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TECHNICAL DATA SHEET // PI DUCT

WellWall Phenolic Duct – Test Reports

دكت فينوليك WellWall – تقارير الاختبار

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01 Intertek test reports

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DOCUMENT

14 pages, extracted from:
Technical Submittal - WellWall Phenolic Pre-Insulated Duct, p. 66–78
Revision 01 · October 2026

CONTACT · REQUEST A QUOTE

Phone / WhatsApp: +974 7097 0111 Email: hvac@tawreed.ltd
Factory: Zone 91, Street 3138, Building 66, Birkat Al Awamer, Qatar
Web: tawreed.ltd Hours: Sat–Thu, 9am–5pm

Data supplied for submittal and specification purposes. Values are nominal;
confirm project-specific requirements with Tawreed before ordering.

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Tel: 021-61136116 Fax: 021-61189921
Website: www.intertek.com

Test Report

Issue Date: 2018/11/15 Intertek Report No. 181030003SHF-002

Applicant: JIANGYIN WELLWALL INSULATION MATERIAL CO., LTD

Applicant Address: No. 4 Xuehai Road, Huangtang Industrial Region, Xuxiake Town, Jiangyin, Wuxi, Jiangsu, China

Attn: Amanda

SUBJECT: Performance testing
Phenolic foam panel

Dear Sir,
This test report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS
Refer to the next following Pages.

SAMPLE ID	MODEL	SPECIFICATION
S181030003SHF.002	/	L1000*W600*T20mm 7pcs L320*W600*T20mm 1pc

SAMPLE RECEIEVED: 2018/10/30
TESTED FROM: 2018/10/30 TO 2018/11/8

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Test Report

Issue Date: 2018/11/15 Intertek Report No. 181030003SHF-002

Test Items, Method and Results:

Test Method: ASTM E84-18a Standard Test Method for Surface Burning Characteristics of Building Materials

Specimen Mounting Method:

The 23.62-ft. long test specimen consisted of six 3.94-ft. long x 23.62-in. wide x 0.79-in. thick Phenolic foam panel.

The specimen was same on both sides.

The specimen was self-sopporting.

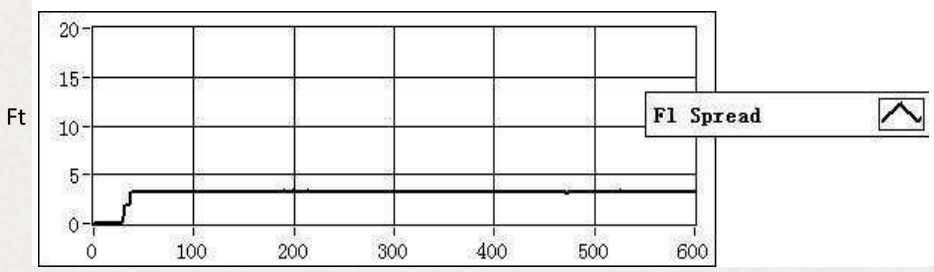
Test Observation (min:sec)

Melting	Blistering	Transient Ignition	Steady Ignition	Flaming drops
/	/	/	0:21	/
Delamination	Sagging	Shrinkage	Falling	Floor Flame
/	/	/	/	/

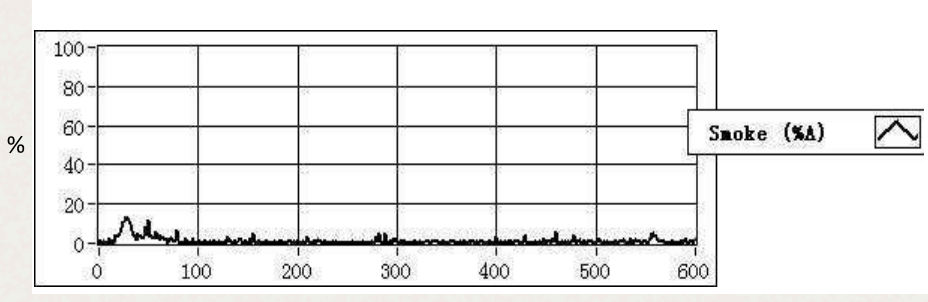
Test Result

Flame Spread Index (FSI)	15	Smoke Developed Index(SDI)	15

Flame spread graph



Smoke developed graph



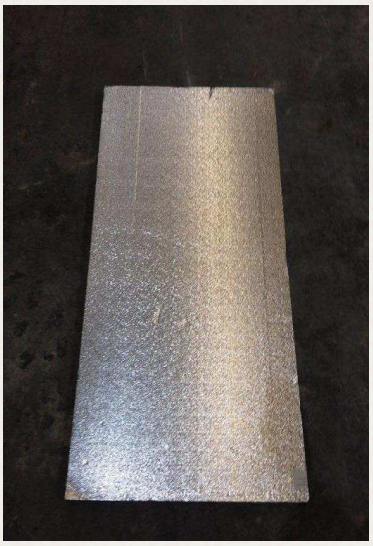
Page 3 of 4

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Test Report

Issue Date: 2018/11/15 Intertek Report No. 181030003SHF-002

APPENDIX: SAMPLE RECEIVED PHOTO





REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.

