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DIVISION: 06 00 00 – WOOD, PLASTICS AND COMPOSITES
Section: 06 50 00 – Structural Plastics
Section: 06 53 00 – Plastic Decking

REPORT HOLDER:
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REPORT SUBJECT:
Deck Lok™ System

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)
- 2017 *Florida Building Code* excluding the High Velocity Hurricane Zone. (see Section 9)

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

1.2 *Deck Lok™* System has been evaluated for the following properties:

- Structural Performance
- Durability
- Surface Burning

1.3 *Deck Lok™* System has been evaluated for the following uses:

- *Deck Lok™* System is a deck board intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs as further defined herein.
- 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 Section 1406.3 as follows:

- Construction Type IIB, IIIB, and VB per IBC § 705.2.3.1 [1406.3] and Table 601 (No fire resistance rating required for floors)
- Construction Type IIIA, IV and VA per IBC § 705.2.3.1 [1406.3], Exception 3 (Sprinkler protection required).

2.0 STATEMENT OF COMPLIANCE

Deck Lok™ System complies 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.

3.0 DESCRIPTION

3.1 Materials and Processes

3.1.1 *Deck Lok™* Systems are co-extruded, hollow, PVC deck boards with a PVC cap and are produced in four colors: Latte, Gray, Tan and Stone.

3.2 Profiles

3.2.1 *Deck Lok™* deck boards have a hollow cross-section with nominal dimensions of 1.5" tall and 5.875" wide. The boards interlock together utilizing a tongue-and-groove joint. See Figure1.

3.2.2 Walking Surface – *Deck Lok™* deck boards are finished with a simulated wood-grain pattern.

4.0 PERFORMANCE CHARACTERISTICS

4.1 *Deck Lok™* deck boards are rated for a uniform live load of 100 lb/ft² when installed on support framing spaced at 24 inches on-center.

4.2 *Deck Lok™* deck boards used as stair treads are rated for the code-prescribed concentrated load equal to 300 lb when installed with a maximum span indicated in Table 1. Deck boards used as stair treads shall be installed in a minimum two-span condition.



4.3 Materials used in the deck boards have a flame spread index not greater than 200, when tested in accordance with ASTM E84, as required by ICC-ES AC174.

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

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

5.0 INSTALLATION

5.1 General:

Deck Lok™ 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 Application:

5.2.1 *Deck Lok™* deck boards are fastened with one #8 x 2" stainless steel wood screw at every wood joist. See Table 1 and Figure 2 for installation details.

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 Table 1 span ratings.

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 calculations 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 fasteners, metal post mount components, and other hardware components is subject to approval by the code official.

6.6 Only those types of fasteners and fastening methods described in this report have been evaluated for the installation of the *Deck Lok™ Systems*; other methods of attachment are outside the scope of this report.

6.7 *Deck Lok™* 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 Reports of testing and engineering evaluation demonstrating compliance with the performance requirements of ASTM D 7032-14 [-10a], *Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails)*.

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

8.0 IDENTIFICATION

The *Deck Lok™* deck boards are identified with the manufacturer's name (Westech Building Products), address and telephone number, the product name (*Deck Lok™* deck boards), the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0200).





- Use of the *Deck Lok™* deck boards for compliance with the High-Velocity Hurricane Zone provisions of the 2017 *Florida Building Code – Building* and the *Florida Building Code – Residential* has not been evaluated and is outside the scope of this Research Report.
- Intertek is a quality assurance entity approved by the Florida Building Commission.

9.0 FLORIDA BUILDING CODE

9.1 Scope of Evaluation:

The *Deck Lok™* deck boards were evaluated for compliance with the 2017 *Florida Building Code – Building*, *Florida Building Code – Residential* and *Florida Building Code – Energy Conservation*.

9.2 Conclusion:

The *Deck Lok™* deck boards, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2017 *Florida Building Code – Building*, *Florida Building Code – Residential* and *Florida Building Code – Energy*, subject to the following conditions:

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 – SPAN AND UPLIFT RESISTANCE RATINGS

| Deck Board | Maximum Span / Allowable Load Rating ⁽¹⁾ | Maximum Stair Tread Span ⁽²⁾ | Fastener Description | Wind Uplift Resistance ⁽³⁾ |
|------------------|---|---|---|---------------------------------------|
| Deck Lok™ System | 24" Span 100 psf Load | 12" Span | One #8 x 2" Exterior Stainless Steel Screw. See Figure 2. | 83 psf |

- ⁽¹⁾ Span/Load rating is the maximum span in inches and the maximum allowable live load in pounds per square feet (psf).
- ⁽²⁾ Stair tread span is based on a continuous deck board over two or more equal spans (3 supports).
- ⁽³⁾ Wind uplift resistance is based on installation as described in Section 5.0. Values have been adjusted for wind load duration and end use. No further adjustments shall be made.

