## UL-EU CERTIFICATE

Certificate No. UL-EU-00866-A1-CPR

Page 1/22

Date of Issue 2015-09-17 Revision 2020-01-15

Certificate Holder FISCHERWERKE GMBH & CO KG

Klaus-Fischer-Strasse 1 72178, Waldachtal

Deutschland

Manufacturer A/008

Certified Product Type Fire Stop - Coated Board

Product Trade Name fischer FCPS Coated Panel System

Trademark N/A

Rating/Classification See Appendix

Harmonised Technical Specifications ETAG 026-2 / EN 13501-2 / EN 13501-3

**Expiry date** 2025-09-16





**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shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



Certificate No. UL-EU-00866-A1-CPR

Page 2/22

Date of Issue 2015-09-17

This certificate relates to the use of fischer FCPS Coated Panel System for fire stopping where services penetrate floors and walls. The detailed scope is given in pages 3 to 21 of this Certificate. This shows the thickness and acceptable dimensions, substrates and orientations required to provide fire resistance periods of up to 120 minutes (EI 120).

The product is certificated on the basis of:

- i) Inspection and surveillance of factory production control by UL
- ii) Fire resistance test data in accordance with 1366-3: 2009 & EN 1366-1: 2000
- iii) Classification in accordance with EN 13501-2 & EN 13501-3
- iv) Durability and Servicability as defined in ETAG 026-2

The durability class of fischer FCPS Coated Panel System is  $Z_1$  - intended for use at internal conditions with high humidity, excluding temperatures below  $0^{\circ}$ C

VOC test report – Indoor Air Comfort GOLD® referenced – eurofins 392-2017-00008801\_A\_EN, is also available.

Fire resisting ducts penetrating the fischer FCPS Coated Panel System shall be classified (EN13501-3) for the required performance period, in addition to the details given on page 21.



Certificate No. UL-EU-00866-A1-CPR

Page 3/22

**Date of Issue** 2015-09-17

Product-type: Coated board	Intended use: Pene	tration Seal
Basic requirement for construction work	Basic Requirement	Basic requirement for construction work
	BWR 1 Mechanical resistance and stabili	ty
人ピスピスツ	None	レルリレルリール
$\times \times \times$	BWR 2 Safety in case of fire	$\langle \times \times \rangle$
EN 13501-1	Reaction to fire	Class E
EN 13501-2	Resistance to fire	See page 7
VII. VII. VII.	BWR 3 Hygiene, health and environmen	t /m. /m.
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
$\times$	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
$\times \times \times$	BWR 5 Protection against noise	$\langle \times \times \rangle$
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	Rw (C;C <sub>tr</sub> )= 24(-2;-3) and See pages 5&6
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
M OF M OF M OF	BWR 6 Energy economy and heat retention	on
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined
YUTYUTYU	General aspects relating to fitness for use	e
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceability	Zı
) U	WR 7 Sustainable use of natural resource	ees
$\overline{}$		No performance determined



Certificate No. UL-EU-00866-A1-CPR

Page 4/22

Date of Issue 2015-09-17

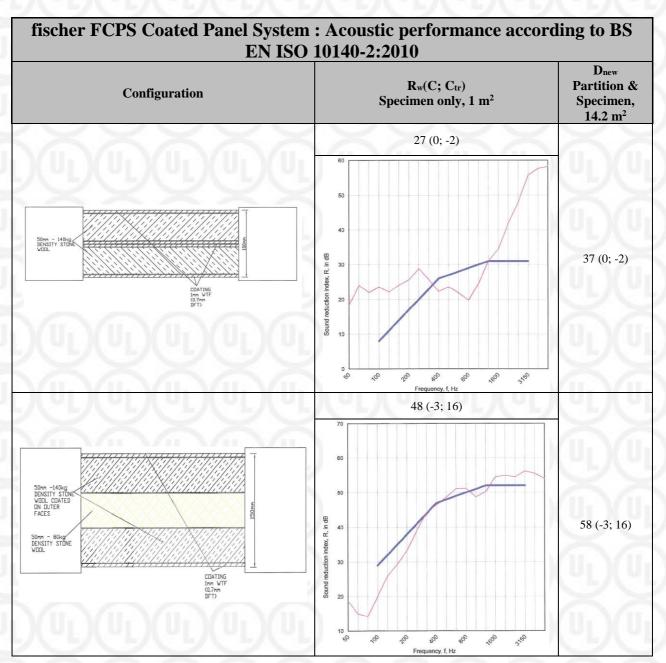
fischer FCPS Coated Panel System : Air Permeability according to BS EN  1026										
Pressure (Pa)	Results under pos	sitive chamber pressure	Results under negative chamber pressu							
Tressure (1 a)	Leakage (m³/h)	Leakage (m³/m²/ h)	Leakage (m³/h)	Leakage (m³/m²/ h)						
50	0.6	0.8	1.1	1.5						
100	1.0	1.4	1.3	1.8						
150	2.8	3.9	1.5	2.1						
200	3.8	5.3	1.9	2.6						
250	4.5	6.3	2.0	2.8						
300	5.0	6.9	2.4	3.3						
450	5.1	7.1	1.9	2.6						
600	6.7	9.3	2.2	3.1						



