Classification Report
Ventilation duct

Name of sponsor:	**Rockwool LTD**		
Product name:	FIREPRO DuctRock Slab		
File no.:	PCA10496D		
Date:	20-07-2018		
Pages:	8	**Encl.:**	None
Ref:	JBK / NOL		

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ilac-MRA DANAK Test Reg.no. 0012

Client information

Client: Rockwool LTD

Address: Rockwool Site, Pencoed Bridgend

GB-CF356NY Mid Glamorgan

The results relate only to the items tested. The classification report should only be reproduced in extenso – in extracts only with a written agreement with this institute.

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1 Introduction

This classification report defines the classification assigned to the product in accordance with the procedures given in DS/EN 13501-3:2005 + A1:2009.

This classification report includes both the direct and extended field of application of the test results.

2 Details of classified product

General

Producer of product: Rockwool LTD

The product was designated: FIREPRO DuctRock Slab

The insulation in the test reports was designated Rockwool Conlit Ductboard 30. The client has declared that the product is identical to FIREPRO DuctRock Slab.

The classification is valid for the following end use application: Ventilations ducts

Product description

The ventilation duct consists of insulated horizontal and vertical steel ducts. The horizontal ducts are suspended with steel rods. The duct insulation is designated FIREPRO DuctRock Slabwith a nominal thickness of 60 mm and a nominal density of 100 kg/m^3. The insulation has a cover of alu-foil.

The details of the product are described in DBI test reports listed in table 3.1:

3 Reports in support of the classification

Test report

The product was successfully tested in accordance with EN 1366-1:2014. The evidence for this is given in the test report listed below:

Table 3.1

Reference test:				
Name of Laboratory	Name of sponsor	Test report file no.	Test method	Date of test
Danish Institute of Fire and Security Technology	NA and Flumroc AG	PGA10878ARev3 dated 20-06-2017	EN 1366-1:2014	15-07-2016
Danish Institute of Fire and Security Technology	Rockwool A/S and Flumroc AG	PGA10879A dated 22-09-2016	EN 1366-1:2014	12-08-2016
Danish Institute of Fire and Security Technology	Rockwool A/S and Flumroc AG	PGA10879B dated 22-09-2016	EN 1366-1:2014	12-08-2016

Danish Institute of Fire and Security Technology	Rockwool A/S and Flumroc AG	PGA10880Arev1 dated 20-06-2017	EN 1366-1:2014	09-09-2016

Extended application:				
Name of Laboratory	Name of sponsor	Test report file no.	Standard	Change
Danish Institute of Fire and Security Technology	Flumroc AG	PHB10062A_Rev2 dated 09-02-2018	EN 15882-1: 2012	Increase number of layers and thickness

Test results

DBI test report PGA10878ARev3 concerns test of a horizontal duct B (fire from inside)

Test Duration	**Parameter**	**Test results**
61 minutes	**Integrity**	
	- Time of ignition of cotton pad:	No failure
	- Time of occurrence of sustained flaming:	No failure
	- Time of failure of gap gauge criteria:	No failure
	Insulation	
	- Time of failure of measured average temperature rise:	No failure
	- Failure of maximum measured temperature rise	48 minutes

DBI test report PGA10879A concerns test of a vertical duct A (fire from outside)

Test Duration	**Parameter**	**Test results**
61 minutes	**Integrity**	
	- Time of ignition of cotton pad:	No failure
	- Time of occurrence of sustained flaming:	No failure
	- Time of failure of gap gauge criteria:	No failure
	- Time of failure for leakage exceeding $15m^3/m^2$:	No failure
	Insulation	
	- Time of failure of measured average temperature rise:	No failure
	- Failure of maximum measured temperature rise:	No failure
	Insulation failure for combustible lining (I)	
	- Time of failure of measured average temperature rise:	26 minutes

