



Building Product Evaluation Report 0138

MoistureShield Claddings

MoistureShield, Inc.

Initial Acceptance: February 04, 2022

Expiration: February 03, 2026

Revision: April 02, 2024

TYPE OF ACCEPTANCE

Product Material – Wood and Plastics

CSI Specification Division: 07 46 00 (Siding) and 07 46 43 (Composite Siding)

MANUFACTURER IDENTIFICATION:

MoistureShield, Inc
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EVALUATION REPORT SUBJECT:

Wood plastic composite boards for Exterior Cladding.
Installation on construction complying with the International Residential Code® (IRC®) or with the International Building Code® (IBC®).

DESCRIPTION OF THE PRODUCT EVALUATED:

MoistureShield, Inc., claddings are wood thermoplastic composite deck board products consisting of plastic, wood filler, additives and color. The product specifications are listed in the approved quality control manual. MoistureShield claddings are manufactured in several colors by the mono-extrusion process (under series name **Vision**) or the co-extrusion process with capping covering three sides of the deck board (under series name **Meridian**). The boards are solid rectangular shape with square edges and have nominal dimensions of 1 in. thick by 5.4 in. wide. See attached drawings in **Table 1**.

For additional cladding installation details see manufacturer's published Cladding Installation Guide, January 2022.

APPLICABLE CODES:

- 2018 and 2021 International Building Code (IBC)
- 2018 and 2021 International Residential Code (IRC)



APPLICABLE CHARACTERISTICS REVIEWED:

Cladding – See below for a list of the descriptions of cladding characteristics reviewed.

1. Structural Performance

- (a) The claddings have been reviewed for uniform load, maximum span, and board direction when installed on support framing members.
- (b) The claddings have been reviewed for wind load resistance. Results are shown in Table 1 in this Report.
- (c) The claddings have been reviewed for the temperature range of -20 to 125°F (-29 to 52°C).
- (d) The claddings have been reviewed for in-service moisture effects.
- (e) The claddings have been reviewed for freeze/thaw resistance.

2. UV Resistance

- (a) The UV testing was conducted, and an appropriate adjustment factor was applied, in accordance with ASTM D7032 *Standard for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails)*.

3. Decay Resistance

- (a) The claddings reviewed for this Report have been deemed comparable to naturally durable wood for resistance to fungal decay.

4. Termite Resistance

- (a) The claddings reviewed for this Report have been deemed suitable to be installed comparable to preservative-treated wood for resistance to Formosan termites attack.

5. Fire Resistance

- (a) The claddings reviewed for this Report have flame-spread index less than 200 and smoke-developed index less than 450 when tested in accordance with ASTM E84 *Standard Test Method for Surface Burning Characteristics of Building Materials*.

6. Ignition Resistance

- (a) The claddings reviewed for this Report have been deemed suitable for installation on exterior walls having a fire separation distance of 5 ft. when tested in accordance with NFPA 268 *Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source*.

7. Fastening

- (a) The claddings must be fastened to the furring strips in accordance with the manufacturer's Cladding Installation Guide, the applicable codes, and Table 1 of this Report. The furring strips must be attached to a minimum 7/16 Category structural panel (oriented strand board or plywood) certified to US DOC PS 2, with #10 x 2" wood screws. When manufacturer's installation instructions differ from this Report, this Report governs.

APPLICABLE USES:

MoistureShield claddings evaluated in this Report are limited to exterior wall covering applied on the exterior side of exterior walls as a weather-resisting barrier.

LIMITATIONS OF ACCEPTANCE:

MoistureShield claddings described in this Report comply with the codes listed in the Applicable Codes section above and are subject to the following conditions:

1. Installation of the MoistureShield claddings must comply with this Report, the manufacturer's published Cladding Installation Guide, and the applicable codes. When manufacturer's installation instructions differ from this Report, this Report governs.
2. When installed in Types I, II, III or IV construction, the installation must comply with the applicable requirements of IBC Section 1405.1 (Combustible exterior wall coverings).
3. The fasteners described in this Report have been evaluated for the installation of the MoistureShield claddings only. Compatibility of the fasteners to the treated supporting construction has not been evaluated.



4. When required, the exterior walls where the claddings are installed must be designed by a professional and submitted to the authority having jurisdiction for final acceptance.
5. MoistureShield claddings have not been evaluated as a part of fire-resistance-rated construction.
6. MoistureShield, Inc., has a third-party inspection program provided by PFS TECO.

DOCUMENTATION SUBMITTED:

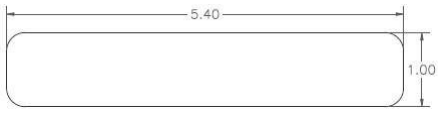
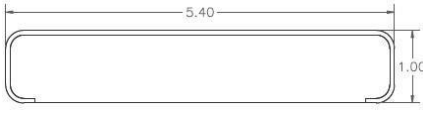
Submitted data was provided in accordance with PFS TECO's *Certification and Inspection Policy: Wood-Plastic Composite Siding* (Quality control manual, Specifications, Manufacturer's installation instructions, Test data and Descriptive information). The products have been evaluated in accordance with ICC-ES AC524, *Acceptance Criteria for Wood-Plastic Composite Products Used as Exterior Siding*.

PRODUCT IDENTIFICATION:

MoistureShield claddings evaluated in this Report must be identified with a label, stamp, or laser imprint on every board or the packaging. The information that is required is as follows: MoistureShield, Inc., product identification, the PFS TECO Building Product Evaluation Report number (BPER 0138), and PFS Certification Mark for use in the United States (see image below). Cladding without this information are not covered under this Report.



Table 1: Span Table and Fastening Schedule for MoistureShield Claddings ^{1, 2, 3}

Nominal Size and Trade Name	Cladding Profile	Maximum Span (in)	Horizontal Cladding		Vertical Cladding	
			Fastening Schedule ⁴	Allowable Design Pressure (psf)	Fastening Schedule ⁴	Allowable Design Pressure (psf)
1x5.4 Vision		16	Two (2) #10x2-3/4" Starborn Captor XD screws with 1x3" furring strip	133	Two (2) #10x3" Starborn Captor XD screws with 1x3" furring strip	129
1x5.4 Meridian		16	Two (2) #10x2-3/4" Starborn Captor XD screws with 1x3" furring strip	127	Two (2) #10x3" Starborn Captor XD screws with 1x3" furring strip	135

for SI conversion: 1 in = 25.4 mm, 1 psf = 47.9 Pa, 1 lbf = 0.0044 kN

1 No duration of load increase is allowed for the uplift values noted in Table 1 in this Report.

2 Allowable design pressure is based on test results with a safety factor of 2.5.

3 Wood furring shall be pressure-treated SPF or better with a specific gravity 0.42 or better.

4 The fastener can be installed countersunk with the Starborn Pro Plug System attachment (<http://starbornindustries.com/pro-plug-pvc-product>) or equivalent.