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DIVISION: 06 00 00 – WOOD, PLASTICS AND COMPOSITES
Section: 06 53 00 - Plastic Decking

REPORT HOLDER:

TREX COMPANY, INC.
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Winchester, VA 22603
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REPORT SUBJECT:

TREX Enhance® Basics and Naturals composite deck boards

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2018 and 2015 *International Building Code®* (IBC)
- 2018 and 2015 *International Residential Code®* (IRC)

NOTE: This report references 2018 Code sections with [2015] Code sections shown in brackets where they differ.

1.2 *TREX Enhance® Basics and Naturals* deck boards have been evaluated for the following properties:

- Structural performance
- Durability
- Surface Burning
- Decay Resistance
- Termite Resistance
- Wind Uplift

1.3 *TREX Enhance® Basics and Naturals* deck boards have been evaluated for the following uses:

- Exterior walking surface on exterior decks, balconies, porches walkways and stair tread.
- The deck boards identified in this report may be used in One- and Two-Family Dwellings regulated by the IRC and other construction types regulated by the IBC in accordance with IBC Section §705.2.3.1 [§1406.3] as follows:

Construction Type IIB, IIIB & VB per IBC §705.2.3.1 [§1406.3] and Table 601 (No fire resistance rating required for floors)

Construction Type IIIA, IV & VA per IBC §705.2.3.1 [§1406.3], Exception 3 (Sprinkler protection required)

2.0 STATEMENT OF COMPLIANCE

TREX Enhance® Basics and Naturals deck boards comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

3.0 DESCRIPTION

3.1 *TREX Enhance® Basics and Naturals* deck boards are co-extruded and semi-capped composite material composed of polyethylene and wood fiber.

3.2 Solid and Grooved Edged boards measure a nominal 1 in. thick and 5-1/2 in. wide and have five 9/16 in. high flutes running the entire length along the bottom of the deck board. Grooved edge deck boards additionally include 5/16 in. deep by 1/8 in. high grooves on each of the long edges. See Figures 1 and 2.

3.3 The top surface has an embossed simulated wood-grain pattern. *TREX Enhance® Basics and Naturals* are available in nine colors:

3.3.1 Basics are solid colors available as Saddle, Clam Shell and Beach Dune.

3.3.2 Naturals are a solid base color with streaks to available as Sunset Cove, Rocky Harbor, Foggy Wharf, Toasted Sand, Coastal Bluff, and Calm Water.



4.0 PERFORMANCE CHARACTERISTICS

4.1 *TREX Enhance® Basics and Naturals* deck boards are rated for a Span/Load Rating of 16/100 (16.0 in. Span and 100 psf Live Load) installed on support framing spaced 16 in on center.

4.2 Deck Boards used as stair treads are rated for the code-prescribed concentrated load equal to 300 lbs. when installed with a maximum 9" support spacing. Deck boards used as stair treads shall be installed in a minimum two-span condition.

4.3 *TREX Enhance® Basics and Naturals* solid edge deck boards have a wind uplift resistance rating of 150 lb/ft² when face-fastened to support framing spaced 16 in. on center.

4.4 *TREX Enhance® Basics and Naturals* grooved edge deck boards have a minimum wind uplift resistance rating of 139 lb/ft² when installed using the Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center.

4.5 *TREX Enhance® Basics and Naturals* deck boards have a flame spread index of less than 200 when tested in accordance with ASTM E84.

4.6 Materials are deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effect, attack from termites, and fungus decay.

4.7 Structural performance has been demonstrated for a temperature range from -20 °F to 125 °F.

5.0 INSTALLATION

5.1 *TREX Enhance® Basics and Naturals* deck boards must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.2 Decking can be installed on full runs or uniformly staggered on the deck support structure. For all but stairs, install deck boards on substructures built on 16" center maximum support spacing.

5.3 Face fastening of the *TREX Enhance® Basics and Naturals* solid edge deck board shall be two #8 x 2-1/2 in. stainless steel screws.

5.4 The grooved edge decking shall be attached at each joist, regardless of joist spacing with the Trex® Hideaway® Universal Hidden Fastener system using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. See Figure 3.

5.5 The stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" square drive stainless screw. See Figure 3.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 Deck board placed at an angle other than 90 degrees to the supporting joist will require support framing at a reduced spacing such that the span of the deck board does not exceed 16 in.

