Code Compliance Research Report
CCRR-0300

Issue Date: 09-29-2020
Renewal Date: 11-30-2020

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 46 00 – Siding

REPORT HOLDER:
Boral Building Products
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REPORT SUBJECT:
Boral TruExterior® Siding

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2018 *International Building Code®* (IBC)
- 2018 *International Residential Code®* (IRC)
- 2020 *Florida Building Code* (FBC), excluding High Velocity Hurricane Zone (HVHZ) (see Section 9)
- 2019 *California Building Code* (CBC), including Wildland Urban Interface (WUI) (See Section 9)

NOTE: This report references 2018 Code sections with FBC and CBC code sections shown in brackets where they differ.

1.2 *Boral TruExterior®* products have been evaluated for the following properties:

- Durability
- Physical Properties
- Surface Burning
- Wind Load Resistance

1.3 *Boral TruExterior®* products have been evaluated for the use as an exterior wall cladding on buildings of Type V-B construction under the IBC, FBC and CBC, and construction permitted under the IRC, FBC-R, CRC.

2.0 STATEMENT OF COMPLIANCE

Boral TruExterior® products comply 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

Boral TruExterior® products are composite exterior wall coverings, composed of a blend of a proprietary polymer, fly ash and glass fiber. The siding products are provided in six cross-sections (Channel, Channel Bevel, Cove/Dutch Lap, Nickelgap Shiplap, Shiplap, V-Rustic) in nominal dimensions of 1x6, 1x8, and 1x10. See Figures 1 through 6 for actual dimensions.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Allowable wind loads are given in Table 2.

4.2 *Boral TruExterior®* products have a flame spread index not exceeding 200 when tested in accordance with ASTM E84.

5.0 INSTALLATION

5.1 General:

Boral TruExterior® products 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 *Boral TruExterior®* products shall be installed over an approved structural wood sheathing complying with Section 2303.1.5 of the IBC, FBC, and CBC.

5.3 Sheathing must be covered by an approved water-resistive barrier in accordance with Section 1404.2 of the IBC, FBC, CBC, and Section R703.1.1 of the IRC, FBC-R, and CRC, and provide a means for draining water that enters the assembly to the exterior.

5.4 Flashing shall be installed in accordance with Section 1404.4 of the IBC [FBC 1405.4], and Section R703.4 of the IRC, FBC-R and CRC.

5.5 Protection against condensation shall be provided in accordance with Section 1405.3 of the IBC, FBC, and CBC.

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 between the manufacturer's instructions and this report, this report governs.

6.2 *Boral TruExterior®* products are limited to use on exterior walls on buildings permitted to be of combustible, nonfire-resistance-rated construction (Type V-B) under the IBC, FBC, and CBC and non-fire-resistance-rated construction permitted under the IRC, FBC-R, and CRC.

6.3 The maximum allowable wind pressure for *Boral TruExterior®* products shall be determined from nominal design wind speeds (V_{asd}) in accordance with Chapter 16 of the IBC, FBC, CBC, and Section R301.2 of the IRC, FBC-R, CRC, and shall not exceed the allowable wind loads given in Table 2.

6.4 The exterior wall must be braced in accordance with the applicable code.

6.5 *Boral TruExterior®* products are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of testing in accordance with ICC-ES AC389, Acceptance Criteria for Composite Siding Containing Inorganic Microspheres and Proprietary Resins, Used as an Exterior Wall Cladding, approved October 2009, effective November 1, 2009.

7.2 Reports of evaluation and engineering analysis for allowable fastener capacities in accordance with NDS-2018 [2015], National Design Specification (NDS) for Wood Construction.

7.3 Reports of testing in accordance with ASTM E84-16 [2013A], Test Method for Surface Burning Characteristics of Building Materials.

7.4 Reports of testing demonstrating compliance with Materials and Construction Methods for Exterior Wildfire Exposure: Exterior Wall Siding and Sheathing, SFM Standard 12-7A-1.

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

8.0 IDENTIFICATION

The *Boral TruExterior®* products produced in accordance with this report shall be identified with labeling that includes the name of manufacturer, the Intertek Mark, and the Code Compliance Research Report number (CCRR-0300) as shown:

CODE COMPLIANCE
Intertek
CCRR-0300

9.0 OTHER CODES

9.1 FLORIDA BUILDING CODE

9.1.1 Scope of Evaluation:

The *Boral TruExterior®* products were evaluated for compliance with the Florida Building Code – Building and Florida Building Code – Residential.

9.1.2 Conclusion:

The *Boral TruExterior®* products described in Sections 2.0 through 7.0 of this Research Report, comply with the *Florida Building Code – Building* and *Florida Building Code – Residential* under the following provisions:

- Use of the *Boral TruExterior®* products for compliance with the High-Velocity Hurricane Zone provisions of the 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 an approved *evaluation entity* and *quality assurance entity* pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*.

9.2 CALIFORNIA BUILDING CODE

9.2.1 Scope of Evaluation:

The *Boral TruExterior®* products were evaluated for use as an exterior wall covering in accordance with CBC Chapter 14 and comply with CBC Section 707A.3 and CRC Section R337.7.3.

9.2.2 Conclusion:

The *Boral TruExterior®* products, described in Sections 2.0 through 7.0 of this report, comply with the 2019 CBC, subject to the conditions noted in Section 6.0 of this report.

- The *Boral TruExterior® Siding* Channel Bevel, V-Rustic, Cove/Dutch, Shiplap, and Channel Shiplap comply with the provisions of CBC Section 707A.3 and CRC Section R337.7.3. The *Boral TruExterior® Siding* must be installed on steel or wood framing, spaced 16 inches o.c., sheathed with 7/16-inch-thick oriented-strand board (OSB) of Exposure 1 rating.