Certificate No. UL-EU-00866-A1-CPR

Page 5/22

Date of Issue 2015-09-17

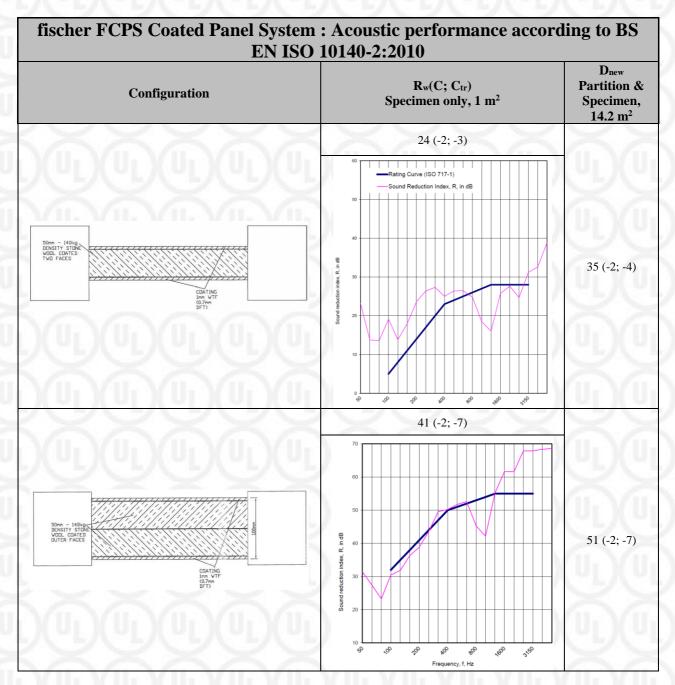




Certificate No. UL-EU-00866-A1-CPR

Page 6/22

Date of Issue 2015-09-17





Certificate No. UL-EU-00866-A1-CPR

Page 7/22

**Date of Issue** 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Service / Insulation**	Fire Re (mi	sistance ns.)
Substrate	Thickness (mm)	(mm)	Position	Depth (mm)		Service / Institution	E	EI
				M	15 mm deep by	Steel or Copper pipe 40 mm diameter and 1.5 – 14.2 mm wall thickness / 20 mm thick foil faced glass wool insulation (min 80 kg/m³)	90	60
		X		XX	15 mm wide annulus fischer FiGM	Steel or Copper pipe 40 - 159 mm diameter and 2.3 – 14.2 mm wall thickness / 30 mm thick foil faced glass wool insulation (min 80 kg/m³)	60	60
	1200 high x 730 wide			Intumescent Graphite Mastic to both faces of the batt seal	Steel pipe 40 mm diameter and 1.5 – 14.2 mm wall thickness / 20 mm thick foil faced glass wool insulation (min 80 kg/m³)	90	60	
		UL)(	U_)(i		Steel pipe 40 - 159 mm diameter and 2.3 – 14.2 mm wall thickness / 30 mm thick foil faced glass wool insulation (min 80 kg/m³)	60	60	
			$\leq$	100*	2 12 12	Electrical cables up to 21 mm diameter	60	60
Drywall/		730 wide	11.		1.\/ii.	Electrical cables 22-80 mm diameter	60	45
Masonry/ Concrete	100	$\Lambda^{u} L \Lambda$	Central			Steel cable trays and ladders	60	60
wall	$\sim$	/ii. V				Telecommunication cables up to 21 mm diameter and in a bundle of up to 100 mm diameter	60	60
	りだり	V-FV	S.PV			Unsheathed electrical cables up to 17 mm diameter	60	30
		1		~ /	None	Unsheathed electrical cables 18-24 mm diameter	60	15
	L)(UL	KULX	UL)(	ULX	JL)(UL	Steel or Copper conduits up to 16 mm diameter	60	15
		7	$\leq$	$\leq$	$\leq > \leq$	Plastic conduits up to 16 mm diameter	60	60
	600 high x 600 wide	UL)(	$U_L$ )( $I$	Մ_)(Մ_	Steel or Copper pipe 42-159 mm diameter and 1.2 – 14.2 mm wall thickness / 25 mm thick foil faced glass wool insulation (min 30 kg/m³)	120	45	
		$\sim$	$\times$	$\leq \sim$	Steel or Copper pipe 42 diameter and 1.0 – 14.2 mm wall thickness / 25 mm thick foil faced glass wool insulation (min 30 kg/m³)	120	60	

<sup>\*</sup> Two layers of 50 mm batt



<sup>\*\*</sup> Continuous through seal and full length of the pipe

Certificate No. UL-EU-00866-A1-CPR

Page 8/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Service / Insulation** Min. 0mm between services and 50mm	Fire Re (mi	sistance ns.)
	Thickness (mm)	(mm)	Position	Depth (mm)		to seal edge	E	EI
	Min	ViiiV	ii.V	î V		Steel or Copper pipe 42-159 mm diameter and 1.2 – 14.2 mm wall thickness / 40 mm thick foil faced stone wool insulation (min 40 kg/m³)	45	45
Drywall/ Masonry/	100	1200 high x	Central	100*		Steel 42 - 324 mm diameter and 16 mm wall thickness / 40 mm thick foil faced stone wool insulation (min 40 kg/m³)	45	45
Concrete wall	100	730 wide	Central	100	None	Steel or Copper pipe 42-159 mm diameter and 1.2 – 14.2 mm wall thickness / 2 mm DFT fischer Panel Coating FPC	120	45
5/1	Minimum Incornor	$\mathcal{L}_{\mathcal{L}}$	Steel pipe 42-324 mm diameter and 14.2 mm wall thickness / 2 mm DFT fischer Panel Coating FPC	120	45			
Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Service / Insulation*** Min. 0mm between services and 50mm	Fire Re (mi	sistance ns.)
Substrate	Thickness (mm)	(mm)	Position	Depth (mm)		to seal edge	E	EI
PC		CAN.	T/V	J.C.		Steel or Copper pipe 42-159 mm diameter and 1.2 – 14.2 mm wall thickness / 13-25 mm thick K Flex ST insulation	120	60
D 11/	)(U)	(U <sub>L</sub> )(	UL)(	UL)(1	J <sub>L</sub> )(U <sub>L</sub>	Steel or Copper pipe 42 mm diameter and 1.0 – 14.2 mm wall thickness / 13-25 mm thick K Flex ST insulation	120	90
Drywall/ Masonry/ Concrete wall	100	1200 high x 750 wide	Central	100*	None	Steel or Copper pipe 42-108 mm diameter and 1.2 – 14.2 mm wall thickness / 25-40 mm thick Kingspan Kooltherm FM insulation	120	60
wan						Steel or Copper pipe 42 mm diameter and 1.0 – 14.2 mm wall thickness / 25-40 mm thick Kingspan Kooltherm FM insulation	120	90
	)(U)					Steel or Copper pipe 42 mm diameter and 1.2 – 14.2 mm wall thickness / 50 mm thick glass fibre insulation	120	90

