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**Department for Building Physics**Fire Laboratory and Fire Engineering

Ljubljana, 8. 4. 2015

# **CLASSIFICATION REPORT**

No. P 0653/14-530-1

# CLASSIFICATION OF FIRE RESISTANCE PERFORMANCE IN ACCORDANCE WITH SIST EN 13501-2:2008+A1:2009

# Horizontal linear joint seals **ZCS Series**

Applicant:

Prospec Specialties Inc., 3601 Highway 7, Suite 400 Markham, Ontario

L3R 0M3 Canada

Order No:

16/2014 dated 7<sup>th</sup> of April, 2014

Responsible investigator:

Robert Umek, B.Sc.

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Head of laboratory:

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Director:

Assoc. Prof. Dr Andraž Legat

Accredited laboratory

Other accreditations: BUREAU VERITAS (Certificate of Recognition No. SMS.LAB.462/2900/C.0)

Member egolf - European Group of Organisations for Fire Testing, Inspection and Certifications

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#### 1. Introduction:

This classification report defines the resistance to fire classification assigned to linear joints sealed with insulation ropes **ZCS Series**, in accordance with the procedures given in SIST EN 13501-2:2008+A1:2009.

#### 2. Information above the product:

#### 2.1 General:

The insulation ropes made of rock wool **ZCS Series**, prevents spread of fire from room of origin considering resistance to fire performance characteristics stated in Clause 5 and 7.5.9 of SIST EN 13501-2:2008+A1:2009.

## 2.2 Product description:

The insulation ropes **ZCS Series**, are fully described below.

The insulation ropes are made of rock wool of diameters 20 to 180 mm, density 240±20 kg/m<sup>3</sup> with highly dense shield system (glass thread), which are installed within a gap and glued with Promat Kleber K84 or any other non-combustible inorganic glue resistant to high temperature glue to both sides of supporting construction.

Following diameters of the rope is required for linear gaps:

Joint gap (mm)	<10	<15	<20	<25	<30	<40	<50	<60	<70	<80	<90
Diameter (mm)	20	25	30	35	40	50	60	70	80	90	100

Joint gap (mm)	<100	<110	<120	<130	<140	<150
Diameter (mm)	120	130	140	150	160	180

# 3. Test reports and test results in support of the classification

#### 3.1 Test reports:

Laboratory	Name of sponsor	Report No.	Test method
ZAG Ljubljana		P 0337/12-530-2	SIST EN 1366-4:2006

### 3.2 Test results:

Test method	Parameter	Results
SIST EN 1366-4:2006	Integrity (E):	240 minutes
	<ul> <li>cracks or openings in excess of given dimensions</li> <li>ignition of cotton pad</li> <li>sustained flaming on the unexposed side</li> </ul>	no failure 240 minutes 240 minutes
	Insulation (I) - mean temperature rise >140°C - max. temperature rise >180°C	240 minutes no failure



## 4. Classification and field of application:

#### 4.1 Reference:

This classification has been carried out in accordance with Clause 7.5.9 of SIST EN 13501-2:2008+A1:2009.

#### 4.2 Classification:

The insulation ropes **ZCS Series** are classified according to the following combinations of performance parameters and classes as appropriate. No other classification is allowed.

Е	15		30	45	60	90	120	180	240	
EI	15	20	30	45	60	90	120	180	240	

Fire resistance classification:

$$EI 240 - H - X - F - W 10 to 150$$

## 4.3 Field of application:

This classification is valid for the insulation ropes **ZCS Series** with the following product variations:

4.3.1 Orientation (according to SIST EN 1366-4:2006):

Tested orientation	Application
A	A, D, E <sup>a</sup>

- 4.3.2 Supporting construction (according to SIST EN 1366-4:2006):
  - supporting construction may be concrete, block work or masonry separating elements thickness equal or greater than 200 mm.
- 4.3.3 Seal position (according to SIST EN 1366-4:2006):
  - seal position for linear joints width from 10 to 100 mm should be type D,
  - seal position for linear joints width from 110 to 150 may be types A, B, C or E.

#### 5. Limitations:

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

	Name	Signature	Date
person undertaking classification:	Robert Umek, B.Sc	19	8. 4. 2015
person authorising this report:	Milan Hajduković, B.Sc.	Hoselin/	8. 4. 2015

