

HAINING JIANGSEN ARTIFICIAL GRASS CO., LTD
ROOM 1409, WEALTH BUILDING, HAINING CITY, HEJIANG PROVINCE, P.R. CHINA.

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : ARTIFICIAL GRASS
SGS Ref No. : XMG1508013711FB
Manufacture : HIANING JIANGSEN ARTIFICIAL GRASS CO., LTD
Sample Receiving Date : Aug. 17, 2015
Test Performing Date : Aug. 17, 2015 to Sep. 10, 2015
Test Performed : Selected test(s) as requested by applicant
Test Result(s) : For further details, please refer to the following page(s)

Test Result Summary

Test(s) Requested	Result(s)
EN 13501-1:2007+A1:2009: Table 2 — Classes of reaction to fire performance for floorings.	Classification: E _{fl}
Summary:	
1. For further details, please refer to the following page(s).	

Signed for and on behalf of
Xiamen Branch, SGS-CSTC Co., Ltd.



Sharky Xia
Approved Signatory



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Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Doccheck@sgs.com

Test Conducted:

This test is conducted as per EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests, Class E_{fl}. And the test methods as following:

EN ISO 11925-2:2010 Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

Test Results:

<u>Test method</u>	<u>Parameter</u>	<u>Number of tests</u>	<u>Results</u>
EN ISO 11925-2 Exposure = 15 s	$F_s \leq 150$ mm within 20 s	6	Yes

Classification and direct field of application:

This classification has been carried out in accordance with **EN 13501-1:2007+A1:2009**.

Classification:

The product, "ARTIFICIAL GRASS", comply the requirements of Reaction to fire classification: E_{fl}

Remark:

The classes with their corresponding fire performance are given in annex A.

Reaction to fire classification is based on the 7-step scale of A_{1fl} to F_{fl}, where A_{1fl} is good and F_{fl} is bad.

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.

Remark: This test was subcontracted to SGS other qualified subcontractor.

Annex A
Table 2 - Classes of reaction to fire performance for floorings

Class	Test method(s)	Classification criteria	Additional classification
A1 _{fl}	EN ISO 1182 ^a and	$\Delta T \leq 30\text{ }^{\circ}\text{C}$; 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 and $PCS \leq 1,4\text{ MJ/m}^2$ ^c and $PCS \leq 2,0\text{ MJ/kg}$ ^d	-
A2 _{fl}	EN ISO 1182 ^a or	$\Delta T \leq 50\text{ }^{\circ}\text{C}$ 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 $PCS \leq 4,0\text{ MJ/m}^2$ ^c and $PCS \leq 3,0\text{ MJ/kg}$ ^d	-
	EN ISO 9239-1 ^e	Critical flux ^f $\geq 8,0\text{ kW/m}^2$	Smoke production ^g
B _{fl}	EN ISO 9239-1 ^e and	Critical flux ^f $\geq 8,0\text{ kW/m}^2$	Smoke production ^g
	EN ISO 11925-2 ^h : Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	-
C _{fl}	EN ISO 9239-1 ^e and	Critical flux ^f $\geq 4,5\text{ kW/m}^2$	Smoke production ^g
	EN ISO 11925-2 ^h : Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
D _{fl}	EN ISO 9239-1 ^e and	Critical flux ^f $\geq 3,0\text{ kW/m}^2$	Smoke production ^g
	EN ISO 11925-2 ^h : Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
E _{fl}	EN ISO 11925-2 ^h : Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
F _{fl}	No performance determined		

^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 Test duration = 30 min.

^f Critical flux is defined as the radiant flux at which the flame extinguishes or the radiant flux after a test period of 30 min, whichever is the lower (i.e. the flux corresponding with the furthest extent of spread of flame).

^g s1 = Smoke $\leq 750\%$ minutes;

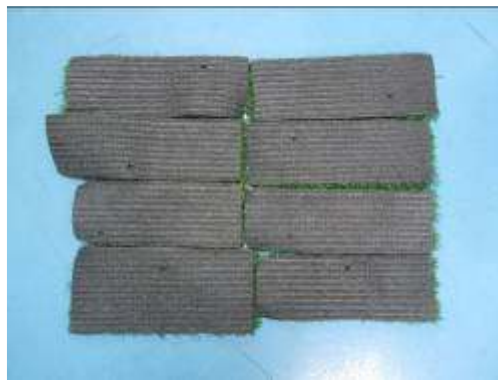
s2 = not s1.

^h Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack

Sample photo(s):



Sample Face



Sample Back

The testing report/certificate only refers to the sample(s) tested.

End of Report