



ICC-ES VAR Environmental Report VAR-1015

Reissued March 2024

This report is subject to renewal January 2026.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES

Section: 06 53 00—Plastic Decking

Section: 06 63 00—Plastic Railings

REPORT HOLDER:

MOISTURESHIELD, INC.

EVALUATION SUBJECT:

**CHOICEDEK® DECKING, RAILING AND FASCIA;
MOISTURESHIELD® ELITE COLLECTION® DECKING
AND FASCIA; MOISTURESHIELD® VANTAGE
COLLECTION® DECKING AND FASCIA;
MOISTURESHIELD® ESSENTIAL COLLECTION®
DECKING AND FASCIA; MOISTURESHIELD® RAILING;
MOISTURESHIELD® EXTERIOR TRIM; AND
LIFECYCLE® DECKING, RAILING AND FASCIA**

1.0 EVALUATION SCOPE

Compliance with the following evaluation guidelines:

- ICC-ES Environmental Criteria for Determination of Recycled Content of Materials (EC101), dated March 2012.
- ICC-ES Environmental Criteria for Determination of Biobased Material Content (EC102), dated March 2012.

Compliance eligibility with the applicable sections of the following green building rating systems, standards and codes:

- 2015 *International Green Construction Code*® (IGCC) (see Table 3 for details)
- 2019 California Green Building Standards Code (CALGreen), Title 24, Part 11 (see Table 4 for details)
- LEED for Homes 2008 (see Table 5 for details)
- LEED 2009 for New Construction and Major Renovations (see Table 6 for details)
- LEED 2009 for Schools New Construction and Major Renovations (see Table 7 for details)
- ANSI/GBI 01-2010—Green Building Assessment Protocol for Commercial Buildings (see Table 8 for details)

2.0 USES

The products listed are used for a variety of exterior applications, including nonstructural trim and deck boards

and guardrail assemblies for balconies, porches and exterior walking surfaces.

3.0 DESCRIPTION

The products listed are wood thermoplastic composite lumber (WTCL) made from a blend of wood and polyethylene. The products are manufactured in a variety of sizes, profiles, textures and colors.

4.0 CONDITIONS

4.1 Code Compliance:

Evaluation of products listed in this report for compliance with the requirements of the International Codes is outside the scope of this evaluation report. Compliance with all applicable code requirements must be demonstrated to the Authority Having Jurisdiction (AHJ) for product approval.

4.2 Green Rating Systems, Standards and Code Eligibility:

The information presented in Tables 3 through 8 of this report provides a matrix of areas of evaluation and corresponding limitations and/or additional project-specific requirements, and offers benefits to individuals who are assessing eligibility for credits or points.

The final interpretation of the specific requirements of the respective green building rating system and/or standard rests with the developer of that specific rating system or standard or the AHJ, as applicable.

Compliance for items noted as “Verified Attribute” is subject to any conditions noted in the tables. Decisions on compliance for those items noted as “Eligible for Points” in Tables 3 through 8 rest with the user of this report, and those items are subject to the conditions noted. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. Rating systems or standards often provide supplemental information as guidance.

5.0 BASIS OF EVALUATION

The information in this report, including the “Verified Attributes,” is based upon the following supporting documentation:

- 5.1 ICC-ES EC101. [Evaluation applies to IGCC Section 505.2.2; LEED Homes MR Credit 2.2; LEED NC MR Credit 4; LEED Schools MR Credit 4; CALGreen Section A4.505.3 and A5.405.4; and ANSI/GBI 01 Section 10.1.2.1.]

5.2 ICC-ES EC102. [Evaluation applies to CALGreen Section A5.405.2; and ANSI/GBI 01 Section 10.1.2.2.]

6.0 IDENTIFICATION

6.1 MoistureShield, Inc. products are identified with a stamp noting the manufacturer’s name (MoistureShield, Inc.) and address, the product name, the manufacturing location, the ICC-ES evaluation report number (if applicable), and the name or logo of the inspection or grading agency. The report subjects are also identified on the product and/or packaging with the VAR Environmental Report number (VAR-1015) and the ICC-ES SAVE Mark, as applicable.

