

ICC-ES Evaluation Report

ESR-3023

Reissued February 2020

This report is subject to renewal January 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 06 00 00—WOOD, PLASTICS, AND COMPOSITES

Section: 06 50 00—Structural Plastics

REPORT HOLDER:

ROYAL MOULDINGS LIMITED

EVALUATION SUBJECT:

ROYAL TRIM BOARD®

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2009 *International Building Code*® (IBC)
- 2009 *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 load

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 3.1

2.0 USES

Royal Trim Board® is used for nonload-bearing exterior trim.

3.0 DESCRIPTION

3.1 General:

Royal Trim Board® is a rigid cellular PVC (polyvinyl chloride) solid cross section 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 PVC with a small-cell micro-structure. Royal Trim-Board® is supplied in woodgrain and smooth surface. Royal Trim Board® is available in nominal widths of 3 inches (76.2 mm) to 12 inches (305 mm) and thicknesses of $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ and 1 inch (9.5, 12.7, 15.9, 19.1 and 25.4 mm).

The attributes of the trim boards have been verified as conforming to the requirements of (i) 2016 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.

3.2 Surface-burning Characteristics:

Royal Trim Board®, at a maximum nominal thickness of 1 inch (25.4 mm), has a flame-spread index of not more than 200 when tested in accordance with ASTM E84.

3.3 Termite Resistance:

Royal Trim Board® has demonstrated equivalent termite resistance to that of an approved preservative-treated wood or naturally durable wood in accordance with the code.

4.0 INSTALLATION

4.1 General:

Royal Trim Board® exterior trim must be installed in accordance with the manufacturer's published installation instructions and this report. A copy of the instructions must be available on the jobsite at all times during installation. In the event of any conflicts, this report governs.

4.2 Fasteners:

Nails must be stainless steel or hot-dipped galvanized. Nails must be approved 8d by minimum 2 $\frac{1}{2}$ -inch-long (63.5 mm) finish nails designed for wood trim and wood siding. The nails must be long enough to penetrate the solid wood substrate a minimum of 1 $\frac{1}{2}$ inches (38.1 mm). The nails must be located $\frac{3}{4}$ inch (19.1 mm) from board edges or ends.

4.3 Wind Load Assembly:

Royal Trim Board® exterior trim, with a minimum thickness of 1 inch (25.4 mm) and maximum width of 11¹/₄ inches (286 mm), must be installed with the length perpendicular to solid wood framing ($G = 0.55$ minimum) spaced a maximum of 16 inches (406 mm) on center and fastened to each framing member with two 8d by 2¹/₂-inch-long (63.5 mm) finish nails located ³/₄ inch (19.1 mm) from either edge of the trim board. The Royal Trim Board® exterior trim installed as described has a maximum allowable design load of 87 psf (4.2 kN/m²) negative transverse wind load (suction).

5.0 CONDITIONS OF USE

The Royal Trim Board® described in this report complies with, or is a suitable alternative 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 product is limited to the following construction types:
 - a. Nonload-bearing exterior trim on buildings of combustible nonfire-resistance-rated construction (Type V-B) under the IBC.
 - b. All buildings permitted under the IRC.

- 5.3 The product must be installed over solid wood backing material, such as approved exterior sheathing, which is covered with an approved water-resistive barrier or approved exterior wall covering, or as otherwise noted in Section 4.0 of this report.

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 January 2011).

7.0 IDENTIFICATION

- 7.1 Each package of Royal Trim Board® exterior trim must be labeled with the Royal Mouldings, Ltd., name, the product trade name and the evaluation report number (ESR-3023).
- 7.2 The report holder's contact information is the following:

ROYAL MOULDINGS LIMITED
POST OFFICE BOX 610
MARION, VIRGINIA 24354
(276) 783-8161
www.royalmouldings.com