

Pei Evaluation Service is an accredited ISO Standard 17065 Product Certifier, accredited by the IAS. This **Product Evaluation Report** represents a product that **Pei ES** has Evaluated and this product has a Follow-up Service / Inspection Agreement. This **Product Evaluation Report** in no way implies warranty for this product or relieves **Boral Composites Inc.** of their liabilities for this product. This **PER** is an official document if it is within one year of the initial or re-approved date.

Initial Approval
April, 2015

Re-Approved
April, 2017

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Report Owner

Boral Composites Inc.
200 Mansell Court East, Suite 310
Roswell, GA 30076

Approved Manufacturing Location

Boral Composites Inc.
500 Correll Street
East Spencer, NC 28039

Products

Boral TruExterior® Trim
Boral TruExterior® Beadboard

For Evaluation Report Questions

www.boralamerica.com
Boral Contact: Guy Crocco - 210-332-8394

General Details

Boral TruExterior Trim and Beadboard is manufactured in East Spencer, North Carolina. The manufacturing facility has an approved Quality Control Manual for the manufacture of this product. **Boral Composites Inc.** has an Evaluation Agreement with **Pei Evaluation Service (Pei ES)** and an Inspection Agreement with **Progressive Engineering Inc. (Pei)** and is audited periodically by **Pei**.

Product Description

Boral TruExterior Trim and Beadboard are manufactured from a proprietary polymeric blend, fly ash, and glass fibers. These materials are formed in a continuous process, cut to lengths of 8ft to 20ft, and for beadboard, milled to give a surface texture. The trim and beadboard are then coated with a primer. This product has been tested to ASTM E84 with a Flame Index of less than 40 and a Smoke Developed Index of less than 450. **Boral TruExterior Trim** may be used in non-structural exterior trim applications (i.e. corners, door trim, etc.). **Boral TruExterior Beadboard** may be used in non-structural exterior applications such as soffits.

General Product Use

1. **Boral TruExterior Trim and Beadboard** must be installed on braced wood stud construction in accordance with the manufacturer's installation instructions.
2. This Product Evaluation Report (**PER**) does not address the capacity of the framing members, framing connections, structural and non-structural sheathing connections, or overall wall load carrying capacity. These items are outside the scope of this **PER** and fall under the responsibility of the registered design professional.
3. Product should be cut using a standard carbide tipped saw blade.
4. The Trim and Beadboard material can be drilled and routed using standard woodworking tools. Carbide tipped bits are recommended for use on this product.
5. **Painting of the installed Trim and Beadboard material is required.** Failure to do so will void the warranty from the manufacturer.
6. A water-resistant barrier conforming to 2012 and 2015 IRC Section R703.2 shall be installed behind the exterior trim to prevent the accumulation of water within the wall assembly.

Building Code and Standard Compliance

<p>2012 International Residential Code Section R104.11 Section R703.1.1 Section R703.2</p>	<p>2012 International Building Code Section 1403.2 Section 1404.1 Section 1404.2 Section 1405.17</p>
<p>2015 International Residential Code Section R104.11 Section R703.1.1 Section R703.2</p>	<p>2015 International Building Code Section 1403.2 Section 1404.1 Section 1404.2 Section 1405.17</p>

Surface Burning Characteristics - Flame Spread less than 40 / Smoke Development less than 450 when tested in accordance with ASTM E84-09 (2012 IBC/IRC) and ASTM E 84-2013A (2015 IBC/IRC)

Storage and Handling

Each **Boral TruExterior Trim and Beadboard** is manufactured with a factory applied water based primer. The product is placed on pallets, which are shipped from the manufacturing facility in a protective covering. The covering contains labels showing date of manufacture and nominal product dimensions. Care shall be taken to keep the product covered until installed. Product shall be stored on a flat, level surface. Storing the material off the ground, being supported properly underneath, and covered will help keep the product free of dirt and debris.

