



ENGINEERING EVALUATION REPORT

Issue Date	2025-04-22
Expiry Date	2025-12-31
Report Number	0098-21-1-6019-R1
Client Name	Nichiha USA, Inc.
Address	6465 E. Johns Crossing, Suite 250, Johns Creek, GA 30097

Subject

Nichiha fiber cement siding systems. ASTM E331 Water Penetration Resistance Testing Results.

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.

Nichiproducts NichiBoard is $\frac{5}{16}$ " thick plank lap siding available in 5 $\frac{1}{4}$ " , 6 $\frac{1}{4}$ " , 7 $\frac{1}{4}$ " , 8 $\frac{1}{4}$ " , 9 $\frac{1}{4}$ " , 12" heights by 12' lengths.

Nichiproducts NichiPanel is $\frac{5}{16}$ " thick panel siding available in 4' height by 8', 10', 12' lengths and 16" height by 12' length.

Nichiproducts NichiStraight Shake is $\frac{5}{16}$ " thick board shakes, 16" height by 4' length.

Sierra Premium Shake is $\frac{1}{2}$ " thick plank lap siding, 8 $\frac{7}{8}$ " height by 9' 4" length.

Savannah Smooth is $\frac{1}{2}$ " thick plank lap siding, 6 $\frac{1}{4}$ " , 7 $\frac{5}{16}$ " , or 8 $\frac{1}{4}$ " in height and 9' 4" length.

Evaluation

Testing of the siding has been conducted in accordance with the referenced test standards at Intertek - Coquitlam, BC location. Intertek is an independent testing laboratory accredited by the International Accreditation Service (IAS).

Description ¹	Cladding Fastening	Requirement	PASS/FAIL
Nichipanel	6d nail 4" o/c in to studs and sheathing	ASTM E331 Water Penetration Resistance Test 120 minutes at 6.24 psf 15 minutes at 12 psf 15 minutes at 20 psf	PASS up to 12 psf
Nichiboard	6d nail 8" o/c in to studs and sheathing		PASS
Nichistraight Shake	6d nail 16" o/c in to studs		PASS
Sierra Shake / Savannah Smooth	#8 screw 8" o/c in to studs and sheathing		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:

Nichiproducs: Macon, GA, USA,

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

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 1058639COQ-002L R1, dated 2024-9-9.

Signed

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

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

2025-04-22

Issue 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 2025-12-31, 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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