<sup>\*</sup> Two layers of 50 mm batt



<sup>\*\*</sup> Continuous through the seal and full length of the pipe

Certificate No. UL-EU-00866-A1-CPR

Page 9/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Service / Insulation	Fire Re (mi	sistance ns.)
Substruce	Thickness (mm)	(mm)	Position	Depth (mm)		Service / Institution	E	EI
3/1	Mil	WW.	ii V	î V	M	Electrical cables up to 21 mm diameter insulated with P40/40 stone wool insulation** 40 mm thick, 40 kg/m³	120	120
			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Ţ.	AT CT	Electrical cables 22-80 mm diameter insulated with P40/40 stone wool insulation** 40 mm thick, 40 kg/m³	120	90
	1200 high x 730 wide Central 100*	100*	Մ <u>.</u> )(Մլ.	Steel cable trays and ladders insulated with P40/40 stone wool insulation** 40 mm thick, $40 \text{ kg/m}^3$	120	120		
		The Contract of the Contract o	Telecommunication cables up to 21 mm diameter and in a bundle of up to 100 mm diameter insulated with P40/40 stone wool insulation** 40 mm thick, 40 kg/m <sup>3</sup>	120	120			
		$\times$	X	$\approx$	$\times \times$	Unsheathed electrical cables up to 24 mm diameter insulated with P40/40 stone wool insulation** 40 mm thick, 40 kg/m³	120	120
Masonry/ Concrete Wall	150		Any position within wall thickness		None	Steel or Copper pipe 108 mm diameter and 1.5  – 14.2 mm wall thickness / 40 mm thick stone wool insulation (min 140 kg/m³)***	60	45
						Electrical cables up to 80 mm diameter insulated with 6 mm thick fischer Thermal Defense Wrap min. 300 mm long	60	60
	(UL	600 high x 600 wide	UL)(	50	Մը)(Մը	Steel cable trays and ladders insulated with 6 mm thick fischer Thermal Defense Wrap min. 300 mm long	60	60
	Central	Central	Central	TAC.	Telecommunication cables up to 21 mm diameter and in a bundle of up to 100 mm diameter insulated with 6 mm thick fischer Thermal Defense Wrap min. 300 mm long	60	60	
				Unsheathed electrical cables up to 24 mm diameter insulated with 6 mm thick fischer Thermal Defense Wrap min. 300 mm long	60	60		

<sup>\*</sup> Two layers of 50 mm batt



<sup>\*\*</sup> Interrupted at the seal and extending 200 mm from both faces of the seal

<sup>\*\*\*</sup> Interrupted at the seal and full length of the pipe

UL-EU-00866-A1-CPR Certificate No.

> 10/22 **Page**

2015-09-17 **Date of Issue** 

Substrate	Minimum Substrate Thickness	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth	Incorporated seal	Service / Insulation***	Fin Resist (min	tance ns.)
Drywall/	(mm)		U)(	(mm)		Electrical cables up to 80 mm diameter insulated with P40/40 stone wool insulation 40 mm thick, 40 kg/m³  Steel cable trays and ladders insulated with P40/40 stone wool insulation 40 mm thick, 40 kg/m³  Telecommunication cables up to 21 mm	E	EI
Masonry/ Concrete Wall	100	1200 high x 750 wide	Pattress**, single layer to each face	200**	None	diameter and in a bundle of up to 100 mm diameter insulated with P40/40 stone wool insulation 40 mm thick, 40 kg/m³  Unsheathed electrical cables up to 24 mm diameter insulated with P40/40 stone wool insulation 40 mm thick, 40 kg/m³	120	120
<u> </u>		$\times$	<b>X</b>	K).	K.X	Plastic Conduits up to 16 mm diameter insulated with P40/40 stone wool insulation 40 mm thick, 40 kg/m <sup>3</sup>	$\langle \rangle_{\mathbb{R}}$	<



<sup>\*\*</sup> Two layers of 50 mm batt separated by minimum 100 mm

\*\*\* Interrupted at the seal and extending 300 mm from both faces of the seal

Certificate No. UL-EU-00866-A1-CPR

Page 11/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Collar ref.	PVC Pipe**		sistance ns.)				
Substruce	Thickness (mm)	(mm)	Position	Depth (mm)			1 vo Tipe	E	EI				
						32 mm	32 mm Ø / 1.8 mm wall						
	1/11	100 31	11.31	\ /	· \/	40 mm	40 mm Ø / 1.8 mm wall		. \				
	I W U i	M Un M	Ur M	Dr Mil	Ji Willi	50 mm	50 mm Ø / 1.8 mm wall		uL)				
	レノヘーレノ	ハーレハ	ニレハ	_ L L / / .	C' 1 FEG	55 mm	55 mm Ø / 1.8-2.3 mm wall						
D11/			Election 4		fischer FFC	63 mm	63 mm Ø / 2.3-3 mm wall						
Drywall/		1200 1:-1	Flush to		Firestop Collar	75 mm	75 mm Ø / 3.1-4.8 mm wall						
Masonry/ Concrete	100	1200 high x 730 wide	both faces of	100*	Ref secured to both faces with	82 mm	82 mm Ø / 3.1-4.8 mm wall	120	120				
wall		750 wide	wall	$v_{\perp} n$	U1 76 1	$v \perp N^{-1}$	~LA	UL AL	80 mm steel pig	90 mm	90 mm Ø / 4.2-7.4 mm wall		V [ ]
wan	フトーツ		wan	/ \	tail screw	100 mm	100 mm Ø / 4.2-7.4 mm wall		. "/				
					tan screw	110 mm	110 mm Ø / 4.2-7.4 mm wall						
	1/11/1	1/11 3/	11 \/	11 3/6	1 1/11	125 mm	125 mm Ø / 6 mm wall						
	1 36 LJ 1	)( UL)( UL)( UL)	U : W	UI WI	JI X UI	140 mm	140 mm Ø / 6.1-7.5 mm wall						
	レノハーレ		ニトハ	ニトンバ		160 mm	160 mm Ø / 6.2-9.5 mm wall						
Substrate	Substrate	Minimum Substrate Seal Size Seal	Seal S	Minimum Seal	Seal seal		DD D'**	Fire Resistance (mins.)					
			D 141	D 41			PP Pipe**						
	Thickness (mm)	(mm)	Position	Depth (mm)			PP Pipe**	E	EI				
			Position	-		32 mm	32 mm Ø / 2.9 mm wall		EI				
<>			Position	-	<×	32 mm 40 mm	•		EI				
5			Position	-	5/6		32 mm Ø / 2.9 mm wall		EI				
			Position	-	i (Ui	40 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall		EI				
D)(U			Ū <sub>L</sub> )(	-	fischer FFC	40 mm 50 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall		EI				
Drywall/		(mm)	Flush to	-	Firestop Collar	40 mm 50 mm 55 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall		EI				
Masonry/		(mm)	Flush to	-	Firestop Collar Ref secured to	40 mm 50 mm 55 mm 63 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall		EI 120				
Masonry/ Concrete	(mm)	(mm)	Flush to both faces of	(mm)	Firestop Collar Ref secured to both faces with	40 mm 50 mm 55 mm 63 mm 75 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall 75 mm Ø / 2.8-6.7 mm wall	E					
Masonry/	(mm)	(mm)	Flush to	(mm)	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall 75 mm Ø / 2.8-6.7 mm wall 82 mm Ø / 2.8-6.7 mm wall	E					
Masonry/ Concrete	(mm)	(mm)	Flush to both faces of	(mm)	Firestop Collar Ref secured to both faces with	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall 75 mm Ø / 2.8-6.7 mm wall 82 mm Ø / 2.8-6.7 mm wall 90 mm Ø / 2.7-10 mm wall	E					
Masonry/ Concrete	(mm)	(mm)	Flush to both faces of	(mm)	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm 100 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall 75 mm Ø / 2.8-6.7 mm wall 82 mm Ø / 2.8-6.7 mm wall 90 mm Ø / 2.7-10 mm wall 100 mm Ø / 2.7-10 mm wall	E					
Masonry/ Concrete	(mm)	(mm)	Flush to both faces of	(mm)	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm 100 mm	32 mm Ø / 2.9 mm wall 40 mm Ø / 2.9 mm wall 50 mm Ø / 2.9 mm wall 55 mm Ø / 2.9-4.4 mm wall 63 mm Ø / 2.9-4.4 mm wall 75 mm Ø / 2.8-6.7 mm wall 82 mm Ø / 2.8-6.7 mm wall 90 mm Ø / 2.7-10 mm wall 100 mm Ø / 2.7-10 mm wall 110 mm Ø / 4.2-7.4 mm wall	E					

