

DASSO USA, LLC FIRE TEST REPORT

SCOPE OF WORK

SFM 12-7A-4A TESTING ON XTR-DK20-G2-PP FUSED BAMBOO DECK BOARDS

REPORT NUMBER

J6810.01-121-24-R0

TEST DATE(S)

06/27/19

ISSUE DATE

07/17/19

RECORD RETENTION END DATE

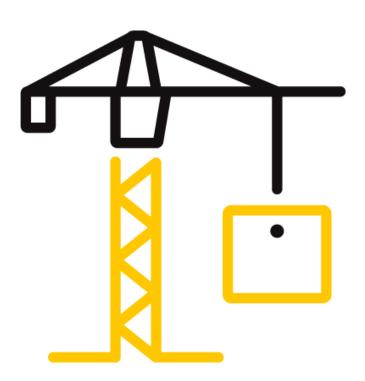
06/27/23

PAGES

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DOCUMENT CONTROL NUMBER

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TEST REPORT FOR DASSO USA, LLC

Report No.: J6810.01-121-24-R0

Date: 07/17/19

REPORT ISSUED TO

DASSO USA, LLC

6060 Boat Rock Boulevard SW Atlanta, Georgia 30336

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Dasso USA, LLC, 6060 Boat Rock Boulevard SW Atlanta, Georgia 30336 to evaluate the performance of XTR-DK20-G2-PP decking boards 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

Product Type: Exterior Decking

Series/Model: XTR-DK20-G2-PP fused bamboo deck boards

SFM 12-7A-4 Test Results

The assembly described and tested in this report **did** meet the Conditions of Acceptance of SFM 12-7A-4A. Construction of the full assembly is summarized in Section 7 of this test report.

For INTERTEK B&C:

COMPLETED BY: Scott Gingrich
Technician Team Lead—
Fire Testing

SIGNATURE:
DATE:

07/17/19

SDG:ddr

REVIEWED BY: Ethan Grove

Manager – Fire Testing

SIGNATURE:
DATE:
07/17/19

O7/17/19

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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-4A, Decking

SECTION 4

MATERIAL SOURCE/INSTALLATION

The sampled products were selected by Intertek B&C personnel. The specimen(s) was/were witnessed during production and tagged prior to shipment on 06/11/19, (Reference Intertek B&C Test Specimen Selection Report No. J6810.03-103-15-r0, dated 06/11/19). The remaining components of the test assembly were provided by the client except simulated floor joists which were acquired and assembled by Intertek B&C personnel.

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY	
Scott Gingrich	Intertek B&C	
Nathan Brillhart	Intertek B&C	
Mark Dluzeski	Intertek B&C	

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TEST PROCEDURE

Part A - Under-deck Flame Test

For the under-deck flame test, the ignition source for the under-deck test is a gas burner with a 12 inch by 12 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 centered and positioned 27 inches below the surface of the deck. The gas supply to the burner is C.P. grade propane (99 percent purity). A burner verification test is run prior to the under-deck test. Verification test involves using oxygen consumption calorimeter to confirm the output. The burner is set to produce a gross heat output of 80 ±4 kW for three minutes. The gas burners are controlled with mass flow meters to control the volume of gas to match the heat outputs of the standard. After the verification test, the specimen is installed into the fixture and the diffusion burner is placed. The collection hood exhaust duct blower is turned on and an initial flow is established. Burner is centered underneath the test deck and then ignited at a fuel flow rate that is known to produce 80 kW of heat output and maintained for 3 minutes. When the burner is shut off, post-test observations are documented for 40 minutes.

SECTION 7

TEST ASSEMBLY DESCRIPTION

The overall dimensions of the test assembly are 4 feet wide by 84 inches high. Below is a detailed description of the components in the assembly:

Framing

2 x 6 Douglas fir dimensional lumber was cut to 27-1/8 in. Two identical pieces were cut to simulate two joists for the deck boards to attached to.

Decking

Dasso USA, LLC XTR-DK20-G2-PP fused bamboo deck boards were cut to 24 in. long lengths. The deck boards were secured to the joists using Cisen winged deck fasteners system. This system used a $\#7 \times 1-3/5$ in. grade 304 stainless steel screws and wing clips to secure the deck boards to the wood joists. The deck fastener system created a 5/16 in. space between each deck board.

