

PRODUCT EVALUATION REPORT

Report No.	PER-N-S1110218
Report Date	02/18/11
Code Reference	2007 Florida Building Code Approved for Use Outside the HVHZ Only
Product Category	Panel Walls
Product Sub-Category	Siding
Product Name	Novik Polymer Siding Panels
Product Manufacturer	Novik Incorporated 160, rue des Grands-Lacs St-Augustin-de-Desmaures, Québec G3A 2K1 CANADA
Evaluating Engineer	Emma T. Mellinger, P.E. Category 5 Engineering Services, Inc.

1. SCOPE OF EVALUATION AND STATEMENT OF CODE COMPLIANCE

This Product Evaluation Report is issued in accordance with the requirements of Florida Administrative Code Rule 9N-3 (formerly Rule 9B-72) for Statewide Product Approval by Method 1(d). The above-referenced product has been tested and evaluated as described herein, and found to be in compliance with the 2007 Florida Building Code. The above-referenced product is, for the purpose intended, at least equivalent to that required by the Code. This product shall be re-evaluated following any relevant changes to the 2007 Florida Building Code.

The 2007 FBC does not specifically address polypropylene siding; whereas there are specific code requirements for other types of siding, i.e. vinyl, and fiber cement in Chapter 14. Section 104.11 (“Alternative Materials, Design and Methods of Construction”) provides for the approval of materials not specifically addressed in the Code, provided that said material is at least equivalent to that required by the Code in terms of quality, strength, effectiveness, fire resistance, durability and safety.

The siding products evaluated in this report have been tested and shown to comply with ICC-ES AC366 “Acceptance Criteria for Polypropylene Siding.” This evaluation finds that the requirements of ICC-ES AC366 are substantially equivalent to the requirements of the 2007 FBC Section 1405.13 (Vinyl Siding) under the terms of the “Limitations and Conditions of Use” listed in this report.

2. SUBSTANTIATING DATA

The following documents substantiate the evaluation contained in this report:

2.1 Test Reports

Tests were performed by Intertek Testing Services NA Ltd., and South West Research Institute, as reported in the documents listed below:

Test Report Number	Tests Performed	Test Description	FBC Code Section	Result
3181562COQ-002B	ASTM D4226-09	Impact Resistance	1405.13*	Pass
3179159COQ-002	ASTM G155-05a	Exposure	2612.2	Pass Pass
3188057TOR-004c	ASTM D5206-06a	Wind Resistance	1405.13*	17.82 psf
G100066784COQ-004a/b	ASTM E84-10	Flame Spread	2612.2	Pass
G100066784COQ-004c/d	ASTM D1929-96 (01)	Self-Ignition	2612.2	Pass
G100066784COQ-004e/f	ASTM D635-08	Rate of Burning	2612.2	Pass
SWRI 01.16046.01.304	NFP 268-07	Ignition Resistance	N/A	Pass

* Test Standards ASTM D4226 and D5206 are specifically referenced in the Standard ASTM D3679, which is a Code requirement for PVC siding.

2.1.1 Test Standard Equivalency

The 2007 Florida Building Code references several of the above test standards by different revision years. The following test standard revisions have been reviewed by this office, and deemed equivalent in all technical respects:

ASTM G155-05a (as tested) is equivalent to ASTM G155-04 (as referenced in 2007 FBC).

ASTM E84-10 (as tested) is equivalent to ASTM E84-04 (as referenced in 2007 FBC).

ASTM D635-08 (as tested) is equivalent to ASTM D635-03 (as referenced in 2007 FBC).

2.2 Structural Calculations

Structural engineering calculations in accordance with 2007 FBC Chapter 16 were performed to verify the anchors as tested, and to determine the allowable anchor spacing for the various panel sizes. Reference withdrawal design values from ICC-ES ESR-1539 for 12d x 1 1/2" roofing nails were used. A 1.33 increase in allowable stress was used for anchors into wood.

3. PRODUCT DESCRIPTION

Novik Polymer Siding Panels are interlocking wall covering materials manufactured in various colors and designs from a proprietary blend of polymer-based materials, and are designed to provide the look of cedar shake, cedar planks, stone or brick depending on the design selected. Nominal dimensions are provided in the table below.