<sup>\*</sup> Two layers of 50 mm batt



<sup>\*\*</sup> Minimum distance between services 0 mm and 50 mm to edges of seal

Certificate No. UL-EU-00866-A1-CPR

Page 12/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Collar ref.	PE Pipe**		sistance ns.)																										
	Thickness (mm)	(mm)	Position	Depth (mm)			121.p0	E	EI																										
						32 mm	32 mm Ø / 2.9 mm wall																												
	7/11/	1/11/3/	11.31	11 \/	- \/ii	40 mm	40 mm Ø / 2.9 mm wall																												
	I W U I	n Un n	UT M	Ur Mi	JI W UI	50 mm	50 mm Ø / 2.9 mm wall		Un 1																										
	レノハーレ	ハーレハ	T L / N	- L/V		55 mm	55 mm Ø / 2.9-4.4 mm wall		- 4/																										
D 11/			F1 1 .			fischer FFC	63 mm	63 mm Ø / 2.9-4.4 mm wall																											
Drywall/		12001:1	Flush to		Firestop Collar	75 mm	75 mm Ø / 2.8-6.7 mm wall																												
Masonry/ Concrete	100	1200 high x 730 wide	both	100*	Ref secured to both faces with	82 mm	82 mm Ø / 2.8-6.7 mm wall	120	120																										
wall		/30 wide	faces of wall	$\cup$ $\cup$ $\cup$ $\cup$ $\cup$		90 mm	90 mm Ø / 2.7-10 mm wall																												
wan	7 \		wall					-	-	-			_ "/ \	<b>ニン/</b> \	80 mm steel pig tail screw	100 mm	100 mm Ø / 2.7-10 mm wall																		
	$\times \times \times \times$			tall sciew	110 mm	110 mm Ø / 4.2-7.4 mm wall																													
	N/11 1	V/11 3/	11. \/	11. \/	11. \/	1111 1/1		/hi: \/h	111. 3/1	11 \/1		11 1/1	11 \/	1 3/11	125 mm	125 mm Ø / 3.1 mm wall		11.																	
	1 10 U1	M THE M	UT W	UI KI	31 X U1	140 mm	140 mm Ø / 3.5-5.8 mm wall		U1 I																										
	-/\ T L	/\_ L/\	Th/\	T 1-//	_ b-/\	5 L/N	/\	160 mm	160 mm Ø / 4.9-9.5 mm wall		. 16.3																								
Substrate	Minimum Substrate	Maximum Seal Size			Seal Size Sea	m   Seal   Sea	ize Seal	Seal		Seal	Incorporated seal	Uponor MLC (Multi-layer Composite) Pipe		Fire Resista																					
	Thickness (mm)	(mm)	Position	Depth (mm)				E	EI																										
					fischer FiGM		40 mm Ø / 4 mm wall																												
	N/	1. 1	. \		Intumescent	50	0 mm Ø / 4.5 mm wall																												
	: W III	M He W	1111111	111 37 1	Graphite	(	63 mm Ø / 6 mm wall																												
Masonry/		1100 high x	Central,	PLA	ULA	マレハヤ	~1.7.				WEAL.	YLA!		PLAT	$v_L \Lambda^q$	UL A	PLAT			1000	100*	100*	100*	100*	100*	100*	100*	100*		, Masti	Mastic, 20 mm	75 Hill 67 7.5 Hill wall			
Concrete	150	750 wide	back to	100*	annulus and full	91	0 mm Ø / 8.5 mm wall	120	120																										
wall	wall 750 wide back	100	depth of the fischer FCPS Coated Panel System seal	)(U <sub>L</sub>	10 mm Ø 10 mm wall		ũ)																												

<sup>\*</sup> Two layers of 50 mm batt / 100mm separation



<sup>\*\*</sup> Min. Separation between services 0 mm, and 50 mm to edges of seal

