



Code Compliance Research Report

CCRR-0218

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1.0 Subject

Style Selections Decking

2.0 Research Scope

2.1. Building Codes:

2015 International Building Code (IBC)
 2015 International Residential Code (IRC)

2012 International Building Code (IBC)
 2012 International Residential Code (IRC)

2014 Florida Building Code (FBC) (excluding
 High Velocity Hurricane Zones)

2.2. Properties

Structural Performance

Durability

Surface Burning

Decay Resistance

Termite Resistance

3.0 Description

3.1. General – *Style Selections* deck boards are intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs as further defined herein.

3.2. Materials and Processes – *Style Selections* deck boards are a co-extruded material composed of a low density polyethylene (LDPE) and wood fiber composite core with a polymer capstock on the top and side surfaces (semi-capped). *Style Selections* deck boards are produced in the following colors: Light Brown, Dark Brown, and Grey.

3.3. *Style Selections* deck boards have a fluted rectangular cross-section with nominal dimensions of 1" thick by 5.5" wide. The two flutes are 1-1/2" wide by 1/4" deep and run the length of the underside of the deck board. The deck boards are available with 0.20" wide by 0.28" deep grooves in the

longitudinal edges to accept hidden fasteners. See Figure 1.

3.4. Walking Surface - *Style Selections* deck boards are finished with an embossed simulated wood-grain pattern.

4.0 Performance Characteristics

4.1. *Style Selections* deck boards are rated for a uniform live load of 100 lbs/ft.² when installed on support framing spaced at 16".

4.2. *Style Selections* used as stair treads are rated for the cod-prescribed concentrated load equal to 300 lb when installed with a maximum 11" support span. Deck boards used as stair treads shall be installed in a minimum two-span condition.

4.3. *Style Selections* deck boards have a minimum wind uplift resistance rating of 212 lb/ft.² when face-fastened to support framing spaced 16" on center. *Style Selections* deck boards have a minimum wind uplift resistance rating of 153 lb/ft.² when installed using the Trex Hideaway® Universal Hidden Fastener System on support framing spaced 16" on center.

4.4. *Style Selections* deck boards have a flame spread index of less than 200 when tested according to ASTM E 84. The referenced criteria, AC174, requires a flame spread index not exceeding 200.

4.5. Materials are deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects, 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

Installation shall be in accordance with the manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

5.1. Face-fastening of the *Style Selections* shall be with #10 x 2-3/4" long deck screws. Two fasteners are required at every joist 3/4" from the side and at least 1" from the end of the board.

5.2. *Style Selections* shall be attached at each joist, regardless of joist spacing, with the Trex Hideaway® Universal Hidden Fastener System utilizing the #8 x 1.6" long stainless steel trim-head screws supplied with the clips. The stainless steel Trex Hideaway® Start Clips are attached to the ledger board at each joist location with one #8 x 1.6" screw per clip. The plastic Trex Hideaway® Connector Clips are attached to each joist with one #8 x 1.6" screw. (See Figure 3). The outboard edge of the deck board is fastened to the rim Joist with one #8 x 1.6" screw at a 45° angle through the grooved edge at each joist location.

6.0 Supporting Evidence

6.1. Manufacturer's drawings and installation instructions.

6.2. 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.

6.3. The reports of testing and engineering analysis demonstrating compliance with the performance requirements of ASTM D 7032-08, Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails).

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

7.0 Conditions of Use

The *Style Selections* deck board applications identified in this report are deemed to comply with the intent of the provisions of the referenced building codes subject to the following conditions.

7.1. 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 1406.3 as follows:

- Construction Type IIB, IIIB & VB per IBC §1406.3 and Table 601 (No fire resistance rating required for floors)
- Construction Type IIIA, IV & VA per IBC §1406.3, Exception 3 (Sprinkler protection required)

7.2. 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 16".

7.3. 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.

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

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

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

7.7. All products are manufactured in Winchester, Virginia by Trex Company, Inc., in accordance with the manufacturer's approved quality control system with inspections by PFS Corporation (IAS AA-652).

8.0 Identification

Style Selections deck boards produced in accordance with this report shall be identified with labeling on the individual deck boards that includes the following information:

8.1. Name and/or trademark of manufacturer;

8.2. The following statement: "Complies with ASTM D 7032. See CCRR-0218 at www.ati-es.com for uses and performance levels."

8.3. The mark of the independent inspection agency, PFS Corporation (IAS AA-652).

8.4. The Code Compliance Research Report mark and number (CCRR-0218).

9.0 Code Compliance Research Report Use

9.1. 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.

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

9.3. Reference to the Architectural Testing internet web site address at www.ati-es.com is recommended to ascertain the current version and status of this report.

