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DIVISION: 06—WOOD AND PLASTICS
Section: 06500—Structural Plastics

REPORT HOLDER:

UFP VENTURES II, INC.
1801 EAST LESSARD STREET
PRAIRIE DU CHIEN, WISCONSIN 53821
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EVALUATION SUBJECT:

LATITUDES® SOLID AND LATITUDES® SLOTTED (BOTH KNOWN AS VERANDA®), AND PREMIER™ WOOD PLASTIC COMPOSITE DECK BOARDS, AND EQUATOR® HIDDEN FASTENER SYSTEM

ADDITIONAL LISTEE:

COMPOSATRON MANUFACTURING INC.
25 IRONSIDE CRESCENT
TORONTO, ONTARIO M1X 1G5
CANADA
Product Name: PREMIER™

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Structural
- Durability
- Surface-burning characteristics

2.0 USES

Latitudes® Solid and Latitudes® Slotted (both known as Veranda®), and Premier™ wood plastic composite deck boards evaluated in this report are limited to exterior use as deck boards for balconies, porches, stair treads, and decks of buildings of Type V-B (IBC) construction and dwellings constructed in accordance with the IRC and IBC.

3.0 DESCRIPTION

3.1 General:

Latitudes® Solid and Latitudes® Slotted (both known as Veranda®), and Premier™ products described in this report are wood thermoplastic composite lumber (WTCL) consisting of a minimum of 50 percent wood flour and a maximum of 50

percent high-density polyethylene and other processing additives. Latitudes® is manufactured by an extrusion process in accordance with the approved quality assurance manual in four colors (redwood, cedar, gray and walnut). Latitudes® is also known by the product names Veranda® and Premier™. Figure 1 provides dimensioned cross-sectional profiles of each board type.

The Equator® Hidden Fastener System consists of a plastic clip made of polypropylene copolymer and No. 8 by 2½-inch-long (64 mm) square drive stainless steel screws with 0.22-inch (5.6 mm) head diameters. The Equator® Hidden Fastener System is designed specifically for attachment of Latitudes® Slotted deck boards. See Figure 2.

3.2 Deck Boards:

Latitudes® Solid and Latitudes® Slotted (both known as Veranda®), and Premier™ are manufactured in three different sizes ranging from 0.9 inch by 5.2 inches (22.9 mm by 132.1 mm) to 1.0 inch by 5.4 inches (25.4 mm by 137.2 mm). The three sizes are all solid boards, with Latitudes® Slotted having two keyhole slot openings of 0.15 inch by 0.38 inch (3.8 by 9.7 mm) on each board edge to allow for fastener attachments.

3.3 Durability:

When subjected to weathering, insect attack, and other decaying elements, the material used to manufacture the deck board products is equivalent in durability to preservative-treated or naturally durable lumber when used in locations described in Section 2.0 of this report. The deck boards have been evaluated for use within a temperature range of -20°F to 125°F (-29°C to 52°C).

3.4 Surface-burning Characteristics:

When tested in accordance with ASTM E 84, the deck board products have a flame-spread index no greater than 200.

4.0 DESIGN AND INSTALLATION

4.1 General:

Installation of deck boards must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation. When the manufacturer's published installation instructions differ from this report, this report governs.

4.2 Deck Boards:

4.2.1 Structural: Latitudes® Solid and Latitudes® Slotted (both known as Veranda®), and Premier™, when used as a deck board, have allowable capacity, when installed at a maximum center-to-center spacing of the supporting construction as prescribed in Table 1. A minimum of ¼ inch (6.4 mm) side gapping must be provided between the decking materials and any permanent structure or post.

*Revised April 2008

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4.2.2 Fasteners:

4.2.2.1 Latitudes® Solid and Veranda®, and Premier™:

The boards must be attached at each joist using two No. 9 by 2½-inch-long (64 mm) corrosion-resistant screws. The maximum allowable fastener head pull-through load is 303 lbf (1364 N) per fastener. Fasteners located within 1½ inch (38 mm) of board ends must be predrilled.

