



Building Product Evaluation Report 0100

UFP Ventures Deck Boards and Stair Treads UFP Ventures II, Inc.

Initial Acceptance: August 23, 2018

Expiration: September 12, 2024

Revision: September 12, 2023

TYPE OF ACCEPTANCE

Product Material – Wood and Plastics

CSI Specification Division: 06 50 00 (Structural Plastic) and 06 53 00 (Plastic Decking)

MANUFACTURER IDENTIFICATION:

UFP Ventures II, Inc.

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EVALUATION REPORT SUBJECT:

Deck Boards and Stair Treads for Exterior Applications
Installation on construction complying with the International Residential Code®
(IRC®) or with the International Building Code® (IBC®).

DESCRIPTION OF BUILDING COMPONENTS:

A. Deck Boards

UFP Ventures deck boards are wood thermoplastic composite lumber (WTCL) products consisting of high-density polyethylene, wood flour filler plus additives and color. The product specifications are listed in the approved quality control manual. The UFP Ventures deck boards are manufactured by an extrusion process (mono-extruded or coextruded) in several colors. All deck boards can be used as stair treads except where noted. See Drawings Table 1.

1. Deck Boards: Solid

- (a) The **Deckorators Vista-Solid** deck board is rectangular in shape, has rounded edges, is completely solid and has a proprietary plastic cap on top of the board. See attached drawing in Table 1 Section A.
- (b) The **Deckorators Fire Rated-Solid** deck board is rectangular in shape, has rounded edges, is completely solid and has a proprietary plastic cap on top of the board. See attached drawing in Table 1 Section A.

2. Deck Boards: Solid with Lobes

- (a) The **Veranda-Solid** deck board is rectangular in shape, has rounded edges, is completely solid and has three (3) lobes on the bottom of the board. This deck board has a proprietary plastic cap on the top of the deck board. See attached drawing in Table 1 Section B. This deck board is also named **Veranda Elite-Solid, Veranda HP-Solid, Veranda Vintage-Solid, Deckorail Vintage-Solid, and High Performance-Solid.**
- (b) The **Trailhead** deck board is rectangular in shape, has rounded edges, is completely solid and has four (4) lobes on the bottom of the board. This deck board has a proprietary plastic cap on the top of the deck board. See attached drawing in Table 1 Section B.
- (c) The **TG2** deck board is rectangular in shape, has rounded edges, is completely solid and has three (3) lobes on the bottom of the board. This deck board has a proprietary plastic cap on the top of the deck board. See attached drawing in Table 1 Section B. This deck board is also named **Deckorators Tropics-Solid and Deckorators Tradewinds-Solid.**



3. Deck Boards: Solid with Side Grooves

- (a) The **Deckorators Vista-Slotted** deck board is rectangular in shape, has rounded edges, is completely solid, has a groove on each side of the board and has a proprietary plastic cap on the top of the board. See attached drawing in Table 1 Section C.
- (b) The **Deckorators Fire Rated-Slotted** deck board is rectangular in shape, has rounded edges, is completely solid, has a groove on each side of the board and has a proprietary plastic cap on top of the board.

4. Deck Boards: Solid with Side Grooves and Lobes (Oval and Square)

- (a) The **Veranda Vintage-Slotted** deck board is rectangular in shape, has rounded edges, is solid, has a groove on each side of the board and has three (3) lobes on the bottom of the board. See attached drawing in Table 1 Section D. This deck board is also named **Veranda Elite-Slotted/Rainure'e**, **Veranda HP-Slotted**, **Deckorators Vintage-Slotted**, and **High Performance-Slotted**.
- (e) The **Trailhead-Slotted** deck board is rectangular in shape, has rounded edges, is completely solid, has a groove on each side of the board and has four (4) lobes on the bottom of the board. This deck board has a proprietary plastic cap on the top of the deck board. See attached drawing in Table 1 Section D.
- (f) The **TG2-Slotted** deck board is rectangular in shape, has rounded edges, is solid, has a groove on each side of the board and has three (3) lobes on the bottom of the board. This deck board has a proprietary plastic cap on the top of the deck board. See attached drawing in Table 1 Section D. This deck board is also named **Deckorators Tropics-Slotted** and **Deckorators Tradewinds-Slotted**.

