Get to Know Hunter Xci Ply and Xci NB
These innovative, high-thermal, rigid insulation panels consist of a closed cell polyisocyanurate foam core bonded to a premium performance coated glass facer on one side, and either fire-treated plywood (Xci Ply) or regular plywood or OSB (Xci NB) on the other. They are designed for use in above grade wall applications to provide continuous insulation within the building envelope.

FEATURES AND BENEFITS
• Polyiso offers highest R-value per inch of any foam plastic board insulation
• Designed to assist in meeting the most current ASHRAE 90.1, IECC, IBC and IRC standards
• A superior combination of high insulating properties and mechanically attachable surface for ease of cladding attachment
• Xci Ply is NFPA 285 compliant in numerous wall assemblies

APPLICATIONS
• Used for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
• Compatible with numerous claddings/finishes: masonry, fiber cement, stucco, terra cotta, mcm, metal, natural stone, aluminum, EIFS
• Optimal substrate for mechanically attaching cladding materials
• Can be installed directly to studs for certain applications
ST. MARCUS LUTHERAN SCHOOL CASE STUDY

Job Name: St. Marcus Lutheran School  
Location: Milwaukee, Wisconsin  
Product: Hunter Xci NB 3.6” polyiso + 5/8” Plywood  
Contractor: M.M. Schranz Roof and Sheet Metal, Inc., Milwaukee, Wisconsin  
Architect: Rinka Chung Architecture, Milwaukee, Wisconsin  
General Contractor: Catalyst Construction, Milwaukee, Wisconsin  
Job Insights: Hunter Xci NB helps contractor shave 25% off cladding installation time

To meet growing demand for student enrollments, Milwaukee’s St. Marcus Lutheran School completed a 40,000 sq. ft expansion in 2016. The addition will allow the popular private voucher school to grow enrollments from 860 to 1,120, reports the Milwaukee Journal Sentinel.

Rinka Chung Architecture’s design called for 22-gauge standing seam metal roof panels to be used for wall cladding. To simplify attachment of the cladding, while providing continuous insulation for the building envelope, the contractors installed Hunter Xci NB. The product is a high thermal rigid insulation panel composed of a closed cell polyisocyanurate foam core bonded to a premium performance coated glass facer on one side and oriented strand board (OSB) or plywood on the other.

The entire plywood or OSB surface can be used as a cladding attachment point, which greatly simplifies cladding installation compared to trying to align fasteners with a girt, clip or rail. Additionally, while the Xci NB panels are secured firmly to the base wall, the cladding attachment is thermally broken by being attached to the wood of the composite panel — which reduces thermal bridging, for a more energy-efficient building.

“Hunter Xci NB probably saved us 25% in time to attach the standing seam cladding, since we didn’t have to add another layer of furring for the cladding to attach to,” says Kevin Brennan, sheet metal project manager with M.M. Schranz Roofing, Inc.
What types of fasteners are available to use with Xci Ply and Xci NB?

We have fasteners available for wood stud walls, CMU, concrete or steel stud walls. Features include:

- FM approved — plates not required
- star/spider head eliminates need for washer and offers dramatically increased pull-out value
- 100% American made
- fast, one-step installation
- no pre-drilling required for wood or steel frame application
- multiple bits included in each pail

Use Hunter Panels SIP WD Fasteners for wood studs or wood framing.

Hunter Panels SIP HD Fasteners are intended for steel studs or steel framing. SIP/HD is for 16 ga or thicker steel studs.

And use Hunter Panels SIP SD Fasteners for CMU, Concrete or Steel Stud wall types. These also feature pull out values for metal, as well as fast, one-step steel stud installation. They are for use with 18 ga and lighter steel studs. When applying to concrete or CMU, a 3/16" pilot hole 1½" deep is required.
**Typical Physical Property Data Chart** - Polyiso Foam Core Only

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>ASTM D 1621</td>
<td>20 psi* min. (138 kPa, Grade 2)</td>
</tr>
<tr>
<td>Dimensional Stability</td>
<td>ASTM D 2126</td>
<td>2% linear change (7 days)</td>
</tr>
<tr>
<td>Moisture Vapor Permeance</td>
<td>ASTM E 96</td>
<td>&lt;1 perm (57.5ng/(Pa•s•m2))</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM C 209</td>
<td>&lt; 0.1% volume</td>
</tr>
<tr>
<td>Service Temperature</td>
<td></td>
<td>-100° to 250° F (-73°C to 122°C)</td>
</tr>
<tr>
<td>Resistance to Mold</td>
<td>ASTM D 3273</td>
<td>Passes (10)</td>
</tr>
</tbody>
</table>

*Also available in grade 3 (25 psi)

**Xci Ply / Xci NB Thermal Values**

<table>
<thead>
<tr>
<th>Thickness* (inches)</th>
<th>Thickness* (mm)</th>
<th>R-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6</td>
<td>41</td>
<td>6.6</td>
</tr>
<tr>
<td>2.1</td>
<td>53</td>
<td>9.6</td>
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<tr>
<td>2.6</td>
<td>66</td>
<td>12.7</td>
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<td>22.3</td>
</tr>
<tr>
<td>4.6</td>
<td>117</td>
<td>25.6</td>
</tr>
</tbody>
</table>

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

*thicknesses calculated with 5/8” plywood
Hunter Xci Ply/Xci NB carry the following compliances:

- ASTM C 1289
- Xci Ply offers multiple NFPA 285 compliant wall assemblies with CMU, Concrete, Steel Stud and Fire Retardant Treated Wall types
- ICC-ESR-3174 (foam only)
- DRJ Technical Evaluation Report 1402-02
- California Title 24
- California Bureau of Furnishings and Home Insulation
- UL Classified for use in Canada – Refer to UL Direct

To help you meet both continuous insulation and fire requirements, Hunter Panels offers many polyiso insulation options that have passed NFPA 285 testing within steel frame, CMU, FR treated wood frame and concrete wall assemblies, and with a wide range of cladding types and weather barriers. Polyiso offers the highest R-value per inch of rigid foams, so our products help you create a thinner profile, NFPA 285 compliant wall assembly than is possible with other insulations.

As NFPA 285 tests all components of a wall assembly, it can be challenging to figure out if a given insulation is appropriate for your situation. To help you cut through the smoke, Hunter’s “Build-A-Wall sheets” show at a glance which types of assemblies our various insulation products can be used in to meet NFPA 285 requirements.