

ABODO WOOD LTD FIRE TEST REPORT

SCOPE OF WORK

SFM 12-7A-1 TESTING ON EXTERIOR WALL ASSEMBLY CONTAINING ABODO VULCAN T&G WOOD SIDING PLANK INSTALLED IN THE VERTICAL ORIENTATION

REPORT NUMBER

K5893.01-121-24-R0

TEST DATE(S)

03/16/20

ISSUE DATE

04/30/20

RECORD RETENTION END DATE

03/16/24

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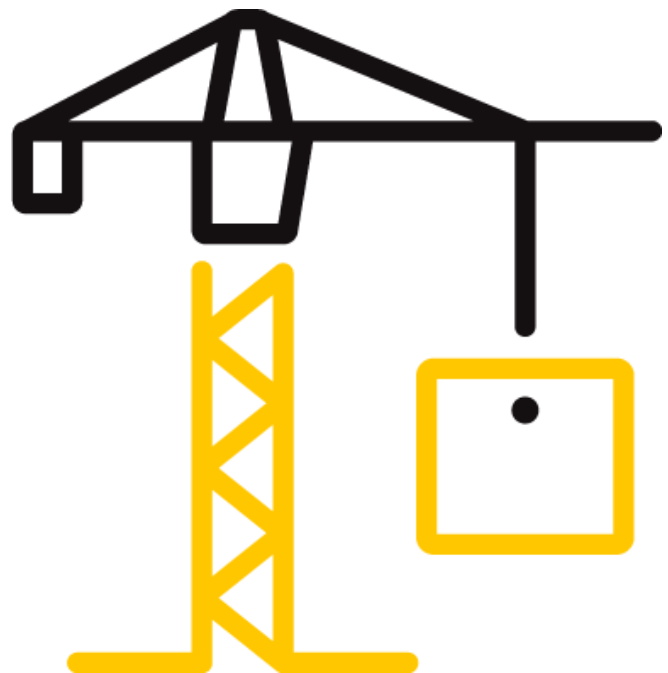
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TEST REPORT FOR ABODO WOOD LTD

Report No.: K5893.01-121-24-R0

Date: 04/30/20

REPORT ISSUED TO

ABODO WOOD LTD

62 Ascot Road

Mangere, AU 2022 New Zealand

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Abodo Wood Ltd., 62 Ascot Road Mangere, AU (New Zealand) to evaluate the performance of exterior walls containing Abodo Vulcan T&G Wood Siding Plank when exposed to direct flames. Testing was conducted at the Intertek B&C test facility in York, Pennsylvania. Results obtained are tested values and were secured by using the designated test method(s). A summary of test results and the complete graphical test data is reported herein.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

Wall System: Exterior Wall Assembly

Combustible Components: 5/8 in. thick FlamePro Plywood sheathing, Wrapsheild RS™

Rainscreen 3 mm, Abodo Vulcan T&G Wood Siding Plank

SFM 12-7A-1 Test Results

The assembly described and tested in this report **did** meet the Conditions of Acceptance of SFM 12-7A-1. Construction of the full assembly is summarized in Section 7 of this test report.

For INTERTEK B&C:

COMPLETED BY:	Scott Gingrich	REVIEWED BY:	Ethan Grove
TITLE:	Technician Team Lead– Fire Testing	TITLE:	Manager – Fire Testing
SIGNATURE:		SIGNATURE:	
DATE:	04/30/20	DATE:	04/30/20

SDG:ddr

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SECTION 3

TEST METHOD

The assembly was evaluated in accordance with the following:

California Referenced Standards Code (Chapter 12-7A), Materials and Construction Methods for Exterior Wildfire Exposure

SFM Standard 12-7A-1, Exterior Wall Siding and Sheathing

SECTION 4

MATERIAL SOURCE/INSTALLATION

The sampled product was selected by Intertek B&C personnel. The specimens were witnessed during production and tagged prior to shipment on 02/07/20, (Reference Intertek B&C Test Specimen Selection Report No. K5893.03-103-15, dated 02/07/20). The remaining components of the test assembly were provided by the client except for the wall framing and sheathing which were acquired and assembled by Intertek B&C personnel.

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Bill Stevens	reSAWN TIMBERco
Scott Gingrich	Intertek B&C
Nate Brillhart	Intertek B&C
Logan Chronister	Intertek B&C
Mark Dluzeskie	Intertek B&C

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SECTION 6**TEST PROCEDURE**

The test specimen is installed into the fixture and centered underneath of the combustion collection system. The ignition source for the test is a gas burner with a 4 inch by 39-inch diffusion adapter filled with a minimum 4-inch layer of Ottawa sand. The top surface of the burner through which the gas is applied is positioned 12 inches above the floor. The burner is centered inside of the fixture and is placed in contact with the surface of the specimen. The gas supply to the burner is C.P. grade propane (99 percent purity). The burner is set to produce a gross heat output of 150 ± 8 kW for ten minutes. The flow rate is metered throughout the test. The gas burners are controlled with mass flow meters to control the volume of gas to match the heat outputs of the standard. At the end of the ten-minute burn period, the burner is shut off and all instrument readings are stopped. Post-test observations are made for an additional 60 minutes or until all evidence of combustion is no longer visible. The test procedure is repeated to a total of three total tests.

