Hunter Xci Tech Topic #113

What are the cladding attachment system options for continuous insulation products?

Building professionals have several options for supporting and attaching exterior wall cladding through a layer of continuous insulation (ci). While the various options have their applications, foam/wood composite panels reduce installation complexity while providing walls with higher thermal performance. Hunter Panels’ composite products include Hunter Xci Ply and Hunter Xci NB.

Features of foam/wood composite panels

Composite insulation products that combine rigid foam insulation with wood structural panels allow for faster installation, fewer pieces handled and thinner wall cavities. They provide ci for superior energy performance and minimize thermal bridging compared to other cladding attachment system options, as they decouple the cladding attachment fastener from the base wall. Composite insulation panels also simplify cladding attachment since their entire plywood or OSB surface can be used as an attachment point.

**Hunter Xci Ply**

Xci Ply is composed of a polyisocyanurate foam core bonded to a premium performance coated glass facer on one side and 5/8” or ¾” fire-treated plywood on the other. The product is NFPA 285 compliant in a range of wall assemblies.

**Hunter Xci NB**

Xci NB is composed of a 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. This product is designed for use in Type V commercial and residential applications where NFPA 285 compliance is not required.

Other cladding attachment system options

While composite insulation products like Hunter Xci Ply and Hunter Xci NB simplify cladding attachment and reduce thermal bridging, it is helpful to be aware of other cladding attachment system options (summarized below). Hunter Xci polyiso products fully compatible with these options include Hunter Xci CG, Hunter Xci Foil and Hunter Xci Class A panels.

**Z Girts**

Also called Z-channels or Z-furring, Z girts serve to extend the structure of wall studs outwards beyond the insulation. These systems are relatively easy to use and provide a cladding attachment area of up to a quarter of the wall’s surface. Vertical steel Z girts interrupt the ci layer along the entire length of a stud and can result in severe thermal bridging, while horizontal steel Z girts require additional labor to properly flash. An alternative, composite Z girts aim to reduce heat transfer by using plastic or other non-conductive materials. They tend to be more expensive than metal Z girts but are installed in similar fashion.

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Clips
The numerous clip types on the market generally seek to reduce the thermal bridging inherent with Z girts. Most clip systems utilize composites to reduce thermal bridging and require less material than a girt system, offering potential savings.

Rail Systems
These products are intended to offer the support of Z Girts while reducing some of the thermal bridging. This is accomplished by passing a row of members over the base layer, which penetrates the ci. Benefits include rigidity, less thermal bridging, and a large attachment area. However, they may include higher material price and installation time.

For further details on cladding attachment systems for Hunter Xci products, please contact Hunter Panels at (888) 746-1114.