4.2.2.2 Latitudes® Slotted: The boards are attached at each joist using the Equator® Hidden Fastener and one No. 8 by 2½-inch-long (64 mm) stainless steel, square drive screw with 0.22-inch (5.6 mm) head diameter through the plastic clip. The fastener wings must remain level with the joist for the boards to fit correctly. The Latitudes® Slotted deck boards must be attached to the outside and inside edges of the deck with No. 8 by 2½-inch-long (64 mm) corrosion-resistant traditional screws at 16 inches on center. Fasteners located within 1½ inches (38 mm) of board ends must be predrilled. The Equator® Hidden Fasteners have allowable negative pressure of 80 psf (3830 Pa).

4.2.2.3 Deck Boards to Rim Joists: The boards must be attached to rim joist with one No. 8 or No. 9 by 2½-inch-long (64 mm) corrosion-resistant screw spaced at 16 inches (406 mm) on center.

4.3 Deck Boards Used as Stair Treads:

Latitudes® Solid, Latitudes® Slotted and Premier™, when used as stair treads, are satisfactory to resist the code-prescribed concentrated load of 300 lbf (1.33 kN) when installed at a maximum center-to-center spacing of the supporting construction as shown in Table 2 of this report.

5.0 CONDITIONS OF USE

The Latitudes® Solid, Latitudes® Slotted and Premier™ wood plastic composite deck boards described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 These products are limited to exterior use as a deck board for balconies, porches, stair treads, and decks of buildings of Type V-B (IBC) construction and dwellings constructed in accordance with the IRC.
- 5.2 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. Only those fasteners and fastener configurations described in this report have been evaluated for the installation of Solid, Latitudes® Slotted, Veranda® and Premier™. In the event of conflict between this report and the manufacturer's published installation instructions, this report governs.

- 5.3 The use of deck boards as a component of a fire-resistance-rated assembly is outside the scope of this report.
- 5.4 The compatibility of the fasteners with the supporting construction, including chemically treated wood, is outside the scope of this report.
- 5.5 Adjustment factors outlined in the AF&PA *National Design Standard* and applicable codes must not apply to the allowable capacity and maximum spans for Latitudes® Solid and Latitudes® Slotted.
- 5.6 Latitudes® Solid, Latitudes® Slotted and Premier™ deck boards must be directly fastened to supporting construction. Where required by the code official, engineering calculations and construction documents consistent with this report must be submitted for approval. The calculations must verify that the supporting construction complies with the applicable building code requirements and is adequate to resist the loads imparted upon it by the products and systems discussed in this report. The documents must contain details of the attachment to the supporting structure consistent with the requirements of this report. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.7 Latitudes® Solid and Latitudes® Slotted (both known as Veranda®) are produced by UFP Ventures II in Prairie du Chien, Wisconsin, under a quality control program with inspections by PFS Corporation (AA-652).
- 5.8 Premier™ is produced by UFP Ventures II in Prairie du Chien, Wisconsin, for Composatron Manufacturing Inc., under a quality control program with inspections by PFS Corporation (AA-652).

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) (AC174), dated February 2007.

7.0 IDENTIFICATION

The Latitudes® Solid, Latitudes® Slotted and Premier™ deck boards described in this report must be identified by a stamp on each individual piece bearing the manufacturer's name (UFP Ventures II, Inc.) or the company name, the product name, the name of the inspection agency (PFS Corporation) and the ICC-ES evaluation report number (ESR-1573).

TABLE 1—DECK BOARD SPAN RATINGS

| DECK BOARD | MAXIMUM SPAN (in) ¹ | ALLOWABLE CAPACITY (lbf/ft ²) ² |
|---|--------------------------------|--|
| Latitudes [®] Solid, Premier™ (at 90° to supporting joist) | 16 | 100 |
| Latitudes [®] Solid, Premier™ (at 45° to supporting joist) | 12 | 100 |
| Latitudes [®] Slotted (at 90° to supporting joist) | 16 | 100 |
| Latitudes [®] Slotted (at 45° to supporting joist) | 12 | 100 |

For **SI**: 1 inch = 25.4 mm; 1 lbf/ft² = 47.9 Pa.

¹Maximum span is measured center-to-center perpendicular, of the supporting construction.

²Maximum allowable capacity is adjusted for durability. No further increases are permitted.

