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WESTLAKE ROYAL BUILDING PRODUCTS (USA) INC. 2801 Post Oak Blvd., Suite 600 Houston, Texas 77056 855- ROYAL85 www.westlakeroyalbuildingproducts.com

CELECT CELLULAR COMPOSITE SIDING

CSI Section: 07 46 33 Plastic Siding

1.0 RECOGNITION

Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding products described in this report were evaluated for use as exterior covering materials for walls as part of the weather-resistant exterior wall envelope. The exterior veneer, wind resistance, and installation properties of the Celect Cellular Composite Siding products were evaluated. The siding products are satisfactory alternatives to those prescribed in the following codes:

- 2021, 2018, and 2015 International Building Code[®] (IBC)
- 2021, 2018, and 2015 International Residential Code[®] (IRC)
- 2023 and 2020 Florida Building Code, Building (FBC, Building) attached supplement
- 2023 and 2020 Florida Building Code, Residential (FBC, Residential)-attached supplement

2.0 LIMITATIONS

Use of the Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding recognized in this report is subject to the following limitations:

2.1 The Siding 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 shall govern.

2.2 Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding shall be installed over solid sheathing capable of resisting the design wind pressures.

2.3 Flashing and water-resistive barrier shall be installed as required by the applicable code.

2.4 Celect Cellular Composite Siding is manufactured in Bristol, Tennessee.

3.0 PRODUCT USE

Celect Cellular Composite Siding is a rigid, cellular PVC ventilated exterior wall covering in accordance with Section 1405 of the IBC and Chapter 7 of the IRC. The siding is for use in Type V Construction under the IBC and on buildings constructed in accordance with the IRC. Celect Cellular Composite Siding may also be used in Construction Types I to IV when installed in accordance with Section 1406.2 of the IBC.

Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding does not reduce the fire-resistance rating of code prescribed 1-hour fire-resistance-rated wall assemblies. The siding has a flame spread index of 25 or less when tested in accordance with ASTM E84.

3.1 Design: Design wind pressures shall be determined in accordance with Section 1609 of the IBC or Section R301.2.1 of the IRC, as applicable, and shall not exceed the allowable pressures tabulated in this report for use of Celect Cellular Composite Siding. The allowable negative wind pressures for Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding are shown in Table 1 of this report. Allowable positive pressures are dependent on the capacity of the solid sheathing substrate to withstand the positive wind forces.

3.2 Installation: Installation of Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding shall be installed in accordance with the manufacturer's published installation instructions, the applicable code, and this report. The siding panels shall be installed in accordance with the installation instructions to allow movement of the siding panels due to temperature changes. The panels shall be fastened to minimum 0.42-specific-gravity wood substrate as described in Table 1 of this report.

4.0 PRODUCT DESCRIPTION

Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding is an alternative siding to those prescribed in IBC Section 1404.9 and IRC Section R703.11. Celect Cellular Composite Siding is made of polyvinyl chloride (PVC) with an expanded core.

Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding is available in 7-inch horizontal clapboard profiles, 7-inch shake profile, 8-inch and 11-inch Board and Batten vertical profiles. The 7-inch clapboard and 7-inch shake profiles are similar except for the shake appearance.. The 7-inch clapboard siding is packaged in 12-foot-4-inch (3.76 m) lengths.



The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

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The Perfection Shingle is packaged in panels 48 inches (1.22 m) long. The Board & Battens are packaged in 10-foot (3.05 m) lengths.

5.0 IDENTIFICATION

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A label shall be affixed on the packaging and shall include the Westlake Royal Building Products (USA) Inc name or trademark, the manufacturer's address, the product model number, and the Evaluation Report Number (ER-368). Either IAPMO Uniform ES Mark of Conformity may also be used as shown below:



IAPMO UES ER-368

6.0 SUBSTANTIATING DATA

6.1 Reports of testing in accordance with ASTM D3679 as required by ICC-ES Acceptance Criteria for Vinyl Siding (AC37), dated February 2014 (Editorially revised January 2021).

6.2 Data in accordance with ICC-ES Acceptance Criteria for Rigid Cellular PVC Non-load-bearing Exterior Trim (AC227), dated December 2019 (Editorially revised July 2021) as follows:

- Reports of deflection temperature testing in accordance with ASTM D648.
- Reports of density properties testing in accordance with ASTM D792.
- Reports of flexural properties testing in accordance with ASTM D790.

6.3 Reports of ASTM D7254 impact resistance testing in accordance with ICC-ES Acceptance Criteria for Polypropylene Siding (AC366), dated October 2018.