Certificate No. UL-EU-00866-A1-CPR

Page 13/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate Thickness	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth	Incorporated seal	Wrap ref.	Insulated*** PVC Pipe****	Fin Resist (min	tance ns.)																
	(mm)	(mm)		(mm)				E	EI																
5/2		1	~ /	5/2	5/5	3x2 mm	40 mm Ø / 1.9 mm wall with 25 mm Kingspan Kooltherm FM	120	90																
L)(U	L)(UL)	(UL)(	UL)(I	JL)(U	L)(UL)	3x2 mm	40 mm Ø / 3 mm wall with 15 mm Kingspan Kooltherm FM	120	90																
<>	<><	$\times$	$\times$	< >	fischer FIPW-E	5x2 mm	110 mm Ø / 4.2 mm wall with 25 mm Kingspan Kooltherm FM	120	120																
Drywall/ Masonry/	100	1200 high x	Flush to	100*	/ 2mm secured internally	5x2 mm	110 mm Ø / 6.6 mm wall with 20 mm Kingspan Kooltherm FM	120	90																
Concrete wall	100	730 wide	both faces of wall	100*	within both faces of fischer FCPS Coated	3x2 mm	40 mm Ø / 1.9 mm wall with 32 mm Armaflex Class O	120	90																
Mil	2/11/2	VIII.V	11. \/1	i. Vii	Panel System	3x2 mm	40 mm Ø / 3 mm wall with 9 mm Armaflex Class O	120	90																
		CPV		'UK'	シベリ	5x2 mm	110 mm Ø / 4.2 mm wall with 32 mm Armaflex Class O	120	120																
		1				5x2 mm	110 mm Ø / 6.6 mm wall with 13 mm Armaflex Class O	120	90																
Substrate	Minimum Substrate Thickness	Maximum Seal Size	Seal Position	Minimum Seal Depth	Incorporated seal	Wrap ref.	Insulated*** Steel or Copper Pipe	Fin Resist (min	tance																
	(mm)	(mm)		(mm)				E	EI																
$L \mathcal{N}_0$	L)(UL)	$V_{n}\Gamma Y$	n FYFi	/L/(U	レノ(リレ)		42-159 mm Ø / 1.2 mm wall with 13-25 mm K Flex ST	120	60																
$\leq >$	$< \times <$	$\times$	$\times$	$\leq >$	$< \times$	$\times$	42-159 mm Ø / 1.2-14.2 mm wall with 25 mm K Flex ST	120	90																
i )( U	)('U <sub>L</sub> '	$(U_1)(U_2)$	$U_{i}$ )(1	J <sub>1.</sub> )( U	L)(UL)	$(U_1)$	42 mm Ø / 1-14.2 mm wall with 13-25 mm K Flex ST	120	120																
Drywall/		1200 high x 750 wide	Pattress**,	K>.	fischer FIPW-E / 2mm secured internally	$\times$	42-108 mm Ø / 1.2-14.2 mm wall with 25-40 mm Kingspan Kooltherm FM	120	90																
Masonry/ Concrete wall	100		single layer to each face	200*	within both faces of fischer	2x2 mm	42 mm Ø / 1-14.2 mm wall with 25-40 mm Kingspan Kooltherm FM	120	120																
1	Mil		11.	1	Panel System			FCPS Coated Panel System		42 mm Ø / 1.2-14.2 mm wall with 50 mm glass fibre min. 30 kg/m <sup>3</sup>	120	90													
J(U)(U)	Mir Andrews		اللا										P(nr)							40(41)				D(m)	U.
M		600 x 600	Ur)/i	70	D(U)	(Un)	42 Ø / 1-14.2 mm wall with 25 mm foil faced glass fibre min. 30 kg/m <sup>3</sup>	120	120																

<sup>\*</sup> Two layers of 50 mm batt / 100 mm separation



<sup>\*\*</sup> Pattress installation of fischer FCPS Coated Panel System . The batts are installed in horizontal rows and fixed in minimum 2 vertical edges. Overlap of batts to wall min. 100 mm. Batts mechanically fixed to the wall with min. 6 x 8 mm steel screws and steel retaining washer at 300 mm centres.

<sup>\*\*\*</sup> Continuous through the seal and full length of the pipe

<sup>\*\*\*\*</sup> Min. Separation between services 0 mm, and 50 mm to edges of seal

Certificate No. UL-EU-00866-A1-CPR

Page 14/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Collar ref.	PE Pipe***	Fire Res (mir	
	Thickness (mm)	(mm)	Position	Depth (mm)			<b>-</b>	E	EI
						32 mm	32 mm Ø / 2.9 mm wall		
	1/11/	1/11/3/	11.37	- \/n	1/11/1	40 mm	40 mm Ø / 2.9 mm wall		. `
	I W UT	n un m	$U \cap M I$	ur ar u	1 1/ U1 1	50 mm	50 mm Ø / 2.9 mm wall		11 1
	-/\"L,	ハーレハ				55 mm	55 mm Ø / 2.9-4.4 mm wall		14/
D 111/					fischer FFC	63 mm	63 mm Ø / 2.9-4.4 mm wall		
Drywall/		12001:1	Pattress**,		Firestop Collar	75 mm	75 mm Ø / 2.8-6.7 mm wall		
Masonry/	100	1200 high x 730 wide	single layer	200*	Ref secured to both faces with	82 mm	82 mm Ø / 2.8-6.7 mm wall	120	120
Concrete wall		750 wide	to each face	$I = I \setminus V = I$	80 mm steel pig	90 mm	90 mm Ø / 2.7-10 mm wall		
wan				-/ \	tail screw	100 mm	100 mm Ø / 2.7-10 mm wall		/
	$\times \times \times \times \times$			tall sciew	110 mm	110 mm Ø / 4.2-7.4 mm wall			
	\/II \	V/11 3/	11. \/1	1 3/11	3/m 3	125 mm	125 mm Ø / 3.1 mm wall		. \
	1 N LJ 1	M UI M		01 N U	1 X U1 1	140 mm	140 mm Ø / 3.5-5.8 mm wall		J1 1
	-/\	/\ = E/\		レノ人	L/\_ L/	160 mm	160 mm Ø / 4.9-9.5 mm wall		14/
Substrate	Minimum Substrate Thickness	Maximum Seal Size	Seal Position	Minimum Seal Depth	Incorporated seal	Uponor N Composit	MLC (Multi-layer te) Pipe	Fire Res (mir	
	(mm)	(mm)	1 OSITION	(mm)				E	EI
					fischer FiGM	4	40 mm Ø / 4 mm wall		
	1/20	1.	\/.	. \/	Intumescent	50	0 mm Ø / 4.5 mm wall		
	- W 11a	M Hr W	11-11/1	Dr. 37 III	Graphite	(	53 mm Ø / 6 mm wall		li li
Masonry/		1100 high x	Pattress**,		Mastic, 20 mm	7:	5 mm Ø / 7.5 mm wall		
Concrete	150	750 wide	single layer	250*	annulus and full		0 mm Ø / 8.5 mm wall	45	30
wall	1)(1)	YON	to each face	M	depth of the fischer FCPS Coated Panel System seal		10 mm Ø 10 mm wall		n

