



ENGINEERING EVALUATION REPORT

Report Number	0098-21	Issue Date	2025-12-31
Client	Nichiha USA, Inc.	Issue Number	2-6070
Address	6465 E. Johns Crossing, Suite 250, Johns Creek, GA 30097	Expiry Date	2026-12-31

SUBJECT

Nichiha NichiProducts and Sierra/Savannah Siding Summary conclusion and application of test results derived in accordance to ASTM E331, *Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference*.

TEST SUMMARY

Samples were tested in accordance with ASTM E331 at Intertek in Coquitlam, BC. Intertek is an independent testing laboratory accredited by the International Accreditation Service (IAS) certificate TL-274.

PRODUCT DESCRIPTION

Nichiha exterior wall claddings are Fiber-cement panels manufactured from a pressed, stamped, and autoclaved mix of cement, fly ash, silica, recycled rejects, and wood fiber bundles. The surface is pre-finished with a variety of colors and textures. Cladding panels and planks are installed on the exterior of buildings.

NichiBoard 5/16" thick, 5 1/4", 6 1/4", 7 1/4", 8 1/4", 9 1/4", 12" x 12'.

NichiPanel 5/16" thick, sizes: 4' x 8', 10', 12' and 16" x 12'.

NichiStaggered and NichiStraight, 5/16" thick, 16" x 4'.

Sierra Lap Siding is 1/2" thick, 6 1/4", 7 1/4", and 8 1/4" H x 9' 4" L.

Savannah Lap Siding is 1/2" thick, 8 7/8" H x 9' 4" L.

TEST RESULTS

Table 1: NichiProducts and Sierra/Savannah – ASTM E331 Test Results

Product ¹	Cladding Fastening	Requirement	PASS/FAIL
NichiPanel	6d nail 4" o/c in to studs and sheathing	120min @ 300 Pa (6.2 psf)	PASS
		15min @ 575 Pa (12.0 psf)	PASS
		15min @ 958 Pa (20.0 psf)	FAIL
NichiBoard	6d nail 8" o/c in to studs and sheathing	120min @ 300 Pa (6.2 psf)	PASS
		15min @ 575 Pa (12.0 psf)	PASS
		15min @ 958 Pa (20.0 psf)	PASS
NichiStraight	6d nail 8" o/c in to studs and sheathing	120min @ 300 Pa (6.2 psf)	PASS
		15min @ 575 Pa (12.0 psf)	PASS
		15min @ 958 Pa (20.0 psf)	PASS
Sierra/Savannah	#8 screw 8" o/c in to studs and sheathing	120min @ 300 Pa (6.2 psf)	PASS
		15min @ 575 Pa (12.0 psf)	PASS
		15min @ 958 Pa (20.0 psf)	PASS

1. All products were tested on an 8'x8' wall, wood-framed @ 16" with 7/16" OSB sheathing, water-resistive barrier and 2'x3' window opening with flashing, built in accordance with IBC Ch. 14. The cladding systems each contained at least one horizontal and one vertical siding joint in accordance with the manufacturer's installation instructions.



Testing has been completed in conformance with IBC Section 1402.2. ASTM E331-00(2023) is cited in the 2024 International Building Code (IBC) section 1402.2 *Weather Protection* and Ch. 35 *Reference standards*.

Manufacturing Plants, Labeling and Quality Assurance

The products evaluated in this report are produced at the approved manufacturing locations:

NichiProducts: Macon, GA, USA,

Sierra/Savannah: Iwaki, Fukushima, JPN; Handa-shi, Aichiken, JPN; Nagoya, Aichi, JPN; Narashino, Chiba, JPN;

Shimonoseki, Yamaguchi, JPN, Macon, GA, USA,

with third-party quality assurance inspections and product certification labeling by Intertek. Labeling shall be in accordance with the requirements of the IBC and the Accredited Quality Assurance Agency.

SOURCE DOCUMENTS

The published versions of the following sources, current on the date of this evaluation, were used as reference material to support the conclusions made:

1. ASTM E331 results: Intertek report 105863939COQ-002, dated December 2, 2024.

SIGNED

This report has been prepared and reviewed on behalf of BOCA by:

Chris Bowness, P.Eng., P.E.

2025-12-31

Date



EVALUATION REPORT TERMS:

1. This report is a general evaluation of the building code sections and/or standards requirements as identified and applies only to the samples that were evaluated. It does not imply any endorsement or warranty, nor that the signatory Engineer is the Designer of Record of any construction project for which the information is used.
2. This Evaluation Report expires Dec. 31, 2026, open to renewal. Up to the renewal date, the report is valid until such time as the named product(s) changes, the Quality Assurance Agency changes, or provisions of the Code that relate to the product change.

CERTIFICATION OF INDEPENDENCE:

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