6.2 The report holder’s contact information is the following:

MOISTURESHIELD, INC.
914 NORTH JEFFERSON
SPRINGDALE, ARKANSAS 72764
(479) 756-7400
www.Moistureshield.com

TABLE 1—RECYCLED CONTENT BY WEIGHT SUMMARY

PRODUCT NAME	RECYCLED MATERIALS	% PRE-CONSUMER RECYCLED CONTENT ¹	% POST-CONSUMER RECYCLED CONTENT	% TOTAL RECYCLED CONTENT
Choicedek® Decking, Railing and Fascia MoistureShield® Elite Collection® Decking and Fascia MoistureShield® Vantage Collection® Decking and Fascia MoistureShield® Essential Collection® Decking and Fascia	Wood	36.33	13.67	95.00
MoistureShield® Railing MoistureShield® Exterior Trim Lifecycle® Decking, Railing and Fascia OEM Products	Polyethylene	20.20	24.80	

¹Actual pre-consumer recycled content amount is listed. For use with LEED the pre-consumer content calculation requires that pre-consumer recycled content amount can only be counted for 1/2 of the actual value.

TABLE 2—BIOBASED MATERIAL CONTENT SUMMARY

PRODUCT	MINIMUM % BIOBASED CONTENT	METHOD OF DETERMINATION
Choicedek® Decking, Railing and Fascia MoistureShield® Elite Collection® Decking and Fascia MoistureShield® Vantage Collection® Decking and Fascia MoistureShield® Essential Collection® Decking and Fascia MoistureShield® Railing MoistureShield® Exterior Trim Lifecycle® Decking, Railing and Fascia OEM products	50.0	Calculation

TABLES 3 THROUGH 8

Section #	Section Intent	Possible Points	Conditions of Use to Qualify for Points	Choicedek® Decking, Railing and Fascia MoistureShield Elite® Decking and Fascia MoistureShield® Vantage Decking and Fascia MoistureShield® Essentials Decking and Fascia MoistureShield® Railing MoistureShield® Exterior Trim Lifecycle® Decking, Railing and Fascia	OEM Products	MoistureShield® FR Fire-Rated Decking	MoistureShield® EcoShield Deck Tiles Lifecycle® EcoDeck Deck Tiles
TABLE 3—SUMMARY OF AREAS OF ELEGIBILITY WITH 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)							
A4.405.1	Prefinished building materials	Elective	Utilize prefinished building materials which do not require additional painting or staining when possible.	●	●	●	●
A4.405.3 A5.405.1	Regional materials	Elective	Verify local products that are extracted, processed and manufactured within California or 500 miles (805 km) of the job site. Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A
A5.405.2	Bio-based materials	Elective	A.E.R.T products are qualified as bio-based.	●	●	●	●
A4.405.3 A5.405.4		Elective	To achieve Tier 1 - Use materials, equivalent in performance to virgin materials, with a postconsumer or preconsumer recycled content value (RCV) for a minimum of 10% of the total value, based on estimated cost of materials on the project. To achieve Tier 2 - Use materials, equivalent in performance to virgin materials, with a postconsumer or preconsumer recycled content value (RCV) for a minimum of 15% of the total value, based on estimated cost of materials on the project. RCV shall be determined as follows: RCV = (% PC x material cost) + 0.5 (% PI x material cost) Notes: 1. PC means post consumer waste. 2. PI means post industrial waste.	●	●	●	●
4.505.3	Moisture content of building materials	Mandatory	Moisture content of interior framing members may be measured with an appropriate handheld moisture meter.	○	○	○	○
TABLE 4—SUMMARY OF AREAS OF ELEGIBILITY WITH THE ICC-700 NATIONAL GREEN BUILDING STANDARD							
602.8	Termite-resistant materials are used	6 max	To earn 6 points all structural elements must be termite resistant in areas of heavy termite infestation. 2 or 4 points are available for areas with lower infestation probability	●	●	●	●
604.1	Use two or more major and/or minor building materials containing recycled content	2 6 max	2, 4 or 6 points may be earned when products are used with another major building component with recycled content of 25% < 50%; 50% < 75%; ≥ 75%, respectively.	●	●	●	●
606.1(2)	Two types of biobased materials are used, each for more than 1 percent of the project's projected building material cost	6	To earn 6 points two types of bio-based products must be used and the cost of each must be more than 1% of the projects projected building material cost.	●	●	●	●

TABLES 3 THROUGH 8 (Continued)