<sup>\*</sup> Two layers of 50 mm batt / 100 or 150 mm separation



<sup>\*\*</sup> Pattress installation of fischer FCPS Coated Panel System. The batts are installed in horizontal rows and fixed in minimum 2 vertical edges. Overlap of batts to wall min. 100 mm. Batts mechanically fixed to the wall with min. 6 x 8 mm steel screws and steel retaining washer at 300 mm centres.

<sup>\*\*\*</sup> Min. Separation between services 0 mm, and 50 mm to edges of seal

Certificate No. UL-EU-00866-A1-CPR

Page 15/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Collar ref.	PP Pipe***	Fire Res	
	Thickness (mm)	(mm)	Position	Depth (mm)			•	E	EI
						32 mm	32 mm Ø / 2.9 mm wall		
	1/	160 31	11.74	· \/	1/11/	40 mm	40 mm Ø / 2.9 mm wall	1	. `
	i Willia	M III M	11 T W 1	11 W II	1 W H 1	50 mm	50 mm Ø / 2.9 mm wall	l 1 1 1 1 1	In Y
	レハーレ	ヘーレハ	"LA	LA	レハーレノ	55 mm	55 mm Ø / 2.9-4.4 mm wall	1	3/
					fischer FFC Firestop Collar	63 mm	63 mm Ø / 2.9-4.4 mm wall		
Drywall/			Pattress**,	~ /		75 mm	75 mm Ø / 2.8-6.7 mm wall		
Masonry/	100	1200 high x	single layer	200*	Ref secured to	82 mm	82 mm Ø / 2.8-6.7 mm wall	120	120
Concrete		730 wide	to each face		both faces with	90 mm	90 mm Ø / 2.7-10 mm wall		
wall		(\ \=/\		-/\	80 mm steel pig	100 mm	100 mm Ø / 2.7-10 mm wall	-//	-/
					tail screw	110 mm	110 mm Ø / 4.2-7.4 mm wall		
	1/	160 31	\ /.	. 1/11	1/1	125 mm	125 mm Ø / 3.1 mm wall	1)(4)	
	- M III v	M HE W	$\Pi_{T} \cdot M \cdot I$	1 × W 11	r W II+ 1	140 mm	140 mm Ø / 3.5-8 mm wall		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	レハーレ	バードソ	TFV.	LAL	レノヘーレノ	160 mm	160 mm Ø / 4-14.6 mm wall		14/
	Minimum	35 4		Minimum	Incorporated	Collar		Fire Res	istance
Substrate	Substrate Thickness (mm)	Maximum Seal Size (mm)	Seal Position	Seal Depth	seal	ref.	PVC Pipe***	(mir	is.)
				(mm)				E	151
				(mm)		32 mm	32 mm Ø / 1.8 mm wall	E	LI
		25	X 2	(mm)	<×	32 mm 40 mm	32 mm Ø / 1.8 mm wall 40 mm Ø / 1.8 mm wall	E	EI
	SVII.	/ii.V	ĭ. 7/	(mm)	576			E	EI
	00	(Q)(	VI)(I	(mm)	500	40 mm	40 mm Ø / 1.8 mm wall	E	EI
		(Ū)	Ū)(I	(mm)	fischer FFC	40 mm 50 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall	E	
Drywall/		(UL)(	Pattress**	(mm)	Firestop Collar	40 mm 50 mm 55 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall	<b>E</b>	Ei
Masonry/	100	1200 high x	Pattress**,	DO	Firestop Collar Ref secured to	40 mm 50 mm 55 mm 63 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall		D
Masonry/ Concrete	100	1200 high x 730 wide	Pattress**, single layer to each face	(mm) 200*	Firestop Collar Ref secured to both faces with	40 mm 50 mm 55 mm 63 mm 75 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall 75 mm Ø / 3.1-4.8 mm wall	120	120
Masonry/	100		single layer	DO	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall 75 mm Ø / 3.1-4.8 mm wall 82 mm Ø / 3.1-4.8 mm wall		D
Masonry/ Concrete	100		single layer	DO	Firestop Collar Ref secured to both faces with	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall 75 mm Ø / 3.1-4.8 mm wall 82 mm Ø / 3.1-4.8 mm wall 90 mm Ø / 4.2-7.4 mm wall		D
Masonry/ Concrete	100		single layer	DO	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm 100 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall 75 mm Ø / 3.1-4.8 mm wall 82 mm Ø / 3.1-4.8 mm wall 90 mm Ø / 4.2-7.4 mm wall 100 mm Ø / 4.2-7.4 mm wall 110 mm Ø / 4.2-7.4 mm wall		D
Masonry/ Concrete	100		single layer	DO	Firestop Collar Ref secured to both faces with 80 mm steel pig	40 mm 50 mm 55 mm 63 mm 75 mm 82 mm 90 mm 100 mm	40 mm Ø / 1.8 mm wall 50 mm Ø / 1.8 mm wall 55 mm Ø / 1.8-2.3 mm wall 63 mm Ø / 2.3-3 mm wall 75 mm Ø / 3.1-4.8 mm wall 82 mm Ø / 3.1-4.8 mm wall 90 mm Ø / 4.2-7.4 mm wall 100 mm Ø / 4.2-7.4 mm wall		D

<sup>\*</sup> Two layers of 50 mm batt / 100 or 150 mm separation



<sup>\*\*</sup> Pattress installation of fischer FCPS Coated Panel System. The batts are installed in horizontal rows and fixed in minimum 2 vertical edges. Overlap of batts to wall min. 100 mm. Batts mechanically fixed to the wall with min. 6 x 8 mm steel screws and steel retaining washer at 300 mm centres.

