



# Thermo-ply®

STRUCTURAL SHEATHING

## Thermo-ply® Structural Sheathing for Strong Structures:

*Strengthen your building envelope and bottom line with  
Thermo-ply® Structural Sheathing.*

*A stable-priced, high-performance alternative to wood structural panels,  
Thermo-ply® meets or exceeds building codes, provides an efficient WRB  
and best in class Air Barrier.*



# BUILD THE BETTER WALL

## Walls built with **Thermo ply** are High Performance Walls



### STRONG WALLS

Composed of pressure laminated plies consisting of high-strength cellulosic fibers. Fibers are specially-treated to be water resistant and are bonded with a proprietary water-resistant adhesive. A protective polymer layer is applied on both sides of the panel, and foil facings may be applied on one or both faces.

### STRONG WATER RESISTANCE and AIR BARRIER

- Factory-extrusion coating for built-in Water Resistive Barrier with 3/4" (min.) overlapped joints OR taped joints.
- Air tight seal to studs reduces air leakage and provides best-in-class air barrier
- AMG (Advanced Moisture Guard) option provides adhesive with the 3/4" overlap. Provides self-adhesive overlap panel joints for even tighter water and air barrier performance.

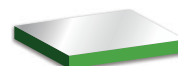
### STRONG ENVIRONMENT

- No harmful chemicals, VOC's, or toxic bonding agents added.
- No added asphalts, formaldehyde, phenols or CFCs
- Made from 94% recycled fibers and is 99% recyclable

### STRONG COMPETITIVE EDGE and BOTTOM LINE

- Stable pricing
- Exterior Wall Sheathing and Bracing
- Interior Shearwall Bracing
- Interior air barrier and draft stop
- Temporary surface protector for floors and countertops.
- Light-weight, durable and easy installation
- Custom sizes and private label
- Made in USA

## THERMO-PLY GRADES



### GREEN/GREEN AMG

Light Structural Grade .078" thickness, 290 lbs/MSF, 400 sheets per skid



### RED/RED AMG

Standard Structural Grade, 0.113" thickness, 414 lbs/MSF, 300 sheets per skid



### BLUE/BLUE AMG

High Structural Grade, 0.135" thickness, 504 lbs/MSF, 250 sheets per skid

## THERMO-PLY OPTIONS: ALL AVAILABLE ON ALL GRADES

- 48" or 48- 3/4" widths at no MSF up charge
- 49" width for AMG
- 8', 9' or 10' lengths at no MSF up charge
- Custom lengths up to 14' available

Thermo-ply	OSB
94 % post consumer recycled content, no added formaldehyde or toxic agents	Made from wood chips, may contain formaldehyde
Stable Pricing	Commodity - rapid price fluctuations
Extrusion Coated WRB both sides	Requires additional WRB layer
High moisture tolerance	Low moisture tolerance-significant swelling when wet. Source for mold
Tight seal controls air infiltration for lower ACH	Average air infiltration performance
Custom sizes and private labeling available	Typically no custom sizes or print available
~ 13 lbs for 4'x8' sheet (RED)	45 lbs for 7/16"x 4'x8' sheet

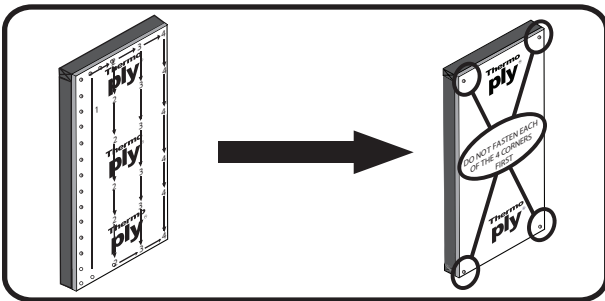
\*Formaldehyde is classified as a probable human carcinogen by the U.S. Environmental Protection Agency. Thermo-ply® is a registered trademark of OX Engineered Products, LLC and all other trademarks, registered trademarks, copyrights and logos are the property of their respected owners.

## APPLICATIONS:

- Wall sheathing for buildings constructed in accordance with IRC and IBC for light-frame construction
- Structural wall sheathing to provide lateral load resistance (wind and seismic) for braced wall panels used in light-frame construction
- Structural wall sheathing to provide resistance to transverse loads for wall assemblies
- Structural wall sheathing to provide resistance to uplift loads for wall assemblies
- Approved WRB
- Approved air-barrier material
- Where other means of wall bracing are provided or not required, any grade of Thermo-ply may be used in non-structural applications as outlined in DRJ Evaluation Reports
- Gable Ends on Trusses
- Air barrier behind shower units and other internal sheathing applications that require a thin air-barrier or draft stop.
- Temporary floor or surface coverings protection
- Templates and Layout

## THERMO-PLY® INSTALLATION INSTRUCTIONS/Instrucciones de Instalacion

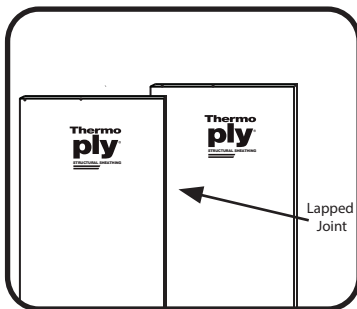
### 1. Orientation & Fastener Pattern/Orientacion



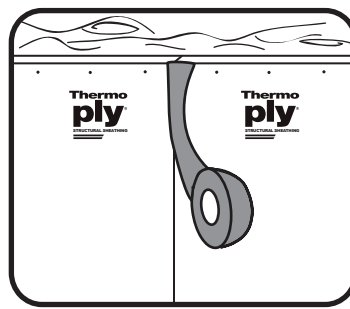
Install vertically or horizontally (edges blocked and fastened). Fastener Pattern for Structural: 3"/3" o.c. Start at #1 and move across panel. DO NOT fasten 4 corners first. DO NOT use as a nail base.

