

**Building Product Evaluation Report 0123** 

# **Barrette Outdoor Living® Deck Boards**

Initial Acceptance: May 20, 2019

Expiration: May 19, 2024

Revision: November 21, 2022

 TYPE OF ACCEPTANCE
 Product Material – Wood and Plastics

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

MANUFACTURER IDENTIFICATION:

Barrette Outdoor Living 8 Morin Street Biddeford, ME 04005 1-800-866-8101 www.barretteoutdoorliving.com

**EVALUATION REPORT SUBJECT:** Barrette Outdoor Living Deck Boards and Stair Treads for Exterior Applications Installation on construction complying with the International Residential Code<sup>®</sup> (IRC<sup>®</sup>) or with the International Building Code<sup>®</sup> (IBC<sup>®</sup>).

# **DESCRIPTION OF BUILDING COMPONENTS:**

# A. Deck Boards

**Barrette Outdoor Living** deck boards are thermoplastic composite products consisting of plastic (polypropylene (PP)), filler (wood fiber/sawdust) plus additives and color. The product specifications are listed in the approved quality control manual. The **Barrette Outdoor Living** deck boards are manufactured in several colors by the co-extrusion process and have capping covering three (3) or four (4) sides of the deck boards. The **Barrette Outdoor Living** deck boards can be used as stair treads as described in B-1(c) and Table 1, in this Report.

- 1. Deck Boards: Solid
  - (a) The *Siesta*<sup>™</sup> *Non-Grooved* deck board is rectangular in shape, has rounded edges, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
  - (b) The Siesta Grooved deck board is rectangular in shape, has rounded edges, has grooves on the sides of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
  - (c) The *Siesta Starter* deck board is rectangular in shape, has rounded edges, has a groove on one side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
  - (d) The *MVP*<sup>™</sup> *Grooved* deck board is rectangular in shape, has rounded edges, has four (4) lobes on the bottom of the board, has grooves on the side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
  - (e) The **Dock Board** deck board is rectangular in shape, has rounded edges, is completely solid and has PP capstock on four (4) sides of the deck board. See attached drawing in Table 1.



- (f) The *Arched Double* deck board is rectangular in shape, has rounded edges, has five (5) lobes on the bottom of the board, has a groove on each side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
- (g) The *Arched Starter* deck board is rectangular in shape, has rounded edges, has two (2) lobes on the bottom of the board, has a groove on one side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
- (h) The Veranda deck board is rectangular in shape, has rounded edges, has three (3) lobes on the bottom of the board, has a groove on each side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
- (i) The *MVP Plus* deck board is rectangular in shape, has rounded edges, has four (4) lobes on the bottom of the board, has grooves on the side of the board, is completely solid and has PP cap stock on three (3) sides of the deck board. See attached drawing in Table 1.
- 2. Barrette Outdoor Living deck boards must be installed in accordance with this report and as indicated in the manufacturer's published installation instructions dated October 1, 2017. Also, see Limitations of Acceptance 2.

## APPLICABLE CODES:

- 2012, 2015 2018, and 2021 International Building Code (IBC)
- 2012, 2015, 2018, and 2021 International Residential Code (IRC)

## APPLICABLE CHARACTERISTICS REVIEWED:

- **B.** Deck Board(s) See Section A 1(a) -(g) above for the identification and description 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 manufacturers' installation instructions and Table 1 in this Report. Note - not all deck boards can be used as stair treads.

#### 2. Deck Board: Fastening

- (a) Deck Boards, non-grooved and with side grooves, must be fastened to the structural supporting members 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.
- (b) 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) The flame spread rating for the deck boards described in this Report was less than 200 when tested in accordance with 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 Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and Handrails* 

## APPLICABLE USES:

The **Barrette Outdoor Living** deck boards evaluated in this Report are limited to exterior applications for balconies, porches, stair treads, walking surfaces, and decks.

