DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Housing - Federal Housing Commissioner TO: DIRECTORS, SINGLE FAMILY HOCS DIRECTORS, MULTIFAMILY HUBS ISSUE DATE October 27, 2009 REVIEW DATE

October 27, 2012

SUBJECT: 1. Product MaxiTile Exterior Siding, Soffit and Trim

2. Name and address of Manufacturer

Mexalit Industrial S.A. de C.V. Horacio 1855-5to. Piso Col. Los Morales Polanco

Mexico, D.F.

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:

Exterior structural wall sheathing, cladding, soffit and trim board

DESCRIPTION:

Mexalit Industrial S.A. de C.V., exterior structural wall panels, cladding and soffit and trim boards consist of cellulose fiber-reinforced cement sheets that are not compressed. The products covered by this report include: MaxiPanel® cladding, MaxiPlank® lap siding, MaxiSoffit® panels, MultiShake® notched panel, MaxiShingle® cladding shingles, and MaxiTrim® boards.

REQUIREMENTS:

Mexalit Industrial S.A. de C.V., structural fiber-cement exterior wall sheathing panels, cladding and soffit, and trim boards shall be in compliance with the following standards

ASTM C 1186, Flat Non-Asbestos Fiber Cement Sheets.

INSTALLATION:

Mexalit Industrial S.A. de C.V., structural fiber-cement exterior wall sheathing panels, cladding and soffit, and nonstructural trim boards shall be installed in accordance with Table 1 and this report and the manufacturer installation instructions.

PRODUCT CERTIFICATION AND IDENTIFICATION:

R.I Ogawa & Associates shall certify that MaxiPanel structural fiber-cement exterior wall sheathing panels, MaxiPanel, MaxiPlank and MultiShake claddings, Maxisoffit panels, and MaxiTrim nonstructural trim boards shall conform to the requirements of this MR and the following requirements:

- 1) R.I Ogawa & Associates shall issue to the manufacturer:
 - a) A label/seal/logo that identifies and certifies this product in compliance with the requirements of this MR.
 - b) A certification statement of conformance to this MR. A copy of this certification should be forwarded to HUD.
- 2) R.I Ogawa & Associates every six (6) months, at a minimum, shall visit each of the production facilities listed below. R.I Ogawa & Associates shall, at a minimum, review each of the production facility's Quality Control Manual (QCM), Quality Assurance procedures, in line testing, record keeping, and corrective actions. Records of such visits shall be made available in each production facility.
- 3) If changes are made to the products covered by this MR, R.I Ogawa & Associates shall notify HUD, within 30 days, of these changes with suggestions to keep/maintain, revise, or suspend this MR.

Each certified MaxiTile, Inc., product named in this MR shall be marked with the following information:

- 1. Mexalit Industrial S.A. de C.V.
- 2. MaxiPanel, MaxiPlank, MultiShake, MaxiShingle, Maxisoffit. or MaxiTrim.
- 3. R.I Ogawa & Associates validation mark.
- 4. The manufacturer's conformance to this MR.
- 5. The date of manufacture.

MANUFACTURING LOCATIONS:

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

Mexalit Industrial, S.A. de C.V.

Address: Av. Hidalgo No. 180, Colonia Santa Clara C.P. 55540

Ecatepec, Estado de Mexico, Mexico Telephone: 011 + 52 (55) 5699 3000

Maxitile Industries, S.A. de C.V.

Address: Segundo Anillo Periferico No. 6625, Colonia Ejido El Progreso. C.P. 88123

Nuevo Laredo, Tamaulipas, Mexico Telephone: 011 + 52 (867) 890 0251

Eureka, S.A. de C.V.

Address: Juan de la Barrera #3335, Colonia Alamo Industrial

C.P. 44490 Guadalajara, Jalisco, Mexico Telephone: 011+52 (33) 3818 04 00

WARRANTY:

Mexalit Industrial S.A. de C.V., warrants MaxiPanel, MaxiPlank, MultiShake, MaxiShingle, Maxisoffit, or MaxiTrim against faulty performance resulting from faulty materials or workmanship in the manufacturing process for a period of 20 years from the date of installation.

The manufacturer's warranty does not, in any way, relieve the builder 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 upon completion of the property.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits each of the manufacturers 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 FHA Standards, 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 certification agency, production facilities, methods, design of the product, company name, ownership or mailing address.
- 5. If, in the interval between the annual review of the QCM, significant changes are made to the product which would by definition revise the previously recognized facts, HUD will be informed within 30 days of formal implementations of these changes.

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 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 FHA Standards, Office of Manufactured Housing Programs 451 Seventh Street, SW; Room 9168 Washington, DC 20410-8000

Appropriate User Fee shall be sent to:

U. S. Department of Housing and Urban Development Miscellaneous Income – Technical Suitability of Products Fees Bank of America P. O. Box 198762 Atlanta, GA 30384-8762 The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to this 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 the 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. 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.