Section #	Section Intent	Possible Points	Conditions of Use to Qualify for Points	ChoiceDeck® Decking, Railing and Fascia MoistureShield Elite® Decking and Fascia MoistureShield® Vantage Decking and Fascia MoistureShield® Essentials Decking and Fascia MoistureShield® Railing MoistureShield® Exterior Trim Lifecycle® Decking, Railing and Fascia	OEM Products	MoistureShield® FR Fire-Rated Decking	MoistureShield® EcoShield Deck Tiles Lifecycle® EcoDeck Deck Tiles
TABLE 4—SUMMARY OF AREAS OF ELEGIBILITY WITH THE ICC-700 NATIONAL GREEN BUILDING STANDARD (Continued)							
608.1	Indigenous materials	2 each 10 max	To earn 2 points verify local products are originated, produced, grow naturally or occur naturally within 500 miles (805 km) of job site. Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A
903.4.1(3)	The moisture content of lumber is sampled to ensure it does not exceed 19 percent prior to the surface and/or wall cavity exposure	4	To earn 4 points the moisture content of lumber must be determined to not exceed 19%, such as measuring with a moisture meter, prior to enclosure.	○	○	○	○
TABLE 5—SUMMARY OF AREAS OF ELEGIBILITY WITH USGBC'S LEED FOR HOMES							
MR 2.2	Recycled content	0.5	To earn 0.5 point use materials with recycled content such that the sum of postconsumer recycled content plus 1/2 the post industrial (preconsumer) content constitutes a minimum total recycled content of 25%.	●	●	●	●
MR 2.2(c)	Environmentally preferable products for roof, wall and floors; interior and exterior framing and sheathing	0.5 each 8 max	To earn points use products that are extracted, processed and manufactured within 500 miles (805 km) of the site for a minimum of 90% (by weight or volume of the component. Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A
TABLE 6—SUMMARY OF AREAS OF ELEGIBILITY WITH USGBC'S LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATION							
MR4	Recycled content	1 2 max	To earn 1 point use materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the preconsumer content constitutes at least 10%, based on the cost, of the total value of the materials in the project. To earn 2 points use 20% or more.	●	●	●	●
MR 5 (MR 5.1)	Regional materials (10% of content)	1	To earn 1 point use products that are extracted, processed and manufactured within 500 miles (805 km) of the site for a minimum of 10% (by cost) of total materials value.	○	○	○	N/A
MR 5 (MR 5.2)	Regional materials (20% of content)	2	To earn 2 points use a minimum of 20%. Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A

TABLES 3 THROUGH 8 (Continued)

Section #	Section Intent	Possible Points	Conditions of Use to Qualify for Points	ChoiCEDeK® Decking, Railing and Fascia MoistureShield Elite® Decking and Fascia MoistureShield® Vantage Decking and Fascia MoistureShield® Essentials Decking and Fascia MoistureShield® Railing MoistureShield® Exterior Trim Lifecycle® Decking, Railing and Fascia	OEM Products	MoistureShield® FR Fire-Rated Decking	MoistureShield® EcoShield Deck Tiles Lifecycle® EcoDeck Deck Tiles
TABLE 7—SUMMARY OF AREAS OF ELEGIBILITY WITH USGBC'S LEED 2009 FOR SCHOOLS NEW CONSTRUCTION AND MAJOR RENOVATION							
MR4	Recycled content	1 2 max	To earn 1 point use materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the preconsumer content constitutes at least 10%, based on the cost, of the total value of the materials in the project. To earn 2 points use 20% or more.	●	●	●	●
MR 5 (MR 5.1)	Regional materials (10% of content)	1	To earn 1 point use products that are extracted, processed and manufactured within 500 miles (805 km) of the site for a minimum of 10% (by cost) of total materials value. To earn 2 points use a minimum of 20%. Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A
MR 5 (MR 5.2)	Regional materials (20% of content)	2		○	○	○	N/A
TABLE 8—SUMMARY OF AREAS OF ELEGIBILITY WITH ANS/GBI 01-2010							
10.1.2.1	Materials content - Assemblies	1 8 max	Recycled post-consumer or post-industrial (pre-consumer) content materials accounted for 1% to 20% or more of building materials. Percentage is calculated as $100 \times A / B$ (total cost or weight of recycled content materials) ÷ B (total cost or weight of all building materials)	●	●	●	●
10.1.2.2	Biobased Products - building assemblies	7 max	Products are qualified as greater than or equal to 50% biobased content.	●	●	N/A	N/A
10.1.4.1	Regional Materials - building assemblies	5 max	To earn credits use products that are extracted, processed and manufactured within 500 miles (805 km) of the site for a minimum of 90% (by weight or volume of the component). Regional material calculations based on raw material supplier to manufacturing location using the free ZIP Code Distance Calculator (www.zip-codes.com).	○	○	○	N/A
○	= Eligible for points						
●	= Verified attribute						

N/A = Not applicable (i.e. this is a minimum requirement that is met and points/credits are not applicable)