DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
SECTION: 07 46 33—PLASTIC SIDING

REPORT HOLDER:
KAYCAN LTD.

EVALUATION SUBJECT:
PERFECTION SHINGLE SIDING

“2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence”
1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:
- 2018, 2015 and 2012 International Residential Code® (IRC)

Properties evaluated:
- Exterior veneer
- Durability
- Wind load resistance
- Flame spread

1.2 Evaluation to the following green codes and/or standards:
- 2016 California Green Building Standards Code (CALGreen), Title 24, Part 11

Attributes verified:
- See Section 2.0

2.0 USES

Kaycan Perfection Shingle Siding products are used as exterior wall coverings over a code-complying sheathing or substrate capable of supporting the imposed loads on buildings of all types of construction under the 2018 IBC and on structures constructed in accordance with the IRC. Under the 2015 and 2012, IBC the Kaycan Perfection Shingle Siding products are limited to Type V-B construction, and on structures constructed in accordance with the IRC.

The attributes of the Exterior Portfolio vinyl sidings have been verified as conforming to the provisions of (i) CALGreen Sections A4.405.1.3 (prefinished materials) and A5.406.1.2 (reduced maintenance); (ii) ICC 2015 and ICC 700-2012 Sections 601.7, 11.601.7, and 12.1(A).601.7 (site-applied finishing materials); and (iii) ICC 700-2008 Section 601.7 (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. The code may provide supplemental information as guidance.

3.0 DESCRIPTION

3.1 Siding:
Kaycan Perfection Shingle Siding is a molded polypropylene product conforming to the requirements of ASTM D7254 and 2018 IBC Section 1403.12.2 (2015 and 2012 IBC Section 1404.12.2) or 2018 and 2015 IRC Section R703.14.2. Siding products include a variety of accessories such as inside and outside corners, corner posts, and J-Channel trims made from a variety of materials as polypropylene and PVC. The starter strip is made of galvanized steel. The sidings are available in a range of colors and profiles designed to overlap at adjacent panel edges. The siding is produced in a nominal wall thickness of 0.090 inch (2.3 mm), and is finished to simulate cedar shingles, as shown in Figure 1. Refer to Table 1 for the profile names and related descriptive information.

When tested in accordance with ASTM E84, the siding has a flame-spread index of no greater than 200.

3.2 Sheathing Substrates:
- Minimum 7/16-inch-thick (11.1 mm) solid plywood structural sheathing complying with DOC PS-1.
- Minimum 7/16-inch-thick (11.1 mm) Exposure 1 oriented strand board (OSB) sheathing complying with DOC PS-2.

3.3 Fasteners:
Non-corrosive (galvanized, aluminum or stainless steel) roofing nails or screws with a minimum length of 1½ inches (38 mm), a minimum shank diameter of 0.12 inch (3 mm), and a 3/8-inch (9.5 mm) head diameter.

4.0 DESIGN AND INSTALLATION

4.1 General:
Kaycan Perfection Shingle Siding must be installed in accordance with the manufacturer’s published installation instructions, the applicable code, and this report. The manufacturer’s published installation instructions and this
The allowable wind loads are as noted in the prescriptive requirements of the applicable code. See Section 4.2.1 for applications in excess of the prescriptive requirements or where the applicable code does not provide prescriptive requirements.

4.2 Wind Resistance:

4.2.1 General: The design wind pressures must be determined in accordance with the requirements of Section 16 of the IBC or Section R301.2.1 of the IRC, as applicable, and must not exceed the allowable wind pressures in Table 2, subject to the conditions in Section 4.2.2 and 4.2.3 of this report. The allowable wind pressures must be determined in accordance with Annex A1 of ASTM D7254. Wind resistance of soffit panels is outside the scope of this report.