SECTION 7**TEST ASSEMBLY DESCRIPTION**

The overall dimensions of the test assembly are 4 feet wide by 8 feet high. Below is a detailed description of the components in the assembly:

Framing

Dimensional lumber measuring a nominal 2 in. x 4 in. x 96 in. long were used as the framing "studs" of the assembly. These framing pieces were placed on 16 in. centers. The same size of framing pieces was cut to 48 in. long as used as a header and sill piece. These pieces were nailed to each stud framing piece using a 3-1/2 in. long 8d nail. The wood components used for the assembly framing were verified to have less than a 12% moisture content.

Exterior Sheathing

5/8 in. thick flamePro plywood was used as the sheathing. This sheathing had a vertical joint on a vertical stud 16 in. from the assemblies centerline. This sheathing was secured to the framing using 2-1/2 in. long 8d nails. These nails were placed 8 in. on center around the perimeter and 12 in. on center in the field of the plywood. The sheathing used for the assembly was verified to have less than an 8% moisture content.

Water-resistive Barrier

VaproShield® Wrapshield™ RS 3mm water resistive vapor permeable air barrier membrane was used on this assembly. This barrier was secured to the assembly using 5/16 staples on nominal 12 in. centers.

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SECTION 7(CONTINUED)

TEST PROCEDURE

Exterior Cladding

Abodo Vulcan T&G wood siding planks were used as the exterior cladding. The siding planks were mounted in a vertical orientation with the long dimension parallel with the framing members. The siding planks were 5-5/8 in. x 3/4 in. thick x 8 ft. long. The planks utilized a tongue and groove that when installed created a 3/8 in. joint between the next plank that is installed. The planks were secured to the assembly using a #7 stainless steel wood screw placed on 16 in. centers.

SECTION 8

TEST OBSERVATIONS

Test Date: 03-16-2020

Lab Temperature: 60°F

Lab Relative Humidity: 30%

Test #1

TIME (Min:Sec)	OBSERVATIONS
00:00	Ignition of room burner. Heat output set at 150 kW
01:29	Ignition of the cladding.
02:09	Smoke emitting from the plywood joint on the unexposed surface.
10:00	Burner extinguished. Post-test observation period begins.
10:01	Flames continue to emit from the exposed surface.
11:28	Smoke is observed emitting from the unexposed surface.
70:00	Post-test observation period ends; test concluded.

Test #2

TIME (Min:Sec)	OBSERVATIONS
00:00	Ignition of room burner. Heat output set at 150 kW
01:17	Ignition of the cladding.
05:40	Smoke emitting from the plywood joint on the unexposed surface.
10:00	Burner extinguished. Post-test observation period begins.
70:00	Post-test observation period ends; test concluded.

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SECTION 8 (CONTINUED)

TEST OBSERVATIONS

Test #3

TIME (Min:Sec)	OBSERVATIONS
00:00	Ignition of room burner. Heat output set at 150 kW
01:20	Ignition of the cladding.
10:00	Burner extinguished. Post-test observation period begins.
10:23	Smoke emitting from the plywood joint on the unexposed surface.
70:00	Post-test observation period ends; test concluded.

SECTION 9

TEST RESULTS

TEST REQUIREMENTS	TEST RESULTS	PASS/FAIL
Absence of flame penetration through the wall assembly at any time.	Flame penetration through the assembly was not observed during the full duration of the three tests.	PASS
Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute test.	Evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute duration for all three tests was not present.	PASS

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SECTION 10

PHOTOGRAPHS



Photo No. 1
Exterior Cladding Profile



Photo No. 2
Framing Complete

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SECTION 10 (CONTINUED) PHOTOGRAPHS



