

ICC-ES VAR Environmental Report**VAR-1011**

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**DIVISION: 06 00 00—WOOD, PLASTICS AND
COMPOSITES****Section: 06 53 00—Plastic Decking****Section: 06 63 00—Plastic Railings****REPORT HOLDER:****TREX COMPANY, INC.**
160 EXETER DRIVE
WINCHESTER, VIRGINIA 22602
(540) 542-6300
www.Trex.com**EVALUATION SUBJECT:****Trex Origins® Decking; Trex Brasilia® Decking; Trex
Contours® Decking; Trex Accents® Decking; Trex
Transcend™ Decking; Trex Transcend™ Fascia: 1x8
and 1x12; Trex® Fascia: 1x8 and 1x12; Trex Designer
Series Railing®; Trex Seclusions® Fencing; Trex
Surroundings® Fencing****1.0 EVALUATION SCOPE****Compliance with the following evaluation guidelines:**

- ICC-ES Evaluation Guideline for Determination of Recycled Content of Materials (EG101), dated October 2008 (editorially revised July 2009).
- ICC-ES Evaluation Guideline for Determination of Biobased Material Content (EG102), dated October 2008 (editorially revised July 2009).

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

- National Green Building Standard (ICC 700-2008) (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)
- 2010 California Green Building Standards Code (CALGreen), Title 24, Part 11 (see Table 7 for details)

2.0 USES

Trex Origins®, Trex Brasilia®, Trex Contours®, Trex Accents®, Trex Designer Series Railing® and Trex® Transcend are used for a variety of exterior applications, including nonstructural trim and deck boards and guardrail assemblies for balconies, porches and exterior walking surfaces.

Trex Seclusions® Fencing and Trex Surroundings® Fencing are used for exterior fencing applications.

3.0 DESCRIPTION

Trex® products 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:**

The Trex Origins®, Trex Brasilia®, Trex Contours®, Trex Accents®, Trex Transcend™ Decking and Trex Transcend™ Fascia: 1x8 and 1x12, Trex® Fascia: 1x8 & 1x12 and Trex Designer Series Railing® have been evaluated for compliance with the requirements of the International Codes as listed in Table 3 of this report.

Trex Seclusions® Fencing and Trex Surroundings® Fencing do not fall within the scope of the International Codes.

4.2 Green Rating Systems, Standards and Code Eligibility:

The information presented in Tables 4 through 7 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 4 through 7 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 Attribute,” is based upon the following supporting documentation:

- 5.1** ICC-ES EG101. [Evaluation applies to ICC 700 Section 604.1; LEED Homes MR Credit 2.2; LEED NC MR Credit 4; CALGreen Section A4.405.3 & A5.504.4].

- 5.2 ICC-ES EG102. [Evaluation applies to ICC 700 Section 606.1(2)].
- 5.3 Evidence of compliance with termite resistance in accordance with Section 4.4 of the ICC-ES Acceptance Criteria for Thermoplastic Composite Wood Products (AC109) or Section 3.9 of the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) (AC174). [Evaluation applies to ICC 700 Section 602.8.]

6.0 IDENTIFICATION

Trex products are identified with a stamp noting the manufacturer’s name (Trex) 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-1011) and the ICC-ES SAVE Mark, as applicable.

TABLE 1—RECYCLED CONTENT BY WEIGHT SUMMARY

PRODUCT NAME	RECYCLED MATERIALS	% PRE-CONSUMER RECYCLED CONTENT	% POST-CONSUMER RECYCLED CONTENT	% TOTAL RECYCLED CONTENT
Trex Origins® Decking Trex Brasilia® Decking Trex Contours® Decking Trex Accents® Decking Trex® Fascia: 1x8 & 1x12 Trex Designer Series Railing® Trex Seclusions® Fencing Trex Surroundings® Fencing	Wood	48.50	0	97.00
	Polyethylene	17.00	31.52	
Trex Transcend™ Decking Trex Transcend™ Fascia: 1x8 & 1x12	Wood	47.70	0	95.40
	Polyethylene	16.70	31.00	

TABLE 2—BIOBASED MATERIAL CONTENT SUMMARY

PRODUCT	MINIMUM % BIOBASED CONTENT	METHOD OF DETERMINATION
Trex Origins® Decking Trex Brasilia® Decking Trex Contours® Decking Trex Accents® Decking Trex® Fascia: 1x8 & 1x12 Trex Designer Series Railing® Trex Seclusions® Fencing Trex Surroundings® Fencing Trex Transcend™ Decking Trex Transcend™ Fascia: 1x8 & 1x12	40%	Calculation

TABLE 3—ICC-ES EVALUATION REPORT NUMBERS FOR TREX PRODUCTS

PRODUCT	REPORT NUMBER
Trex Origins® Decking Trex Brasilia® Decking Trex Contours® Decking Trex Designer Series Railing® Trex Accents® Trex® Fascia: 1x8 and 1x12	ESR-1190
Trex Transcend™ Decking Trex Transcend™ Fascia: 1x8 and 1x12	ESR-3168

TABLES 4 THROUGH 7

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify for Points	Trex Origins® Decking Trex Brasilia® Decking Trex Contours® Decking Trex Accents® Decking Trex® Fascia: 1x8 & 1x12 Trex Designer Series Railing®	Trex Accents Fire Defense® Decking	Trex Transcend™ Decking Trex Transcend™ Fascia: 1x8 & 1x12	Trex Seclusions® Fencing Trex Surroundings® Fencing
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TABLE 4—SUMMARY OF AREAS OF ELIGIBILITY WITH THE NATIONAL GREEN BUILDING STANDARD (ICC 700-2008)

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.	●	●	●	●
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 ELIGIBILITY WITH USGBC'S LEED FOR HOMES 2008

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%.	●	●	●	●
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TABLE 6—SUMMARY OF AREAS OF ELIGIBILITY WITH USGBC'S LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATIONS

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 east 10%, based on the cost,of the total value of the materials in the project. To earn 2 points use 20% or more.	●	●	●	●
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TABLE 7—SUMMARY OF AREAS OF ELIGIBILITY WITH 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE

A4.405.3 A5.405.4	Recycled content.	N/A	Use materials with postconsumer or preconsumer recycled content value for a minimum of 10% of the total value, based on estimated cost of materials on the project.	●	●	●	●
4.505.3	Moisture content of building materials.	N/A	Moisture content of lumber may be measured with an appropriate handheld moisture meter.	○	○	○	○

○ = Eligible for points

● = Verified attribute

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