Hunter Xci: Exterior Continuous Insulation

Energy Efficiency and NFPA 285 Compliance
Made Easy
As the first start-up company to enter the polyiso industry since 1975, Hunter Panels has a singularly dedicated mission: to distinguish ourselves as an aggressive entrepreneurial manufacturer, and also as a proactive leader in the marketing of innovative continuous insulation polyiso products. We are a self-contained manufacturer with a companywide, laser-like focus on our mission.

Hunter Panels has assembled an unparalleled team of leading industry professionals who know polyiso inside and out and have a proven passion for being technically proficient and customer driven in everything we do as a company. Quality isn’t just a goal at Hunter Panels — it’s in our corporate DNA.

As the recognized industry leader and pioneer in polyiso roof insulation panels for over 19 years, we take great pride in introducing you to Hunter Xci, our product line for commercial wall applications. Hunter Xci products have been intuitively designed for exclusive use in commercial wall applications to provide continuous insulation (ci) within almost any commercial building envelope.

**What is ci?**

The U.S. Department of Energy’s Building Energy Code program defines continuous insulation (ci) as “insulation that runs continuously over structural members and is free of significant thermal bridging.” Ci can be installed on interior and exterior wall structures or as an integral part of any opaque surface of the overall building envelope. It should be noted that ci options that include foam plastics carry additional code compliance requirements and must comply with Chapter 26 of the IBC and NFPA 285-tested assembly requirements.

ASHRAE 90.1 includes significant and increased requirements for nonresidential wall insulation. These prescriptive minimum values are increasing across all climate zones to include “continuous exterior insulation”. Hunter Xci Polyiso is the proven choice of design professionals for NFPA 285 code compliance and all of your ci needs.

* Other than fasteners and service openings.

**Why is “ci” important?**

BOMA estimates that the commercial real estate industry spends approximately $24 billion annually on energy. Furthermore, they state that energy is the single largest controllable operating expense for office buildings. In total, residential and commercial buildings comprise approximately 40% of overall US energy use by sector. These figures illustrate why continuous insulation is important. Thermal bridging can reduce effective R-values within walls by 30%–60% or more. The ci component of a wall assembly is essential in minimizing the effects of thermal bridging and creating wall systems where the actual thermal performance more closely resembles what has been specified.

ASHRAE Standards & Guidelines are designed to provide minimum requirements for energy efficient buildings (excluding low-rise structures).
Hunter Xci Polyiso—the best choice for “ci”

• Seven distinct NFPA-compliant products with an exponential number of wall assembly combinations
• More NFPA-compliant assemblies than other manufacturers
• Easy-to-use, three-step Wall Assembly Guide app available for iPad, Smartphone and online use
• Legendary “Whatever It Takes” customer service
• We actually answer our telephones!
• Knowledgeable and friendly account managers
• Full-time, unsurpassed technical department staff
• Full-time research and development, testing and quality control departments
• Uniquely innovative product development capabilities
• The recognized global leader in polyiso manufacturing
• Seven manufacturing facilities positioned to strategically service North American needs
• BIM objects on BIMObjects and BIMsmith
• All necessary specs available online at MasterSpec, Spec-Link
• AIA CEU courses available
• WUFI modeling offered

Hunter Polyiso Manufacturing Facilities

New York • Texas • Illinois • Utah • Florida • Pennsylvania • Washington

LEED Potential Credits for Polyiso Use

Energy and Atmosphere —
• Optimize Energy Performance

Materials & Resources
• Building Life-Cycle Impact Reduction • Material Reuse
• Environment Product Declaration • Recycled Content
• Construction and Demolition Waste Management
**Xci Foil (Class A) Thermal Values**

<table>
<thead>
<tr>
<th>Thickness (inches)</th>
<th>Thickness (mm)</th>
<th>R Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>25</td>
<td>6.3</td>
</tr>
<tr>
<td>1.5</td>
<td>38</td>
<td>9.5</td>
</tr>
<tr>
<td>2.0</td>
<td>51</td>
<td>13.0</td>
</tr>
<tr>
<td>2.5</td>
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<td>19.0</td>
</tr>
<tr>
<td>3.5</td>
<td>89</td>
<td>22.0</td>
</tr>
</tbody>
</table>