SUB-PRODUCT	WIDTH (in)	LENGTH (in)
Hand-Split Shake	48.5	19
Hand-Cut Stone	45.38	20.5
Stacked Stone	46.38	20.5
Staggered Edge Shake	51.12	8.38
Cedar Plank	97.5	9.75
Portsmouth Shake	53.75	16.13
Perfect Shake	74.13	15
Half-Round	32	10
D6 Cedar Plank	98.5	13.58
Rough Sawn Cedar	49	14.5
Hand-Laid Brick	48	18.5
8' Cedar Shake	96.10	8.45

4. INSTALLATION

The products shall be installed in strict accordance with the manufacturer's specific written instructions provided with each product, with the exception of the anchor types and spacing, which shall be in accordance with this Evaluation Report. (The afore-mentioned instructions are an integral part of this Evaluation Report).

PRODUCT	NOVIK POLYMER SIDING
MAX. CLADDING DESIGN PRESSURE	-33.0 psf
SHEATHING	Solid Sheathing in accordance with 2007 FBC Section 2304.6. Sheathing shall be structurally adequate and fastened to resist the wind loads specified by 2007 FBC Section 1609.
WIND RESISTANCE	Products are limited to installation in areas where the maximum wind speed is 100 mph (161 km/h) on structures with a mean roof height of 40 feet (12192 mm) or less in Exposure B areas. See Limitations and Conditions for further information
SUB-PRODUCT	FASTENER SPACING <i>(in)</i>
Hand-Split Shake	12*
Hand-Cut Stone	12*
Stacked Stone	12*
Staggered Edge Shake	16
Cedar Plank	16
Portsmouth Shake	12*
Perfect Shake	12*
Half-Round	16
D6 Cedar Plank	16
Rough Sawn Cedar	16
Hand-Laid Brick	12*
8' Cedar Shake	16

**Note the reduced spacing specified above as highlighted in bold typeface.*

5. QUALITY ASSURANCE

Novik Polymer Siding products described in this Product Evaluation Report are manufactured under a Quality Assurance Program that meets the requirements of the 2007 Florida Building Code, and F.A.C. Rule 9N-3. The Quality Assurance Entity is *Intertek Testing Services NA, Inc – ETL/Warnock Hersey* in Middleton, Wisconsin.

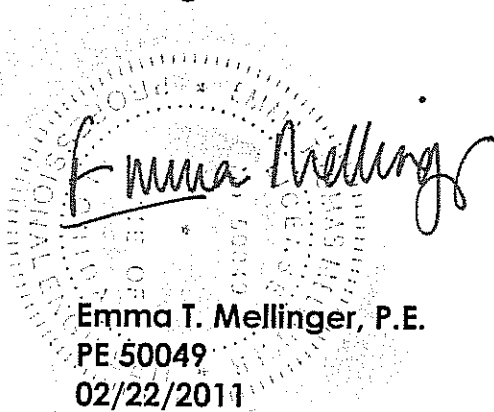
6. ENGINEER'S CERTIFICATION OF INDEPENDENCE

Emma T. Mellinger, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which this report is being issued. Additionally, Emma T. Mellinger, P.E. does not have nor will acquire a financial interest in any other entity involved in the approval process of said products.

7. LIMITATIONS AND CONDITIONS OF USE

- Use of the above-referenced product shall be in strict accordance with this Evaluation Report and the manufacturer's specific written instructions. For all other conditions, a site specific design shall be prepared by a Florida-registered Professional Engineer.
- When installed in accordance with this report, the siding material is limited to installation in areas where the maximum wind speed is 100 mph (161 km/h) on structures with a mean roof height of 40 feet (12192 mm) or less in Exposure B areas. Where the basic wind speed is in excess of 100 mph, or the exposure category is determined to be Exposure C, the negative component and cladding design pressures required shall be equal to or less than -33.0 psf when calculated in accordance with Chapter 16 of the 2007 FBC.
- The above-referenced product is NOT APPROVED for installation in the High Velocity Hurricane Zone.

This Engineer's Evaluation Report has been prepared by



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02/22/2011