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Testing. Advising. Assuring.



Title:

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1: 2009.

Notified Body No:

0833

Product Name:

"Styrolite Insulation"

Report No:

WF 398641

Issue No:

1

Prepared for:

Custompac Ltd, Delta Works, 27 Methley Road, Castleford, West Yorkshire, WF10 1PA

Date:

16th April 2018

1. Introduction

This classification report defines the classification assigned to "Styrolite Insulation", an expanded polystyrene insulation, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, "Styrolite Insulation", an expanded polystyrene insulation, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Styrolite Inslation", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	Expanded Polystyrene Insulation (EPS)		
Product reference	"Styrolite Insulation"		
Name of manufacturer	Custompac Ltd		
Thickness	10 - 200mm		
Density	15kg/m ³		
Colour reference	"White"		
Trade name of flame retardant	"Emerald 3000, Greencrest and FR-122P"		
Generic type of flame retardant	Brominated polymeric flame retardant		
Amount of flame retardant	1%		
Mounting and fixing details	The specimens were tested with a calcium silicate backing board butted up against the reverse face		
Brief description of manufacturing process	 Pre-expansion- Raw material is heated with steam. The raw material's compact beads (containing the FRA) turn into cellular plastic beads. Intermediate maturing and stabilisation- The beads are matured and dried in silos to allow for greater expansion. Expansion and final moulding- The stabilised pre-expanded beads are transported to moulds where they are once again subjected to steam, so that the beads bind together. In this way, moulded shapes or large blocks are obtained (that are later cut to the required shape). 		

3. Test reports test results in support of classification

3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova warringtonfire	Custompac Ltd	WF 395234	EN ISO 11925-2
Exova warringtonfire	Custompac Ltd	WF 395232 WF 395233 (indicative)	EN 13823
Exova warringtonfire	Custompac Ltd	WF 398642	EN/TS 15117

3.2 Test results

Test			Results		
method & test number	Parameter	No. tests	Continuous parameter - mean (m)	Compliance parameters	
EN ISO	F_s		Nil	Compliant	
11925-2 (30s exposure - surface)	Flaming droplets/ particles	6	None	Compliant	
EN ISO	F_s	6	Nil	Compliant	
11925-2 (30s exposure – edge)	Flaming droplets/ particles		None	Compliant	
EN 13823	FIGRA _{0.2MJ}		42.33, 210.81	Compliant	
	FIGRA _{0.4MJ}		0.00, 0.00	Compliant	
	THR _{600s}	1, 3	0.94, 0.57	Compliant	
	LFS		None	Compliant	
	SMOGRA		0.00, 0.00	Compliant	
	TSP _{600s}		13.33, 16.51	Compliant	

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1: 2009.

4.2 Classification

The product, "Styrolite Insulation", an expanded polystyrene insulation, in relation to its reaction to fire behaviour is classified:

C

The additional classification in relation to smoke production is:

The additional classification in relation to flaming droplets / particles is:

dΩ

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
С	-	S	1	,	d	0

i.e. C - s1 , d0

Reaction to fire classification: C - s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

i) Construction applications other than flooring or linear pipe insulation, used over any substrate with a thickness of 11m of greater, a density equal to or greater than 870kg/m³ and a fire performance of A2-s1-d0 or better.

This classification is also valid for the following product parameters:

10mm - 200mm 15kg/m³ Product thickness

Product weight per unit area

No variation allowed Product composition No variation allowed Product construction

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SIGNED

APPROVED

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