4.2.2 IBC: For buildings constructed under the requirements of the IBC, Kaycan Perfection Shingle Siding must be installed as described in 2018 IBC Section 1404.18 (2015 and 2012 IBC Section 1405.18) and Section 4.1 of this report. Should the basic wind speed at the building locations exceed the conditions provided for in 2018 IBC Section 1404.18 (2015 and 2012 IBC Section 1405.18), installation must be in accordance with Section 4.2.1 of this report.

4.2.3 IRC: For buildings constructed in accordance with the IRC, Kaycan Perfection Shingle Siding must be installed as described in Section 4.1 of this report and in accordance with one of the following conditions:

1. 2018 and 2015 IRC: Installation over sheathing other than foam plastic sheathing, in applications where the building’s mean roof height and ultimate wind speed [2018 IRC Figure R301.2(5)A (2015 IRC Figure R301.2(4)A)] are in accordance with Table R703.3.1, must be as required by Table R703.3.1(1). Should any of these conditions not be met, installation must be in accordance with Section 4.4 of this report.

2. 2012 IRC: Installation over sheathing other than foam plastic sheathing, in applications where the building’s mean floor height does not exceed 30 feet and the basic wind speed [Figure R301.2(4)A] is less than 110 mph (49 m/s) in Exposure B, and does not exceed 90 mph (40 m/s) in Exposure C, or 85 mph (37 m/s) in Exposure D, must be as required by Table R703.4. Should any of these conditions not be met, installation must be in accordance with Section 4.4 of this report.

4.3 Use on Exterior Walls in Types I, II, III, and IV Construction in accordance with 2018 IBC Section 1405.1: Kaycan Perfection Shingle Siding can be used on the exterior side of exterior walls on buildings of Types I, II, III, and IV construction. The siding shows no sustained flaming at a maximum tolerable level of incident radiant heat flux of 5.5 kW/m², when tested in accordance with NFPA 268. The minimum fire separation distance required shall be determined from 2018 IBC Section 1405.1.1.1.2. The installation of the siding must comply with the applicable requirements in 2018 IBC Section 1405.1

4.4 Installation:

The Kaycan Perfection Shingle Siding must be backed by a substrate capable of withstanding the imposed positive and negative design wind loads. Sheathing substrate must be fastened to the wall framing in accordance with the applicable code, taking into account the transverse wind loads it will be subjected to in use. The substrate must be covered with an approved water-resistive barrier where required by code.

For each given profile, fastening must be in accordance with Table 2 to withstand the tabulated allowable negative wind pressures.

The noncorrosive fastener’s shank diameter and head diameter must be a minimum, respectively, of 0.12 inch (3 mm) and 0.6 inch (9.5 mm). Siding fasteners must be installed through the centers of the nailing slots in the fastening flanges, leaving a space between the fastener head and the face of the flange, and leaving a minimum 1/4-inch (6.35 mm) clearance at all J-channels and stops, so as not to restrict movement and to allow for thermal expansion and contraction of the panels. Once installed, each panel must be adjusted to the proper location and fixed in position by the installation of one fastener through the slotted hole in the center of the panel. See the manufacturer’s published installation instructions for more details concerning installation. Accessories such as corners, starter strips and trim must be fastened at a minimum of 8 inches on center (203 mm) in accordance with the manufacturer’s published instructions. Flashing in accordance with the applicable code must be installed at all openings, penetrations, and abutments with dissimilar materials, and at terminations of the siding and soffit.

5.0 CONDITIONS OF USE

The Kaycan Perfection Shingle Siding 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 Installation must comply with this report, the manufacturer’s published instructions, and the applicable code. In the event of a conflict between the manufacturer’s published installation instructions and this report, this report governs.

5.2 The sidings are limited to the design pressures shown in Table 2. In jurisdictions adopting the IRC, the siding must be installed in accordance with Table R703.3(1) of the 2018 and 2015 IRC, and Table R703.4 of the 2012 IRC; and limited to areas where the design wind pressure does not exceed the design values shown in Table 2.