Trim Dimensions

Table 1a - TruExterior Trim Size Chart

5/8 Nominal Thickness		4/4 Nominal Thickness		5/4 Nominal Thickness		2" Nominal Thickness	
Nominal Size	Actual Size	Nominal Size	Actual Size	Nominal Size	Actual Size	Nominal Size	Actual Size
5/8 x 2	5/8" x 1 1/2"	1 x 2	3/4" x 1 1/2"	5/4 x 2	1" x 1 1/2"	2 x 2	1 1/2" x 1 1/2"
--	--	1 x 3	3/4" x 2 1/2"	5/4 x 3	1" x 2 1/2"	--	--
5/8 x 4	5/8" x 3 1/2"	1 x 4	3/4" x 3 1/2"	5/4 x 4	1" x 3 1/2"	2 x 4	1 1/2" x 3 1/2"
--	--	1 x 5	3/4" x 4 1/2"	5/4 x 5	1" x 4 1/2"	--	--
5/8 x 6	5/8" x 5 1/2"	1 x 6	3/4" x 5 1/2"	5/4 x 6	1" x 5 1/2"	2 x 6	1 1/2" x 5 1/2"
5/8 x 8	5/8" x 7 1/4"	1 x 8	3/4" x 7 1/4"	5/4 x 8	1" x 7 1/4"	2 x 8	1 1/2" x 7 1/4"
5/8 x 10	5/8" x 9 1/4"	1 x 10	3/4" x 9 1/4"	5/4 x 10	1" x 9 1/4"	2 x 10	1 1/2" x 9 1/4"
5/8 x 12	5/8" x 11 1/4"	1 x 12	3/4" x 11 1/4"	5/4 x 12	1" x 11 1/4"	2 x 12	1 1/2" x 11 1/4"

Table 1b - TruExterior Trim Skirt Board Size Chart

Nominal Size	Actual Size
1 x 6	3/4" x 5 1/2"
1 x 8	3/4" x 7 1/4"
5/4 x 6	1" x 5 1/2"
5/4 x 8	1" x 7 1/4"

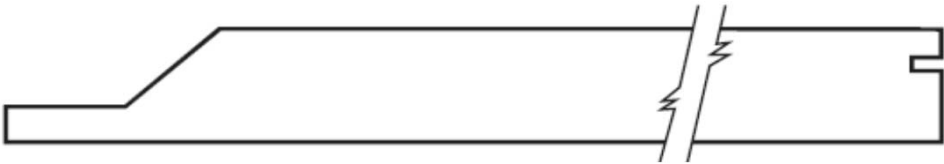


Figure 1: TruExterior Trim Skirt Board General Profile

Beadboard Dimensions

Table 2 - TruExterior Beadboard Size Chart

Nominal Size	Actual Size
5/8 x 4	5/8" x 3 1/2"
5/8 x 6	5/8" x 5 1/4"
5/8 x 4 Double	5/8" x 6 3/4"
5/8 x 6 Double	5/8" x 10 1/4"

