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Classification report
No. 2012-2250-K1

issued 14.11.2012

Order: **Classification of the burning behaviour according to DIN EN 13501-1 (2010-01)**

Date of order **25.10.2012**

Notification number of the test laboratory

NB 1378

Designation of the classificated building product

PES FR Taft and PES FR Nessel 4 x 16
in different colours This classification report lays down the classification of the building product above according to the procedures of DIN EN 13501-1.

This classification report is a translation of the German version 2012-2246 K1-1 (issued 14.11.2012). In case of doubt only the German version is valid.
This classification report contains 4 pages.

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1. Description of the material

1.1 Details of the customer:

PES FR Taft and PES FR Nessel 4 x 16
in different colours

Product name:	PES FR Taft	PES FR Nessel 4 x 16
Article:	275 – Polyester Taft PES FR	832 – stage nessel PES FR
Kind of manufacturing:	woven, coloured	woven, coloured
Flame retardant: agent	polyester flame retardant	polyester flame retardant
Kind of flame retardant agent:	flame retardant yarn	flame retardant yarn
Colours	white, black, green	white, black, green
Square weight:	60 g/qm – 300 g/qm	
Application:	decorative fabrics	decorative fabrics
Kind of product:	fabrics	fabrics

1.2 At the specimen preparation from the Exova Warringtonfire determined values:

Fabric samples

Kind of material:	Colour:	Thickness: [mm]	Square weight: [g/m²]
PES FR Taft	white	0,1	69
PES FR Taft	green	0,1	69
PES FR Taft	black	0,1	67
PES FR Nessel 4 x 16	white	0,15 mm	307
PES FR Nessel 4 x 16	green	0,15 mm	295
PES FR Nessel 4 x 16	black	0,15 mm	307

1.3 Production and pretreatment of the samples for the tests according to DIN EN 13823

The samples were provided for the tests in the necessary sample dimensions, by the test laboratory.
The tests were carried out full-laminar without joint design.
A 80mm ventilated cavity was situated between the reverse face of the specimens and the plasterboard substrate in accordance with DIN EN 13823, Point 4.4.10 (calcium silicate, gross density 800 ± 150 kg/m³, thickness 12 ± 3 mm). All samples were tested in the same assembly.
The samples were conditioned for more then 48 h to constant mass at a temperature of 23 ± 2°C and a relative humidity of 50 ± 5% prior to the testing.

1.4 Production and pretreatment of the samples for the tests according to DIN EN 11925-2

The samples were provided for the tests in the necessary sample dimensions, by the test laboratory.
The samples were conditioned for more then 48 h to constant mass at a temperature of 23 ± 2°C and a relative humidity of 50 ± 5% prior to the testing.

Further details about the sample preparation are available in the corresponding test report.

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2. Test reports and test results

2.1 Test reports

Name of test laboratory	Customer	Report to form the basis	Test procedure
Exova Warringtonfire, Frankfurt		2012-2250	DIN EN 13823 (SBI) EN ISO 11925-2 (30s ignition time and edge surface ignition)

2.2 Test results

Test procedures	Parameter / classes	Test results
		average
DIN EN 13823 (SBI)	FIGRA $_{0,2MJ}$ ≤120 [W/s] for class A2 FIGRA $_{0,2MJ}$ ≤ 120 [W/s] for class B	0
	FIGRA $_{0,4MJ}$ ≤ 250 [W/s] for class C FIGRA $_{0,4MJ}$ ≤ 750 [W/s] for class D	0
	THR $_{600s}$ [MJ] ≤ 7,5 MJ for class A2 THR $_{600s}$ [MJ] ≤ 7,5 MJ for class B THR $_{600s}$ [MJ] ≤ 15 MJ for class C THR $_{600s}$ [MJ] no requirement for class D	0,304
	SMOGRA-index ≤ 30 [m²/s²] für s1 SMOGRA-index ≤ 180 [m²/s²] für s2	0
	TSP $_{600s}$ ≤ 50 [m²] for s1 TSP $_{600s}$ ≤ 200 [m²] for s2	8,304
	LFS < edge of the specimen for class A2 LFS < edge of the specimen for class B LFS < edge of the specimen for class C	fulfilled
	no burning dripping off/dropping within 600s for class d0	fulfilled
DIN EN ISO 11925-2 30s 15s	FS ≤ 150 mm within 60 s for class B, C u. D FS ≤ 150 mm within 20 s for class E	fulfilled

Explanations of table standing too above:
Figra$_{02MJ}$: Heat release rate with consideration of the THR of threshold value of 0,2MJ [W/s]
Figra$_{04MJ}$: Heat release rate with consideration of the THR of threshold value of 0,4MJ[W/s]
THR$_{600s}$: Total set free warmth during 600s [MJ]
SMOGRA: Smoke development rate
TSP$_{600s}$: Total set free smoke quantity during 600s [m²]
LSF: lateral propagation of flames

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3 Classification and range of application

3.1 Reference

The classification was carried out according to the chapter 11 of DIN EN 13501-1

3.2 Classification

The tested material is incorporated regarding its behaviour in case of fire into the class **B**.
Concerning the smoke development the tested material is incorporated into the class **s1**
Concerning the dripping off behaviour the tested material is incorporated into the class **d0**.

The classification of the tested material reads thus:

B – s1 d0

3.3 Area of application

The classification is only valid for the in chapter one described material, in the tested square weights and colours, in free hanging configuration.
The distance to other plane material must be more or equal to 80 mm.
Open edges must be covered in the installation state.

Due to the experiences of the test laboratory also between lying square weights and colours are enclosed in the classification.

4 Reservation

This classification report replaces not a possible required type admittance or type certification of the product.

Frankfurt 14th November 2012

P. Scheinkönig
Tester in charge

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Head of Exova Warringtonfire, Frankfurt

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