



**OX Engineered Products**  
22260 Haggerty Road Suite 365  
Northville, MI 48167  
p. 1.800.345.8881  
f. 248.289.9955  
oxep.com




## ISO**RED**ci<sup>®</sup>

polyiso sheathing

### **IsoRED can help you stay in the black.**

IsoRED CI is a rigid polyiso insulation used in residential and light commercial applications to achieve best-in class R-values and the ultimate in energy efficiency.

Made in USA 

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#### **Energy Efficiency**

Easily add R-value and eliminate insulation gaps.

#### **\*Multiple Applications**

Use it on interior walls, exterior walls, ceilings and sub-terrain applications.

#### **Easy to Install**

Light panels go up fast, saving time and money.

\*Thermal barrier required for habitable spaces

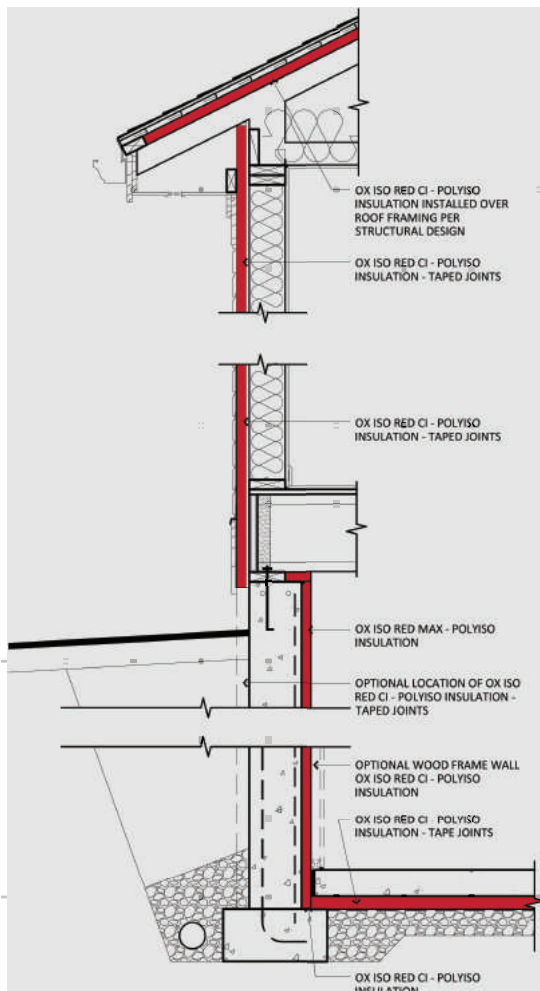
## Open up to the idea of closed cell polyiso technology

Iso RED CI is a rigid polyiso insulation that can add much needed R-value for residential and light commercial applications. With the ability to be affixed to wood, metal, masonry and concrete, Iso RED CI can be used for practically any job to increase energy efficiency in ceilings, interior walls and exterior walls. Additionally, water-resistant facers provide a first line of defense against moisture intrusion.

### Attributes

- Best-in-class long term R-value performance.
- Provides thermal, air and vapor control layers to help keep conditioned spaces comfortable.
- 25 psi compressive strength equates to 3600 psf soil pressure.
- Resilient facer technology with closed cell foam core allows for a code compliant, weather-resistant barrier.
- Closed cell polyiso foam provides superior fastener seal-ability that building wraps do not.
- ASTM E84 Class B

### Typical Application



### Product sizes

Standard width  
48"

Standard lengths  
8', 9', 10'

Custom lengths available

#### THERMAL IMAGE OF A STRUCTURE BUILT WITHOUT INSULATED SHEATHING



*Without continuous insulation, heat loss through framing (thermal bridging) is significant.*

#### THERMAL IMAGE OF THE SAME STRUCTURE BUILT WITH 1/2" (R-3) OF CONTINUOUS INSULATION



*1/2" of continuous insulation greatly reduces heat loss through wall framing and improves on cavity performance.*

## Thermal R-Values <sup>(1)</sup> "R" means resistance to heat flow. The higher the R-value, the greater the insulating value.

Thickness	0.50	.625	0.75	1.00	1.55	2.00
Thermal R-Value	3.3	4.0	5.0	6.5	10.0	13.0
System R-Value <sup>(2)</sup>	6.1	6.8	7.8	9.3	13.6	15.8

(1) Thermal values are determined by using ASTM C518 test method at 75 degrees mean temperature. (2) System R-value refers to additional effective R-value possible due to emissivity performance of reflective surface. According to ASHRAE, the reflective foil facing ISO RED CI qualifies to add R-value to a properly detailed assembly, which includes an adjacent, 3/4" dead air space.

