XCI CONCAST

Polyisocyanurate Insulation Manufactured On-Line to Tri-Laminate Facers for Precast and Tilt-Up Applications

Hunter Xci ConCast is a non-structural, energy efficient rigid insulation panel composed of a closed cell polyisocyanurate foam core manufactured on-line to tri-laminate (poly/kraft/foil) facers on both sides. It is designed for use in concrete wall panels as the core insulation layer between two layers of concrete held together by connectors. This material would be suitable for precast, tilt-up or poured in place "sandwich" panels.

APPLICATIONS

- Provides continuous insulation (ci) in precast, tilt-up or poured in place concrete wall panel construction
- Xci ConCast is sandwiched between two layers of concrete with connectors holding together the finished panel

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
- Facing material has no exposed metal, eliminating risk of corrosion or negative chemical reaction with the concrete used in such application
- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- Available 4' x 8' (1220mm x 2440mm) panels in thicknesses of 1" (25mm) – 3.5" (89mm)
- Other lengths/widths are available upon special request

XCI CONCAST THERMAL VALUES

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

Thickness		R-Value
(inches)	(mm)	
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
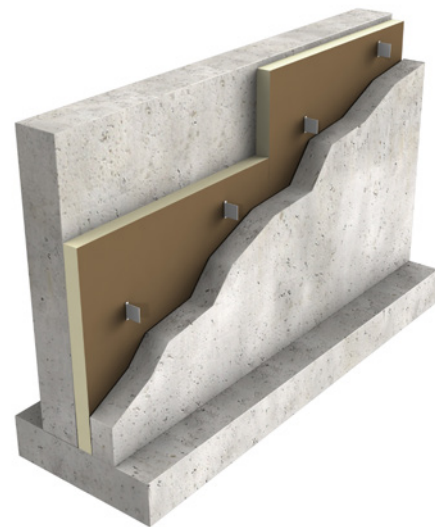
LEED POTENTIAL CREDITS FOR POLYISO USE

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

- Xci ConCast boards are lightweight and easily cut with a knife or saw
- Boards are sandwiched as insulating component between two layers of concrete held together by connectors

TYPICAL PHYSICAL PROPERTY DATA

Physical Property	Test Method	Value
Compressive Strength	ASTM D 1621	25 psi min. (138 kPa)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E 96	<0.05 perm (2.875ng/(Pa•s•m^2))
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

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
- California Bureau of Household Goods and Services

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 Xci ConCast 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

Consult local building codes or code authorities regarding code requirements and related acceptances. 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.