | 3.10                  | 18.0         |
| 1.25                  | 7.1          | 3.20                  | 18.6         |
| 1.30                  | 7.4          | 3.25                  | 18.9         |
| 1.40                  | 8.0          | 3.30                  | 19.2         |
| 1.50                  | 8.6          | 3.40                  | 19.9         |
| 1.60                  | 9.1          | 3.50                  | 20.5         |
| 1.70                  | 9.7          | 3.60                  | 21.1         |
| 1.75                  | 10.0         | 3.70                  | 21.7         |
| 1.80                  | 10.3         | 3.75                  | 22.0         |
| 1.90                  | 10.8         | 3.80                  | 22.3         |
| 2.00                  | 11.4         | 3.90                  | 23.0         |
| 2.10                  | 12.0         | 4.00                  | 23.6         |
| 2.20                  | 12.6         | 4.10                  | 24.2         |
| 2.25                  | 12.9         | 4.20                  | 24.9         |
| 2.30                  | 13.2         | 4.25                  | 25.2         |
| 2.40                  | 13.8         | 4.30                  | 25.5         |
| 2.50                  | 14.4         | 4.40                  | 26.1         |
| 2.60                  | 15.0         | 4.50                  | 26.8         |
| 2.70                  | 15.6         |                       |              |

Flute Spanability is 2%" for 1.4" or thickness or smaller. Flute Spanability is 4%" for 1.5" thickness or greater.



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.







