



TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 1 of 6



XMIN2109009813SC-01

CUSTOMER NAME: SHERA PUBLIC COMPANY LIMITED
ADDRESS: NO.59 VILLAGE NO.12, SARABURI-LOMSAK ROAD, KM.16, TAMBON
CHONGSARIKA, AMPHUR PATTANANIKOM, LOPBURI PROVINCE
15220 THAILAND

Sample Name : SHERA BOARD
Manufacturer : SHERA PUBLIC COMPANY LIMITED
Other Information : Product Description: SHERA BOARD (Thickness 6 mm)
Manufacture date: 6/13/2021
Country of manufacture: Lopburi, THAILAND
Model: SHERA BOARD
Material Type: Fiber cement board

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

SGS Ref. No. : SUBC037488, SDFS2109005753FF-02
Order No.: 2099050
Sample No.: 5231102
Date of Receipt : Sep 06, 2021
Testing Start Date : Sep 06, 2021
Testing End Date : Oct 12, 2021
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co., Ltd Xiamen Branch
Testing Center

Jude Zhao
Authorized signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center/Materials Laboratory

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 | (86-592) 5761588 | (86-592) 5765380 | www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 | 邮编: 361101 | (86-592) 5761588 | (86-592) 5765380 | sgs.china@sgs.com

Member of the SGS Group (SGS SA)



TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 2 of 6

Test Result Summary

Test(s) Requested	Result(s)
EN 13501-1:2018 Fire classification of construction products and building elements-Part 1: Classification using data from reaction to fire tests	Classification: A1

Summary:

1. For further details, please refer to the following page(s).



SGS-CSTC Xi'an Technical Services Co., Ltd.
Xi'an Branch Testing Center Materials Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's Instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 | (86-592) 5761588 | (86-592) 5765380 | www.sgs.com
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 | 邮编: 361101 | (86-592) 5761588 | (86-592) 5765380 | sgs.china@sgs.com

Member of the SGS Group (SGS SA)

TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 3 of 6

TESTS AND RESULTS

Test Conducted:

This test is conducted as per EN 13501-1:2018 Fire classification of construction products and building elements-Part 1: Classification using data from reaction to fire tests.

And the test methods as following:

1. EN ISO 1182:2010 Reaction to fire tests for products-Non-combustibility test.
2. EN ISO 1716:2010 Reaction to fire tests for products-Determination of the gross heat of combustion. (Calorific Value).

Test Results:

Test method	Parameter	Number of tests	Results
EN ISO 1182:2010	ΔT	5	5.7°C
	Δm		17.1%
	t_f		0s
EN ISO 1716:2010	Homogeneous products ^a : -PCS	3	0.6MJ/kg

Remark:

ΔT -temperature rise [°C]; Δm -mass loss [%]; t_f - duration of sustained flaming [s]

PCS-gross heat of combustion [MJ/kg or MJ/m²]

Classification and direct field of application

This classification has been carried out in accordance with EN 13501-1:2018.

Classification:

Fire behaviour	Smoke production
A1	-

Remark:

The classes with their corresponding fire performance are given in Table 1.

Reaction to fire classification is based on the 7-step scale of A1 to F, where A1 is the highest level and F is the lowest level.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's Instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 | (86-592) 5761588 | (86-592) 5765380 | www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 | 邮编:361101 | (86-592) 5761588 | (86-592) 5765380 | e.sgs.china@sgs.com

TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 4 of 6

Statement:

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

Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

Table 1 — Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

Class	Test method(s)	Classification criteria	Additional classification
A1	EN ISO 1182 ^a and	$\Delta T \leq 30^{\circ}\text{C}$, and $\Delta m \leq 50\%$, and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$PCS \leq 2.0\text{MJ/kg}$ ^a and $PCS \leq 2.0\text{MJ/kg}$ ^{b,c} and $PCS \leq 1.4\text{MJ/m}^2$ ^d and $PCS \leq 2.0\text{MJ/kg}$ ^e	-
A2	EN ISO 1182 ^a or	$\Delta T \leq 50^{\circ}\text{C}$, and $\Delta m \leq 50\%$, and $t_f \leq 20\text{ s}$	-
	EN ISO 1716	and $PCS \leq 3.0\text{MJ/kg}$ ^a and $PCS \leq 4.0\text{MJ/m}^2$ ^b and $PCS \leq 4.0\text{MJ/m}^2$ ^d and $PCS \leq 3.0\text{MJ/kg}$ ^e	-
	EN 13823	$FIGRA \leq 120\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5\text{MJ}$	Smoke production ^f and Flaming droplets/particles ^g