Photo No. 3
Sheathing Installed

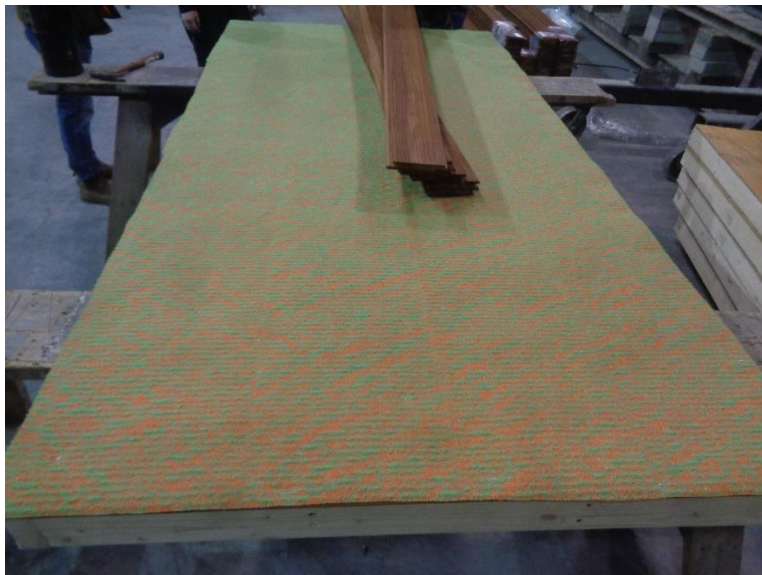


Photo No. 4
Water/Air Barrier Installed

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SECTION 10 (CONTINUED)

PHOTOGRAPHS



Photo No. 5
Cladding Installed



Photo No. 6
Complete Assembly (Exterior Surface)

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PHOTOGRAPHS



Photo No. 7
Complete Assembly (Interior Surface)



Photo No. 8
Ignition of Burner

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PHOTOGRAPHS



Photo No. 9
Burner Off



Photo No. 8
Post-test Exterior

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PHOTOGRAPHS



Photo No. 9
Exterior Cladding Removed (Post-Test)

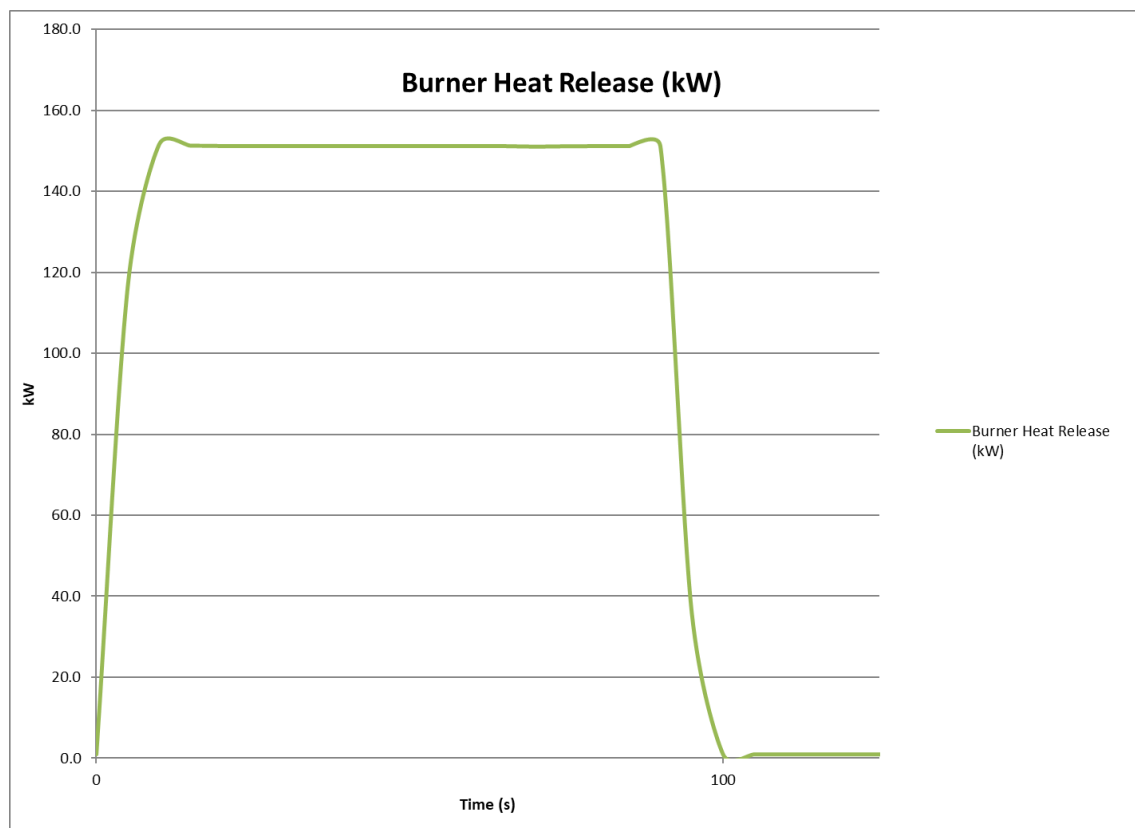
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SECTION 11

GRAPHS



Graph No. 1
Burner Output Verification Data



Total Quality. Assured.

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

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SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
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