

RADIAL ENGINEERING LTD

TEST REPORT

SCOPE OF WORK

BROADBAND

REPORT NUMBER

211012007SHF-001

TEST DATE(S)

2021-10-12- 2021-10-27

ISSUE DATE

2021-11-01

PAGES

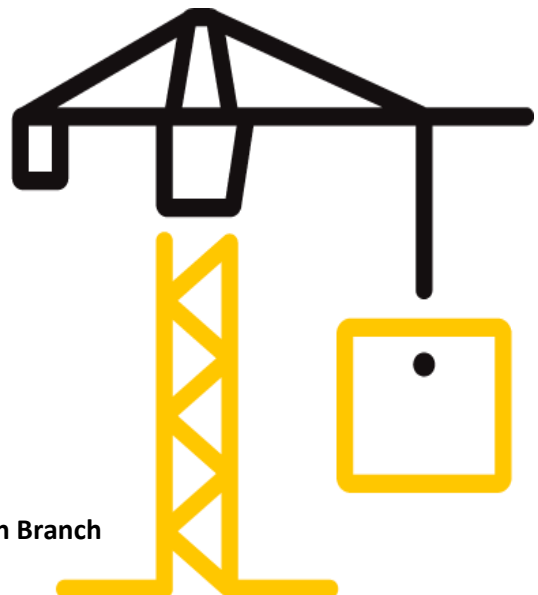
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DOCUMENT CONTROL NUMBER

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Test Report

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Test Report

Issue Date: 2021-11-01 Intertek Report No. 211012007SHF-001
 Applicant: RADIAL ENGINEERING LTD
 Address: 1845 KINGSWAY UNIT 1165, PORT COQUITLAM, V3C 1S9. CANADA
 Attn: JUAN CARLOS BOLOMEY
 Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	BROADBAND	Brand	PRIMACOUSTIC
Sample Description	Good Condition	Sample Amount	8 pcs + 1 package
		Received Date	2021-09-30
Sample ID	Model	Specification	
S211012007SHF.001 S211012007SHF.003	RAW PANEL	48"×48" NO FABRIC FINISH	


Test Methods And Standards


Test Standard	EN 13823:2010+A1:2014 and EN ISO 1716:2010
Specification Standard	EN 13501-1:2018
Test Conclusion	The samples were tested according to the above standards, and the results are shown in the following page.


Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

Report Authorized


 Name: Sally Xie
 Title: Reviewer


 Name: Lu Cheng
 Title: Project Engineer



Test Report

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Intertek Report No. 211012007SHF-001

Test Items, Method and Results:

EN 13501-1:2018 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

1.1 HEAT OF COMBUSTION TEST

The test was conducted in accordance with EN ISO 1716. This test evaluates the gross heat of combustion (Q_{PCS}) of products at constant volume in a bomb calorimeter.

1.2 SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item near to the product.

1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1:2018. The class A2 with its corresponding fire performance is given in the table below.

Table - Class of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

Class	Test Method(s)	Classification criteria	Additional classifications
A2	EN ISO 1716 and	$PCS \leq 3.0 \text{ MJ/kg}^a$ and $PCS \leq 4.0 \text{ MJ/m}^2^b$ and $PCS \leq 4.0 \text{ MJ/m}^2^c$ and $PCS \leq 3.0 \text{ MJ/kg}^d$	--
	EN 13823	$FIGRA_{0.2MJ} \leq 120 \text{ W/s}$ and LFS < edge of specimen and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production ^e and Flaming droplets/particles ^f

Note:

- a. For homogeneous products and substantial components of non-homogeneous products.
- b. For any external non-substantial component of non-homogeneous products.
- c. For any internal non-substantial component of non-homogeneous products.
- d. For the product as a whole.
- e. $s1 = SMOGRA \leq 30 \text{ m}^2/\text{s}^2$ and $TSP_{600s} \leq 50 \text{ m}^2$; $s2 = SMOGRA \leq 180 \text{ m}^2/\text{s}^2$ and $TSP_{600s} \leq 200 \text{ m}^2$; $s3 = \text{not } s1 \text{ or } s2$.
- f. $d0 = \text{no flaming droplets/particles in EN 13823 within 600s}$;
 $d1 = \text{no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s}$;
 $d2 = \text{not } d0 \text{ or } d1$.
 Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

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Intertek Report No. 211012007SHF-001

Test Items, Method and Results:

2 RESULTS AND OBSERATIONS

Method	Parameter		Result
EN ISO 1716:2010	PCS	the product, MJ/kg	2.0
EN 13823:2010+A1:2014 *	FIGRA _{0,2MJ} , W/s		32
	THR _{600s} , MJ		1.6
	LFS, m		<Edge of specimen
	SMOGR _A , m ² /s ²		0
	TSP _{600s} , m ²		22
	Flaming droplets/particles		No flaming droplets/particles occur within 600s

Note

- *Test item is subcontracted on accreditation by CNAS L0057.
- Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 12mm thick calcium silicate board. The density of the calcium silicate board was 900kg/m³.

3 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

Fire behaviour		Smoke production			Flaming Droplets	
A2	-	s	1	-	d	0

Reaction to fire classification: A2 - s1, d0



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Intertek Report No. 211012007SHF-001

Test Items, Method and Results:

4 Test Photos of EN 13823



Before test (Long wing)



Before test (Short wing)



After test (Long wing)



After test (Short wing)



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Intertek Report No. 211012007SHF-001

Appendix A: Sample Received Photo



Front view



Back view

Revision:

NO.	Date	Changes
211012007SHF-001	2021-11-01	First issue