Harrison Li Alan Yang

INTERTEK TESTING SERVICES SHENZHEN LTD. SHANGHAI FENGXIAN BRANCH 检验检测专用章

Name: Harrison Li Name: Alan Yang
Title: Reviewer Title: Project Engineer

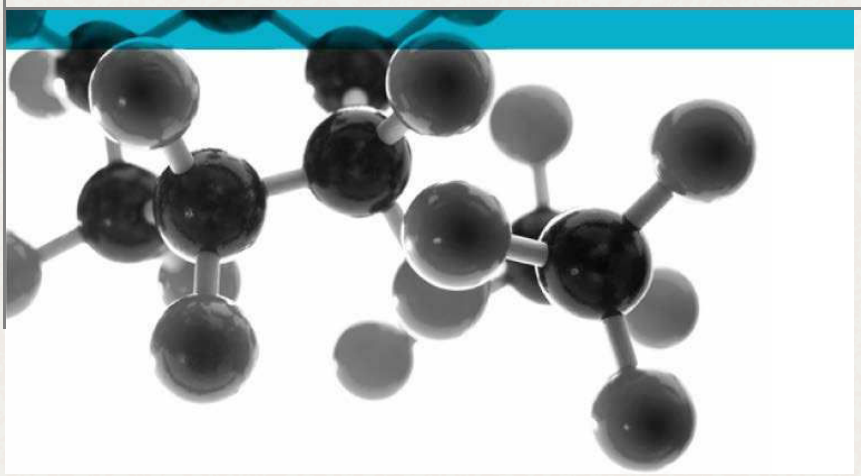
Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
181030003SHF-002	2018/11/15	First issue	Alan Yang	Harrison Li

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Class 0 Summary Report



Including Opinion Of Compliance With The Requirements For A Class 0 Surface As Defined In Paragraph A13(b) Of Approved Document B (Volumes 1 & 2), (2006 Edition) 'Fire Safety' To The Building Regulations 2000

A Report To: Jiangyin Wellwall Insulation Material Co., Ltd

Document Reference: 394459 & 394460

Date: 2nd March 2018

Issue No.: 1

Page 1

Testing
Advising
Assuring

Registered Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Reg No.SC 70429
This report in issued in accordance with our terms and conditions, a copy of which is available on request.

Class 0 Summary Report

Exova Warringtonfire

Executive Summary

Objective

To assess the results of tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7:1997, obtained on specimens of the following product and to provide an opinion of compliance with the requirements for a Class 0 surface, as defined in Approved Document B to the Building Regulations 2000.

Generic Description	Product reference	Thickness	Weight per unit area or density
Double aluminium foil faced phenolic insulation board	"Wellwall"	20mm	975.1g/m²*
Individual components used to manufacture composite:			
Foil	Unwilling to provide	0.03mm	Unwilling to provide
Adhesive	Unwilling to provide	Not applicable	Unwilling to provide
Insulation	"Wellwall"	20mm	60kg/m³
Adhesive	Unwilling to provide	Not applicable	Unwilling to provide
Foil	Unwilling to provide	0.03mm	Unwilling to provide
***determined by Exova Warringtonfire**			
Please see page 5 of this test report for the full description of the product tested			

Test Sponsor

Jiang Wellwall Insulation Material Co., Ltd., No. 4 Xuehai Road, Huangtang Industrial Zone, Xuxiake Town, Jiangyin, Jiangsu, China

Opinion:

We consider the results of the tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7: 1997, demonstrate that the product, as tested, complies with the requirements for Class 0, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.

Date of Test

14th and 15th February 2018

Signatories

Responsible Officer
T. Mort *
Senior Technical Officer

Authorised
S. Deeming *
Business Unit Head

* For and on behalf of **Exova Warringtonfire**.

Report Issued: 2nd March 2018

This version of the report has been produced from a .pdf format electronic file that has been provided by **Exova Warringtonfire** to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of **Exova Warringtonfire**.

Class 0 Summary Report

Exova Warringtonfire

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Class 0 Summary Report

Exova Warringtonfire

Test Details

Terms Of Reference

To assess the results of tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7:1997, obtained on specimens of a product and to provide an opinion of compliance with the requirements for a Class 0 surface, as defined in Approved Document B to the Building Regulations 2000.

