



ENGINEERING EVALUATION REPORT

Issued Date	2023-07-18
Expiry Date	2024-12-31
Report Number	0093-17-1
Client	FastPlank Systems Inc.
Address	101-4441 76th Ave SE, Calgary, AB T2C 2G8

SUBJECT

Summary conclusion and application of test results derived from AAMA 508-21, *Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems* completed for installations of FastPlank Aluminium 6" Siding Rain Screen System.

TEST SUMMARY

One (1) representative wall assembly has been tested in accordance with AAMA 508-21 at Intertek in Coquitlam, British Columbia. Intertek is an accredited laboratory by International Accreditation Service (IAS).

PRODUCT DESCRIPTION

FastPlank Systems are aluminum siding planks with fastening clips and trim accessories, serving as an exterior wall covering. Planks are extruded 3/64 in. thick aluminum with a V-Notch™ profile, available in widths of 4 in. or 6 in. and in 16 ft. or 32 ft. lengths.

Table 1: FastPlank Aluminium Siding Rain Screen System Assembly¹

Test Assembly	Configuration	Framing	Clip Fastener	Sheathing ²
1	Fastplank P46 6" plank with aluminum fastening clips @ 32" o.c. horizontal spacing on ea. siding plank staggered @ 16" o.c. every course of planks, clips fastened in to framing studs, one clip @ termination of each plank with J-track and trim per manufacturer's instructions	8'x8' wall, 2x6, 16 ga., 50 ksi steel studs @16" o.c.	# 12 x 1-1/2" hex head screw and gasketed washer, with sheathing tape	1/2" clear poly carbonate sheet

- For further assembly information, see the manufacturer's installation instructions: https://fastplank.com/wp-content/uploads/sites/2/2021/09/FastPlank-Installation-Guide_Jun27-2023.pdf.
- Polycarbonate sheathing used in test per the testing standard. Is substituted in testing for a typical field installation of nominal 1/2" code-compliant sheathing with water-resistive barrier.

Table 2: AAMA 508-21 Test Results¹

Property	Standard ²	Test Results
Air Leakage	ASTM E283/E283M (Static)	Confirmed simulated air leakage of 0.6 L/s*m ² ± 10% @ 75 Pa
Pressure Equalization	ASTM E1233	Met requirements of AAMA 508 to be considered pressure equalized



Static Water Penetration Resistance	ASTM E331	Tested at specified pressure differential of 720 Pa and met requirements of AAMA 508 as water droplets appeared on $\leq 5\%$ of surface area, and no continuous water stream
Dynamic Water Penetration Resistance	AAMA 501.1	Tested at specified pressure differential of 720 Pa and met requirements of AAMA 508 as water droplets appeared on $\leq 5\%$ of surface area, and no continuous water stream

1. Test results obtained from Intertek Report 105139889COQ-012.
2. ASTM E283/E283M, ASTM E1233, ASTM E331, and AAMA 501.1 are cited reference documents in AAMA 508-21.

CONCLUSION

The listed tested assembly has been tested in conformance with the following tests:

ASTM E283/E283M-19, *Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen*

ASTM E1233/1233M-14(2021), *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Cyclic Static Air Pressure Differential*

ASTM E331-00(2016), *Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference*

AAMA 501.1-17, *Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure*

The listed tested assembly meets the criteria of AAMA 508-21, *Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems*.

SIGNED

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

Nico Nordal

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



2023-07-18

July 18, 2023

Date

Date