<sup>\*\*\*</sup> Min. Separation between services 0 mm, and 50 mm to edges of seal

Certificate No. UL-EU-00866-A1-CPR

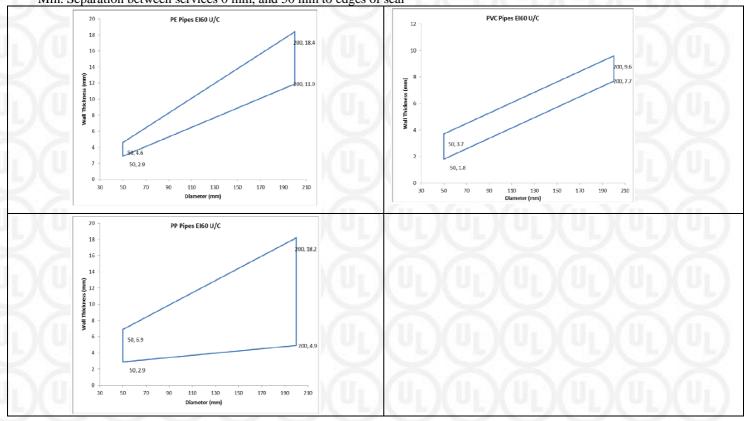
Page 16/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size	Seal	Minimum Seal	Incorporated seal	Wrap size	Pipe Diameter***	Fire Res	
Substrate	Thickness (mm)	(mm)	Position	Depth (mm)		WxT (mm)	Tipe Diameter	E	EI
					fischer FiPW-E	40x2	$32 \text{ mm } \emptyset - 50 \text{ mm } \emptyset$		
Drywall/	1/60	160 31	11.3/	· \/	secured	40x4	51 mm Ø – 82 mm Ø	100	
Masonry/	i Willia	M III M	Pattress**,	11 W II	internally	40x6	83 mm Ø – 115 mm Ø	11 3/1/1	
Concrete	100	600 x 600	single layer	200*	within both	40x8	116 mm Ø – 160 mm Ø	See diagra	ms below
wall			to each face		faces of fischer	40x10	161 mm Ø – 200 mm Ø		
Wall					FCPS Coated Panel System	40x12	201 mm Ø – 250 mm Ø		

<sup>\*</sup> Two layers of 50 mm batt / 100 or 150 mm separation

\*\*\* Min. Separation between services 0 mm, and 50 mm to edges of seal





<sup>\*\*</sup> Pattress installation of fischer FCPS Coated Panel System. The batts are installed in horizontal rows and fixed in minimum 2 vertical edges. Overlap of batts to wall min. 100 mm. Batts mechanically fixed to the wall with min. 6 x 8 mm steel screws and steel retaining washer at 300 mm centres.

Certificate No. UL-EU-00866-A1-CPR

Page 17/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate Thickness (mm)	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth (mm)	Incorporated seal	Service / Insulation	Fire Resistance (mins.)	
							E	EI
	150	600 x 600	Central	50*	fischer FiGM Intumescent Graphite Mastic, 20 mm annulus and full depth of the fischer FCPS Coated Panel System seal	Electrical cables up to 80 mm diameter insulated with fischer Thermal Defense Wrap**	60	60
						Steel cable trays and ladders insulated with fischer Thermal Defense Wrap**	60	60
						Telecommunication cables up to 21 mm diameter and in a bundle of up to 100 mm diameter insulated with fischer Thermal Defense Wrap**	60	60
						Unsheathed electrical cables up to 24 mm diameter insulated with fischer Thermal Defense Wrap**	60	60
						Steel or copper pipe 108 mm Ø, 1.5-14.2 mm wall with 40 mm stone wool insulation 40 kg/m³ continuous through the seal and full length of the pipe	60	45
Masonry/		1100 high by 730 wide				Steel or copper pipe 42 mm Ø, 1.2-14.2 mm wall with 40 mm stone wool insulation 40 kg/m³ interrupted at the seal and 300 mm long on each face	45	45
						Steel or copper pipe 42-159 mm Ø, 2-14.2 mm wall with 40 mm stone wool insulation 40 kg/m³ interrupted at the seal and 300 mm long on each face	45	15
Concrete Wall		1100 high by 750 wide				500 mm wide perforated steel cable tray coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	30	30
						Electrical cables up to 21 mm diameter coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	45	45
						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	45	45
						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	45	45
						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	45	45
				100***		500 mm wide perforated steel cable tray coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	120	120
	)(U					Electrical cables up to 21 mm diameter coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	120	120
						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	120	120
J)(I						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	120	90
						1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	120	120

<sup>\*</sup> One layer of 50 mm batt



<sup>\*\*</sup> fischer Thermal Defense Wrap, 6 mm thick, interrupted at the seal and extending 300 mm from both faces of the seal

<sup>\*\*\*</sup> Two layers of 50 mm batt

Certificate No. UL-EU-00866-A1-CPR

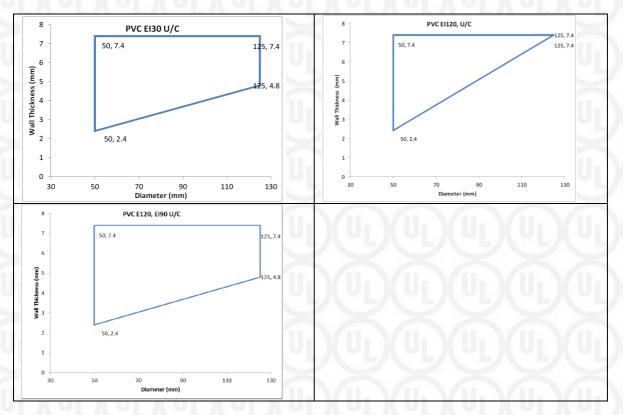
Page 18/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate	Maximum Seal Size (mm)	Seal Position	Minimum Seal	Incorporated seal	Service / Insulation	Fire Resistance (mins.)	
	Thickness (mm)			Depth (mm)		Service / Institution	E	EI
Masonry/ Concrete Wall		1100 high by 750 wide  150 Cen  1100 high by 750 wide	Central	al 100*	fischer FiGM Intumescent Graphite Mastic, 20 mm annulus and full depth of the fischer FCPS Coated Panel System seal	PVC Pipe 50 mm diameter / 2.4-7.4 mm wall	45**	45**
	150				fischer FiGM Intumescent Graphite Mastic, 20 mm annulus and 20 mm depth to both faces of the fischer FCPS Coated Panel System seal	PVC Pipe	See diagram below	
	L)(UL				None	Steel or Copper Pipe 42 mm diameter / 1.2-14.2 mm wall, insulated with 40 mm stone wool min. 40 kg/m³***	120	60
	5m		ĭ'n			Steel or Copper Pipe 42-159 mm diameter / 2-14.2 mm wall, insulated with 40 mm stone wool min. 40 kg/m³***	120	30

