ICC EVALUATION SERVICE
In Cooperation with Innovation RESEARCH LABS

Most Widely Accepted and Trusted

ICC-ES Evaluation Report

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

ESR-3070

Reissued 09/2018
This report is subject to renewal 09/2019.

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

REPORT HOLDER:

DERBY BUILDING PRODUCTS, LLC

EVALUATION SUBJECT:

NOVIK AND TANDO INNOVATIVE POLYMER SIDING

"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"

A Subsidiary of ICC INTERNATIONAL CODE COUNCIL

ICC-ES Evaluation Report

ESR-3070

Reissued September 2018

This report is subject to renewal September 2019.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 33—Plastic Siding

REPORT HOLDER:

DERBY BUILDING PRODUCTS, LLC

EVALUATION SUBJECT:

NOVIK AND TANDO INNOVATIVE POLYMER SIDING

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2015, 2012 and 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:

- Exterior veneer
- Durability
- Wind load resistance
- Flame spread

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

- 2016 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

Novik and Tando Innovative Polymer Siding products are used as exterior wall coverings over a code-complying sheathing or substrate capable of supporting the imposed loads on buildings of Type VB construction (IBC), and on structures constructed in accordance with the IRC.

3.0 DESCRIPTION

Novik and Tando Innovative Polymer Siding is molded from polypropylene (PP) resins. The siding panels conform to, and are certified and labeled in accordance with, ASTM D7254. Siding accessory products include polypropylene outside corner caps, PVC J-channels and corner keys, and galvanized steel starter strips. The siding is available in a range of colors, textures, and profiles designed to overlap at adjacent panel edges. The siding is produced in a nominal wall thickness of 0.090 inch (2.29 mm) and is available in finishes simulating cedar shingles, hand-split shakes, brick or stone. Refer to Table 3 for the profile names and related descriptive information.

4.0 DESIGN AND INSTALLATION

4.1 General:

Novik and Tando Innovative Polymer 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 report must be strictly adhered to, and a copy of the instructions must be available on the jobsite at all times during installation.

4.2 Design:

4.2.1 General: The design wind pressures must be determined in accordance with the requirements of Chapter 16 of the IBC or Section R301.2.1 of the IRC, as applicable, and must not exceed the allowable wind pressures in Table 1, subject to the conditions in Sections 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, Novik and Tando Innovative Polymer Siding must be installed as described in 2015 and 2012 IBC Section 1405.18 or installed over solid sheathing as described in 2009 IBC Section 1405.14.1 and Section 4.1 of this report. Should the basic wind speed at the building locations exceed the conditions provided for in 2015 and 2012 IBC Section 1405.18 and 2009 IBC Section 1405.14, 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, Novik and Tando Innovative Polymer Siding must be installed as described in Section 4.1 and in accordance with one of the following conditions:

1. For the 2015 IRC, installation over sheathing other than foam plastic sheathing, in applications where the building's mean roof height and ultimate wind speed [Figure R301.2(4)A] are in accordance with Table R703.3.1, sheathing must be as required by Table R703.3(1) of the IRC. Should any of these

conditions not be met, installation must be in accordance with Section 4.3 of this report.

2. For the 2012 and 2009 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, sheathing must be as required by Table R703.4 of the IRC. Should any of these conditions not be met, installation must be in accordance with Section 4.3 of this report.

4.3 Installation:

The Novik and Tando Innovative Siding must be backed by 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 1 to withstand the tabulated allowable negative wind pressures.

The fastener shank diameter and head diameter must be a minimum, respectively, of 0.120 inch (3.05 mm) and 0.375 inch (9.53 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 $^{3}/_{8}$-inch (9.53 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 nonslotted 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 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 Novik and Tando Innovative Polymer 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 siding is limited to the design pressures shown in Table 1. In jurisdictions adopting the IRC, the siding must be installed in accordance with Table R703.3(1) of the 2015 IBC and Table R703.4 of the 2012 and 2009 IRC, and limited to areas where the design wind pressure does not exceed the design values shown in Table 1.

5.3 The siding is limited to use on Construction Type VB (IBC) and to structures constructed in accordance with the IRC.

5.4 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 be no less than 10 feet (3048 mm).

5.5 Exterior walls must be braced or sheathed to resist racking loads with approved materials in accordance with the requirements of the applicable code.

5.6 The Novik and Tando Innovative Polymer Siding is manufactured in Miami, FL, under a quality-control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Polypropylene Siding (AC366), dated January 2015.

