



中国认可
国际互认
检测
TESTING
CNAS L6069



Test Report


Report No. TC.23.03.001258

Date of Issue 04/07/2023

Applicant: ZHANGJIAGANG FEITENG NEW COMPOSITE MATERIALS CO.,LTD.

Applicant address: 77 Huada Rd., Environmental & New Material Industry Park, Bonded Port Zone, Zhangjiagang City, Jiangsu China.

Description of the test subject:

Sample	Description	Photo
001	<p>Sample Description: Aluminum composite panels</p> <p>Style No.: 6mm</p> <p>Manufacturer: FEITENG</p>	

Receipt Date of Sample: 03/27/2023

Date of Testing: From 03/27/2023 to 04/06/2023

Sample Submitted: The sample(s) was (were) submitted by applicant and identified.

Conclusion:

Test Items			Conclusion
No.	Items	Standard	
1	Burning behaviour	EN 13501-1:2018	C-s1,d0

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Test Results

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

1. EN 13823:2020 reaction to fire tests for building products – building products excluding floorings exposed to the thermal attack by a single burning item

1.1 Sample details

Sample size	Long limb:1500mm×1000mm
	Short limb:1500mm×495mm
Thickness	About <u>6.0</u> mm

Precondition	Temperature (°C)	Humidity (%)	Duration (h)
	23±2	50±5	≥48

1.2 Test results

	1	2	3	Average
FIGRA _{0.2MJ} (W/s)	23.7	32.3	38.3	31.4
FIGRA _{0.4MJ} (W/s)	23.7	32.3	38.3	31.4
LFS< edge of specimen (Yes/No)	Yes	Yes	Yes	--
THR _{600s} (MJ)	1.3	0.3	1.9	1.2
SMOGRA(m ² /s ²)	0	3.0	4.3	2.4
TSP _{600s} (m ²)	13.8	8.5	12.9	11.7
Flaming particles or droplets (Yes/No)	No	No	No	--
Observe	--			

Remark:

FIGRA_{0.2MJ}=maximum of the quotient of heat release rate from the specimen and the time of its occurrence using a THR-threshold of 0.2MJ

FIGRA_{0.4MJ}=maximum of the quotient of heat release rate from the specimen and the time of its occurrence using a THR threshold of 0.4MJ

LFS=lateral flame spread on the long specimen wing

THR_{600s}=Total heat release from the specimen in the first 600s of exposure to the main burner flames

SMOGRA=smoke growth rate. the maximum of the quotient of smoke production rate from the specimen and the time of its occurrence

TSP_{600s}=Total smoke production from the specimen in the first 600s of exposure the main burner flames

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2. EN ISO 11925-2:2020 Reaction to fire tests- ignitability of building products subjected to direct impingement of flame- part2: single-flame source

2.1 Sample details

Sample size	250mm×90mm
Thickness	About <u>6.0</u> mm

Precondition	Temperature (°C)	Humidity (%)	Duration (h)
	23±2	50±5	≥48

2.2 Test results

Face ignition

Specimen	1	2	3
Whether ignition occurs (Yes/No)	No	No	No
Whether the flame tip reaches 150mm above the flame application point (Yes/No)	No	No	No
The time of the flame tip reaches 150mm above the flame application point.	--	--	--
Whether ignition of the filter paper occurs(Yes/No)	No	No	No

Edge ignition

Specimen	1	2	3
Whether ignition occurs (Yes/No)	No	No	No
Whether the flame tip reaches 150mm above the flame application point (Yes/No)	No	No	No
The time of the flame tip reaches 150mm above the flame application point.	--	--	--
Whether ignition of the filter paper occurs(Yes/No)	No	No	No

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EN 13501-1:2018 table 1 - classification:

Classification	Test method	Classification criteria
C	EN 13823 and	FIGRA _{0.4MJ} <250W/s LFS< edge of specimen THR _{600s} ≤15MJ
	EN ISO 11925-2 Exposure = 30 s	Fs ≤150mm within 60s
Additional classification	Smoke	s1 SMOGRA≤ 30 m ² /s ² , TSP _{600s} ≤50m ²
		s2 SMOGRA≤ 180 m ² /s ² , TSP _{600s} ≤200m ²
		s3 Not s1 or s2
	Flaming droplets/particles	d0 No flaming droplets/particles in EN 13823 within 600s
		d1 No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s
		d2 Not d0 or d1 Ignites of the paper in EN ISO 11925-2 results in a d2 classification.

Conclusion:

Test standard	Record	Conclusion
EN 13823	FIGRA _{0.4MJ} = 31.4 W/s LFS < Sample edge THR _{600s} =1.2 MJ SMOGRA=2.4 m ² /s ² TSP _{600s} =11.7m ² No flaming droplets/particles persisting longer than 10 s within600s	C-s1,d0
EN ISO 11925-2	Fs ≤ 150mm within 60s No ignition of the filter paper occurs.	

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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 smoke and toxicity hazard of the product in use. Test results are just for internal reference.

TÜV SÜD SW Rail Transportation Technology (Jiangsu) Co., Ltd.

Drafted by:

Jinqiang Zhou

Approved by:

Wayne Wang

-End of Report-

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