APPLICABLE CODES:

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

APPLICABLE CHARACTERISTICS REVIEWED:

B. Deck Board(s) – See Section A - 1 thru 4 above for list of all the names and descriptions of the deck boards reviewed.

1. Deck Board: Structural Performance

- (a) The deck boards have been reviewed for uniform load, maximum span and deck board direction when installed on support framing members. See attached Table 1.
- (b) The deck boards have been reviewed for wind uplift resistance and have an uplift load rating when installed as indicated in Table 1 in this Report.
- (c) The deck boards used as stair treads meet the code prescribed load requirements including the concentrated load of 300 lbf when installed in accordance with the manufacturer's installation instructions and Table 1 in this Report. Figure 1 provides a typical installation for the 3 Lobed Deck Board.

2. Deck Board: Fastening

- (a) The deck boards must be fastened to the structural supporting members in accordance with the manufacturer's installation instructions and Table 1 of this Report. When manufacturer's installation instructions differ from this Report, this Report governs.
- (b) Solid Deck Boards with side grooves and Solid Deck Boards with side grooves and lobes can be installed with the Equator Hidden Fastener, Trex Hideaway Hidden Fastener, Stowaway Hidden Fastener, or the VersaClip Hidden Fastener. These fasteners must be installed in accordance with manufacturer's installation instructions and Table 1 of this Report. When manufacturer's installation instructions differ from this Report, this Report governs.
- (c) The deck board attachment to rim and floor joist is outlined in the manufacturer's installation instructions and Table 1 of this Report. When the manufacturer's installation instructions differ from this Report, this Report governs.
- (d) When deck boards are used as stair treads, they must be installed in accordance with the manufacturer's installation instructions and Table 1 in this Report. When the manufacturer's installation instructions differ from this Report, this Report governs.

**3. Deck Board Durability: Temperature**

- (a) The deck boards have been reviewed for the temperature range of -20 to 125 °F (-29 to 52 °C).

4. Deck Board Flame Spread Index:

- (a) UFP Ventures deck boards meet the requirements for Class C classification, except that **Deckorators Fire Rated-Solid** and **Deckorators Fire Rated-Slotted** meet the requirements for Class B classification for the Flame Spread and Smoke Development Index when tested in accordance with the ASTM E84 *Standard Test Method for Surface Burning Characteristics of Building Materials*.

5. Deck Board Decay Resistance:

- (a) The deck boards reviewed for this Report have been deemed comparable to naturally durable wood for resistance to fungal decay.

6. Deck Board Termite Resistance:

- (a) The deck boards reviewed for this Report have been deemed comparable to preservative-treated wood for resistance to termite attack.

7. UV Testing:

- (a) The UV testing was conducted, and an appropriate adjustment factor was applied in accordance with ASTM D7032 *Standard for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards and Handrails*.

APPLICABLE USES:

The UFP Ventures II deck boards evaluated in this Report are limited to exterior applications for balconies, porches, stair treads, walking surfaces and decks.

LIMITATIONS OF ACCEPTANCE:

The UFP Ventures II deck boards described in this Report comply with those codes listed in Applicable Codes section above and are subject to the following conditions:

