



## ROYAL BUILDING PRODUCTS ZURI CELLULAR PVC DECKING

**CSI Section:**  
**06 53 00 Plastic Decking**

### 1.0 RECOGNITION

Zuri Cellular PVC Decking was evaluated for use as deck boards for exterior balconies, porches, decks and stair treads. The physical properties, structural properties, and surface burning characteristics of the deck boards were evaluated for compliance with the following codes:

- 2018, 2015, 2012 and 2009 International Building Code® (IBC)
- 2018, 2015, 2012 and 2009 International Residential Code® (IRC)

### 2.0 LIMITATIONS

Use of Zuri Cellular PVC Decking recognized in this report is subject to the following limitations:

**2.1** Zuri Cellular PVC Decking shall be installed in accordance with the applicable code, the manufacturer's published installation instructions, and this report. Where there is a conflict, the most restrictive requirements shall govern.

**2.2** The use of the deck boards as components of a fire-resistance-rated assembly is outside the scope of this report.

**2.3** The compatibility of the fasteners, metal post mount components, and other hardware with the supporting construction, including chemically treated wood, is outside the scope of this report and subject to approval by the code official.

**2.4** The deck boards shall be directly fastened to supporting construction. Where required by the code official, engineering calculations and construction documents consistent with this report shall be submitted for approval. The calculations shall verify that the supporting construction complies with the applicable building code requirements and is adequate to resist the loads imparted upon it from the products and systems described in this report. The documents shall contain details of the attachment to the supporting structure consistent with the requirements of this report. The documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

**2.5** Adjustment factors outlined in the AWC National Design Standard (NDS) and applicable codes do not apply to the allowable capacity and maximum spans for the Zuri Cellular PVC Decking.

**2.6** The deck boards do not contain wood or other cellulosic materials and are considered equivalent to preservative-treated or naturally durable wood for termite resistance.

### 3.0 PRODUCT USE

Zuri Cellular PVC Decking is for exterior use as deck boards for balconies, porches, decks, stair treads and similar appendages of buildings of Type V-B Construction (IBC) and other types of construction in applications where untreated wood is permitted by IBC Section 1406.3, and buildings constructed in accordance with the IRC.

#### 3.1 Design:

**3.1.1 Structural capacity:** The Zuri deck boards have an allowable capacity of 225 psf (10.8 kN/m<sup>2</sup>) when installed at a maximum center-to-center spacing of the supporting construction of 16 inches (406 mm). The Zuri deck boards have a span rating of 100/16.

**3.1.2 Deck boards used as stair treads:** Zuri deck boards used as stair treads resist the code-prescribed concentrated load of 300 lbf (1.33 kN) when installed at a perpendicular, center-to-center, maximum spacing of the supporting construction of 12 inches (305 mm). The deck board stair treads shall be installed in a minimum two-span condition.

#### 3.2 Installation:

**3.2.1 General:** Installation of Zuri Cellular PVC Decking shall comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions shall be available at the jobsite during installation. When the manufacturer's published installation instructions differ from this report, the more restrictive governs.

The end of each deck board shall be supported by a joist. The manufacturer's published installation manual provides end-to-end gapping requirements and additional details.

**3.2.2 Fasteners:** Zuri Cellular PVC Decking boards shall be installed on supporting wood members having a minimum specific gravity of 0.50. The minimum edge and end distances for fasteners is ¼ inch (6.35 mm) and ¾ inch (19.1 mm), respectively. Zuri decking may be installed in a variety of manners. Details of these installation methods and required fasteners are found in Table 1 of this report.



### 4.0 PRODUCT DESCRIPTION

Zuri Cellular PVC Decking is a co-extruded cellular PVC deck board with a photorealistic wood grain pattern and an acrylic capstock layer. The deck boards are manufactured of nominally 1-inch-thick (25.4 mm) by 5 1/2-inch-wide (140 mm) profiles. The Zuri deck boards are available in lengths of 12, 16 and 20 feet (3.66, 4.88, and 6.1 m, respectively) and in five woodgrain patterns: Chestnut, Brazilia, Walnut, Pecan, and Weathered Gray.

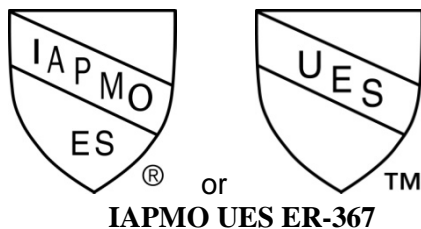
Zuri deck boards are available with a square edge profile and with a grooved edge profile (See Figures 1 and 2). The Zuri deck boards produced with the grooved edge profile are extruded to include a 5/16-inch-deep (7.9 mm), 90° groove running the entire length of the board.

When subjected to weathering, the Zuri Cellular PVC Decking is equivalent in durability to preservative-treated or naturally durable lumber. The Zuri Cellular PVC Decking does not contain cellulosic fillers. The deck boards have been evaluated for structural capacity when exposed to temperatures between -20°F (-29°C) and 125°F (52°C).

The surface burning characteristics of Zuri deck boards were tested in accordance with Section 4.9.1, the Fire Propagation Test Method, in ASTM D7032-10a and comply with the surface burning acceptance criteria therein.