6.4 Reports of wind resistance testing in accordance with ASTM D5206.

6.5 Reports of ignitability testing in accordance with NFPA 268.

6.6 Reports of testing in accordance with ASTM E119 and ASTM E84.

6.7 Test reports are from laboratories in compliance with ISO/IEC 17025.

6.8 Quality control documentation.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding to assess its conformance to the codes shown in Section 1.0 of this report and serves as documentation of the product certification. The siding is manufactured at locations noted in Section 2.4 of this report under a quality control program with periodic inspection under the surveillance of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org EVALUATION REPORT



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TABLE 1 –

MAXIMUM ALLOWABLE NEGATIVE WIND PRESSURES FOR CELECT CELLULAR COMPOSITE SIDING

Siding Profile	Exposure (in.)	Fastener Type ²	Spacing (in.)	Attachment Substrate ³	Allowable Negative Wind Pressures (psf) ¹
		1.25" No.8 truss head screws	16	Into Sheathing only	136.8
Horizontal 7-inch Clapboard	7	1.5" smooth-shank roofing nails	16	Into Sheathing only	72.1
			8	Into Sheathing only	96.2
			16	Through Sheathing into Framing	110.6
Horizontal 7-inch Shake	7	1.5" smooth-shank roofing nails	16	Through Sheathing into Framing	123.9
Vertical 8-inch Board & Batten	8	1.5" smooth-shank roofing nails	12	Into Sheathing only	96.2
		1.25" No.8 truss head screws	12		79.1
Vertical 11-inch Board and Batten	11	1.5" smooth-shank roofing nails	12	Into Sheathing only	25.6

For SI: 1 inch = 25.4 mm, 1 $psf = 47.9 N/m^2$

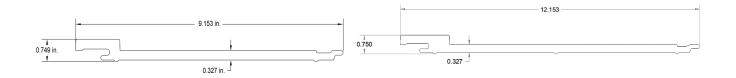
1. Indicates maximum allowable wind pressures for the siding fastened using the fastener types and on-center spacing indicated in the columns above.

2. The roofing nails shall be corrosion resistant and have a minimum of 3/8-inch-diameter heads, 1/8-inch-diameter shanks, and 11/4-inch embedment into the substrate.

3. The attachment substrate shall have specific gravity of 0.42 minimum.



Horizontal 7-inch Clapboard & Horizontal 7-inch Shake



Vertical 8-inch Board & Batten

Vertical 11-inch Board & Batten

FIGURE 1 – SIDING PROFILES

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FLORIDA SUPPLEMENT

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CELECT CELLULAR COMPOSITE SIDING

CSI Section:

07 46 33 Plastic Siding

1.0 RECOGNITION

Westlake Royal Building Products (USA) Inc.'s Celect Cellular Composite Siding Profiles described in IAPMO UES Evaluation Report ER-368 are satisfactory alternatives to the cladding systems prescribed in the following codes:

- 2023 and 2020 Florida Building Code, Building (FBC, Building)
- 2023 and 2020 Florida Building Code, Residential (FBC, Residential)

2.0 LIMITATIONS

Installation shall be in accordance with ER-368, the manufacturer's published installation instructions, and Section 1405 of the FBC, Building or Section R703 of the FBC, Residential, as applicable. Flashing shall comply with Section 1405.4 of the FBC, Building.

For buildings built in accordance with the FBC, Residential, design wind loads for cladding shall be determined in accordance with Tables R301.2(2) and R301.2(3), as required by Section R301.2.1 of the FBC, Residential; when required, conversion between V_{ult} (Ultimate Design Wind Speed) and V_{asd} (Nominal Design Wind Speed) shall be in accordance with R301.2.1.3 of the FBC, Residential. For buildings built in accordance with the FBC, Building, design wind loads for cladding shall be determined in accordance with Section 1609.1.1 of the FBC, Building; when required, conversion between V_{ult} and V_{asd} shall be in accordance with Section 1609.3.1 of the FBC, Building. Allowable design pressures determined in accordance with the FBC shall not exceed those in Table 1 of ER-368.

Use of the Westlake Royal Building Products (USA) Inc's Celect Cellular Composite Siding Profiles for compliance with the high-velocity hurricane zone (HVHZ) provisions of the FBC, Building and FBC, Residential is outside of the scope of this evaluation report.

For products falling under Florida Rule 61G20-3, verification is required that the report holder's quality assurance program is audited by a quality assurance entity, approved by the Florida Building Commission (or the building official when the report holder does not possess an approval by the Commission), to provide oversight and determine that the products are being manufactured as described in this evaluation report to establish continual product performance.

This supplement expires concurrently with ER-368.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org