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

**REPORT HOLDER:**

TREX COMPANY, INC.  
160 Exeter Drive  
Winchester, VA 22603  
www.trex.com

**REPORT SUBJECT:**

TREX Enhance® Basics and Naturals composite deck boards  
TREX Select® 1x6 and 2x6 composite deck boards  
TREX Transcend® Tropicals and Earth Tones 1x6 and 2x6 composite deck boards  
TREX Transcend® Lineage™ composite deck boards  
TREX Signature® composite deck boards

### 1.0 SCOPE OF EVALUATION

**1.1** This Research Report addresses compliance with the following Codes:

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

NOTE: This report references 2021 Code sections. Section numbers in earlier versions of the Codes may differ.

**1.2** TREX deck boards have been evaluated for the following properties:

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

**1.3** TREX 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 *Projection Protection*, where fire-resistance rated floor construction is not required for the deck or balcony.

### 2.0 STATEMENT OF COMPLIANCE

TREX 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 deck boards are co-extruded and semi-capped composite material composed of polyethylene and wood fiber.

**3.2** TREX Enhance® Basics and Naturals solid and grooved edged boards measure a nominal 1 inch thick and 5-1/2 inch wide and have five flutes running the entire length along the bottom of the deck board. Grooved edge deck boards additionally include 5/16 inch deep by 1/8 inch high grooves on each of the long edges. See Figure 1.

**3.2.1** TREX Enhance® Basics and Naturals are available in seven colors:

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

**3.2.1.2** Naturals are a solid base color with streaks available as Rocky Harbor, Foggy Wharf, Toasted Sand, and Coastal Bluff.

**3.3** TREX Select® are provided in two thicknesses; 1x6 measuring a nominal 5-1/2 inch wide and 7/8 inch thick, and 2x6 measuring a nominal 5-1/2 inch wide and 1-3/8 inch thick. See Figure 2. 1x6 grooved edge deck boards include a 5/16 inch deep by 1/8 inch high groove on each of the long edges.



**3.3.1** *TREX Select*® are available in five colors: Madeira, Pebble Grey, Saddle, Woodland Brown.

**3.4** *TREX Transcend*® Tropicals and Earth Tones are provided in two thicknesses; 1x6 measuring a nominal 5-1/2 inch wide and 15/16 inch thick, and 2x6 measuring a nominal 5-1/2 inch wide and 1-3/8 inch thick. See Figure 3. 1x6 grooved edge deck boards include a 5/16 in. deep by 1/8 in. high groove on each of the long edges.

**3.4.1** *TREX Transcend*® *Tropicals and Earth Tones* are available in eight colors: Gravel Path, Vintage Lantern, Havana Gold, Island Mist, Lava Rock, Rope Swing, Spiced Rum, Tiki Torch.

**3.5** *TREX Transcend*® *Lineage* measures nominally 5-1/2 inch wide and 15/16 inch thick. See Figure 4. Grooved edge deck boards include a 5/16 in. deep by 1/8 in. high groove on each of the long edges.

**3.5.1** *TREX Transcend*® *Lineage* are available in four colors: Biscayne, Carmel, Jasper and Rainier.

**3.6** *TREX Signature*® solid and grooved boards measure a nominal 1 in. thick and 5-1/2 in. wide. Grooved deck boards additionally include 5/16 in. deep by 1/8 in. high grooves on each of the long edges. The top surface has an embossed simulated wood-grain pattern.

**3.6.1** *TREX Signature*® is available in two colors: Whidbey and Ocracoke.

## 4.0 PERFORMANCE CHARACTERISTICS

**4.1** *TREX* deck boards are rated for uniform live load ratings as identified in Table 2.

**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 support spacing identified in Table 2. Deck boards used as stair treads shall be installed in a minimum two-span condition.

**4.3** *TREX* deck boards have wind uplift resistance ratings as indicated in Table 2 with the fastening specified.

**4.4** *TREX* deck boards have a flame spread index of less than 200 when tested in accordance with ASTM E84.

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

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

## 5.0 INSTALLATION

**5.1** *TREX* 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. See Table 1 for fastening descriptions and uplift ratings.

## 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 boards 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 the maximum span in Table 2.

**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 deck boards are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

### 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 D7032-17, *Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and 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 deck boards are identified with the manufacturer’s name (*TREX Company, Inc.*) the website address [www.trex.com](http://www.trex.com), the product name, the Intertek Mark as shown below and, the Code Compliance Research Report number (CCRR-0301).