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SECTION 8

TEST OBSERVATIONS

Test Date: 06-27-2019 Lab Temperature: 84°F Lab Relative Humidity: 44%

Under-deck Test #1

TIME	OBSERVATIONS	
(Min:Sec)		
00:00	Ignition of burner. Heat output set at 80 kW	
00:52	Ignition of the underdeck.	
01:18	Ignition of the deck surface.	
03:00	Burner extinguished.	
03:38	Flaming on the deck surfaces stop emitting from the surfaces.	
41:35	End of test and observations. No signs of combustion.	

Under-deck Test #2

TIME	OBSERVATIONS	
(Min:Sec)		
00:00	Ignition of burner. Heat output set at 80 kW	
00:53	Ignition of the underdeck.	
01:18	Ignition of the deck surface.	
03:00	Burner extinguished.	
03:40	Flaming on the deck surfaces stop emitting from the surfaces.	
43:00	End of test and observations. No signs of combustion.	

Under-deck Test #3

TIME	OBSERVATIONS	
(Min:Sec)		
00:00	Ignition of burner. Heat output set at 80 kW	
00:51	Ignition of the underdeck.	
01:12	Ignition of the deck surface.	
03:00	Burner extinguished.	
04:05	Flaming on the deck surfaces stop emitting from the surfaces.	
34:20	End of test and observations. No signs of combustion.	

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TEST RESULTS

Part A - Under-deck Flame Tests

TEST REQUIREMENTS	TEST RESULTS	PASS/FAIL
Effective net peak heat release rate of less than or equal to 25 kW/ft² (269 kW/m²)	Effective net peak heat release rate of: Sample #1: 158.1 kW/m² Sample #2: 137.8 kW/m² Sample #3: 150.3 kW/m²	PASS
Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period.	Sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period was not present.	PASS
Absence of falling particles that are still burning when reaching the burner or floor.	Falling particles that are still burning when reaching the burner or floor was not evident.	PASS

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SECTION 10



Photo No. 1 Complete Assembly (Above Deck)



Photo No. 2 Complete Assembly (Below Deck)



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Photo No. 3
Test Assembly (Pre-test)



Photo No. 4 Ignition of Burner



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Photo No. 5 Burner Off



Photo No. 6
Post-test Above Deck



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Photo No. 7
Post-test Below Deck



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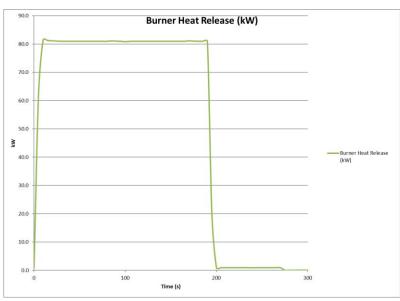
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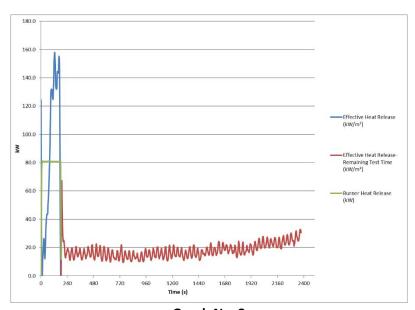
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SECTION 11

GRAPHS



Graph No. 1
Under-deck Burner Output Verification Data



Graph No. 2
Under-deck Test #1 Heat Release Data



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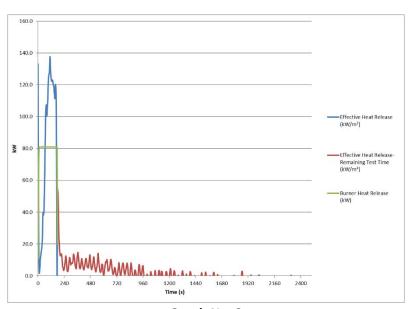
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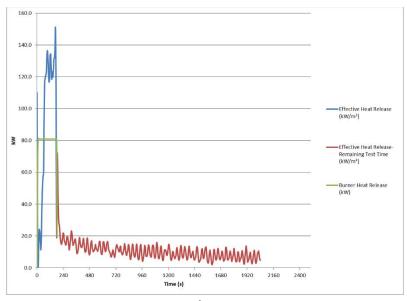
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GRAPHS



Graph No. 3
Under-deck Test #2 Heat Release Data



Graph No. 4
Under-deck Test #3 Heat Release Data



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SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	07/17/19	N/A	Original Report Issue

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