### 5.0 IDENTIFICATION

The Zuri Cellular PVC Decking described in this report is identified by a label, on each individual piece or on the packaging, bearing the Royal Building Products name, the Zuri name, see ER-367 for use and performance levels, the IAPMO Uniform ES Mark of Conformity and the Evaluation Report Number (ER-367). The identification includes the IAPMO Uniform Evaluation Service Mark of Conformity. Either Mark of Conformity may be used as shown below:



### 6.0 SUBSTANTIATING DATA

6.1 Data was submitted in accordance with applicable portions of the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) (AC174), dated January 2012, editorially revised December 2014.

6.2 Deck Fire Propagation testing in accordance with ASTM D7032-10a, Appendix A2.

### 7.0 CONTACT INFORMATION

#### ROYAL BUILDING PRODUCTS

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### 8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Royal Building Product's Zuri Cellular PVC Decking to assess conformance to the codes shown in Section 1.0 of this report, and serves as documentation of the product certification.

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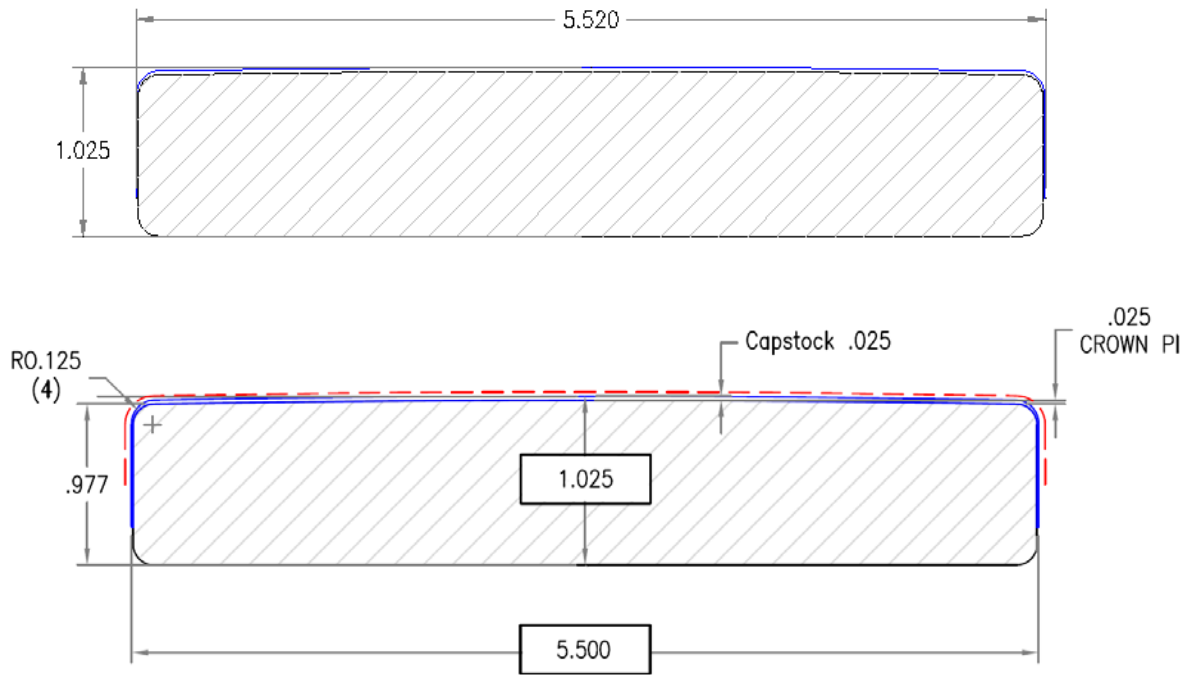
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For additional information about this evaluation report please visit [www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)

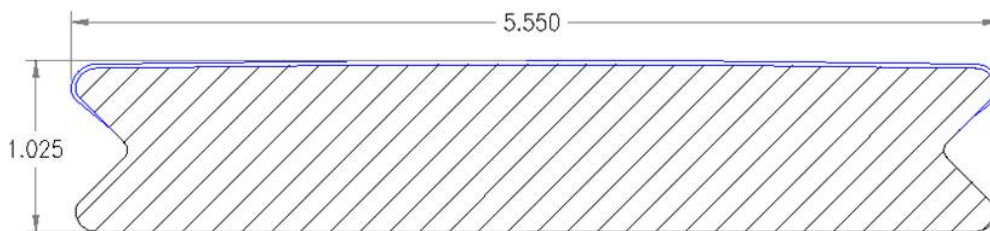


**TABLE 1 – ATTACHMENT METHODS FOR ZURI DECK BOARDS**

| Deck Board        | Attachment Description           | Attachment Configuration | Fastener Type  | QTY/Board/Joist |
|-------------------|----------------------------------|--------------------------|--|-----------------|
| Solid and Grooved | Face Screw Attachment            |                          | No. 8 x 2 1/2-inch HEADCOTE Trim Head Stainless Steel Deck Screws  | 2 screws        |
| Solid             | CAMO toe-nail type fasteners     |                          | No. 7 x 1 7/8-inch ProTech Coated Trimhead CAMO Deck Screws Hidden Deck Fasteners                                  | 2 screws        |
| Solid             | EB-TY hidden fasteners           |                          | EB-TY Hidden Deck Fastener system - EBTYS Polypropylene Biscuit installed with No. 7 x 2 1/4-inch trim-head screws | 1 screw         |
| Grooved           | Zuri Clip hidden fastener system |                          | Zuri Clip hidden fastener system with #8 x 2 1/4-inch trim head stainless steel screw                              | 1 screw         |



**FIGURE 1 – ZURI DECK BOARD PROFILE**



**FIGURE 2 – ZURI DECK BOARD PROFILE (GROOVED EDGE)**