### 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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Table 1 – Fastening Schedule and Wind Uplift Ratings

Product		Fastening Description	Wind Uplift Resistance
Trex Enhance® Basics and Naturals	Solid	Two #8 x 2-1/2 in. stainless steel screws on support framing spaced 16 in. on center	150 psf
	Grooved	Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. Stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" star drive stainless screw. See Figure 6.	139 psf
Trex Select®	1x6 Solid	Two #10 x 2-3/4 inch TrapEase II Composite Deck Screws on support framing spaced 16 inch span	724 psf
	1x6 Grooved	Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. Stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" star drive stainless screw. See Figure 4.	117 psf
	2x6 Solid	Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 16 in. on center	429 psf
		Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 24 in. on center	286 psf
Trex Transcend® Tropical and Earth Tones	1x6 Solid	Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 16 in. on center	561 psf
	1x6 Grooved	Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. Stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" star drive stainless screw. See Figure 6.	131 psf
	2x6 Solid	Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 16 in. on center	429 psf
		Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 24 in. on center	286 psf
Trex Transcend® Lineage	Solid	Two #8 (0.178 in. major dia.), 2-1/2 inch long HEADDCOTE stainless steel screws on support framing spaced 16 in. on center	561 psf
	Grooved	Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. Stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" star drive stainless screw. See Figure 6.	131 psf
Trex Signature	Solid	Two TrapEase II® composite deck screws	150 psf
	Grooved	Trex Hideaway Hidden Fastener system on support framing spaced 16 in. on center using one #8 x 1-5/8 in. trim head stainless screw as supplied with the clips. Stainless steel Trex® Hideaway® Start Clips are attached to the ledger board at each joist location with one #8-10 x 1-5/8" star drive stainless screw. See Figure 6.	117 psf



Table 2 – Span/Load and Stair Tread Span Ratings

Product	Span/Load Rating (inches/psf)	Maximum Stair Tread Span <sup>(1)</sup>
Trex Enhance® Basics and Naturals	16/100	9 inches
Trex Select® 1x6	16/100	12 inches
Trex Select® 2x6	16/200, 24/100	16 inches
Trex Transcend® Tropical and Earth Tones 1x6	16/100	12 inches
Trex Transcend® Tropicals and Earth Tones 2x6	16/200, 24/100	16 inches
Trex Transcend Lineage	16/100	12 inches
Trex Signature	16/100	12 inches

<sup>(1)</sup> Deck boards used as stair treads shall be installed in a minimum two-span condition.