	- Failure of maximum measured temperature rise:	27 minutes
	Smoke leakage	
	- Time of failure for leakage exceeding $10m^3/h/m^2$:	54 minutes

DBI test report PGA10879B concerns test of a vertical duct B (fire from inside)

Test Duration	**Parameter**	**Test results**
61 minutes	**Integrity**	
	- Time of ignition of cotton pad:	No failure
	- Time of occurrence of sustained flaming:	No failure
	- Time of failure of gap gauge criteria:	No failure
	- Time of failure for leakage exceeding $15m^3/m^2$:	No failure
	Insulation	
	- Time of failure of measured average temperature rise:	45 minutes
	- Failure of maximum measured temperature rise:	50 minutes

DBI test report PGA10880Arev1 concerns test of a horizontal duct A (fire from outside)

Test Duration	**Parameter**	**Test results**
60 minutes	**Integrity**	
	- Time of ignition of cotton pad:	No failure
	- Time of occurrence of sustained flaming:	No failure
	- Time of failure of gap gauge criteria:	No failure
	- Time of failure for leakage exceeding $15m^3/m^2$:	55 minutes
	Insulation	
	- Failure of insulation due to failure of integrity:	55 minutes
	- Time of failure of measured average temperature rise:	No failure
	- Failure of maximum measured temperature rise:	59 minutes
	Insulation failure for combustible lining (I)	
	- Time of failure of measured average temperature rise:	25 minutes
	- Failure of maximum measured temperature rise:	25 minutes

	Smoke leakage - Time of failure for leakage exceeding $10m^3/h/m^2$:	 50 minutes

4 Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.2.2 of EN 13501-3:2005.

Classification

The product is classified according to the following combinations of performance and classes as appropriate.

Fire resistance classification: **EI 30 (ve, ho i ↔ o) S**

Field of application

The classification is valid for the following end use conditions:

The insulation

- With insulation type FIREPRO DuctRock Slab, nominal thickness 60-100 mm and nominal density 100 kg/m^3. The insulation can be installed with two layers of 50 mm or one layer of 60-100mm. The insulation has a cover of aluminum-foil.

The steel duct

- With steel duct dimensions up to 1250 x 1000 mm.
- With an underpressure or overpressure up to 500 Pa.
- With leakage class B according to EN 1507 or tighter.

The suspension device

- The loadbearing component of the suspension device system shall be sized so that the bending stress does not exceed that applied to the equivalent member in the test.

Horizontal duct

- With suspension devices of steel with maximum tensile stress in all vertically orientated components not exceeding 9 N/mm^2 and shearing stress in screws of property class 4.6 according to EN ISO 898-1 not exceeding 15 N/mm^2.
- With distance between suspensions devices not exceeding 1500 mm.
- The lateral distance between the outer vertical surface of the steel duct and the centre line of the suspension rod shall not exceed 50 mm.
- The maximum distance from the suspension device to the closest duct joint most not exceed 150 ± 100 mm.
- The maximum distance from the suspension device to the closest insulation joint must not exceed 430 ± 100 mm.

Vertical duct

- With distance between supporting construction does not exceed 5 m.

Penetration

- Penetrating flexible or rigid wall constructions with a fire resistance equal to or greater than EI 30 with a minimum thickness 70 mm.

- Penetrating rigid floor constructions with a fire resistance equal to or greater than EI 30 with a minimum thickness 100 mm.

- The gap between the duct insulation and the supporting construction shall not exceed 20 mm.

Note: Regarding temperature measurement for ducts with combustible lining (kitchen extract). Failure occurred after 25 minutes on the horizontal duct A

5 Limitations

This document does not represent type approval or certification of the element.

6 Remarks

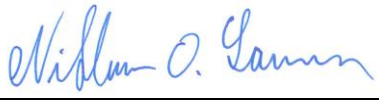
This report has only been printed in a pdf-version. DBI has not issued a hard copy version.

All values mentioned in this report are nominal values, production tolerances are not considered.

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