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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:

"Kooltherm Insulation With
Facing Removed"

Report No:

WF 349141

Issue No:

1

Prepared for:

Kingspan Insulation Limited
Pembridge
Leominster
Herefordshire
HR6 9LA

Date:

3rd March 2015



0249

1. Introduction

This classification report defines the classification assigned to "Kooltherm Insulation With Facing Removed", a phenolic insulation board, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, "Kooltherm Insulation With Facing Removed", a phenolic insulation board, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Kooltherm Insulation With Facing Removed", a phenolic insulation board, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Phenolic insulation board
Name of manufacturer		Kingspan Insulation Ltd.
Trade name		"Kooltherm Insulation With Facing Removed"
Batch number		"8100121610"
Foam	Product reference	"Kooltherm Insulation With Facing Removed"
	Generic type	Phenolic foam
	Name of manufacturer	Kingspan Insulation Ltd.
	Thickness	40mm
	Density	35 kg/m ³ ± 15%
	Colour	Pinkish
Flame retardant details		See Note 1 below
Mounting and fixing details		As per end use application: reisser countersunk screws 6x60mm with 70x70mm SFS 'Isofast' ID 70 plate washers. Edge fixings sited more than 50mm and not less than 150mm from board edges with no overlap of board joints. Fixings applied at overall rate of 9.44 per m ² .
Joint details		Long wing: one horizontal at 500mm of specimen height, vertical 200mm in from corner line - Short wing one horizontal joint at 500mm height. As per EN 13823 5.2.2
Substrate details		The specimens were tested with a 12mm thick calcium silicate board, having a density of 870±50 kg/m ³ (as specified in EN 13238: 2010), butted up against the reverse face of the product.
Brief description of manufacturing process		Foam boards made at 70°C under pressure

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

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	Kingspan Insulation Limited	WF 329354	EN ISO 11925-2
Exova warringtonfire	Kingspan Insulation Limited	WF 329355	EN 13823

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2 (30s exposure - surface)	F _s	6	61.7	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure - edge)	F _s	6	66.7	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA _{0.2MJ}	3	305.06	Compliant
	FIGRA _{0.4MJ}		176.89	Compliant
	THR _{600s}		7.06	Compliant
	LFS		None	Compliant
	SMOGRA		0.00	Compliant
	TSP _{600s}		34.45	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 and EN 15715: 2009.

4.2 Classification

The product, "Kooltherm", a phenolic insulation board, in relation to its reaction to fire behaviour is classified:

C

The additional classification in relation to smoke production is:

s1

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

d0

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	
C	-	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 used over any substrate with a density equal to or greater than 870kg/m³, having a minimum thickness of 12.5mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).

This classification is also valid for the following product parameters:

Insulation thickness	No variation allowed
Insulation density	± 15% of tested density
Product composition	No variation allowed

SIGNED



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Matthew Dale

Certification Engineer
Technical Department

APPROVED



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Frans Paap

Certification Engineer
Technical Department
on behalf of **Exova warringtonfire**

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