## Physical Properties of Iso RED CI Polyiso Sheathings

ASTM Method	D1621	C209	E96	D2126 <sup>(1)</sup>	D2126		E84 <sup>(3)</sup>	
	Minimum Comprehensive Strength, PSI	Water Absorption	Water Vapor Transmission, perms	Dimensional Stability % Change	Nominal Density, pcf	Service Temperature Range, F	Flame Spread	Smoke Developed <sup>(2)</sup>
ISO RED CI Type 1, Class 1	25	<0.06	<0.3	<0.4	2.0	-50 to +250	≤ 75	≤ 450

(1) -40 and 200 degrees F, ambient RH, length & width (2) Fire Performance/Surface Burn Characteristics (3) Proprietary polyiso rigid board facers on both sides

### Fastener Methods

Application	Stud Spacing	Attachment Method	Fastener Spacing (1)
Wood Framing	16" or 24"	Capped nails, staples or roofing nails (~1" framing embedment)	12" perimeter 12" field Fastener heads flush with surface
Metal framing	16" or 24"	Corrosion-resistant self-tapping screws with 1" diameter cap or washer. (1/4" framing embedment)	12" perimeter 12" field Fastener heads flush with surface
Interior Masonry or concrete	N/A	Suitable construction adhesive or masonry fasteners with 1" diameter cap or washer or combination of adhesive & mechanical fasteners. (~1" embedment into substrate)	Adhesive beads spaced 16" horizontally or full perimeter. Mechanical fasteners 12" perimeter and 12" field spaced 16" horizontally or combination of adhesive and minimum fasteners to hold until adhesive sets
Exterior Masonry or concrete below grade	N/A	Granular water-draining fill	Only as required to ensure intimate contact to masonry surface or water proofed surface

1) Refer to project engineer for potential fastener spacing variation



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### Poly ISO Grades & Available Facers

Grade	Front Facer	Back Facer	Seam Finish Options
ISO RED CI (E84: Class B)	3-ply P/K/F	3-ply P/K/F	Ox Seam Tape
ISO RED CI FF (E84:Class B)	2-ply F/K	2-ply F/K	Ox Seam Tape
ISO RED CI XS (E84: Class B)	XS 3-ply P/K/F <i>*ISO RED CI XS has a facer 4 times thicker than standard ISO RED CI</i>	3-ply P/K/F	Ox Seam Tape
ISO RED MAX (E84: Class A) Approved for exposed installations	0.9 mil foil	0.9 mil foil	Ox Seam Tape

For water-resistive barrier installations, tape all seams with minimum 2 1/2" wide Ox Seam Tape or equivalent. 4" wide self-adhered flashing tape meeting AAMA 711 (Ox Butyl Flashing Tape) with release liner may be required for effectively taping of inside and outside corners.

Flash all openings and penetrations with self-adhered flashing tape meeting AAMA 711 (Ox Butyl Flashing Tape). For installation instructions see:  
<http://www.drjbestpractices.org/installation-guide/2015/jun/installation-instructions-windows-over-fpis>

### Storage

Normal care should be taken to avoid excessive moisture exposure (soaking) to unpackaged product. Maintain packaging protection until installation. Once removed from the protective bundle covering and installed on the wall frame, ISO RED can remain installed exposed to elements.

Notice: Customer is responsible for complying with all applicable laws, regulations, and building codes (collectively, "Laws") of the location where any products (individually, "Product" and collectively, "Products") manufactured by Ox Engineered Products, LLC ("Ox") are actually used, specifically including, but not limited to, Laws regarding use and disposal of the Products by Customer. Ox expressly disclaims all liability for the Products other than as expressly provided in the applicable warranty for the Product (the "Product Warranty") which is available from Ox at the address below. OX EXPRESSLY DISCLAIMS ANY OTHER WARRANTY EXPRESS OR IMPLIED INCLUDING SPECIFICALLY, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. None of the information contained in this brochure shall act as a waiver of any patent, trademark, copyright or other intellectual property right of Ox, nor shall any such information expand any rights or remedies set forth in the applicable Product Warranty. Ox shall not be liable for compliance of the Products with any test results obtained by third parties that may be included in this brochure. Actual results may vary. Not all Products are approved for use in all jurisdictions. The Products are not load bearing. Do not attempt to walk on them. Some Ox Products are amenable. Ox disclaims liability for damages caused by incineration of the Products. By purchasing the Products, Customer irrevocably consents that any dispute arising between Ox and Customer will be determined under Michigan law without consideration of any conflicts of law analysis and that any such dispute shall be brought only in the state or federal courts serving the locality in which Ox's headquarters are then located. By purchasing the Products, Customer expressly consents to the exercise by such courts of personal and subject matter jurisdiction and venue for such purposes. Ox Engineered Products offices are located at 22260 Haggerty Road, Suite 365, Northville, Michigan 48167. Phone (800) 345-8881.