5.3 The substrate must be covered by an approved water-resistive barrier where required by the code prior to installing the siding, and must comply with IBC Section 1403.2.

5.4 The sidings can be used on all types of construction under the 2018 IBC, and to structures constructed in accordance with the IRC. For Types I, II, III and IV construction, installation must comply with Section 4.3 of this report.

5.5 The sidings are limited to use on Construction Type V-B under the 2015 and 2012 IBC; and to structures constructed in accordance with the IRC.

5.6 Under Section 1404.12.2 of the 2015 and 2012 IBC, the fire separation distance between the building with the siding and adjacent buildings must not be less than 10 feet (3048 mm).

5.7 Under Section R703.14.2 of the 2018 and 2015 IRC, polypropylene siding must not be installed on walls with a fire separation distance of less than 5 feet (1524 mm) and walls closer than 10 feet (3048 mm) to a building on another lot unless the walls are perpendicular to the line used to determine the fire separation distance.
5.8 Exterior walls must be braced or sheathed to resist racking loads with approved materials in accordance with the requirements of the applicable code.

5.9 The Kaycan Perfection Shingle Siding is manufactured in Montreal, Quebec, Canada, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Polypropylene Siding (AC366), dated October 2018.

6.2 Reports containing results of testing in accordance with ASTM E84 and NFPA 268.

7.0 IDENTIFICATION

7.1 The siding products described in this report are identified by a label on the packaging bearing the manufacturer's name (Kaycan LTD.) and address, the product name, manufacturer's lot number, and the evaluation report number (ESR-3806). Also included on the label is the following statement: “Conforms to ASTM Specification D7254.”

7.2 The report holder’s contact information is the following:

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3075 TRANS CANADA HIGHWAY
POINTE-CLAIRE, QUEBEC H9R 1B4
CANADA
(514) 694-5855
www.kaycan.com
joe.lundine@kpproducts.com

FIGURE 1—PERFECTION SHINGLE SIDING PRODUCT PROFILES

TABLE 1—PRODUCT DESCRIPTION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single 7 Perfection Shingle</td>
<td>Polypropylene Siding; available in multiple colors; overall dimensions: 72 inches x 9.07 inches x 0.090 inches</td>
</tr>
<tr>
<td>Double 7 Perfection Shingle</td>
<td>Polypropylene Siding; available in multiple colors; overall dimensions: 49.67 inches x 16.02 inches x 0.090 inches</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4mm

TABLE 2—ALLOWABLE NEGATIVE WIND PRESSURES

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>NAILING FLANGE THICKNESS (inch)</th>
<th>LENGTH (inches)</th>
<th>FASTENER SPACING (inches)</th>
<th>ALLOWABLE NEGATIVE WIND PRESSURES1 (psf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single 7 Perfection Shingle</td>
<td>0.090</td>
<td>72</td>
<td>12</td>
<td>68</td>
</tr>
<tr>
<td>Double 7 Perfection Shingle</td>
<td>0.090</td>
<td>49.67</td>
<td>12</td>
<td>31</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 psf = 0.0479 kPA

Footnote:
1Allowable loads as determined in accordance with Section A1.2.1 of ASTM D7254.
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Section: 07 46 33—Plastic Siding

REPORT HOLDER:

KAYCAN LTD.

EVALUATION SUBJECT:

PERFECTION SHINGLE SIDING

1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that Perfection Shingle Siding, recognized in ICC-ES master evaluation report ESR-3806, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2017 Florida Building Code—Building®
- 2017 Florida Building Code—Residential®

2.0 CONCLUSIONS

The Perfection Shingle Siding, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3806, complies with the Florida Building Code—Building® and Florida Building Code—Residential®, provided the design and installation are in accordance with the 2015 International Building Code® provisions noted in the master report.

Use of the Perfection Shingle Siding 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 supplemental report.

For products falling under Florida Rule 9N-3, verification that the report holder’s quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued December 2018 and revised January 2019.