6.3 The wind uplift resistance rating recognized in this report is based on attachment to treated Southern Pine framing (specific gravity, G=0.55). Installation on wood framing with a lesser specific gravity may result in a lower wind uplift rating

6.4 Where required by the building official, engineering calculations and details shall be provided. The calculation shall verify that the anchorage complies with the building code for the type of framing and condition of the supporting construction.

6.5 Compatibility of the supporting construction materials with all metal fasteners are subject to approval by the code official.

6.6 The deck board has not been evaluated for use in areas subject to Formosan termite attack.



6.7 The TREX Enhance® Basics and Naturals deck boards are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

(TREX Enhance® Basics and Naturals), the Intertek Mark as shown below and, the Code Compliance Research Report number (CCRR-0301).



7.0 SUPPORTING EVIDENCE

7.1 Manufacturer’s drawings and installation instructions.

7.2 Reports of testing in accordance with ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), revised December 2014.

7.3 The reports of testing and engineering analysis demonstrating compliance with the performance requirements of ASTM D7032-14 [10a], Standard Specification for Establishing Performance Ratings for wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails) and ANSI/AWC NDS-2015 – Wind Uplift Analysis.

7.4 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

The TREX Enhance® Basics and Naturals deck boards are identified with the manufacturer’s name (TREX Company, Inc.) the website address www.trex.com, the product name

9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

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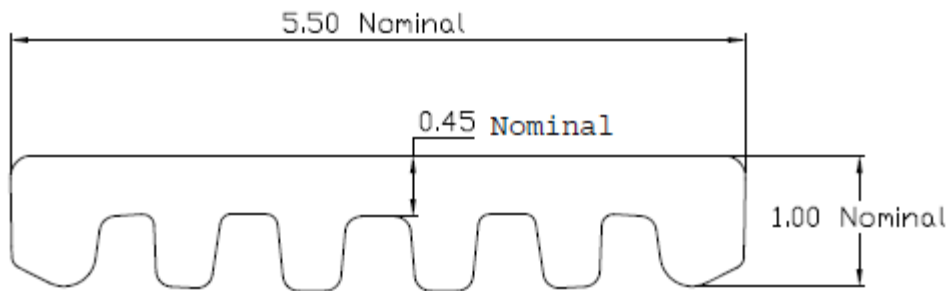


FIGURE 1 – ENHANCE® BASICS AND NATURAL SOLID EDGED DECK BOARD

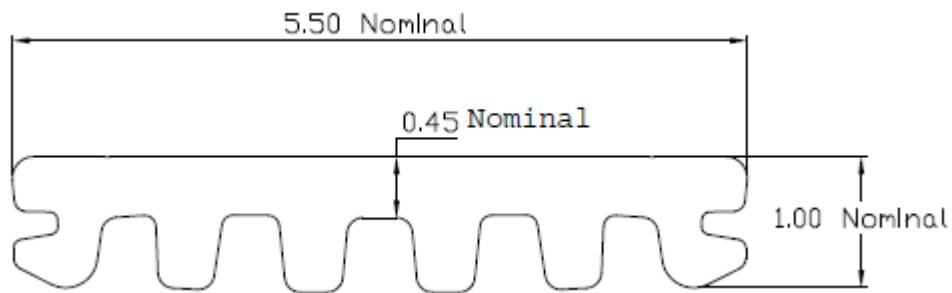


FIGURE 2 – ENHANCE® BASICS AND NATURAL GROOVED EDGE DECK BOARD

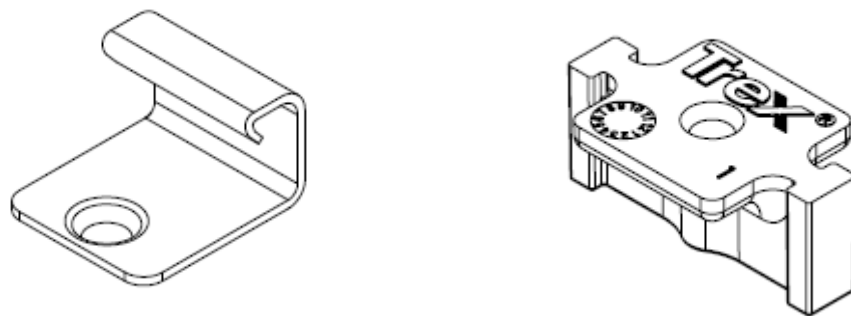


FIGURE 3 – START CLIP (LEFT) AND TREX HIDEAWAY FASTENER (RIGHT) FOR GROOVED EDGE DECK BOARDS