

Issue Date: 03-20-2019
Revision Date: 03-22-2026
Renewal Date: 03-31-2027

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

REPORT HOLDER:

TREX COMPANY, INC.
2500 Trex Way
Winchester, VA 22601
www.trex.com

REPORT SUBJECT:

TREX Enhance® 1x6 composite deck boards
TREX Select® 1x6 and 2x6 composite deck boards
TREX Transcend® 1x6 and 2x6 composite deck boards
TREX Transcend® Lineage® 1x4 and 1x6 composite deck boards
TREX Signature® 1x6 composite deck boards
TREX® 1x6 Composite Deck Board

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021 and 2018 *International Building Code*® (IBC)
- 2024, 2021 and 2018 *International Residential Code*® (IRC)

NOTE: This report references 2024 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® 1x6 solid and grooved edge boards measure a nominal 1 inch thick and 5-1/2 inch wide and have flutes running the entire length along the bottom of the deck board. Grooved edge deck boards include a 5/16 in. deep by 1/8-in.-high groove on each of the long edges. Two profiles are produced, Enhance 2.0 with five flutes on the backside and Enhance with four flutes on the backside. See Figures 1 and 2.

3.2.1.1 TREX Enhance® is available in twelve colors: Beach Dune, Cinnamon Cove, Clam Shell, Coastal Bluff, Foggy Wharf, Golden Hour, Honey Grove, Pebble Beach, Rocky Harbor, Saddle and Tide Pool, and Toasted Sand.

3.3 TREX Select® is provided in two thicknesses; 1x6 measuring a nominal 7/8 inch thick and 5-1/2 inch wide, and 2x6 measuring a nominal 1-3/8 inch thick and 5-1/2 inch wide. See Figure 3. 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®* is available in eight colors: Madeira, Malted Barley, Millstone, Pebble Grey, Saddle, Winchester Grey, Whiskey Barrel and Woodland Brown.

3.4 *TREX Transcend®* is provided in two thicknesses; 1x6 measuring a nominal 15/16 inch thick and 5-1/2 inch wide, and 2x6 measuring a nominal 1-3/8 inch thick and 5-1/2 inch wide. See Figure 4. 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®* is available in nine colors: Gravel Path, Havana Gold, Heron Grey, Island Mist, Lava Rock, Rope Swing, Spiced Rum, Tiki Torch and Vintage Lantern.

3.5 *TREX Transcend® Lineage®* is provided in two thicknesses; 1x4 measuring a nominal 1 inch thick and 3-5/8 inch wide and 1x6 measuring a nominal 15/16 inch thick and 5-1/2 inch wide. See Figure 5. 1x6 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®* is available in seven colors: Biscayne, Carmel, Hatteras, Island Mist Lineage, Jasper, Rainier and Salt Flat.

3.6 *TREX Signature® 1x6* solid and grooved edge boards measure a nominal 1 in. thick and 5-1/2 in. wide. Grooved edge deck boards include 5/16 in. deep by 1/8 in. high groove 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.

3.7 *TREX® 1x6 Composite Deck Board* solid and grooved edge boards measure a nominal 7/8 inch thick and 5-1/2 inch wide. See Figure 7. 1x6 grooved edge deck boards include a 5/16 in. deep by 1/8-in.-high groove on each of the long edges.

3.7.1 *TREX® Composite Deck Board* is available in one color: Sandy Shores.

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 1 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 boards have not been evaluated for use in areas subject to Formosan termite attack.

6.7 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)*, approved January 2012, editorially revised April 2024.

7.3 The reports of testing and engineering analysis demonstrating compliance with the performance requirements of ASTM D7032-21, *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

TREX® deck boards are identified with the manufacturer’s name (*TREX Company, Inc.*) the website address 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.

This Code Compliance Research Report (“Report”) is for the exclusive use of Intertek’s Client and is provided pursuant to the agreement between Intertek and its Client. Intertek’s responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.





Table 1 – Fastening Schedule and Wind Uplift Ratings

| Product | | Fastening Description | Wind Uplift Resistance |
|-----------------|-------------|---|------------------------|
| Trex Enhance® | 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 7. | 139 psf |
| Trex Select® | 1x6 Solid | Two #10 x 2-3/4-inch TrapEase II Composite Deck Screws on support framing spaced 16 in. on center | 724 psf |
| | | Two #10 x 2-1/2-inch TREX Hideaway Composite Plug Screws on support framing spaced 24 in. on center. | 283 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 7. | 117 psf |
| | | 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 |
| | 2x6 Solid | 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 |
| | | 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 |
| Trex Transcend® | 1x6 Solid | Two #10 x 2-1/2-inch TREX Hideaway Composite Plug Screws on support framing spaced 24 in. on center. | 283 psf |
| | | 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 7. | 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 |