1. The deck boards are limited to the “Applicable Uses” indicated above.
2. Installation of the deck board must comply with this Report; the manufacturer’s published installation instructions (<https://www.Deckorators.com/en/Resources/Installation-Instructions>) and the applicable code. When the deck board manufacturer’s installation instructions differ from this Report, this Report governs.
3. The fasteners described in this Report must be used for the installation of the UFP Ventures II deck boards only. Compatibility of the fasteners to treated supporting construction has not been evaluated.
4. The UFP Ventures deck boards indicated in this Report must be fastened to the supporting construction as indicated in the manufacturer’s installation manual and outlined in this Report. When the deck board manufacturer’s fastening instructions differ from this Report, this Report governs.
5. When required, the structural deck board layout must be designed by a design professional and submitted to the authority having jurisdiction for final acceptance.
6. The UFP Ventures deck boards have not been evaluated as a member of a fire-resistance-rated assembly.
7. UFP Ventures has a Third-Party inspections program provided by PFS TECO (AA 652).
8. Deck boards and stair treads must be installed over at least two spans. All 3 lobed deck boards used as stair treads are to be supported full length continuously over all stringers by minimum 5/4” x 6” pressure preservative treated (or equivalent resistant species) boards having a specific gravity not less than 0.42. See Figure 1.
9. The structural design for code compliance of supporting members for the deck boards has not been evaluated and is not part of this Report.



DOCUMENTATION SUBMITTED:

Submitted data was provided in accordance with *PFS TECO Certification and Inspection Policy: Deck Boards and Guardrails* (Quality Control manual, Specifications, Manufacturer's installation instructions, test data and descriptive information). The products have been evaluated in accordance with ASTM D7032.

PRODUCT IDENTIFICATION:

The UFP Ventures deck boards evaluated in this Report must be identified with a label, stamp, or laser imprint on every deck board. The information that is required is as follows: UFP Ventures II, Inc., product identification, compliance to ASTM D7032 including the maximum deck board span (inches on center spacing of supports), and loading (psf), the PFS TECO Building Product Evaluation Report number (BPER 0100), and PFS Certification Mark for use in the United States (see image below). Deck boards without this information are not covered under this Report.





Table 1: Span Table and Fastening Schedule for Deck Boards

Deck Board ID	Deck Board Profile	Maximum Span Rating (in/psf) with Deck Board Orientation to Support Joists		Fastening Schedule ¹ and Uplift Values	Maximum Stair Tread Span ² (in)
		90°	45°		
A. Solid Deck Board					
Deckorators Vista-Solid		16/100	12/100	296 lbf per #8 x 3-in Deck Screw	8 in
Deckorators Fire Rated-Solid		16/100	12/100	296 lbf per #8 x 3-in Deck Screw	8 in

B. Solid Deck Board with Lobes on Bottom					
<ul style="list-style-type: none"> * Veranda Elite-Solid * Veranda HP-Solid * Veranda Vintage-Solid * Deckorail Vintage-Solid * High Performance-Solid 		16/100	12/100	212 lbf per #8 x 3-in Deck Screw	16 in Fully Supported (Fig. 1)
Trailhead		16/100	12/100	145 psf with Starborn Pro-Plug screw system	8 in
<ul style="list-style-type: none"> * TG2 * Deckorators Tropics-Solid * Deckorators Tradewinds-Solid 		16/100	12/100	212 lbf per #8 x 3-in Deck Screw	16 in Fully Supported (Fig. 1)
C. Solid Deck Board with Side Grooves					
Deckorators Vista-Slotted		16/100	12/100	106 psf - Trex (Fig. 2), 97 psf - Stowaway (Fig. 3), 83 psf - VersaClip (Fig. 4)	8 in
Deckorators Fire Rated - Slotted		16/100	12/100	106 psf - Trex (Fig. 2), 97 psf - Stowaway (Fig. 3), 83 psf - VersaClip (Fig. 4)	8 in