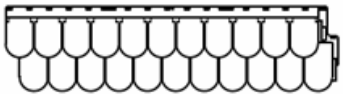
7.0 IDENTIFICATION

7.1 The siding products described in this report are identified by a label on the packaging bearing the manufacturer's name (Derby Building Products, LLC) and address, the product name, manufacturer's lot number, and the evaluation report number (ESR-3070). 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:

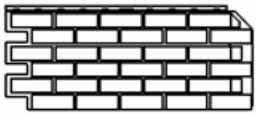
DERBY BUILDING PRODUCTS, LLC
1111 NW 165TH STREET
MIAMI, FLORIDA 33169
(786) 502-1258
www.tandobp.com

TANDOSHAKE™ RUSTIC CEDAR 9



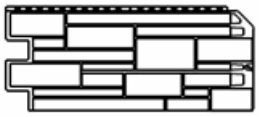
TANDOSHAKE™ SCALLOPED PERFECTION

TANDOSHAKE™ HAND SPLIT SHAKE



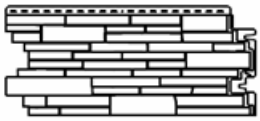
TANDOSTONE™ BRICK

TANDOSHAKE™ ROUGHSAWN CEDAR DUAL



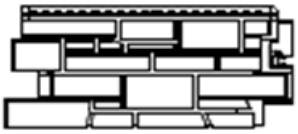
TANDOSTONE™ HAND-CUT STONE

TANDOSHAKE™ CAPE COD PERFECTION



TANDOSTONE™ STACKED STONE
(NOVIKSTONE™ MS)

TANDOSHAKE™ ROUGHSAWN CEDAR SINGLE



TANDOSTONE™ CREEK LEDGESTONE
(NOVIKSTONE™ CS)

TANDOSHAKE™ ROUGHSAWN CEDAR
STAGGERED PANEL

FIGURE 1—NOVIK AND TANDO INNOVATIVE POLYMER SIDING PRODUCT PROFILES

TABLE 1—ALLOWABLE WIND PRESSURES

PRODUCT NAME	FASTENER SPACING	FASTENER TYPE[3]			
		2-inch roofing nails[4]	No 10 wood screws[5]	$^3/_{16}$-inch ITW Tapcon screws[6]	#10 metal screws[7]
TANDOSHAKE™ RUSTIC CEDAR 9	2" oc	88.9 psf	154.2 psf	154.2 psf	154.2 psf
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	44.4 psf	154.2 psf	154.2 psf	154.2 psf
	6" oc	29.6 psf	154.2 psf	106.4 psf	154.2 psf
	8" oc	22.2 psf	154.2 psf	79.8 psf	154.2 psf
TANDOSHAKE™ HAND-SPLIT SHAKE	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	27.6 psf	49.3 psf	49.3 psf	49.3 psf
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	8" oc	13.8 psf	49.3 psf	49.3 psf	49.3 psf
TANDOSHAKE™ ROUGHSAWN CEDAR DUAL	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	38.9 psf	126.4 psf	126.4 psf	126.4 psf
	4" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	7" oc	19.5 psf	126.4 psf	69.9 psf	126.4 psf
TANDOSHAKE™ ROUGHSAWN CEDAR SINGLE	2" oc	120.3 psf	163.4 psf	163.4 psf	163.4 psf
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	60.1 psf	163.4 psf	163.4 psf	163.4 psf
	6" oc	40.1 psf	163.4 psf	144.0 psf	163.4 psf
	8" oc	30.1 psf	163.4 psf	108.0 psf	163.4 psf
TANDOSHAKE™ CAPE COD PERFECTION	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	37.7 psf	166.5 psf	135.4 psf	166.5 psf
	4" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	7" oc	18.8 psf	134.5 psf	67.7 psf	157.3 psf
TANDOSHAKE™ SCALLOPED PERFECTION	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	38.6 psf	144.9 psf	138.7 psf	144.9 psf
	4" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	7" oc	19.3 psf	137.8 psf	69.4 psf	144.9 psf
TANDOSTONE™ BRICK	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	27.6 psf	34.4 psf	34.4 psf	34.4 psf
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	8" oc	13.8 psf	34.4 psf	34.4 psf	34.4 psf
TANDOSTONE™ HAND-CUT STONE	2" oc	31.7 psf	31.7 psf	31.7 psf	31.7 psf
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	27.6 psf	31.7 psf	31.7 psf	31.7 psf
	6" oc	18.4 psf	31.7 psf	31.7 psf	31.7 psf
	8" oc	13.8 psf	31.7 psf	31.7 psf	31.7 psf
TANDOSTONE™ STACKED STONE (NOVIKSTONE™ MS)	2" oc	49.2 psf	49.2 psf	49.2 psf	49.2 psf
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	26.2 psf	49.2 psf	49.2 psf	49.2 psf
	6" oc	17.5 psf	49.2 psf	49.2 psf	49.2 psf
	8" oc	13.1 psf	49.2 psf	47.1 psf	49.2 psf
TANDOSTONE™ CREEK LEDGESTONE (NOVIKSTONE™ CS)	2" oc	52.4 psf	55.5 psf	55.5 psf	55.5 psf
	3.5" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	4" oc	26.2 psf	55.5 psf	55.5 psf	55.5 psf
	6" oc	17.5 psf	55.5 psf	55.5 psf	55.5 psf
	8" oc	13.1 psf	55.5 psf	47.1 psf	55.5 psf
TANDOSHAKE™ ROUGHSAWN CEDAR STAGGERED PANEL	2" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	3.5" oc	38.9 psf	126.4 psf	126.4 psf	126.4 psf
	4" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	6" oc	- - -[1]	- - -[1]	- - -[1]	- - -[1]
	7" oc	19.5 psf	126.4 psf	69.9 psf	126.4 psf

For **SI:** 1 inch = 25.4 mm, 1 psf = 0.0479 kPa.