TABLE 2—MAXIMUM STAIR TREAD SPANS

| PRODUCT | MAXIMUM SPAN (in) ¹ |
|--|--------------------------------|
| Latitudes [®] Slotted, Latitudes [®] Solid, Premier™ (at 90° to supporting stringer) | 8 ² |
| Latitudes [®] Slotted, Latitudes [®] Solid, Premier™ (at 90° to supporting stringer) | 12 ³ |

For **SI**: 1 inch = 25.4 mm; 1 lbf/ft² = 47.9 Pa.

¹Maximum span is measured center-to-center perpendicular, of the supporting construction.

²For use as a stair tread with a one-span condition.

³For use as a stair tread with a two-span condition.

TABLE 3—DECK BOARD PRODUCT NAME BASED ON COMPANY NAME

| COMPANY NAME | PRODUCT NAME |
|---------------------------------|--|
| UFP Ventures II, Inc. | Latitudes [®] Slotted, Latitudes [®] Solid, Veranda [®] |
| Composatron Manufacturing, Inc. | Premier™ |

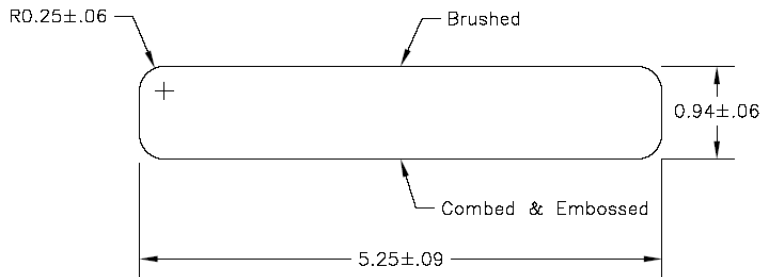
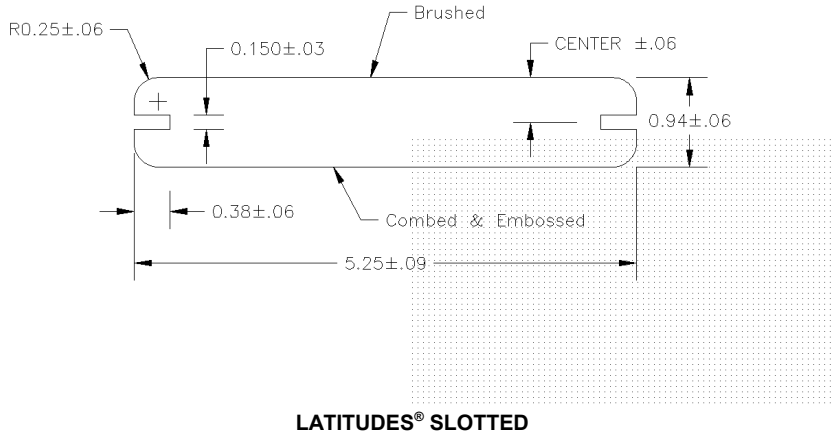
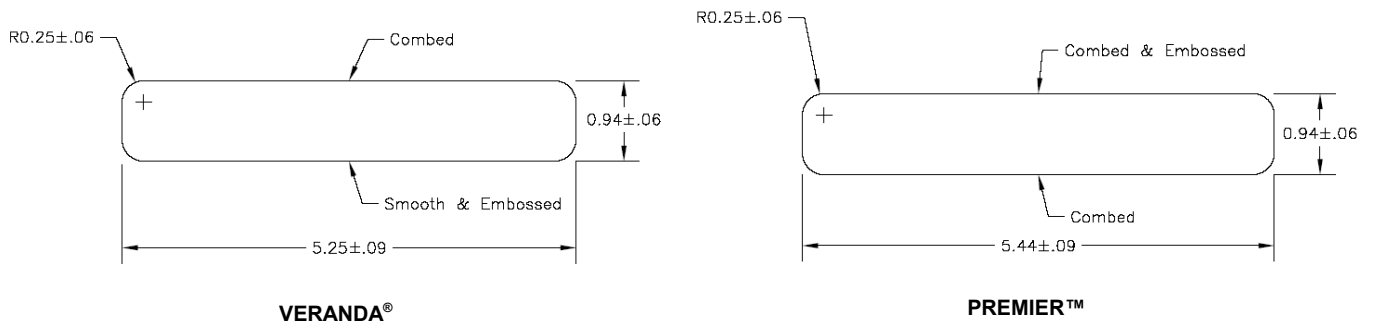