Introduction

Specimens of a product have been tested in accordance with the test methods specified in BS 476: Part 6: 1989+A1: 2009 'Method of test for fire propagation for products' and BS 476: Part 7: 1997 'Method of test to determine the classification of the surface spread of flame of products'. The results of the tests are fully reported in the **Exova Warringtonfire** test reports No's. 394459 and 394460.

This summary test report has been prepared at the request of the sponsor and relates the results of the tests to the requirements for a Class 0 surface of a material or composite product, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.

This summary should be read in conjunction with, and not accepted as a substitute for, the **Exova Warringtonfire** test reports No's. 394459 and 394460. Those test reports may include additional information which may be relevant to the assessment of the potential fire hazard of the product.

Face subjected to tests

The specimens were mounted in the test positions such that one of two identical faces was exposed to the heating conditions of the tests.

Results of test

The following results were obtained for the specimens, which were tested.

BS 476: Part 6: 1989+A1: 2009

Fire propagation index, I	=	8.4
subindex, i_1	=	4.3
subindex, i_2	=	2.8
subindex, i_3	=	1.3

BS 476: Part 7: 1997

Class 1 surface spread of flame

The test results relate only to the behaviour of the test specimens of the product under the particular conditions of the test, they are not intended to be the sole criterion for assessing the potential hazard of the product in use.

Description of Test Specimens

The description of the specimens given below has been prepared from information provided by the sponsor of the test. This information has not been independently verified by **Exova Warringtonfire.** All values quoted are nominal, unless tolerances are given.

General description		Double aluminium foil faced phenolic insulation board
Product reference		"Wellwall"
Name of manufacturer		Jiangyin Wellwall Insulation Material Co., Ltd
Overall thickness		20mm (stated by sponsor) 20.63mm (determined by **Exova Warringtonfire**)
Overall weight per unit area		60kg/m³ (stated by sponsor) 975.1g/m² (determined by **Exova Warringtonfire**)
Foil	Generic type	Aluminium
	Product reference	**See Note 1 below**
	Name of manufacturer	Jiangyin Sanchang Trading Co.,Ltd
	Thickness	0.03mm
	Weight per unit area	**See Note 1 below**
	Colour reference	"Silver"
	Flame retardant details	The foil is inherently flame retardant
Adhesive	Generic type	Water based adhesive
	Product reference	**See Note 1 below**
	Name of manufacturer	Yangzhou Julong Chemical Co., Ltd
	Application rate	**See Note 1 below**
	Application method	**See Note 1 below**
	Flame retardant details	**See Note 1 below**
	Curing process	**See Note 1 below**
Insulation board	Generic type	Phenolic foam compound ventiduct
	Product reference	"Wellwall"
	Name of manufacturer	Jiangyin Wellwall Insulation Material Co., Ltd
	Colour reference	"Pink"
	Thickness	20mm
	Density	60kg/m³
	Flame retardant details	**See Note 1 below**
Adhesive	Generic type	Water based adhesive
	Product reference	**See Note 1 below**
	Name of manufacturer	Yangzhou Julong Chemical Co.,Ltd
	Application rate	**See Note 1 below**
	Application method	**See Note 1 below**
	Flame retardant details	**See Note 1 below**
	Curing process	**See Note 1 below**

Class 0 Summary Report

Foil	Generic type	Aluminium
	Product reference	**See Note 1 below**
	Name of manufacturer	Jiangyin Sanchang Trading Co., Ltd
	Thickness	0.03mm
	Weight per unit area	**See Note 1 below**
	Colour reference	"Silver"
	Flame retardant details	The foil is inherently flame retardant
Brief description of manufacturing process		Material (aluminium foil) - Lamination - Drying - Embossing - Closing Rolls - Trimming - Cutting - Finished Products

Note 1. The sponsor was unwilling to provide this information.

Classification

Opinion

We consider the results of the tests detailed above demonstrate that the product, as tested, complies with the requirements for Class 0, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.

Validity of opinion

This opinion is based on the requirements of the Building Regulations at the date of this report. If the Building Regulations are revised or amended in any way subsequent to that date, care must be taken to ensure that this opinion is not invalidated by those revisions or amendments.

The opinion has been formulated on the assumption that the specimens are representative of the product in practice. **Exova Warringtonfire** was not involved in any sampling or selection procedures which would confirm this or in any audit testing which would provide confidence in the consistency of the product in the tests.