# LIMITATIONS OF ACCEPTANCE:

The **Barrette Outdoor Living** 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 board products must be limited to Type V-B (IBC) and residential construction in accordance with the IRC for exterior use as a deck board for balconies, porches, decks, walking surfaces, and stair treads.
- 2. Installation of the deck boards must comply with this Report, the manufacturer's published installation instructions (see Section A-2 in this Report), and the Applicable Codes. 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 **Barrette Outdoor Living** deck boards. The compatibility of the fasteners to treated supporting construction has not been evaluated.
- 4. The *Barrette Outdoor Living* deck boards indicated in the Report must be fastened to the supporting construction with the manufacturer's provided fasteners 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 Barrette Outdoor Living deck boards have not been evaluated as a member of a fire-resistance-rated assembly.
- 7. The structural design for code compliance of supporting members for the deck boards has not been evaluated and is not part of this Report.
- 8. Barrette Outdoor Living has a Third-Party inspection program provided by PFS TECO.

#### 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 ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) and ASTM D7032, Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and Handrails.

# PRODUCT IDENTIFICATION:

The Barrette Outdoor Living deck boards evaluated in this Report must be identified with a label, stamp, or laser imprint on every deck board or on the packaging. The required information is as follows: Barrette Outdoor Living, product identification (*Barrette Outdoor Living* and *Product Name – Siesta, MVP, Arched, Veranda, or Dock Board*), 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 0123), and PFS Certification Mark for use in the United States (see image below). Deck boards without this information are not covered under this Report.





Page 4 of 5

Product Trade Name	Deck Board Profile	Shape	Maximum Span Rating (in/psf) with Deck Board Orientation to Support Joists 90° 45°		osf) with bard Fastening on to Schedule <sup>1</sup> and loists Uplift Values	
Siesta Non- Grooved	-5.500	Solid Edge	16 / 100	16 / 100	387 psf with two #8 x 2-1/2" SS Trim Head Deck Screws at each joist	12
Siesta Grooved	5.500	Grooved Edge	16 / 100	16 / 100	93 psf with Fastenator™ Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	- n/a -
Siesta Starter	5 500 0.910 1+ 5 220	Starter	16 / 100	16 / 100	93 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	12
MVP Grooved	5.500	Grooved Edge	16 / 100	12 / 100	79 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	8
Dock Board	5.500	Solid Edge	24 / 100	16 / 100	198 psf with two #8 2-1/2" SS Trim Head Deck Screws at each joist	16
Arched Double	5.50 .91 .91	Grooved Edge	16 / 100	12 / 100	79 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	- n/a -
Arched Starter	5.500	Starter	16 / 100	12 / 100	79 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	12
Veranda		Grooved Edge	16 / 100	12 / 100	79 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	- n/a -

Table 1: Span Table and Fastening Schedule for Barret	te Outdoor Living Deck Boards



Page 5 of 5

MVP Plus	5.50 0.91	Grooved Edge	16 / 100	12 / 100	79 psf with Fastenator Clip and 69 psf with Step-Clip <sup>®</sup> at each joist	8
----------	--------------	-----------------	----------	----------	--	---

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

<sup>1</sup> Deck boards installed with Fastenator<sup>™</sup> or Step-Clip<sup>®</sup> hidden fastener system are attached to each joist with a fastener as per Barrette's installation instructions. Fastenator clips are installed with #7 2-1/2 SS screws. Step-Clip strips are installed on each joist with a 1-1/4" SS or hot dipped galvanized ring shank roofing nail using 2 nails between each set of clips located within 3/4" in from each clip. Deck boards with solid edge must be attached to each joist with 2 #8 x 2-1/2-in. composite decking screws. Deck boards installed as stair tread must be fastened with two #8 2-1/2" SS trim head deck screws on each stringer.

The joist to which the deck boards are attached must have a minimum specific gravity of 0.50 or higher, or the fastening must be designed. Deck boards and stair treads must be installed over at least two (2) spans. Stair treads must be installed perpendicular to supporting members.

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

Fastenator clip with #7 2-1/4" SS screw



Step-Clip with 1-1/4" SS roofing nail