Instalar vertical o horizontal (cantos bloqueado y abrochado) Fija a 3"/3" o.c. Trabajando de un lado a otro del panel, empiece a asegurar de arriba hacia abajo. (Referirse a las instrucciones de instalacion al frente del panel) CUIDADO DE NO ASEGURAR PRIMERO LAS CUATRO ESQUINAS. Cuidado de no puede ser usado como un base para clavar.

### 3. Joints/Water Resistive Barrier Options/ Junturas



Overlapped 3/4" (min.)



Butted and Taped

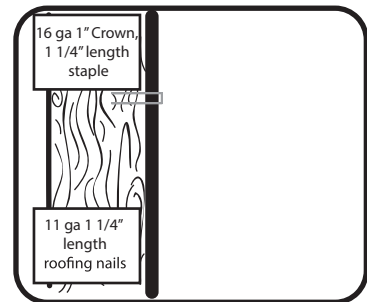
## INSTALLATION

### General for Structural and WRB Applications

All Thermo-ply Grades shall be installed in accordance with the manufacturer's published installation instructions in the Evaluation Report. Where Thermo-ply extends beyond the bottom of a wall and overlaps the band joist below, fasten the bottom edge of the Thermo-ply to the wall bottom plate where it meets the band joist. Due to shrinkage of the band joist, do not fasten the sheathing to the band joist.

**Window Treatment:** If windows and doors are made to accommodate traditional 1/2" sheathing materials, order window with adjustable nailing fins from the supplier. Door brick moldings may be planed or routed 5/16" in order to accommodate the different sheathing thickness, whether at the jobsite or from the millwork supplier. Thermo-ply must be installed with appropriate flashing and counter flashing in conformance with manufacturer's install instructions, accepted building standards and in compliance with local building codes.

### 2. Fastening/Fijacion



Use 16 gauge 1" crown, 1 1/4" length staple OR 11ga/ 1 1/4" length roofing nail.

Staple crown should be flush. DO NOT countersink Staples must run parallel with wood grain of framing studs at sheathing seams.

Necesita estar instalando usando 16 calibre, minimo 1" grapa corona, 1 1/4" largo grapas galvanizado. Los cerrojos necesitan clavar a ras de la superficie, sin cortar el superficte (cantos bloqueado y abrochado) Es importante cuando se usan las grapas de asegurarlas en la direccion paralela en el tachon.

To achieve approved WRB, joints can be:

Overlapped OR butted and taped with approved tape (3M<sup>®</sup> 8087CW, or Equivalent).

Lapped seams should be overlapped by 3/4" (min.) and fastened with single row fasteners.

Para WRB, puede ser doblado o unido a los lados apropiado (3M<sup>®</sup> 8087CW, o Equivalente).

Usando cinta de construccion aprobado. Junturas superpuesto para 3/4" (min.) y elementos de fijacion de una hilera.



Physical Properties of Thermo-Ply® Structural Sheathing					
Physical Property	Standard	Test Result			Unit of Measure
R-value	ASTM C518	Green: .13	Red: .18	Blue: .20	°F. Ft². h/Btu
Drainage efficiency	ASTM E2273	97.8			%
Sound Transmission*	ASTM E90	STC 39			dB
Water Absorption	ASTM D1037	Less than 15			%
Permeability	ASTM E96	<0.6			perms
Air Barrier	ASTM E2178	< 0.02			L/s/M² @ 75 Pa

\*As measured in a typical 2x4 wall assembly with R-13 batt and 1/2" GWB.

#### PRODUCT NAME AND DESCRIPTION:

THERMO-PLY STRUCTURAL SHEATHING

#### BASIC USE:

Thermo-ply is a code-approved exterior structural sheathing, water resistive barrier and air barrier. Reference DrJ Technical Evaluation Reports 1004-01, 1004-02, 1004-03.

#### COMPOSITION AND MATERIALS:

Composed of pressure laminated plies consisting of high-strength cellulosic fibers. These fibers are specially-treated to be water resistant and are bonded with a proprietary water-resistant adhesive. A protective polymer layer is applied on both sides of the panel, and foil facings may be applied on one or both faces.

#### TECHNICAL DATA:

Construction Specifications Institute  
 Identification Codes: Sheathings: 06115  
 Structural Panels: 06120  
 Building Insulation: 07210  
 Draft Stop: 07270

#### STRUCTURAL:

Transverse and Lateral wall bracing in compliance with the IRC and the IBC Type V Construction.

#### AIR & WATER RESISTIVE BARRIER:

When installed in accordance with manufacturer's install instructions, Thermo-ply is approved as WRB and air barrier. All joints must be installed with one of two techniques:  
 1. Joints overlap at least 3/4" OR  
 2. Joints are taped with approved tape.

#### COMPONENT OF 1-HOUR FIRE ASSEMBLY:

See DrJ Evaluation Report 1210-01 for use of Thermo-ply in a 1-hour fire-rated wall system in accordance with the Standard Methods of Fire Tests of Building Constructions and Materials using ASTM E-119 testing procedures.

#### STORAGE:

Maintain packaging protection until using the product. If stored exposed without protective packaging, cover with waterproof tarpaulin. Do not store directly on the ground unprotected or in standing water. Normal care should be taken to avoid excessive moisture exposure (soaking) to unpackaged product.

#### AVAILABILITY:

Visit [www.oxengineeredproducts.com](http://www.oxengineeredproducts.com) to find an OX Sales Rep near you.

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 flammable. 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.