



## ENGINEERING EVALUATION REPORT

Issue Date	2025-04-10
Expiry Date	2025-12-31
Report Number	0098-24-1-5993
Client Name	Nichiha USA, Inc.
Address	6465 E. Johns Crossing, Suite 250, Johns Creek, GA 30097

### Subject

**Nichiha AWP Fiber-Cement Wall Cladding System for Interior Applications** summary results and verification of compliance to NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*.

### Product Description

#### Clips

Panels are held in place by 26-inch galvanized steel clips installed on top and fastened to framing members using a #10 x 1-1/2" screw at each stud. Clips are spaced 4 inches apart along the panel length, and the top row of panels is face-fastened with #8 x 2-1/2" screws.

#### AWP Panel

The AWP Fiber-Cement Panel is nominally 5/8" (16mm) in thickness, 18" (455mm) in width, and 119" (3030mm) in length with alternate sizes of 71.5" (1818mm) in length and thickness of 5/8", 3/4", and 7/8" (16, 18, and 21mm). The AWP system was installed as wall and ceiling finish to the interior of the test room in accordance with NFPA 286, fastened directly to framing of 2x4 wood studs and 2x6 wood ceiling joists @ 16" o/c.

### Evaluation

Testing of the AWP panels 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).

NFPA 286 Section 9 - Test Results				
Flashover	Peak Heat Flux	Peak Heat Release Rate	Peak Average Room Temperature	Result
None	1.41 kW/m <sup>2</sup>	198 kW	306°C	Pass



NFPA 286 Annex C - Test Results		
Performance Criteria	Test Observations	Result
During 40 kW exposure, flames should not spread to the ceiling.	Flames did not spread to the ceiling during the 40kW exposure.	Pass
During the 160-kW exposure, flames not to spread to the outer extremity of the sample on any wall or ceiling and flashover not to occur.	Flame propagation to the outer extremities and/or flashover did not occur during the 160-kW exposure.	Pass
The peak rate of heat release not to exceed 800 kW.	The peak heat release rate was 198 kW.	Pass
The total smoke released not to exceed 1,000 m <sup>2</sup> .	The total smoke released during the entirety of the test was 115 m <sup>2</sup> .	Pass

The results of this testing comply with the requirements of NFPA 286-24 and the criteria of in 2024 IBC Section 803.1.1, *Interior wall and ceiling finish tested in accordance with NFPA 286*.

#### Manufacturing Plants, Labeling and Quality Assurance

The products evaluated in this report are manufactured at locations: 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 by Intertek in accordance with ASTM C1288-17 Section 9.2. Labeling shall be in accordance with the requirements of the IBC, ASTM C1288-17 Section 10.1, 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. Nichiha AWP NFPA 286 results: Intertek Laboratory report 106025025COQ-002 R1, dated 01/24/25

#### Signed

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

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

2025-04-10

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:

1. Boca Engineering Co., its employees and shareholders, do not have, nor do they intend to or will acquire, a financial interest in any company manufacturing or distributing products that they evaluate.
2. Boca Engineering Co. is not owned, operated or controlled by any company manufacturing or distributing products that they evaluate.

-END-

