XCI NB

Polyisocyanurate Insulation Bonded to OSB or Plywood for Exterior Wall Applications in Type V Construction

TECHNICAL DATA SHEET

Xci NB is an energy efficient rigid insulation panel composed of a closed cell polyisocyanurate foam core bonded to a premium performance coated glass facer on one side and 7/16" or 5/8" OSB or plywood on the other. It is designed for use in Type V commercial and residential wall applications to provide both continuous insulation and a cladding attachment substrate within the building envelope.

APPLICATIONS

- Approved component of the Xci AEGIS Wall System
- Provides continuous insulation (ci) for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Suitable substrate for numerous claddings/finishes including fiber cement siding, masonry, metal, composite cladding systems, wood clapboards, wood shingles and vinyl siding
- Suitable for new construction and retrofit on commercial and residential exterior walls

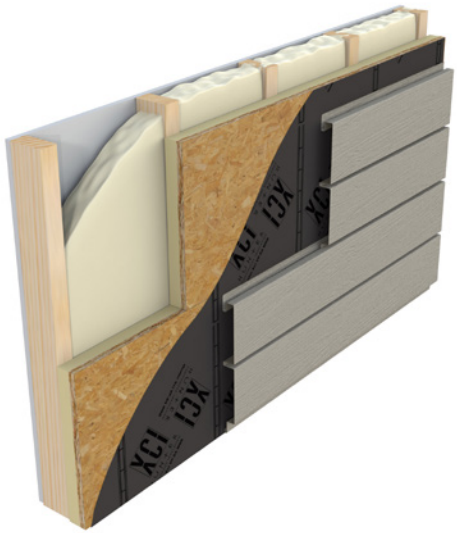
PANEL CHARACTERISTICS

- 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 help reduce the carbon footprint of buildings.
- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- A superior combination of high insulating properties and nailable surface
- Provides improved dimensional stability and fire performance
- ASTM C 1289 Type V made with Type II Class 2 foam
- Available in 4' x 8' (1220mm x 2440mm) panels in thicknesses of 1.5" (38mm) – 4.7" (119mm)
- Available with 7/16" or 5/8" OSB
- Available with 5/8" or 3/4" Plywood

XCI NB THERMAL VALUES WITH 5/8" PLYWOOD

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

Thickness		R-Value
(inches)	(mm)	
1.60	41	6.8
2.10	53	9.8
2.60	66	12.9
3.10	79	16.1
3.60	91	19.3
4.10	104	22.5
4.60	117	25.8



XCI NB THERMAL VALUES WITH 7/16" OSB

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

Thickness		R-Value
(inches)	(mm)	
1.50	38	6.6
2.00	51	9.6
2.50	64	12.7
3.00	76	15.9
3.50	89	19.1
4.00	102	22.3
4.50	114	25.6

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

STRUCTURAL

Hunter Xci NB, up to 2.7" of total thickness, can be used as structural insulating sheathing when applied to wood studs. Please contact Hunter Xci for shear values, wind loads and attachment requirements.

FASTENING

Several factors are involved in the proper fastening of Xci NB. These include overall thickness of the panel, the weight of the specified cladding and the type of support provided at the base of the wall assembly. Please contact Hunter Xci for assistance with fastening rate and fastener type.

POST-INSTALLATION EXPOSURE

Xci NB is not intended to be left exposed for extended periods of time. During the time between the installation of the Xci NB and the application of the exterior cladding it is recommended that the WRB be installed as soon as possible. If the WRB is not being installed right away it is recommended that the Xci NB be protected from excess moisture and UV. All unfaced foam exposed directly to daylight can be taped with a compatible waterproof tape and the edges of the boards can be buttered with a sealant that is compatible with the WRB.

TYPICAL PHYSICAL PROPERTY DATA

(Polyiso foam core only)

Physical Property	Test Method	Value
Compressive Strength	ASTM D 1621	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E 96	<1 perm (57.5ng/(Pa•s•m^2))
Water Absorption	ASTM C 209	< 0.1% volume
Service Temperature		-100° to 250° F (-73°C to 122°C)
Resistance to Mold	ASTM D 3273	Passed (10)
Flame Spread Index	ASTM E 84	< 75
Smoke Developed	ASTM E 84	< 450

*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
- Incorporates APA-TECO Rated Exposure 1 OSB or Plywood
- ASTM C 1289
- IBC Chapter 26 and IRC section R316
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- California Bureau of Furnishings and Home Insulation
- UL Classified for use in Canada – Refer to UL Director of Products Certified for Canada for more details

JOB-SITE STORAGE

Construction practice dictates that all insulations should be protected from moisture and direct sunlight during job-site storage. Pallets of Hunter Xci NB 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 Xci 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 Xci for more specific details.

Note: Xci NB is not intended for use below grade.

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