Table 1 – Fastening Schedule and Wind Uplift Ratings (Continued)

| | | | |
|---|----------------|---|---------|
| <i>Trex Transcend® Lineage®</i> | 1x6 Solid | Two #8 (0.178 in. major dia.), 2-1/2-inch long HEADCOTE stainless steel screws on support framing spaced 16 in. on center | 561 psf |
| | | Two #10 x 2-1/2-inch TREX Hideaway Composite Plug Screws on support framing spaced 24 in. on center. | 283 psf |
| | 1x4 Solid | Two #8 (0.178 in. major dia.), 2-1/2-inch long HEADCOTE 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 7. | 131 psf |
| <i>Trex Signature®</i> | 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 7. | 117 psf |
| <i>Trex® Composite Deck Board</i> | 1x6 Solid | Two #10 x 2-3/4-inch TrapEase II Composite Deck Screws on support framing spaced 16 in. on center | 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 7. | 117 psf |



Table 2 – Span/Load and Stair Tread Span Ratings

| Product | Span/Load Rating (inches/psf) | Maximum Stair Tread Span ⁽¹⁾ |
|---|-------------------------------|---|
| <i>Trex Enhance</i> [®] | 16/100 | 9 inches |
| <i>Trex Select</i> [®] 1x6 | 16/100, 24/85 | 12 inches |
| <i>Trex Select</i> [®] 2x6 | 16/200, 24/100 | 16 inches |
| <i>Trex Transcend</i> [®] 1x6 | 16/100, 24/85 | 12 inches |
| <i>Trex Transcend</i> [®] 2x6 | 16/200, 24/100 | 16 inches |
| <i>Trex Transcend</i> [®] Lineage [®] 1x4 | 16/100 | 12 inches |
| <i>Trex Transcend</i> [®] Lineage [®] 1x6 | 16/100, 24/85 | 12 inches |
| <i>Trex Signature</i> [®] | 16/100 | 12 inches |
| <i>Trex</i> [®] Composite Deck Board 1x6 | 16/100 | 12 inches |