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 – Properties Evaluated

Property	2018 IBC	2018 IRC	2017 FBC - Building	2017 FBC - Residential	2019 CBC	2019 CRC
Exterior Wall Performance Requirements	1402	R703.1	1403	R703.1	1402	R703.1
Materials	104.11 1403	R104.11 R703	104.11 1403	R703	104.11 1403	R104.11 R703
Weather Protection	1404.2	R703	1403.2	R703	1404.2	R703
Wind Load Resistance	1609	R703.1.2	1609	R703.1.2	1609	R703.1.2
Wildland Urban Interface	NA	NA	NA	NA	704A.2	R337.7.3

Table 2 – Allowable Wind Pressure Summary
for *TruExterior® Siding* Channel, Channel Bevel, Cove/Dutch Lap, Nickel Gap Shiplap, Shiplap and V Rustic[(1)]

Fastener	Fastener Penetration[(2)]	Allowable Wind Pressure (psf)			
		Fastener Spacing[(3)]	1x6 inch	1x8 inch	1x10 inch
PrimeGuard Max 8d Stainless Steel Ring Shank 2.5 inch x 0.094 inch (0.208 inch head dia.) nails	1.20 inch	16”	132.0	96.8	76.4
		24”	87.9	64.5	50.9
Maze 8d hot dipped galvanized Ring Shank 2.5 inch x 0.113 inch (0.286 inch head dia.) nails	1.20 inch	16”	132.0	96.8	76.4
		24”	87.9	64.5	50.9
Maze 6d hot dipped galvanized Ring Shank 2.0 inch x 0.113 inch (0.285 inch head dia.) nails	0.75 inch	16”	70.0	51.3	40.5
		24”	46.6	34.2	27.0
	1.25 inch	16”	116.8	85.6	67.6
		24”	77.9	57.1	45.1

(1) Allowable wind loads are applicable to wind design pressure derived from nominal wind speed (V_{asd}) per Section 1609.3.1 of the IBC, FBC, and CBC.
(2) Installation is with one fastener in the tongue and one through the face.
(3) Each fastener penetrating wood framing having a minimum specific gravity of 0.42 (i.e., SPF).

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Channel (D)	Tongue (E)
1 x 6	0.6875"	5.50"	5.0"	0.625"	0.50"
1 x 8	0.6875"	7.50"	7.0"	0.625"	0.50"
1 x 10	0.6875"	9.50"	9.0"	0.625"	0.50"

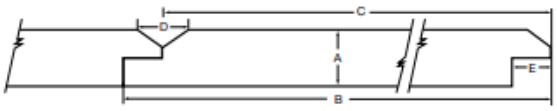

Figure 1 – TruExterior® V Rustic

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Tongue (D)
1 x 6	0.6875"	5.50"	4.969"	0.531"
1 x 8	0.6875"	7.25"	6.719"	0.531"
1 x 10	0.6875"	9.25"	8.719"	0.531"

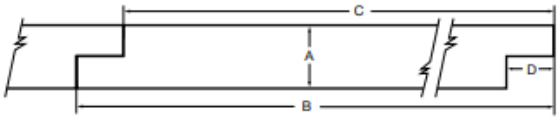

Figure 2 – TruExterior® Shiplap

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Channel (D)	Tongue (E)
1 x 6	0.6875"	5.50"	4.969"	0.969"	0.531"
1 x 8	0.6875"	7.25"	6.719"	0.969"	0.531"
1 x 10	0.6875"	9.25"	8.719"	0.969"	0.531"

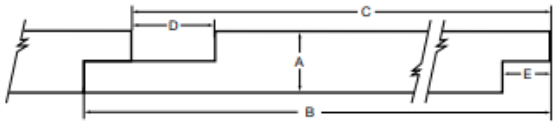

Figure 3 – TruExterior® Channel

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Channel (D)	Tongue (E)
1 x 6	0.6875"	5.50"	4.969"	1.469"	0.531"
1 x 8	0.6875"	7.25"	6.719"	1.469"	0.531"
1 x 10	0.6875"	9.25"	8.719"	1.469"	0.531"

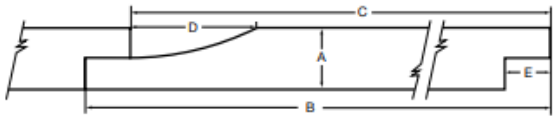

Figure 4 – TruExterior® Cove/Dutch Lap

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Channel (D)	Tongue (E)
1 x 6	0.6875"	5.50"	4.969"	1.469"	0.531"
1 x 8	0.6875"	7.50"	6.969"	1.469"	0.531"
1 x 10	0.6875"	9.50"	8.969"	1.469"	0.531"

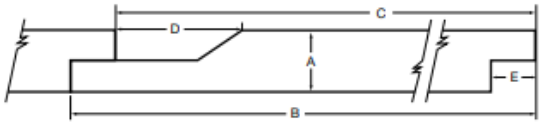

Figure 5 – TruExterior® Channel Bevel

Nominal Size	Actual Thickness (A)	Actual Width (B)	Actual Width (C)	Tongue (D)
1 x 6	0.6875"	5.50"	5.078125"	0.5"
1 x 8	0.6875"	7.25"	6.828125"	0.5"
1 x 10	0.6875"	9.25"	8.828125"	0.5"

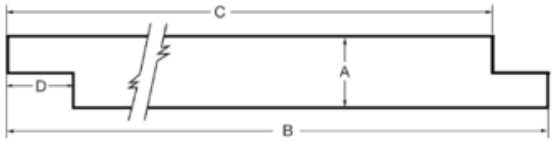

Figure 6 – TruExterior® Nickelgap Shiplap