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Revision History

Issue No :	Re-issue Date:
Revised By:	Approved By:
Reason for Revision:	

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Revised By:	Approved By:
Reason for Revision:	

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Dubai Central Laboratory

Construction Materials Laboratory Section - Structural Unit

TEST REPORT

THERMAL TRANSMISSION PROPERTIES BY HEAT FLOW METER (THERMAL COND)

Report No:	**100478700**	**Request No:**	**EMTX-2019-094219**
Project No:	CF-461	**Report Date:**	07/10/2019
Project Name:	JIANGYIN WELLWALL INSULATION MATERIALS CO LTD		
Consultant:	NA		
Contractor:	JIANGYIN WELLWALL INSULATION MATERIALS CO LTD		
Location:	Jiangyin Wellwall Insulation Materials Co. - China		
Source:	NOT GIVEN		
Sample Description:	PHENOLIC INSULATION BOARD		
Sampling Date/Time:	16/09/2019 09:00 AM	**Lot Number:**	006
Receiving Date/Time:	23/09/2019 08:00 AM	**Lot Size:**	NG NA
Sample Size:	3 pieces	**Sender No:**	YA0127SGS
Material/Mix type:	Energia Duct - (20mm Thick /Aluminium Foil & Fiber Glass Facing)	**Laying Date/Production Date:**	
Nominal Size / Working Block Size L * T * H (mm) :	1000X500X20		

TEST RESULTS

PARAMETERS	RESULTS
SAMPLE TYPE	ENERGIA DUCT
SUPPORT / FACING	ALUMINIUM FOIL & FIBER GLASS DOUBLE SIDED
NOM. THICKNESS (mm) :	20
NOM. DENSITY (kg/m3) :	NG
SPECIFICATION LIMIT	NG
TEST METHOD VARIATION	NIL
TYPE OF MATERIAL USED FOR CALIBRATION	STANDARD REFERANCE MATERIAL 1450C687
R VALUE @ 35deg C [(M2 K) / W]	0.7169
DATE OF CERTIFICATION	10-DEC-2010 00:00:00
SOURCE OF CERTIFICATION	National Institute of Standards & Technology [NIST] - U.S.A.
EXPIRY & CERTIFICATION TEST NUMBER	Refer NIST special publication 260-130
NOMINAL THICKNESS OF SPECIMEN (mm)	20.0
TEMPERATURE, RH & TIME AT WHICH SPECIMEN CONDITIONED	35 deg C, 60%RH & 8 DAYS
DATE OF CALIBRATION	03-OCT-2019 00:00:00
MEAN TEMP.(SET) deg C	35
TEMPERATURE DIFFERENCE (deltaT) deg C	20
NO. OF HEAT FLUX TRANSDUCER USED	2
TEST ARRANGEMENT	HORIZONTAL
METERING (TEST) AREA	302mm X 300mm
Uncertainty of measurement	REFER REMARKS
TEST NO / SPECIMEN NO.	1/1

This Report is computer approved and authorized by Structural Unit
It does not require any signature

DAC
LB-014

P.O. BOX: 67 DUBAI, TEL : 00971-4-3369900, FAX : 00971-4-3366399
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Dubai Central Laboratory

Construction Materials Laboratory Section - Structural Unit

TEST REPORT

THERMAL TRANSMISSION PROPERTIES BY HEAT FLOW METER (THERMAL COND)

Report No:	100478700	Request No:	EMTX-2019-094219

PARAMETERS	RESULTS
MEASURED THICKNESS (L) (mm)	22.1
MEASURED DENSITY (kg/m3)	70.38
MEAN TEMPERATURE ACHIEVED (deg C)	35.65
HEAT FLUX (E) W/m2.K.	5426
THERMAL CONDUCTIVITY, W/(m K)	0.020
THERMAL CONDUCTIVITY, Btu-in /h.square ft.degF	0.1387
THERMAL RESISTANCE, (Square m K) / W	1.105
THERMAL RESISTANCE, ft square / Btu	6.2755
AVERAGE TEMPERATURE GRADIENT (K/m)	938.24
WEIGHT DIFFERENCE (%)	-0.1640
TEST DURATION (h:mm:ss)	02:18:29

Sampled By:	SGS/MR. ROGER	**Tested By:**	SSRAJU
Samples Brought By:	Hafis Hamza	**Testing Date:**	23/09/2019 12:25 PM
Sampling Method:	DCL-IC-99	**Sampling Report No:**	
Test Method:	ASTM C518 -17	**Test Method Variation:**	NIL
Remarks:	THIS REPORT REPRESENTS THE SUBMITTED SAMPLES ONLY. ,Uncertainty of measurement for thermal conductivity 0.0010 W/mÂ·K @ 95% confidence level, k factor 2 Abridged ASTM C 518 Test Report.		

To verify this document please go to **http://login.dm.gov.ae/wps/portal/documentverification** and Enter Document ID: **EMTX-2019-094219** and Verification Code: **543-596** or scan the QR code below.

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