

<p align="center"><b>DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT</b> Housing - Federal Housing Commissioner</p> <p><b>TO: DIRECTORS, SINGLE FAMILY HOCs</b> <b>DIRECTORS, MULTIFAMILY HUBs</b></p>	<p><b>Series and Series Number:</b> <b>MATERIALS RELEASE NO: 840k</b> (Supersedes issue dated January 18, 2017)</p>
	<p><b>ISSUE DATE</b> August 8, 2022</p>
	<p><b>REVIEW DATE</b> August 8, 2025</p>
<p><b>SUBJECT:</b> 1. <b>Product</b> Thermo-Ply® Green Structural Sheathing</p> <p>2. <b>Name and address of Manufacturer</b> Ox Engineered Products, LLC 700 Centerville Road Constantine, MI 49042</p>	

**Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.**

**This Materials Release cannot be used as an indication of endorsement or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.**

**Any reproduction of this Release must be in its entirety.**

USE:

Thermo-Ply® Green Structural Sheathing is used to provide support for interior and exterior wall surfaces for the lifetime of the structure. Installing sheathing on the entire home or structure is generally the most common industry practice. For complete specifications, applications, and code compliances, refer to DrJ TER #1004-03.

DESCRIPTION:

Thermo-Ply® Green Structural Sheathing is composed of pressure-laminated piles consisting of high strength cellulosic fibers. These fibers are specially treated to be water resistant and are bonded with a proprietary water-resistive adhesive. A protective polymer layer is applied on both sides of the panel, and foil facing may be additionally applied on one or both faces.

Thermo-Ply® Green Structural Sheathing panels have a nominal thickness 0.078" and nominal weight of 0.290 lbs. per square foot.

REQUIREMENTS:

Thermo-Ply® Green Structural Sheathing shall be in compliance with the requirements below.

APPLICABLE CODES AND STANDARDS:

IBC—12, 15, 18: International Building Code®  
IRC—12, 15, 18: International Residential Code®  
IECC—12, 15, 18: International Energy Conservation Code®  
FBC-B—17, 20: Florida Building Code – Building (FL 16391)  
FBC-R—17, 20: Florida Building Code – Residential (FL 16391)  
CBC—16, 19: California Building Standards Code  
CRC—16, 19: California Residential Code

STANDARDS AND REFERENCED DOCUMENTS:

ANSI/AWC SDPWS:	Special Design Provisions for Wind and Seismic
ASCE/SEI 7:	Minimum Design Loads and Associated Criteria for Buildings and Other Structures
ASTM E2126:	Standard Test Methods for Cyclic (Reversed) Load Test for Shear Resistance of Vertical Elements of the Lateral Force Resisting Systems for Buildings
ASTM E2178:	Standard Test Method for Air Permeance of Building Materials
ASTM E330:	Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
ASTM E331:	Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
ASTM E84:	Standard Test Method for Surface Burning Characteristics of Building Materials
UL 723:	Test for Surface Burning Characteristics of Building Materials

INSTALLATION:

1. Installation shall be in accordance with the manufacturer's instructions and Section 6 of DrJ TER #1004-03.

2. An approved corner bracing is required when installed on standard wood framing up to 24" o.c. Thermo-Ply is attached to the framing with 1½" galvanized roofing nails or 16 gauge 1.0" proximal crown staples spaced 3" o.c. on all panel edges and 3" o.c. on intermediate supports up to 6 x 12.
3. All nails and staples used on these boards shall be flush with the surface, shall not cut the surface of the board, and shall be galvanized.
4. All joints shall occur over studs, plates or solid blocking. Joints may be lapped or butted.
5. Cut or trim with saw, knife or router.
6. Panels shall not be used as a nail base. Exterior cladding materials shall be fastened to studs, strips, or other nailable surfaces.

CERTIFICATION AND LABELING:

Ox Engineered Products, LLC certifies that the Thermo-Ply® Green Structural Sheathing panels covered by this release and produced in conformance to this MR, are in compliance with a validation program at PFS, Inc. in accordance with the Code of Federal Regulations, 24 CFR 200.935. PFS shall inspect the manufacturer's facility every year at the plant to assure that the initially accepted quality control procedures are being followed. Four samples of this product shall be selected and tested each year to validate the manufacturer's conformance to the requirements of this MR. Each piece of sheathing or roof underlayment certified as conforming to this MR, shall be labeled with the following information:

1. The PFS validation mark.
2. The manufacturer's name.
3. The manufacturer's conformance to this MR.

MANUFACTURING PLANTS:

The product covered under this MR will be produced at the following plant:

Ox Engineered Products, LLC  
700 Centreville Road  
Constantine, MI 49042  
Turner Slaughter  
Quality Assurance Manager  
269-435-2425

WARRANTY:

Ox Engineered Products, LLC warrants Thermo-Ply® Green Structural Sheathing panels against any defect due to faulty material and workmanship in the manufacturing process for a period of 30 years from the date of installation.

The liability of Ox Engineered Products, LLC on this warranty shall be limited to replacement of any defective panel and the cost of installation, or at the option of Ox Engineered Products, LLC payment in lieu thereof.

The warranty applies to any material failure due to manufacture only and does not cover nor will the manufacturer be liable for any defect or damage due to misuse, improper installation, or damages resulting from fire, lightning, or other unforeseen cause beyond the manufacturer's control. There are no warranties, which extend beyond the description of Thermo-Ply® Green Structural Sheathing contained in this document. In no event shall Ox Engineered Products, LLC be liable for any incidental, consequential or proximate damage.

The manufacturer's warranty does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program. A copy of the manufacturer's warranty shall be furnished by the builder to the owner.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Manufactured Housing Programs, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership, or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to:

U. S. Department of Housing and Urban Development  
Office of Manufactured Housing Programs  
451 7<sup>th</sup> Street, SW, Room 9170  
Washington, DC 20410-8000

Appropriate User Fee(s) for the TSP program can be submitted through the Pay.gov website at <https://pay.gov/public/form/start/73881741>

The holder of this MR may apply for revision at any time prior to the Review Date. The revision may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

\*\*\*\*\*

This Materials Release is issued solely for the captioned firm, and is not transferable to any person or successor entity.

\*\*\*\*\*