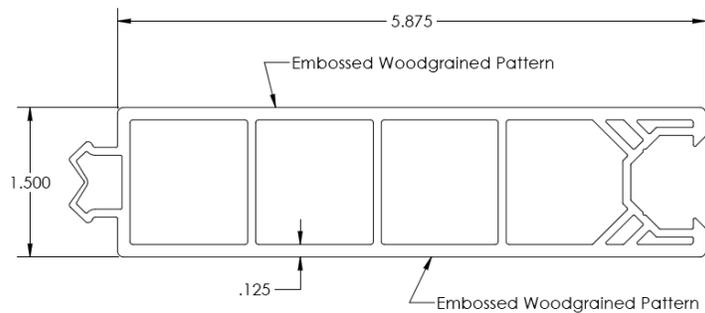
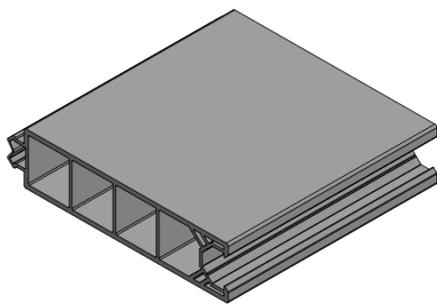


FIGURE 1 – DECK LOK™ PROFILE



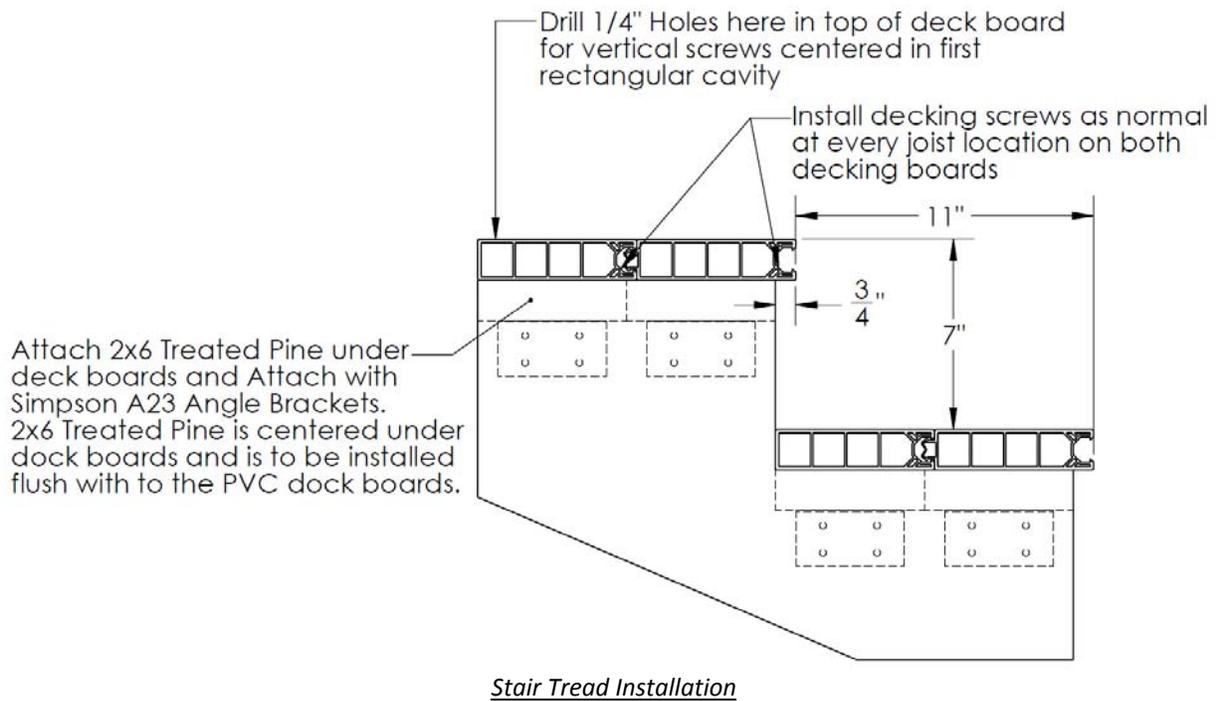
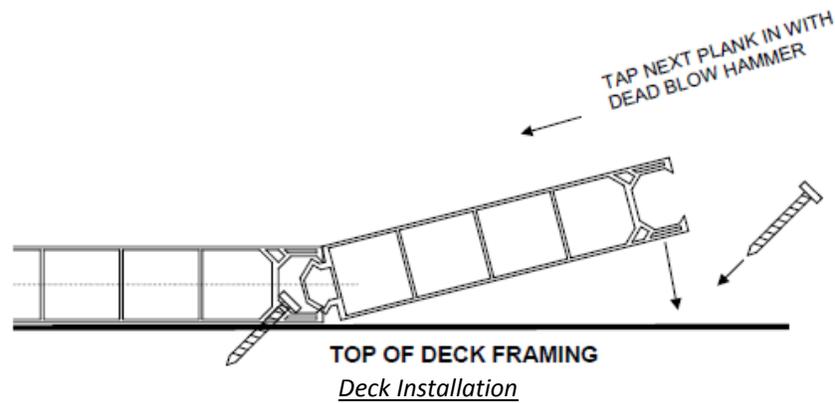


FIGURE 2 – DECK LOK™ INSTALLATION DETAILS