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

**Higher R-value per inch versus XPS, EPS or mineral fiber**

<table>
<thead>
<tr>
<th>Material</th>
<th>R-Value Per Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyiso</td>
<td></td>
</tr>
<tr>
<td>XPS</td>
<td></td>
</tr>
<tr>
<td>Mineral Wool</td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td></td>
</tr>
</tbody>
</table>

**Polyiso offers comfortable thermal control, energy efficiency, and usage benefits with a superior R-value**

Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options. This helps not only in thermal efficiency of the building but requires less material and waste on the jobsite, a smaller overall building footprint for equivalent square footage and supports compliance with strict masonry codes that limit cavity wall insulation thicknesses.

**For the best ci, insulate with Hunter Xci**

Nobody knows polyiso like Hunter. Quality and product consistency is never an afterthought with us; it’s our prime directive. Hunter Xci products’ proven high thermal values and meticulous technical data are only two examples of how we compare to inferior ci products made by other manufacturers.

**Codes and compliances**

- ASTM C 1289, Type I, Class 1, Grade 1, Grade 2 (20 psi) and Grade 3 (25 psi)
- International Building Code Chapter 26
- The 2015 IECC codes aim to increase energy efficiency by 30 percent over those specified by the 2006 IECC code

**Overall metrics of insulation products**

Polyiso is the proven choice when it comes to physical properties in the continuous insulation market place.

- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- Comparable moisture resistance to XPS and EPS in above grade application and greater moisture resistance than rockwool
- Great fire performance and wide selection of NFPA 285 to choose from
- Superior availability and capacity versus other ci options
- Lightweight yet durable, easy to handle. Cuts with a knife or saw
- Proven compatibility with other building components within the wall cavity, including solvent based adhesives and sealants
The International Non-profit NFPA

The mission of the international non-profit National Fire Protection Association (NFPA), established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.

NFPA 285 is a multi-story wall assembly pass/fail fire test required by code for commercial buildings Type I, II, III and IV construction. The assemblies include all products from interior finish to exterior cladding.

The NFPA 285 test is an assembly test of components, not a product approval test. Hunter Panels has ongoing NFPA 285 testing. Please consult our free Wall Assembly Compliance app for iPads and Smartphones and/or our Hunter Xci website for the most current listings of compliant assemblies.

Check out the Hunter Xci Wall Assembly app at www.hunterpanels.com or in the iTunes store and Android shop.

Effective, efficient compliance choices

Hunter Panels has performed extensive testing with our Hunter Xci products in order to provide you with hundreds of NFPA-compliant wall assemblies to choose from. A current listing of these assemblies can be found on our website, www.hunterpanels.com, and on our NFPA 285 Xci app. We are constantly updating our testing so please check back often for updates. Outperforming the competition, Hunter Xci has researched and tested the widest assortment of NFPA 285 compliant assemblies in order to provide architects with unsurpassed flexibility in their design selection.

NFPA 285 compliance in the palm of your hand

Hunter Panels has designed an app to help design professionals create assembly options for compliance with NFPA 285 wall assemblies utilizing Hunter Xci products. The app is very visually friendly and walks you through the process of assembling a compliant wall. First you select your base wall type, then choose one of Hunter Xci Polyiso products, and finally select from one of the many exterior finish families of cladding options. The app will direct you to a final PDF of the specific wall you defined. The final PDF also includes all the manufacturers and their specific components necessary in order to be NFPA 285 code compliant. The app will work on iPad, iPhone, Droid and PC.
Hunter Xci products for NFPA-compliant wall assemblies

HUNTER PANELS Xci FOIL (CLASS A)
For wood, steel, CMU or masonry construction
- Can be installed directly on steel studs in a variety of wall assemblies without the need for gypsum sheathing
- Flame Spread <25 per ASTM E 84
- Provides continuous insulation (ci) for FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Suitable for many commercial wall assemblies
- Available thicknesses 1"–4.0", R values 6.3–25.2
- UL Classified
Note: Xci Foil is not suitable for exposed interior applications.

