UL-EU CERTIFICATE

Certificate No.	UL-EU-01051-CPR
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Date of Issue	2017-11-24
Certificate Holder	FSi Limited Westminster Industrial Estate Tamworth Road Measham DE12 7DS
Manufacturer	As above
Certified Product Type	Fire Stop – Sealant
Product Trade Name	Pyrolastic Silicone
Trademark	PYROLASTIC FIRE RESISTANT SILICONE SEALANT
Rating/Classification	See Appendix
Harmonised Technical Specifications	ETAG 026-3/ EN13501-2
Supporting Documentation	ETA 17/0723, EC - CERTIFICATE OF CONSTANCY OF PERFORMANCE – 1121-CPR-JA5111
Additional information	
Expiry date	2027-11-23

UL EU

UKAS PRODUCT CERTIFICATION 4705

Head of Notified Body
Chris Miles

This is to certify that representative samples of the Certified Product listed above have been investigated by Underwriters Laboratories to the Standard(s) indicated on this Certificate, in accordance with the UL Global Services Agreement and the UL-EU Mark Service Terms and Conditions ("Agreement"). The Certificate Holder is entitled to use the UL-EU Mark for the Certified Product listed on the certificate and manufactured at the production site(s) listed, in accordance with the terms of the Agreement. Only those products bearing the UL-EU Mark for Europe should be considered as being covered by UL's UL-EU Mark Service. This Certificate shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.

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This certificate relates to the use of Pyrolastic Silicone Sealant for fire stopping where there are joints in or between walls & floors. The detailed scope is given in pages 3 to 5 of this Certificate. This shows the thickness and acceptable dimensions, substrates and orientations required to provide fire resistance periods of up to 240 minutes for differing seal configurations and wall/floor constructions

The product is certificated on the basis of:

i) ETA 17/0723
ii) EC - CERTIFICATE OF CONSTANCY OF PERFORMANCE – 1121-CPR-JA5111
iii) Inspection and surveillance of factory production control by UL
iv) Fire resistance test data in accordance with EN 1366-4: 2006
v) Classification in accordance with EN 13501-2
vi) Durability and Servicability as defined in ETAG 026-3

The movement capability of Pyrolastic Silicone joint seals is restricted to 7.5%.

The durability class of Pyrolastic Silicone is X - intended for use in conditions exposed to weathering

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Product-type: Sealant	Intended use: Linear Joint & Gap Seal	
Basic requirement for construction work	Basic Requirement	Basic requirement for construction work
BWR 1 Mechanical resistance and stability		
	None	Not relevant
BWR 2 Safety in case of fire		
EN 13501-1	Reaction to fire	E
EN 13501-2	Resistance to fire	See page 5
BWR 3 Hygiene, health and environment		
EN 1026:2000	Air permeability (material property)	See page 4
ETAG 026-3, Annex C	Water permeability (material property)	No performance determined
Declaration of Manufacturer	Release of dangerous substances	Declaration of manufacturer
BWR 4 Safety in use		
EOTA TR 001:2003	Mechanical resistance and stability	No performance determined
EOTA TR 001:2003	Resistance to impact/movement	No performance determined
EOTA TR 001:2003 ISO 11600	Adhesion	No performance determined
BWR 5 Protection against noise		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	No performance determined
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
BWR 6 Energy economy and heat retention		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined
General aspects relating to fitness for use		
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceability	X
BWR 7 Sustainable use of natural resources		
-	-	No performance determined

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Pyrolastic Silicone: Air Permeability according to BS EN 1314-1				
Pressure (Pa)	**Results under positive chamber pressure**		**Results under negative chamber pressure**	
	Leakage (m^3/h)	**Leakage (m^3/m^2/ h)**	**Leakage (m^3/h)**	**Leakage (m^3/m^2/ h)**
50	0.1	2.8	0.1	2.8
100	0.1	2.8	0.2	5.6
150	0.1	2.8	0.2	5.6
200	0.1	2.8	0.2	5.6
250	0.1	2.8	0.1	2.8
300	0.1	2.8	0.2	5.6
450	0.1	2.8	0.1	2.8
600	0.2	5.6	0.1	2.8

Pyrolastic Silicone: Analytical VOC Results		
Regulation or protocol	**Conclusion**	**Version of regulation or protocol**
French VOC Regulation		Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	Pass	Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
AgBB	Pass	AgBB of February 2015. DIBt of October 2010
Belgian Regulation	Pass	Royal decree of May 2015 (C-2014/24239)
EMICODE	EC 1 PLUS	November 2015
Indoor Air Comfort®	Pass	Indoor Air Comfort 5.3a of March 2015
Indoor Air Comfort GOLD®	Pass	Indoor Air Comfort GOLD 5.3a of March 2015
EN 717-1§	E1	2004
Blue Angel (RAL UZ 123)	Pass	Low-Emission Sealants for Interior Use, April 2009
BREEAM International	Compliant	GN22: BREEAM Recognised Schemes for VOC Emissions from Building Products

Full details of the results given above are included in the test report referenced 392-2017-00014902_A_EN.

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Pyrolastic Silicone – Fire Resistance Classification according to EN 13501-2								
Configuration			**Wall to Wall Joint (rigid wall)**					
Substrate	**Minimum wall Thickness (mm)**	**Maximum Gap Size (mm)**	**Seal Position**	**Minimum Seal Depth (mm)**	**Backing Material**	**Minimum Backing Depth (mm)**	**Fire Resistance (mins.)**	
							E	**EI**
Concrete/ concrete	150	60	Both Sides	5	Stone Mineral Fibre, min. (60kg/m^3)	50	240	240
Concrete/ steel							240	60
Concrete/ hardwood							180	180
Concrete/ softwood							240	180
Concrete/ concrete		50		25	PE backing rod	20	240	180
Configuration			**Floor to Floor/Wall Joint (rigid floor/wall)**					
Substrate	**Minimum floor Thickness (mm)**	**Maximum Gap Size (mm)**	**Seal Position**	**Minimum Seal Depth (mm)**	**Backing Material**	**Minimum Backing Depth (mm)**	**Fire Resistance (mins.)**	
							E	**EI**
Concrete/ steel	150	60	Unexposed face	5	Stone Mineral Fibre, min. (60kg/m^3)	50	90	45
Concrete/ steel			Exposed face				120	60
Concrete/ concrete			Unexposed face				240	180
Concrete/ concrete			Exposed face				90	60
Concrete/ concrete		12	Unexposed face	6	PE backing rod	20	240	120
Concrete/ concrete		60		30			240	60

Appendix UL-EU Certificate

Certification Mark	**UL-EU mark**
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The UL-EU Mark, as displayed below, shall appear on certified products only. Minimum size is not specified, as long as the Mark is legible. The following is suggested.

The minimum height of the registered trademark symbol ® shall be 1 mm. When the overall diameter of the UL-EU Mark is less than 9.5 mm, the trademark symbol may be omitted if it is not legible to the naked eye.

The UL-EU Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Manufacturer's name or trademark and model number shall also appear elsewhere on the product.

All content shall be in accordance with the details provided on this UL-EU Certificate.

PROCUREMENT

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