



Polyisocyanurate Insulation Manufactured On-Line to Foil Facers for Exterior Commercial Wall Applications

TECHNICAL DATA SHEET

Xci Foil is an energy efficient rigid insulation panel composed of a closed cell polyisocyanurate foam core manufactured online to an impermeable foil facing material. It is designed for use in commercial and residential wall applications to provide continuous insulation within the building envelope.

APPLICATIONS

- Provides continuous insulation (ci) for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Suitable for external ductwork
- Suitable for masonry cavity wall applications
- Can be applied to the exterior or interior of exterior walls, when separated from the interior by a 15-minute thermal barrier. Please contact Hunter Panels for more information regarding interior applications that require NFPA 285 compliance.

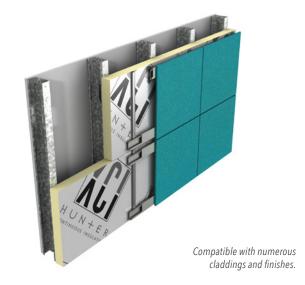
PANEL CHARACTERISTICS

- Manufactured with NexGen Chemistry: Zero Ozone Depleting Potential (ODP);
 Contains no CFCs, HCFCs or HFCs; Virtually zero Global Warming Potential (GWP). Use of Xci products helps reduce the carbon footprint of buildings.
- Lightweight yet durable, easy to handle. Cuts with a knife or saw.
- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- ASTM C 1289 Type I, Class 1 and Class 2 Grade 2 (20 PSI) or Grade 3 (25 PSI)
- Available in 4' x 8' (1220mm x 2440mm) panels in thickness of 1" (25mm) – 4" (102mm)
- Other widths/lengths are available upon special request

XCI FOIL THERMAL VALUES

Thermal values as per ASTM C 518 in accordance with ASTM C 1289

Thickness		R-Value	
(inches)	(mm)	K-value	
1.00	25	6.5	
1.50	38	10.0	
2.00	51	13.3	
2.50	64	17.0	
3.00	76	20.3	
3.50	89	24.0	
4.00	102	27.0	



LEED POTENTIAL CREDITS FOR POLYISO USE

Energy and Atmosphere

Optimize Energy Performance

Materials & Resources

- Building Life-Cycle Impact Reduction
- Environment Product Declaration
- Material Reuse
- Pre-consumer Recycled Content
- Construction and Demolition Waste Management

Indoor Environmental Quality

Thermal Comfort

INSTALLATION

Install Xci Foil between the concrete block wall and the exterior masonry. Attach insulation panels against the inner wall using construction grade adhesive or mechanical attachment. Xci Foil may also be applied directly to oil based waterproofing adhesives.

POST-INSTALLATION EXPOSURE

During the time frame between installation of Xci Foil and the application of the finished exterior cladding, it is recommended that a building wrap be applied to the Xci Foil. If a building wrap has not been specified, ALL UNFACED FOAM EXPOSED TO DIRECT DAYLIGHT (i.e. corners, window and door openings) should be taped with a compatible waterproof tape. Xci Foil is not intended to be left exposed for extended periods of time (i.e. in excess of 60 days) without adequate protection. Please contact Hunter Panels for details.

TYPICAL PHYSICAL PROPERTY DATA

Physical Property	Test Method	Value	
Compressive Strength	ASTM D 1621	20 psi* minimum (138 kPa, Grade 2)	
Dimensional Stability	ASTM D 2126	1.5% max. linear change (7 days)	
Moisture Vapor Permeance	ASTM E 96	<0.05 perm (2.875ng/(Pa•s•m²))	
Water Absorption	ASTM C 209	< 0.05% volume	
Service Temperature		-100° to 250° F (-73°C to 122°C)	
Flame Spread Index (foam core)	ASTM E 84	<75	
Smoke Developed (foam core)	ASTM E 84	<450	
Recycled Content		9% pre-consumer	

^{*}Also available in Grade 3 (25 psi)

CODES AND COMPLIANCES

- Designed for use in continuous insulation to assist in meeting the most current ASHRAE 90.1, IECC, IBC and IRC standards
- ASTM C 1289
- IBC Chapter 26 and IRC Section R316
- Numerous NFPA 285 compliant assemblies
- Numerous UL 263 hourly designs
- DRJ Technical Evaluation Report 1402-02
- Miami Dade County Product Control Approved
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- California Bureau of Furnishings and Home Insulation
- CCMC 13460-L; Type 2, Class 1
- UL Classified for use in Canada Refer to UL Director of Products Certified for Canada for more details
- CAN/ULC S-704 Type 1, Class 1

R-VALUE CALCULATION

Cavity Wall Systems Comparison

	2" Polyiso	2.5" Polyiso	2" XPS
Inside Air Film	.68	.68	.68
8" Concrete Block	1.11	1.11	1.11
Insulation	13.30	17.00	10.00
4" Face Brick	.44	.44	.44
Outside Air Film	.17	.17	.17
Total Design R-Value	15.70	19.40	12.40

WEATHER RESISTANT BARRIER

The incorporation of Weather Resistant Barriers (air, vapor and moisture) is a critical element of a wall assembly. A design professional familiar with local code requirements should specify the selection and placement of any WRB. Furthermore, it is recommended that a hygrothermal analysis of the proposed assembly be conducted to determine the type and locations of a proposed WRB.

Note: The NFPA 285 fire test is an assembly test. The performance of the WRB must also be considered. Please consult Hunter Panels for details and specifications.

JOB-SITE STORAGE

Good construction practice dictates that all insulations should be protected from moisture and direct sunlight during job-site storage. Pallets of Hunter Panels Xci Foil are double packaged in a UV resistant polyethylene bag. This moisture resistant package is designed for protection from the elements during flat bed shipment from our factories to the job-site. Outdoor storage for extended periods of time requires waterproof tarpaulins and elevated storage above ground level a minimum of 2". Additionally, we recommend slitting the bundle packaging vertically down the center of the two short sides to prevent moisture accumulation within the package.

WARNINGS AND LIMITATIONS

Insulation must be protected from open flame. Hunter Panels will not be responsible for specific building design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site 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 Hunter Panels for more specific details.











CONTINUOUS INSULATION