

ICC-ES Evaluation Report



ESR-1074

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES

Section: 06 50 00—Structural Plastics

REPORT HOLDER:

CPG BUILDING PRODUCTS LLC

EVALUATION SUBJECT:

AZEK® TRIMBOARDS TRADITIONAL, AZEK® MILLWORK, AZEK TO MILL, AZEK® TRIMBOARDS FRONTIER SERIES, AZEK® SHEETS, AZEK® BEADBOARD, AZEK® CORNERBOARDS, AZEK® UNIVERSAL SKIRT BOARD, AZEK® FINISH GRADE TRIM, AZEK® INTEGRATED DRIP EDGE, AZEK® RABBETED CORNERBOARDS, AZEK® RABBETED TRIMBOARDS, AND AZEK COLUMN WRAP

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2015, 2012, 2009, 2006 and 2003 *International Building Code*® (IBC)
- 2015, 2012, 2009, 2006 and 2003 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Weather resistance
- Termite resistance
- Surface burning characteristics
- Structural—negative-transverse wind loads on soffits

1.2 Evaluation to the following green code(s) and/or standards:

- 2019 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2015, 2012 and 2008 ICC 700 *National Green Building Standard*™ (ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.0

2.0 USES

AZEK® Trimboards Traditional, AZEK® Millwork, AZEK to Mill, AZEK® Trimboards Frontier Series, AZEK® Sheets, AZEK® Beadboard, AZEK® Cornerboards, AZEK® Universal Skirt Board, AZEK® Finish Grade Trim, AZEK® Integrated Drip Edge, AZEK® Rabbeted Cornerboards, AZEK® Rabbeted Trimboards, and AZEK Column Wrap are used as nonload-bearing exterior trim.

3.0 DESCRIPTION

AZEK® Trimboards Traditional, AZEK® Millwork, AZEK to Mill, AZEK® Trimboards Frontier Series, AZEK® Sheets, AZEK® Beadboard, AZEK® Cornerboards, AZEK® Universal Skirt Board, AZEK® Finish Grade Trim, AZEK® Integrated Drip Edge, AZEK® Rabbeted Cornerboards, AZEK® Rabbeted Trimboards and AZEK Column Wrap are rigid cellular PVC solid cross sections installed as corner boards, soffits, fascias, column wraps, door pilasters, frieze boards, nonload-bearing rake boards, architectural millwork, door trim, and window trim.

The material is expanded rigid poly-vinyl-chloride material with a small-cell micro structure. AZEK® Trimboards Traditional are supplied with a smooth surface on both sides. AZEK® Millwork is machined from AZEK Trimboards using common woodworking equipment. AZEK Trimboards Frontier Series are supplied with a textured surface on one side and a smooth surface on the other. AZEK Trimboards Traditional and AZEK Trimboards Frontier Series are available in nominal widths of 4 inches to 16 inches and nominal thicknesses of $\frac{5}{8}$, $\frac{4}{4}$, $\frac{5}{4}$ and $\frac{6}{4}$ inches. AZEK Sheets are available in 4-foot (1.2 m) widths and in lengths of 8, 10, 12, 18 and 20 feet (2.4, 3.0, 3.6, 5.4 and 6.0 m), with actual thicknesses of, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ and $1\frac{1}{4}$ inches (9.5, 12.7, 15.0, 19.1, 25.4 and 31.75 mm). AZEK Beadboards are available in two nominal sizes, $\frac{1}{2}$ inch thick by 6 inches wide by 18 feet long and $\frac{5}{8}$ inch thick by 4 inches wide by 18 feet long. AZEK Cornerboards are available in nominal thicknesses of $\frac{6}{4}$ and $\frac{5}{4}$ inches, nominal outside-corner widths of 4 and 6 inches, and in lengths of 10 and 20 feet. AZEK® Universal Skirt Board is used to provide a transition between siding and trim, and is a two-piece product that consists of a routed AZEK Trimboard with a $1\frac{1}{2}$ -inch (33.75 mm) nailing flange and $\frac{1}{4}$ -inch (6.35 mm) drip edge overhang. The AZEK® Universal Skirt Board is available in a nominal thickness of $\frac{5}{4}$ inches, nominal widths of 6, 8 and 10 inches, and a length of 18 feet (5.4 m). AZEK® Integrated Drip Edge is used to assist in directing water

away from window and door surrounds and is a two-piece product that consists of a routed AZEK Trimboard with a 1¹/₄-inch (33.75 mm) nailing flange and 1¹/₈-inch (3.18 mm) drip edge overhang. The AZEK® Integrated Drip Edge is available in a nominal thickness of 5¹/₄ inches, nominal widths of 4 and 6 inches, and a length of 18 feet (5.4 m). AZEK® Finish Grade Trim is used to provide installation with hidden fasteners (a fastener-free trim surface) and is a two-piece product consisting of a base trim piece and a cover trim piece. AZEK® Finish Grade Trim is available in an installed nominal thickness of 6¹/₄ inches, nominal widths of 4 and 6 inches, and a length of 18 feet (5.4 m). AZEK® Rabbeted Cornerboards and Trimboards are produced with a 3³/₄-inch (19 mm) square removed from each edge. The AZEK® Rabbeted Cornerboards are available in a nominal thickness of 5¹/₄ inches, nominal widths of 4, 6 and 8 inches, and lengths of 10 and 20 feet (3 m and 6 m). AZEK® Rabbeted Trimboards are available in a nominal thickness of 5¹/₄ inches, nominal widths of 4, 6 and 8 inches, and a length of 18 feet (5.4 m). AZEK Column Wrap consists of three connected panels and a fourth locking panel that secures the Column Wrap in place. AZEK Column Wrap is 1¹/₂ inch thick and has actual outside dimensions of 4³/₄ inches, 6³/₄ inches, or 8³/₄ inches, and is installed around a nominal 4-by-4, 6-by-6 or 8-by-8 wood column or post. AZEK Column Wrap is available in 10-foot lengths.

