

浙江亦阳新材料有限公司

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Test Report

Date: 2021-09-24

Sample Description: Solar Frontlit Grayback Standard

Style No.:SL-F03

Test Requested:

To determine the flammability (building materials class B1) in accordance with DIN 4102-1(May 1998) Fire behavior of building materials and elements Part 1:Classification of building materials, Requirements and testing

Test Results:--See attached sheet--

Classification: The tested sample **meets** class **B1** building materials requirements of DIN 4102-1(May 1998)

I .Test conducted

This test was conducted as per DIN 4102-15:1990 &DIN4102-16:2015 and DIN 4102-1:1998 Clause 6.2,and Classification in according to DIN 4102-1(May 1998)Clause 6.1-Class B1 materials.

II . Sample details

Color	Gray
Area Density	257g/m ²
Size of sample	190mm×1000mm & 190mm×90mm

Conditioning

Prior to testing,the sample was condition at least 14 days to constant mass at a temperature of 23±2°C,and a relative humidity of 50±5%.

III. Test results

1)“Brandschacht”Test according to DIN 4102-15 & 16

Exposed surface:The gray face

Results of “Brandschacht”Test (part 3)					
Line			Test assemblies No.		
No.		Unit	Lengthwise		Widthwise
1	Residual length		/		/
	Single results	cm	62	61	62 63
			64	63	63 61
2	Average of the single results	cm	62.5		62.25

*Reduction in number of test (DIN 4102 Part 16,clause 5.2)

Class B1 materials:

If the residual length measured after the first test is 45cm or greater,futher tests are not required.

2) Normal Flammability Test according to DIN 4102-1 Clause 6.2

Edge ignition

Fire application time: 15s

Parameter	1-L	2-L	3-L	4-L	5-L
Whether or not flaming extinguished before reach the gauge mark (Yes/No)	Yes	Yes	Yes	Yes	Yes
Whether or not flaming reach the measuring mark within 20 seconds (Yes/No)	NO	NO	NO	NO	NO
Time for the flame tip to reach the gauge mark (s)	NA	NA	NA	NA	NA
Afterflame time (s)	0	0	0	0	0
Max. flame height (cm)	9	7	7	7	8
Molten dripping (Yes/No)	No	No	No	No	No
Smoke developments (visual impression)	Slight				
Sample No.	6-C	7-C	8-C	9-C	10-C

Whether or not flaming extinguished before reach the gauge mark (Yes/No)	Yes	Yes	Yes	Yes	Yes
Whether or not flaming reach the measuring mark within 20 seconds (Yes/No)	No	No	No	No	No
Time for the flame tip to reach the gauge mark (s)	NA	NA	NA	NA	NA
Afterflame time (s)	0	0	0	0	0
Max. flame height (cm)	7	8	8	8	7
Molten dripping (Yes/No)	No	No	No	No	No
Smoke developments (visual impression)	Slight				

Note: L-Lengthwise

C-Crosswise NA-Not applicable

IV. DIN 4102-1:1998 Criteria for classification

1) All materials, except flooring, may be classed as **B1** materials if they meet the following requirements a) and b):

a) The test using the 'Brandschacht' apparatus described in DIN 4102-15 (cf. subclause 6.1.3.1) shall be deemed passed if

-The mean value for the residual length (portion of specimen that has not burned or charred; cf. subclause 9.1 of DIN 4102-16) of each specimen is at least 15 cm and no individual values are lower than 0 cm,

-The requirement for the residual length of each specimen is met even where there is afterflame, afterglow, or smouldering.

b) Pass DIN 4102-1:1998 sub-clause 6.2.3 Ignitability Test if

For each specimen, flaming doesn't reach the gage mark within 20s after flame application.

2) Materials may be classed as **B2** materials if they ignitability test specified in DIN 4102-1:1998 subclause 6.2.5.

For each specimen, flaming doesn't reach the gage mark (150mm marks) within 20s after flame application.

3) Combustible materials which cannot be classed as B1 or B2 materials shall be classed as **B3** materials.

STATEMENTS:

This declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

This test report does not replace any mandatory certification of the product that may be required.

The test results relate to the behavior 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 and smoke hazard of the product in use.



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