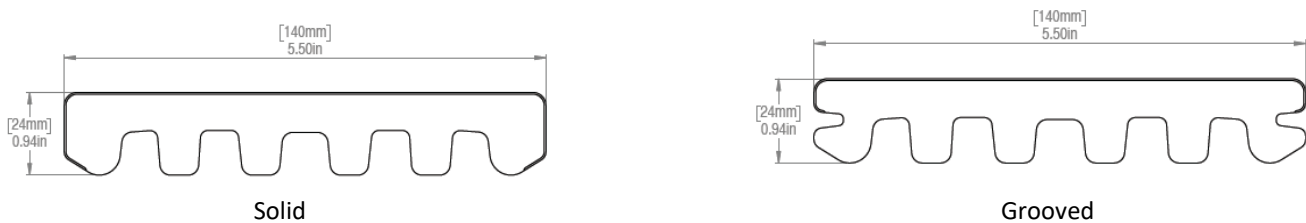


FIGURE 1 – ENHANCE® BASICS AND NATURALS DECK BOARD

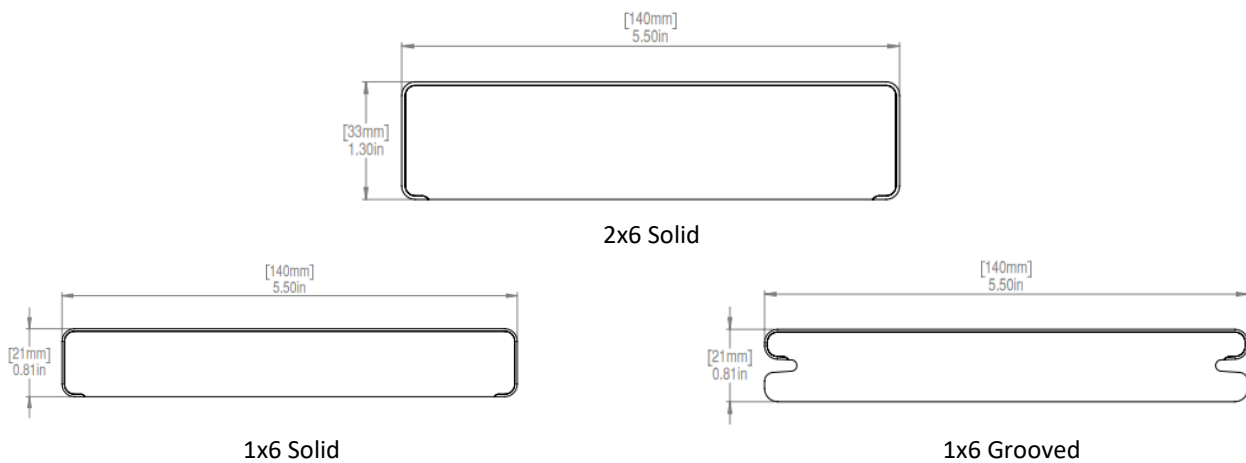
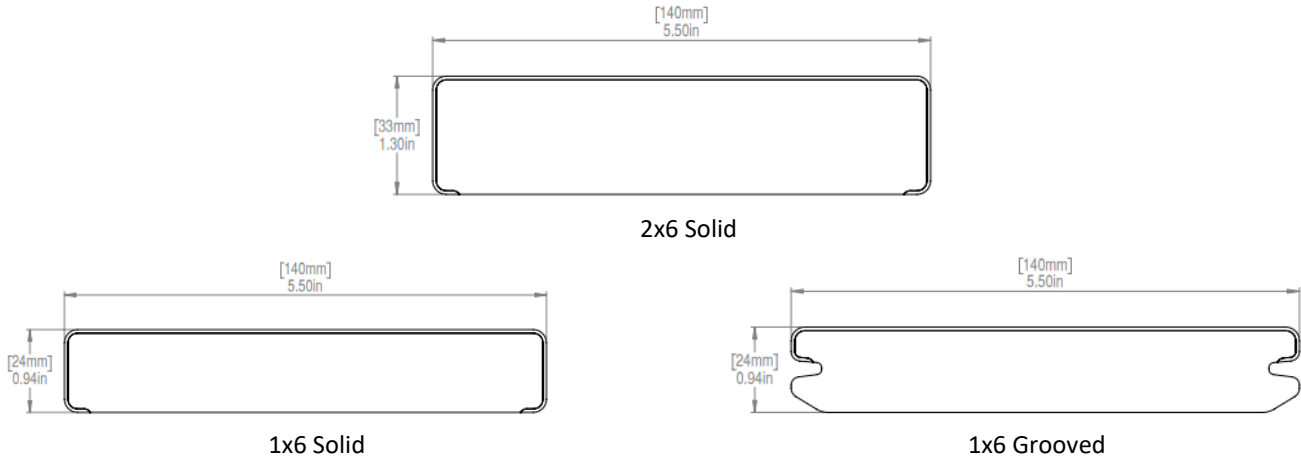


FIGURE 2 – SELECT® 2X6 AND 1X6 DECK BOARD

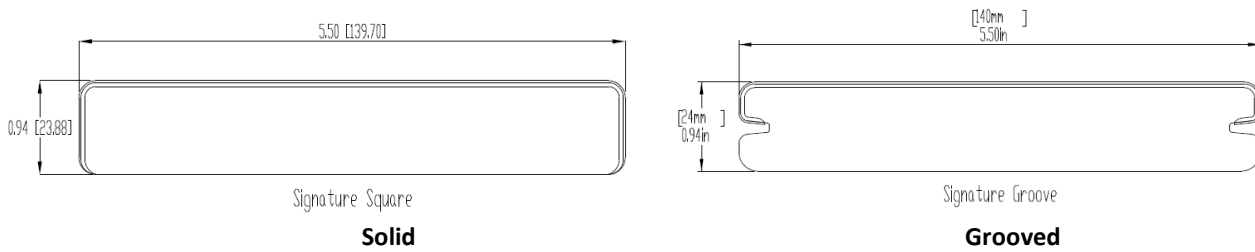




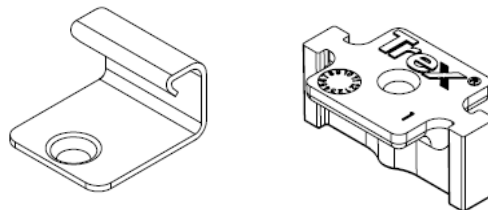
**FIGURE 3 – TRANSCEND® TROPICALS AND EARTH TONES 2X6 AND 1X6 DECK BOARD**



**FIGURE 4 – TRANSCEND® LINEAGE™ DECK BOARD**



**FIGURE 5 – SIGNATURE® DECK BOARDS**



**FIGURE 6 – START CLIP (LEFT) AND TREX HIDEAWAY FASTENER (RIGHT) FOR GROOVED EDGE DECK BOARDS**