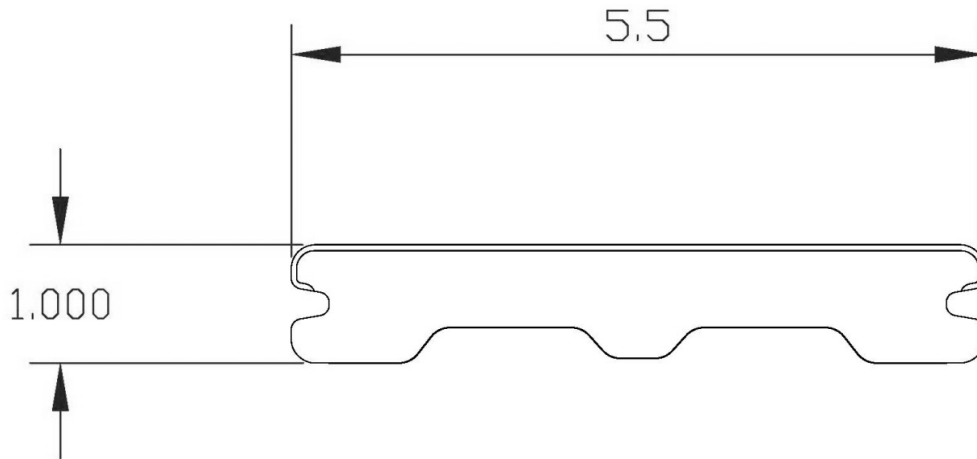


Figure 1 – Style Selections Grooved Deck Board Profile

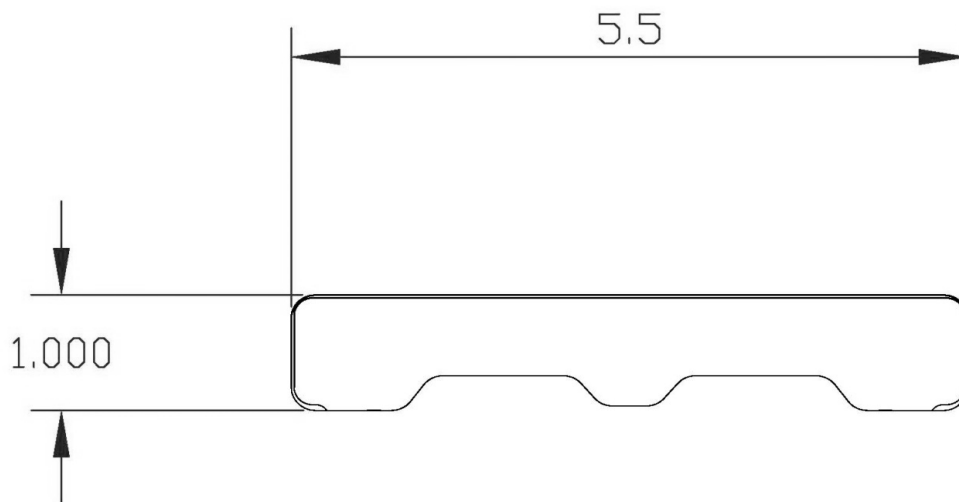


Figure 2: Style Selections Solid Deck Board Profile

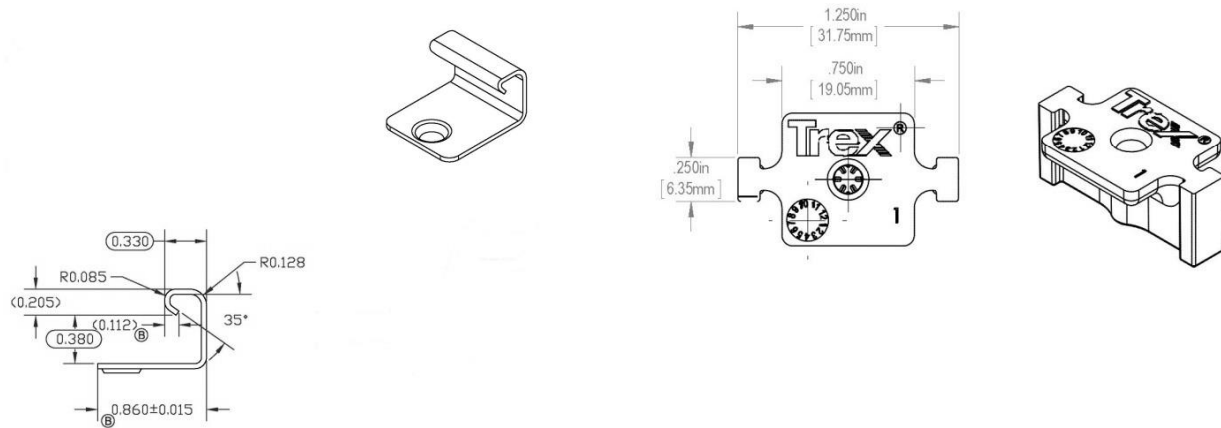


Figure 3: Trex Hideaway® Universal Fastener System
(Left: Start Clip; Right: Connector Clip)