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



FIGURE 1 – TREX ENHANCE® 2.0 DECK BOARD



FIGURE 2 – TREX ENHANCE® DECK BOARD

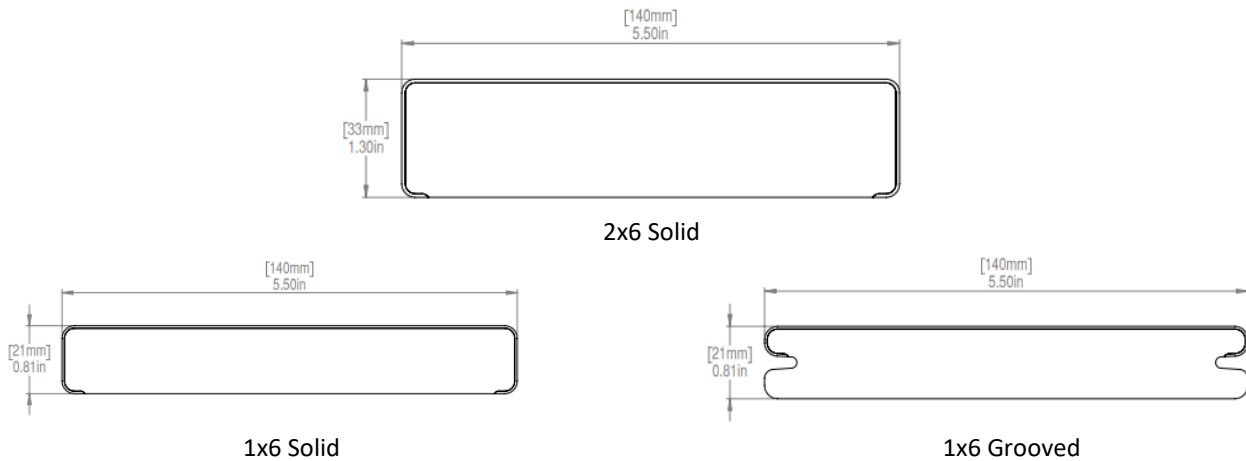


FIGURE 3 – TREX SELECT® 2X6 AND 1X6 DECK BOARD



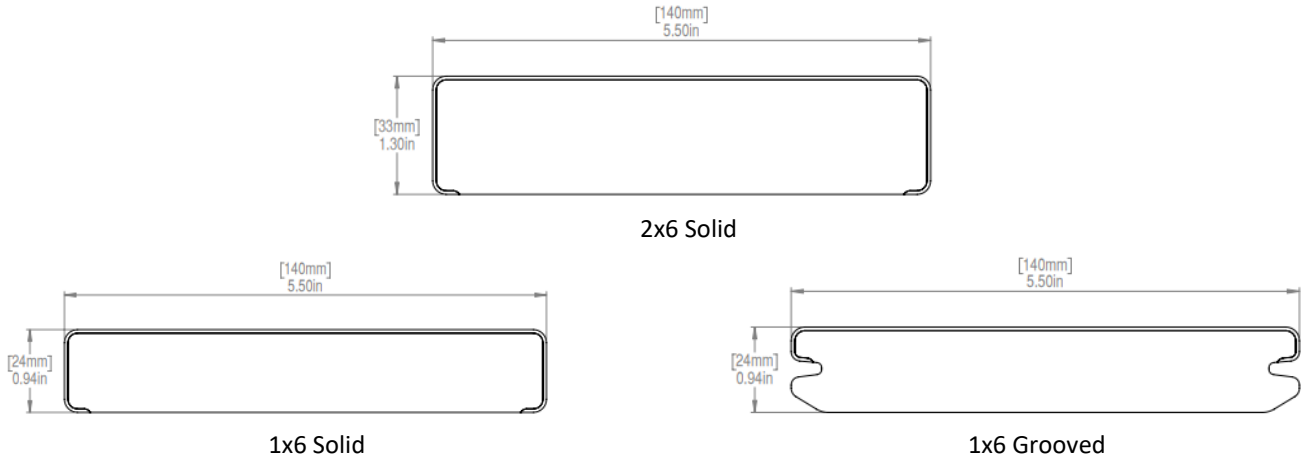


FIGURE 4 – TREX TRANSCEND® 2X6 AND 1X6 DECK BOARD

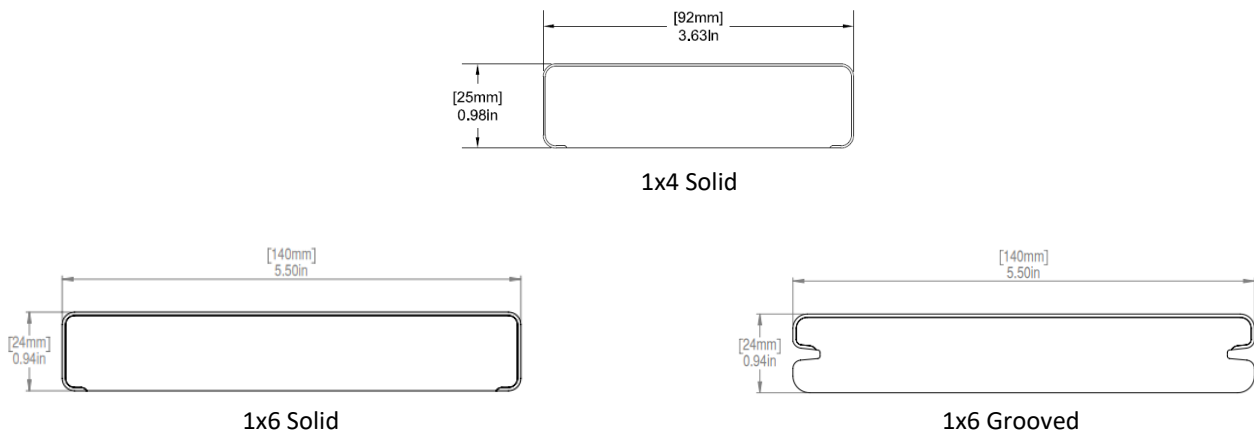


FIGURE 5 – TREX TRANSCEND® LINEAGE® DECK BOARD

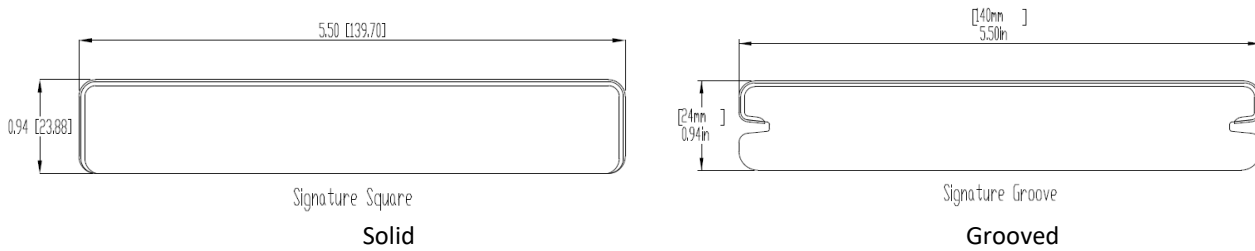


FIGURE 6 – TREX SIGNATURE® DECK BOARDS





FIGURE 7 – TREX® COMPOSITE DECK BOARD 1X6 DECK BOARD

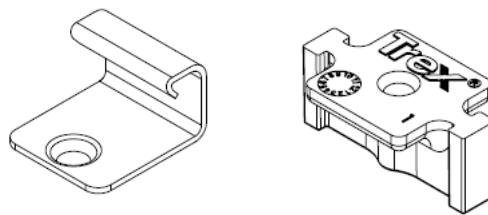


FIGURE 8 – START CLIP (LEFT) AND TREX HIDEAWAY® FASTENER (RIGHT) FOR GROOVED EDGE DECK BOARDS