SGS-CSTC (China) Technical Services Co., Ltd.
Xiamen Branch Testing Center/Materials Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com.
No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5761588 f (86-592) 5765380 www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5761588 f (86-592) 5765380 e sgs.china@sgs.com

TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 5 of 6

Class	Test method(s)	Classification criteria	Additional classification
B	EN 13823 and	FIGRA \leq 120W/s and LFS<edge of specimen and THR600s \leq 7.5MJ	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure =30s	Fs \leq 150mm within 60 s	
C	EN 13823 and	FIGRA \leq 250W/s and LFS<edge of specimen and THR600s \leq 15MJ	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s	Fs \leq 150mm within 60 s	
D	EN 13823 and	FIGRA \leq 750W/s	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s	Fs \leq 150mm within 60 s	
E	EN ISO 11925-2 ⁱ Exposure =15s	Fs \leq 150mm within 20 s	flaming droplets/particles ^h
F	EN ISO 11925-2 ⁱ Exposure =15s	Fs>150mm within 20 s	-

^a For homogeneous products and substantial components of non-homogeneous products.
^b For any external non-substantial component of non-homogeneous products.
^c Alternatively, any external non-substantial component having a PCS \leq 2,0 MJ/m², provided that the product satisfies the following criteria of EN 13823: FIGRA \leq 20 W/s, and LFS < edge of specimen, and THR_{600s} \leq 4,0 MJ, and s1, and d0.
^d For any internal non-substantial component of non-homogeneous products.
^e For the product as a whole.
^f In the last phase of the development of the test procedure, modifications of the smoke measurement system have been introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 | (86-592) 5761588 | (86-592) 5765380 | www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 | (86-592) 5761588 | (86-592) 5765380 | sgs.china@sgs.com

TEST REPORT

No. : XMIN2109009813SC-01

Date : Jan 05, 2022

Page: 6 of 6

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 = not s1 or s2
^gd0 = No flaming droplets/ particles in EN 13823 within 600 s;
d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;
d2 = not d0 or d1.
Ignition of the paper in EN ISO 11925-2 results in a d2 classification.
^h Pass = no ignition of the paper (no classification);
Fail = ignition of the paper (d2 classification).
ⁱ Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.

Note: 1. The above test project/method was carried out by subcontractors.
2. This test report deletes area density of the sample, supersedes the test report No. XMIN2109009813SC dated Oct 13, 2021, original report will be invalid from today.

SAMPLE INFORMATION AND PICTURES

Thickness of the test specimen: 6.0mm



***** End of report*****



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CTC (Shanghai) Technical Services Co., Ltd.
Xiamen Branch Testing Center/Materials Laboratory

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 | (86-592) 5761588 | (86-592) 5765380 | www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 | (86-592) 5761588 | (86-592) 5765380 | e.sgs.china@sgs.com

Member of the SGS Group (SGS SA)



SHERA-QA 025/2023

29 June 2023

TO WHOM IT MAY CONCERN

This is to confirm that SHERA Board has been tested to EN13501-1 standards using samples of 6mm thickness boards.

This thickness can be used as a reliable reference for other thicknesses and an indication that all other thicknesses of SHERA Board will also attain the EN13501-1 standard. This is because they are typically produced using the same composition of raw materials and production processes. Furthermore, they possess identical mechanical and physical properties, regardless of their thickness.

SHERA

Sincerely,

(Mrs. Raviwan Parkpain)

Assistant Vice President of Innovation Center
SHERA Public Company Limited