

<p style="text-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: 840j</b> (Supersedes issue dated April 28, 2011)</p>
	<p><b>ISSUE DATE</b></p> <p>January 18, 2017</p>
	<p><b>REVIEW DATE</b></p> <p>January 18, 2020</p>
<p><b>SUBJECT:</b> 1. <b>Product</b> Thermo-ply<sup>®</sup> Green and Energy Brace<sup>®</sup> (Standard) Nonstructural Sheathing</p> <p>2. <b>Name and address of Manufacturer</b> Ox Paperboard Michigan, 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<sup>®</sup> 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.

DESCRIPTION:

**Composition and Materials:** Thermo-ply is composed of high-quality, long-fibered, specially treated water- and weather-resistant plies. Plies are pressure laminated. A special water-resistant adhesive is used. Standard sizes are 48" x 96", 48.75" x 96", 48" x 108" and 48.75" x 108". Lengths up to 144" can be manufactured. Thermo-ply is available with a variety of approved outer facings, including poly and foil.

REQUIREMENTS:

Thermo-ply<sup>®</sup> sheathing shall be in compliance with the requirements in Table 1.

TABLE 1. REQUIREMENTS FOR NONSTRUCTURAL THERMO-PLY SHEATHING

Physical Properties	Value	Test Method
Thickness, min.	0.066 in.	ASTM C 209
Tensile strength, average lengthwise crosswise	5000 psi 1600 psi	ASTM C 209
Water absorption, max.	15 %	ASTM C 209
Linear expansion, max.	0.5 %	ASTM D 1037
Vapor transmittance, max.	0.88 perms	ASTM E 96
Mullen burst strength, min.	300 psi	ASTM D 3786

INSTALLATION:

1. Installation shall be in accordance with the manufacturer's instructions.
2. These products shall not be used for structural applications.
3. 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 1 $\frac{1}{8}$ " galvanized roofing nails or 16 gauge 1.0" minimum crown staples spaced 6" o.c. on all panel edges and 12" o.c. on intermediate supports.
4. 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.
5. All joints shall occur over studs, plates or solid blocking. Joints may be lapped or butted. Butt joints shall be gapped 1/16" minimum.
6. Cut or trim with saw, knife or router.
7. 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 Paperboard Michigan, LLC certifies that the Thermo-ply® Green 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 Paperboard Michigan, LLC  
700 Centreville Road  
Constantine, MI 49042  
Robert Gest, Quality Assurance Manager  
269-435-2425

WARRANTY:

Ox Paperboard Michigan, LLC warrants Thermo-ply® Green panels against any defect due to faulty material and workmanship in the manufacturing process for a period of four (4) years from the date of installation.

The liability of Ox Paperboard Michigan, LLC on this warranty shall be limited to replacement of any defective panel and the cost of installation; or at the option of Ox Paperboard Michigan, 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 contained in this document. In no event shall Ox Paperboard Michigan, 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.

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

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