<sup>\*</sup> Two layers of 50 mm batt

<sup>\*\*\*</sup> interrupted at the seal and extending 300 mm from both faces of the seal





<sup>\*\*</sup> And as per diagram below

Certificate No. UL-EU-00866-A1-CPR

Page 19/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate Thickness (mm)	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth (mm)	Incorporated seal	Service / Insulation	Fire Resistano (mins.)	
						Sei vice / Insulation	E	EI
	M	1600 x 700	Flush to top of floor	50	None	None	60	60
			Ž,	头	None	Electrical cables up to 80 mm diameter insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
	- )/ U - `	VU: V	Ui Y	Ui Y		Steel cable trays and ladders insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
Concrete Floor		150 1100 x 700 Central, back to back	back to 50*	50*		Telecommunication cables up to 21 mm diameter and in a bundle of up to 100 mm diameter insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
						Unsheathed electrical cables up to 17 mm diameter insulated with 40 mm stone wool insulation 40 kg/m <sup>3</sup> **	60	60
	L)(UL)					Unsheathed electrical cables up to 18-24 mm diameter insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
	150					Steel or Copper conduits up to 16 mm diameter insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
						Plastic conduits up to 16 mm diameter insulated with 40 mm stone wool insulation 40 kg/m³ **	60	60
						Steel or copper pipe 42 mm Ø, 1.2-14.2 mm wall insulated with 40 mm stone wool insulation 40 kg/m³ **	120	120
						Steel or copper pipe 42-159 mm Ø, 2-14.2 mm wall insulated with 40 mm stone wool insulation 40 kg/m³ **	120	30
					fischer FiGM Intumescent Graphite Mastic, 20 mm annulus and full depth of the fischer FCPS Coated Panel System seal	500 mm wide perforated steel cable tray coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	60	60
						Electrical cables up to 21 mm diameter coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	60	60
						1 off 'C1' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	60	60
				J.)(		1 off 'C2' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both faces	60	60
			n V		1 off 'C3' Cable coated with 2 mm DFT fischer Panel Coating FPC for 300 mm to both	60	60	

<sup>\*</sup> Two layers of 50 mm batt



<sup>\*\*</sup> Interrupted at the seal and extending 300 mm from both faces of the seal

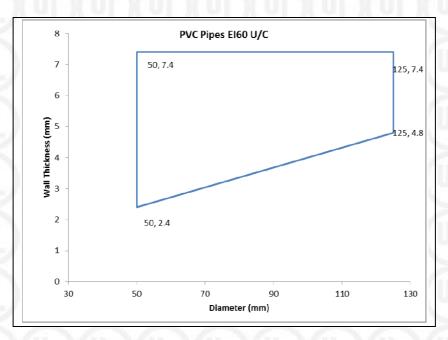
Certificate No. UL-EU-00866-A1-CPR

Page 20/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate Thickness (mm)	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth (mm)	Incorporated seal	Uponor MLC (Multi-layer Composite) Pipe	Fire Resistance (mins.)	
							E	EI
					fischer FiGM	40 mm Ø / 4 mm wall	60	60
	7/11/	1/11/3/	11.37	11 \/1	Intumescent	50 mm Ø / 4.5 mm wall		
	I W U I	n Un n	U r 36	Ur MI	Graphite	63 mm Ø / 6 mm wall		
Concrete	レノハーレ	ヘーレハ	Central,	- L/	Mastic, 20 mm	75 mm Ø / 7.5 mm wall		
floor	150	1100 x 750	back to back	100*	annulus and full depth of the fischer FCPS Coated Panel System seal	90 mm Ø / 8.5 mm wall		
		(U)				110 mm Ø 10 mm wall		
Substrate	Minimum Substrate Thickness (mm)	Maximum Seal Size (mm)	Seal Position	Minimum Seal Depth (mm)	Incorporated seal	PVC Pipe	Fire Resistanc (mins.)	
							E	EI
Concrete floor	150	1100 x 750	Central, back to back	100*	fischer FiGM Intumescent Graphite Mastic, 20 mm annulus and 25 mm depth to both faces of the fischer FCPS Coated Panel System seal	See diagram below	U <sub>L</sub> )(	

<sup>\*</sup> Two layers of 50 mm





Certificate No. UL-EU-00866-A1-CPR

Page 21/22

Date of Issue 2015-09-17

Substrate	Minimum Substrate Thickness (mm)	Maximum Seal width (mm)	Minimum Seal Depth (mm)	Duct A / Duct B	Duct Specification (Duct must be classified in accordance	Fire Resistance (mins.)	
					with EN 13501-3 for the required period)	E	S
Drywall/ Concrete/ Masonry wall	100	100	200*	A	Uninsulated 1.0mm GMS steel, rectangular duct, maximum dimensions 1250 mm wide by 1000 mm high.	60	120
				В		120	×
Concrete	150	250	275**	A		120	120
floor				В		120	Ur-)

<sup>\* 4</sup> layers, outer layers overlapped



<sup>\*\* 50</sup> mm fischer FCPS Coated Panel System /100 mm fischer FFSC FireStop Compound/125 mm fischer FCPS Coated Panel System

#### Appendix UL-EU Certificate

Certification Mark UL-EU mark

Certificate No. UL-EU-00866-A1-CPR

Page 22/22

Date of Issue 2015-09-17

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**

The Production site may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized suppliers can be found on UL's online directory at www.ul.com.