HUNTER PANELS Xci FOIL
For wood, steel, CMU or masonry construction
- Provides continuous insulation (ci) for FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Available thicknesses 1.0"–4.0", R values 6.5–27.0
- Suitable for masonry cavity wall applications
Note: Xci Foil is not suitable for exposed interior applications.

HUNTER PANELS Xci CG
For wood, steel, CMU or masonry construction
- Can be installed directly on steel studs in a variety of wall assemblies without the need for gypsum sheathing
- Available thicknesses 1.0"–4.0", R values 6.0–25.0
- UL Classified
Note: Xci CG is not suitable for exposed interior applications.

HUNTER PANELS Xci PLY
For wood, steel, CMU or masonry construction
- Can be installed directly on steel studs in a variety of wall assemblies without the need for gypsum sheathing
- Optimal substrate for mechanically attaching cladding materials
- Available thicknesses 1.6"–4.7", R values 6.6–25.6
- Approved for use as structural insulated sheathing up to 2.7" thickness
- Approved for use as structural insulated sheathing up to 2.7" thickness
**WOOD STUD**

**WRB**

**SPF INSULATION**

**VINYL SIDING**

**CONCRETE WALL**

**METAL SIDING**

**TAPE (OPTIONAL)**

**HUNTER PANELS Xci 286**

For exposed interior applications

- Provides exterior sheathing options in tested NFPA 285 wall assemblies. Contact Hunter Xci for details.
- Provides continuous insulation (ci) for exposed interior walls or ceilings per NFPA 286
- Both sides reinforced foil, one side white, one side reflective, either may be left exposed
- Available thicknesses 1”–3.5”, R values 6.3–22.0

**HUNTER PANELS Xci NB**

For standard wood frame construction only

**APPLICATIONS**

- For standard wood frame construction only
- Suitable substrate for 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

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

**FEATURES AND BENEFITS**

- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- Designed for use in continuous insulation to assist in meeting the most current ASHRAE 90.1, IECC, IBC and IRC standards
- A superior combination of high insulating properties and nailable surface
- Manufactured with NexGen Chemistry: Contains no CFCs, HCFCs, is Zero ODP, and has virtually no GWP
- Incorporates APA-TECO Rated Exposure OSB or Plywood

Hunter Xci products for type 5 construction where NFPA 285 is not required
Hunter Panels Xci projects

- Penn State Ice Arena, State College, PA
- 1717 Ridge, Evanston, IL
- Parkland Hospital, Dallas, TX
- Protsman Elementary, Dyer, IN
- Clark Park Boathouse, Chicago, IL
- Gardner Elementary, Gardner, KS
- New West Elementary, Sugar Creek, MO
- Aunt Martha’s Youth Center, Chicago Heights, IL
- Mitchellville Penitentiary, Mitchellville, IA
- Clear Lake Medical Center, Houston, TX
- Wichita West HS, Wichita, KS
- Dartmouth College Science Building, Hanover, NH
- Ft. Drum, Governor, NY
- University of Northwestern Ohio, Lima, OH
- Freeport Community Center, Freeport, ME
- Lake Park Crescent, Chicago, IL
- University of KS, Studio 804, Lawrence, KS
- The Inns at Armory Square, Syracuse, NY
- Urbandale High School, Urbandale, IA
- Clifford Corners Development, Indianapolis, IN
- Aunt Martha’s Youth Center, Joliet, IL
- Spencerport Fire Station, Spencerport, NY
- Fort Dodge Middle School, Ft. Dodge, IA
- North End Phase 2, Milwaukee, WI
- Jean D’Arc Credit Union, Lowell, MA
- Hyatt Hotel, Portland, ME
- FedEx Ground Shipping Center, Billings, MT
- RGRTA Transit Center, Rochester, NY
- Lake Mills Elementary, Lake Mills, WI
- Hilltop Townhouses, Berlin, VT
- ER Martin Elementary School, Lancaster, PA

Contact Hunter Panels for a complete listing of projects.

Find Hunter Xci at:

Hunter Xci memberships and associations:

For more information or to order polyiso Xci products, visit www.hunterpanels.com.