[1]Limitation due to profile's anchor slot spacing.

[2]Limitation due to tested anchor spacing.

[3]Fastener head diameter must be a minimum of $^3/_8$-inch; otherwise, a minimum $^3/_8$-inch-diameter corrosion-resistant washer must be used.

[4]Nails must be smooth-shank, electro-galvanized steel or aluminum roofing nails complying with ASTM F1667, and must completely penetrate through a minimum $^{15}/_{32}$-inch wood structural panel substrate.
[5]No.10 wood screws must completely penetrate through a minimum $^{3}/_{4}$-inch wood substrate having specific gravity G = 0.42 or greater.
[6]Screws embedded a minimum of 1 inch into medium or normal-weight, CMU masonry or concrete substrate having a minimum compressive strength, of 2,500 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].
[7]SAE Grade 5, spaced thread screws, 16 threads per inch, penetrating through minimum no.18 light-gage steel substrate.

TABLE 2—MINIMUM SIDE LAP

PROFILE	MINIMUM SIDE LAP		NOTES
	Top	Bottom	
TandoShake™ Rustic Cedar 9	$^{1}/_{2}$"	$^{1}/_{2}$"	- - - - -
TandoShake™ Hand Split Shake	$^{1}/_{4}$"	$^{3}/_{4}$"	Side locking tab interlock
TandoShake™ RoughSawn Cedar Dual	$1^{1}/_{2}$"	$^{1}/_{2}$"	Side locking tab interlock
TandoShake™ RoughSawn Cedar Single	$^{1}/_{2}$"	$^{1}/_{2}$"	- - - - -
TandoShake™ Cape Cod Perfection	$2^{1}/_{2}$"	$^{1}/_{2}$"	Overlap profile varies, side locking tab interlock
TandoShake™ Scalloped Perfection	$1^{1}/_{2}$"	$^{1}/_{2}$"	Overlap profile varies, side locking tab interlock
TandoShake™ Brick	$^{3}/_{8}$"	$^{3}/_{8}$"	Overlap profile varies
TandoStone™ Hand-Cut Stone	$^{1}/_{2}$"	$^{1}/_{2}$"	Overlap profile varies
TandoStone™ Stacked Stone and NovikStone™ MS	1"	1"	Overlap profile varies, side locking tab interlock
TandoStone™ Creek Ledgestone and NovikStone™ CS	1 ½"	1 ½"	Overlap profile varies, side locking tab interlock
TandoShake™ RoughSawn Cedar Staggered Panel	$1^{1}/_{2}$"	$^{1}/_{2}$"	Side locking tab interlock

For **SI:** 1 inch = 25.4 mm.

TABLE 3—PRODUCT DESCRIPTION

PRODUCT NAME	DESCRIPTION
TandoShake™ Rustic Cedar 9	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $72^{7}/_{8}$" X $11^{1}/_{2}$" X 0.090"
TandoShake™ Hand-Split Shake	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $41^{3}/_{8}$" X $18^{1}/_{2}$" X 0.090"
TandoShake™ RoughSawn Cedar Dual	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $59^{1}/_{8}$" X 15" X 0.090"
TandoShake™ RoughSawn Cedar Single	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $90^{1}/_{16}$" X $8^{1}/_{2}$" X 0.090"
TandoShake™ Cape Cod Perfection	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $43^{5}/_{8}$" X $15^{1}/_{2}$" X 0.090"
TandoShake™ Scalloped Perfection	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $59^{1}/_{8}$" X $15^{1}/_{8}$" X 0.090"
TandoStone™ Brick	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $44^{1}/_{4}$" X $18^{3}/_{4}$" X 0.090"
TandoStone™ Hand-Cut Stone	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $44^{3}/_{16}$" X $18^{3}/_{8}$" X 0.090"
TandoStone™ Stacked Stone and NovikStone MS	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $44^{1}/_{2}$" X $19^{3}/_{8}$" X 0.090"
TandoStone™ Creek Ledgestone and NovikStone CS	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $45^{3}/_{4}$" X $19^{7}/_{16}$" X 0.090"
TandoShake™ RoughSawn Cedar Staggered Panel	Mineral filled polypropylene resin; available in multiple colors; overall dimension: $59^{1}/_{8}$" X $15^{1}/_{4}$" X 0.085"

For **SI:** 1 inch = 25.4 mm.

ICC-ES Evaluation Report

ESR-3070 FBC Supplement

Reissued September 2018

This report is subject to renewal September 2019.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 33—Plastic Siding

REPORT HOLDER:

DERBY BUILDING PRODUCTS, LLC

EVALUATION SUBJECT:

NOVIK AND TANDO INNOVATIVE POLYMER SIDING

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Novik and Tando Innovative Polymer Siding, recognized in ICC-ES master evaluation report ESR-3070, 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 Novik and Tando Innovative Polymer Siding, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3070, 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 Novik and Tando Innovative Polymer Siding for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *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 September 2018.