D. Solid Deck Board with Lobes on Bottom and Side Grooves					
<ul style="list-style-type: none"> * Veranda Elite-Slotted/Rainure'e * Veranda HP-Slotted * Veranda Vintage-Slotted * DeckKorail Vintage-Slotted High Performance-Slotted 		16/100	12/100	106 psf - Trex (Fig. 2), 97 psf - Stowaway (Fig. 3), 83 psf – VersaClip (Fig. 4)	16 in Fully Supported (Fig. 1)
Trailhead -Slotted		16/100	12/100	106 psf - Trex (Fig. 2), 97 psf - Stowaway (Fig. 3), 83 psf – VersaClip (Fig. 4), 145 psf with Starborn Pro-Plug screw system	8 in
<ul style="list-style-type: none"> * TG2 -Slotted * Deckorators Tropics-Slotted * Deckorators Tradewinds-Slotted 		16/100	12/100	106 psf - Trex (Fig. 2), 97 psf - Stowaway (Fig. 3), 83 psf – VersaClip (Fig. 5)	16 in Fully Supported (Fig. 1)

for SI conversion: 1 in = 25.4 mm, 1 psf = 47.9 Pa, 1 lbf = 0.0044 kN

¹ Deck boards installed with screws must be attached to each joist with 2 #8 x 3-in. deck screws with a minimum end/edge distance of 1-1/2 in., unless predrilled. Deck boards installed with hidden fasteners (Trex, Stowaway, or VersaClip) or Pro Plug screw system must be attached to each joist with a fastener as per manufacturer's installation instructions.

² Deck boards installed as stair tread must be supported over 3 or more supports.

The joist to which the deck boards are attached must have a minimum specific gravity of 0.50 or better (such as Southern Pine) or the fastening must be designed.

No duration of load increase is allowed for the uplift values noted in Table 1 in this Report.

* Denotes that deck board used as a stair tread must be fully supported, see Figure 1.

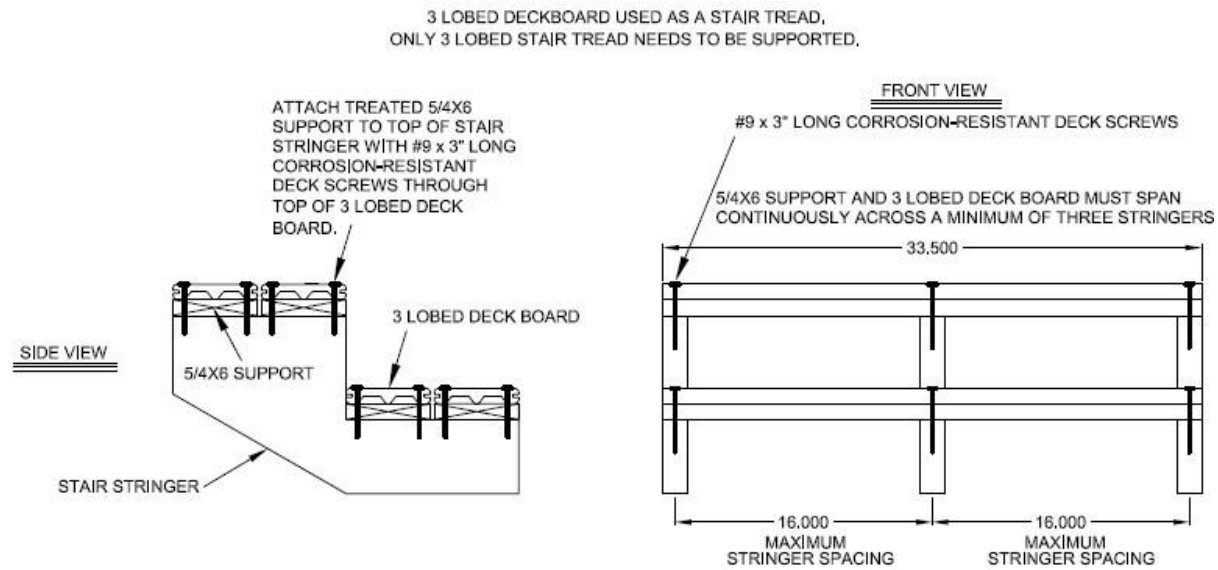


Figure 1: Typical Installation Schematics for a Fully Supported Stair Tread Applicable to Only 3 Lobed Deck Boards Marked with a *



Figure 2: Trex



Figure 3: Stowaway



Figure 4: VersaClip