Table 1 Allowable Loads for Structural Exterior Wall Panels, Claddings and Soffit and Nonstructural Trim Boards¹

Product	Thickness (inches)	Fasteners ^{3,4}	Fastener Spacing	Frame Type	Maximum Frame Spacing (inches)	Shear Value (plf) ⁵	Ultimate Load (psf) ⁶
MaxiPanel ²	¹ / ₄ & ⁵ / ₁₆	Minimum 4d box	6" edge 6" field	2 x 4 wood	16	169	168
MaxiPanel ²	5/16	1½" long roofing nail	3" edge 8" field	2 x 4 wood	16	384	52
MaxiPanel ²	5/16	1½" long roofing nail	3" edge 8" field	2 x 4 wood	24	NA	52
MaxiPanel ²	⁵ / ₁₆ & ⁷ / ₁₆	No. 8 x 1 ¹ / ₄ " long C-Drill Screws	6" edge 6" field	No. 20 ga. $x 3^{5}/8$ " x $1^{3}/8$ " Metal C-Stud	16 & 24	130	120
MaxiPlank ≤12"	5/16	6d common	Face nailed through overlap at each stud	2 x 4 wood	16 & 24	NA	85
MaxiPlank ≤9½"	5/16	6d common or box	Face nailed through overlap at each stud	2 x 4 wood	16	NA	198
MaxiPlank ≤9½"	⁵ / ₁₆	1 ³ / ₄ " long roofing nail	Blind nailed through top edge at each stud	2 x 4 wood	16	NA	51
MaxiPlank ≤8 ¼	5/16	.093" shank x .221" HD x 2" long nail	Blind nailed through top edge at each stud	2 x 4 wood	16	NA	56
MaxiPlank ≤9½"	5/16	1 ³ / ₄ " long roofing nail	Blind nailed through top edge at each stud	2 x 4 wood	16	NA	86
MaxiPlank ≤9½"	5/16	No. 8 x 1 ⁵ / ₈ " long C-Drill Screws	Face fastened through overlap at each stud	No. 20 ga.x 3 ⁵ / ₈ " x 1 ³ / ₈ " Metal C- Stud	24	NA	137

Table 1 (cont'd) Allowable Loads for Structural Exterior Wall Panels, Claddings and Soffit and Nonstructural Trim Boards¹

Product	Thickness (inches)	Fasteners ^{3,4}	Fastener Spacing	Frame Type	Maximum Frame Spacing (inches)	Shear Value (plf) ⁵	Ultimate Load (psf) ⁶
MaxiPlank ≤9½"	⁵ / ₁₆	No. 8 x 1 ¹ / ₄ " long C- Wing Screws	Blind fastened through top edge at each stud	No. 20 ga.x 3 ⁵ / ₈ " x 1 ³ / ₈ " Metal C- Stud	24	NA	70
MultiShake with 7" exposure	1/4	2" long x .113" shank x .267" head diameter	1 nail each stud. Total 4 nails per 48" wide panel	15/32" CDX plywood	16	NA	56
MaxiShingle ≤ 12" w/maximum 10" exposure	1/4	8d galvanized box nail	2 nails per shingle	Minimum ¹⁵ / ₃₂ " APA rated plywood	24	NA	57
MaxiSoffit	¹ / ₄ & ⁵ / ₁₆	4d common	6" edge	2 x 4 wood	16	NA	168
MaxiSoffit	⁵ / ₁₆	No. 8 x 1 ¹ / ₄ " long C-Drill Screws	6" edge 6" field	No. 20 ga. $x \ 3^{5}/8$ " $x \ 1^{3}/8$ " Metal C-Stud	16	NA	198
MaxiSoffit	5/16	No. 8 x 1 ¹ / ₄ " long C-Drill Screws	6" edge 6" field	No. 20 ga. $x \ 3^5/8$ " $x \ 1^3/8$ " Metal C-Stud	24	NA	120
MaxiTrim ≤11¼"	⁷ / ₁₆ or ³ / ₄	Nails of sufficient length to penetrate ¾" minimum into solid framing	16" on center	2 x 4 wood	NA	Non-Structural	Non-Structural
MaxiTrim ≤11¼"	⁷ / ₁₆ or ³ ⁄ ₄	No. 8 x 2" long C-Drill Screws	16" on center	No. 20 ga.x $3^{5}/_{8}$ " x $1^{3}/_{8}$ " Metal C- Stud	NA	Non-Structural	Non-Structural

Notes:

- 1. The maximum height-to-length ratio for construction in this Table is 2:1.
- 2. All panel edges shall be supported by framing. MaxiPanel is permitted to be applied with the long dimension perpendicular to the framing.
- 3. All fasteners shall be corrosion-resistant.
- 4. Allowable tolerances for shank diameter, head diameter, and length of nail fasteners is as specified in Federal Specification FF-N-105B, Section 3.4.2.
- 5. Values determined by testing in accordance with ASTM E72. Value presented is either the ultimate load/3 or load at 1/8" deflection, whichever is less.
- 6. Values determined by testing in accordance with ASTM E330.