All AZEK products covered under this evaluation report, up to a maximum nominal thickness of 6¹/₄ inches, and AZEK® Finish Grade Trim at a maximum nominal installed thickness of 6¹/₄ inches, have a flame-spread index of less than 25 when tested in accordance with ASTM E84.

The attributes of the AZEK products have been verified as conforming to the requirements of (i) CALGreen Section A4.405.1.1 for prefinished building materials and Section A5.406.1.2 for reduced maintenance; (ii) ICC 700-2015 and ICC 700-2012 Sections 602.1.6 and 11.602.1.6 for termite-resistant materials and Sections 601.7, 11.601.7, and 12.1(A).601.7 for site-applied finishing materials; and (iii) ICC 700-2008 Section 602.8 for termite-resistant materials and Section 601.7 for site-applied finishing materials. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

4.0 INSTALLATION

4.1 General:

AZEK Trimboards Traditional, AZEK® Millwork, AZEK to Mill, AZEK® Trimboards Frontier Series, AZEK® Sheets, AZEK® Beadboard, AZEK® Cornerboards AZEK® Universal Skirt Board, AZEK® Finish Grade Trim, AZEK® Integrated Drip, AZEK® Rabbeted Cornerboards, AZEK® Rabbeted Trimboards and AZEK Column Wrap must be installed in accordance with the manufacturer's published installation instructions and this report.

The manufacturer's published installation instructions and this report must be strictly adhered to, and a copy of the instructions must be available at all times on the jobsite during installation. The instructions within this report must govern if there are any conflicts between the manufacturer's published installation instructions and this report.

4.2 Fasteners:

Fasteners must be stainless steel or hot-dipped galvanized, and must be approved box nails or finish wood screws designed for wood trim and wood siding with a thinner shank. Nails must have blunt points and full-rounded heads. The fasteners must be long enough to penetrate the solid wood substrate a minimum of 1¹/₂ inches (38.1 mm). The fasteners located at board ends must be placed no more than 2 inches (50.8 mm) from the end of the board.

4.3 Wind Load Assembly—Soffits Using AZEK® Trimboards:

AZEK® Trimboards measuring a minimum of 12 inches by 48 inches (304.8 mm by 1219.2 mm) must be installed on minimum 2-by-4 wood framing SPF stud grade (G = 0.42) spaced 16 inches (406.4 mm) on center. The AZEK® Trimboards are placed with the long direction perpendicular to the wood framing and are fastened to each of the wood members with two 3¹/₄-inch-long (82.55 mm), 16d box nails, located 1 inch (25.4 mm) from the seam/edge of panels. AZEK® Trimboards nominally 1 inch and 1¹/₄ inches thick must have a maximum allowable design load of 60 psf (2880 N/m²) suction, negative wind load.

5.0 CONDITIONS OF USE

The AZEK® Trimboards Traditional, AZEK® Millwork, AZEK to Mill, AZEK® Trimboards Frontier Series, AZEK® Sheets, AZEK® Beadboard, AZEK® Cornerboards AZEK® Universal Skirt Board, AZEK® Finish Grade Trim, AZEK® Integrated Drip Edge, AZEK® Rabbeted Cornerboards, AZEK® Rabbeted Trimboards and AZEK Column Wrap 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** This evaluation report and the manufacturer's published installation instructions, when required by the code official, must be submitted at the time of permit application.
- 5.2** The trim must be manufactured, identified and installed in accordance with this report and the AZEK Building Products instructions.
- 5.3** The product is limited to the following construction types:
 - 5.3.1** Nonload-bearing exterior trim on buildings of combustible non-fire-resistance-rated construction (Type VB of the IBC).
 - 5.3.2** Architectural trim on buildings of Type I, II, III and IV construction under 2006 and 2003 IBC Section 1406.2.2 that do not exceed 3 stories or 40 feet (12.2 m) in height above grade. The trim must be backed by noncombustible construction. The trim is limited to ten percent of the exterior wall surface area where the fire separation distance is 5 feet (1.52 m) or less.
 - 5.3.3** All construction types permitted under the IRC.
- 5.4** The product must be installed over solid backing material, such as approved exterior sheathing covered with an approved water-resistant barrier or approved exterior wall covering.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Rigid Cellular PVC Nonload-Bearing Exterior Trim (AC227), dated December 2004 (editorially revised November 2017).

7.0 IDENTIFICATION

- 7.1** Each package of AZEK® Trimboards Traditional, AZEK® Millwork, AZEK to Mill, AZEK® Trimboards Frontier Series, AZEK® Sheets, AZEK® Beadboard, AZEK® Cornerboards AZEK® Universal Skirt Board, AZEK® Finish Grade Trim, AZEK® Integrated Drip Edge, AZEK® Rabbeted Cornerboards AZEK® Rabbeted Trimboards and AZEK Column Wrap described in this report must be labeled with the CPG Building Products LLC name, address and telephone number; the product trade name; and the evaluation report number (ESR-1074).

- 7.2** The report holder's contact information is the following:

CPG BUILDING PRODUCTS LLC
888 NORTH KEYSER AVENUE
SCRANTON, PENNSYLVANIA 18504
(570) 558-8000
www.azek.com
info@azek.com