FIGURE 1—LATITUDES® SOLID

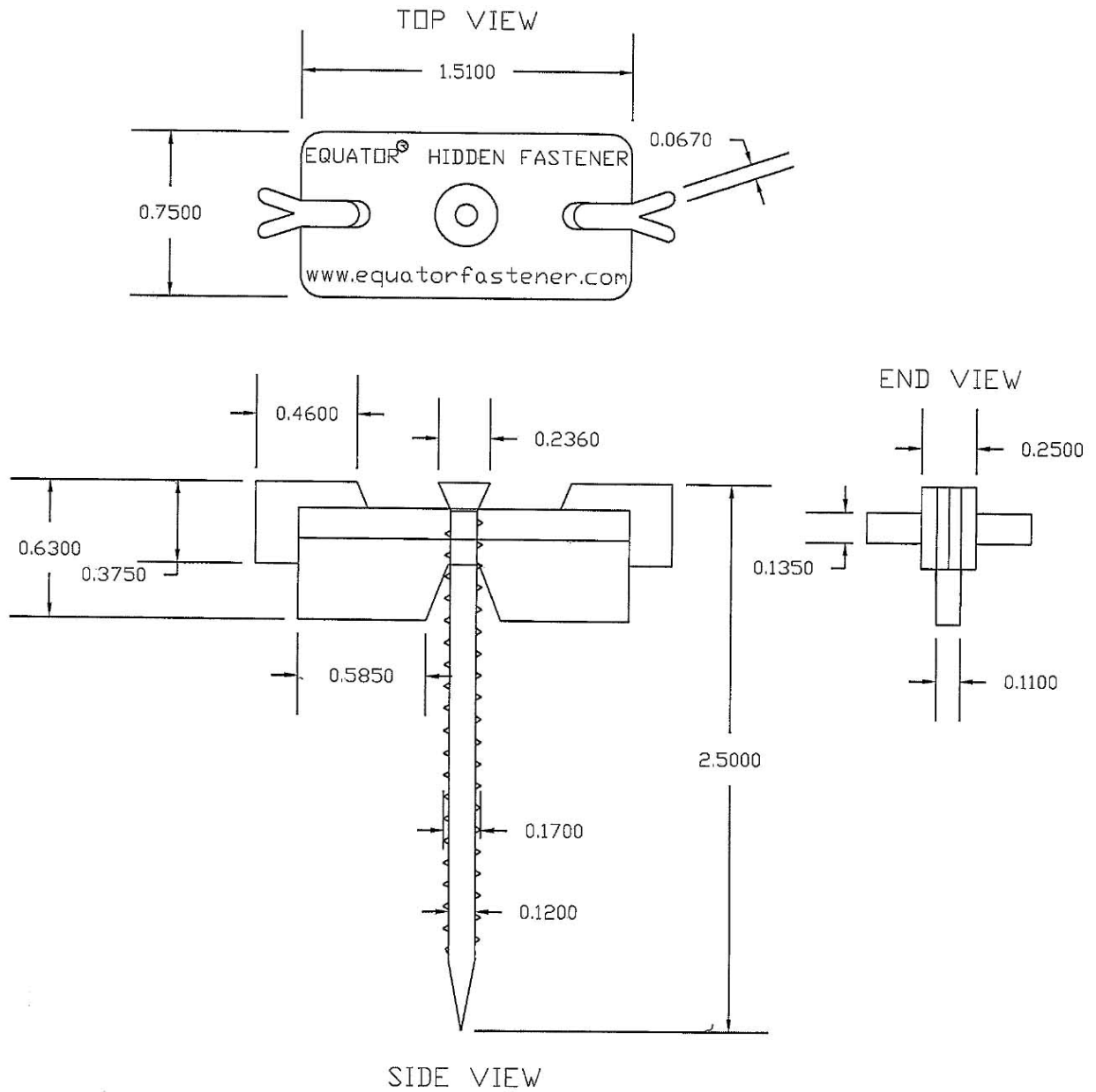


FIGURE 2—EQUATOR[®] HIDDEN FASTENER SYSTEM