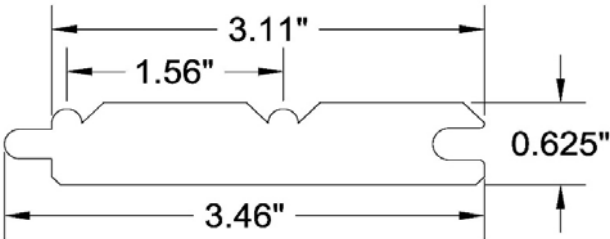


Figure 2a: TruExterior Beadboard 5/8 x 4 Profile

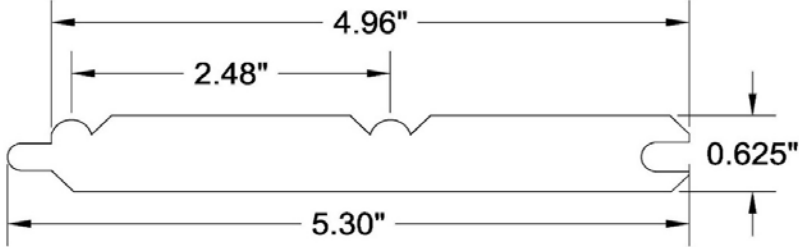


Figure 2b: TruExterior Beadboard 5/8 x 6 Profile

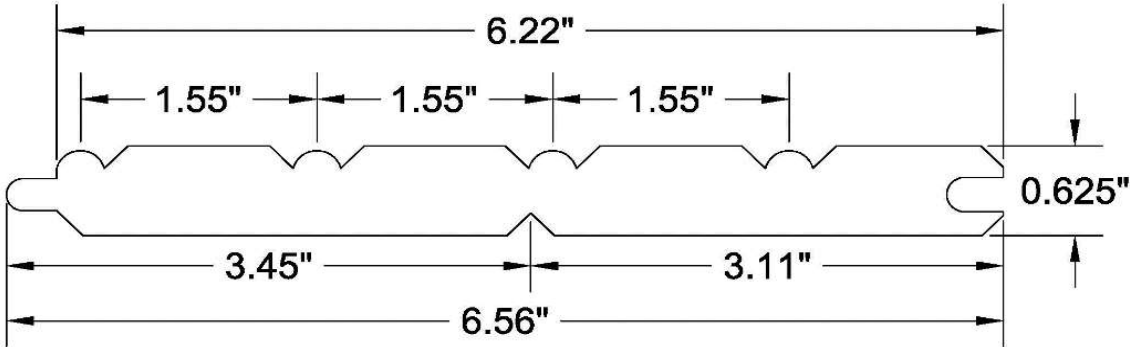


Figure 2c: TruExterior Beadboard 5/8 x 4 Double Profile

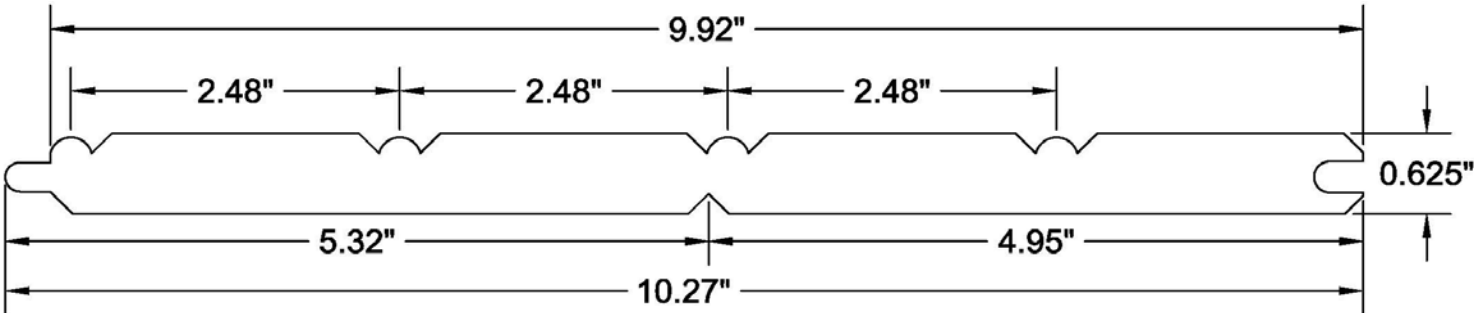


Figure 2d: TruExterior Beadboard 5/8 x 6 Double Profile

Beadboard as Exterior Siding

Table 3 - TruExterior Beadboard Allowable Design Pressures¹

Fastener Description ⁴	Wood Framing w/ 7/16" OSB Sheathing	Beadboard Nominal Width			
		4-inch ⁽²⁾	6-inch ⁽³⁾	4" Double	6" Double
16ga x 2" Galvanized Straight Finish Nails Average Head Size = 0.110" x 0.064"	12" o.c.	51.1 psf	51.1 psf	--	--
	16" o.c.	38.4 psf	38.4 psf	--	--
	24" o.c.	25.6 psf	25.6 psf	--	--

Notes:

1. Framing of SPF with a minimum Specific Gravity of 0.42.
2. Allowable pressure for 4-inch nominal width may be taken as equivalent to values tested and/or calculated for 6-inch nominal width.
3. Allowable pressure for 6-inch nominal width and wood framing of 12" o.c. and 24" o.c. based on engineering analysis of test results. The 16" o.c. framing results are based upon actual testing.
4. All fasteners were installed at approximately a 45-degree angle. Use Paslode part number 650536 (or equivalent) fasteners.

Product Labeling

Each pallet shipped of **Boral TruExterior® Trim and Beadboard**, that is covered by this **PER**, must have a label attached with at least the following information:

1. **Boral Composites Inc.** Name
2. Date of Manufacture
3. This **PER** Number & *Pei* **ES** Logo
4. Product Name

Acceptable Evaluation Marks



Product Documentation

- A **BCI** Quality Control Manual - Dated: March 7, 2017
- An Evaluation and Follow-Up Service Agreement between *Pei Evaluation Service* and **Boral Composites Inc.**
- An Inspection Agreement between *Progressive Engineering Inc.* and **Boral Composites Inc.**
- Boral TruExterior Trim - Installation Guidelines
- A SDS for Boral TruExterior® Trim, Beadboard and TruExterior® Siding - Dated: May 29, 2015
- Test report No. 102304409SAT-001A - ASTM E84 - Dated: September, 2015
- Test report No. 41621912312013: - Evaluation of Boral TruExterior Siding - AC389 - Dated: December, 2013
- Pei* Test Report No. 2015-1899 (A) - ASTM E330 Negative Wind Load Test on 5/8" TruExterior® Beadboard (6") Siding Blind-Nailed at 16" o.c. over 16" o.c. Lumber Framing with 7/16" OSB - Dated: December, 2015
- Pei* Calculations Project No. 2016-0410 - Beadboard & Nickel-Gap Wind Calculations - Dated: February, 2016
- A **Boral Composites Inc.** Affidavit Letter - Dated: January, 2016

Pictures



Figure 3 - Boral TruExterior® Trim



Figure 4 - Boral TruExterior® Beadboard



Figure 5 - Boral TruExterior® Trim Skirt Board