UL-EU CERTIFICATE

Certificate No. UL-EU-01105-CPR

Page 1/157

Date of Issue 2018-12-19

Revised 2021-07-05

Certificate Holder Etex Building Performance Limited

Gordano House Marsh Lane

Easton-in-Gordano

Bristol BS20 0NE

Manufacturer A/021

Certified Product Type Fire Stop – Coated Board Product Trade Name PROMASEAL® Fire Barrier

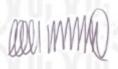
Trademark N/A

Rating/Classification See Appendix

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

Expiry date 2028-12-18





Authorized Certification Decision Maker 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shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.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-01105-CPR

Page 2/157

Date of Issue 2018-12-19

This certificate relates to the use of PROMASEAL® Fire Barrier for fire stopping where services penetrate floors and walls. The detailed scope is given in pages 3 to 156 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 PROMASEAL® Fire Barrier is Z_1 - intended for use at internal conditions with high humidity, excluding temperatures below $0^{\circ}C$

Fire resisting & smoke extraction ducts penetrating the PROMASEAL® Fire Barrier shall be classified (EN13501-3/4) for the required performance period, in addition to the details given on page 156.



Certificate No. UL-EU-01105-CPR

Page 3/157

Date of Issue 2018-12-19

Product-type: Coated board	Intended use: Penet	
Basic requirement for construction work	Basic Requirement	Basic requirement for construction work
Vii. Vii. Viil	BWR 1 Mechanical resistance and stabili	ty
人。インプログロ	None	
\times	BWR 2 Safety in case of fire	$\times \times \times \times$
EN 13501-1	Reaction to fire	Class E
EN 13501-2	Resistance to fire	See pages 7 to 156
$\nabla u \cdot \nabla u \cdot \nabla u$	BWR 3 Hygiene, health and environmen	t // //
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
$\times \times \times$	BWR 4 Safety in use	$\langle \times \times \rangle$
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 _{tr})= 24(-2;-3) and See pages 5&6
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
MALXALXA	SWR 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
)(U ₁)(U ₁)(U ₁	General aspects relating to fitness for use	e
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceability	Z_{l}
В	WR 7 Sustainable use of natural resource	ees
\sim		No performance determined



Certificate No. UL-EU-01105-CPR

Page 4/157

Date of Issue 2018-12-19

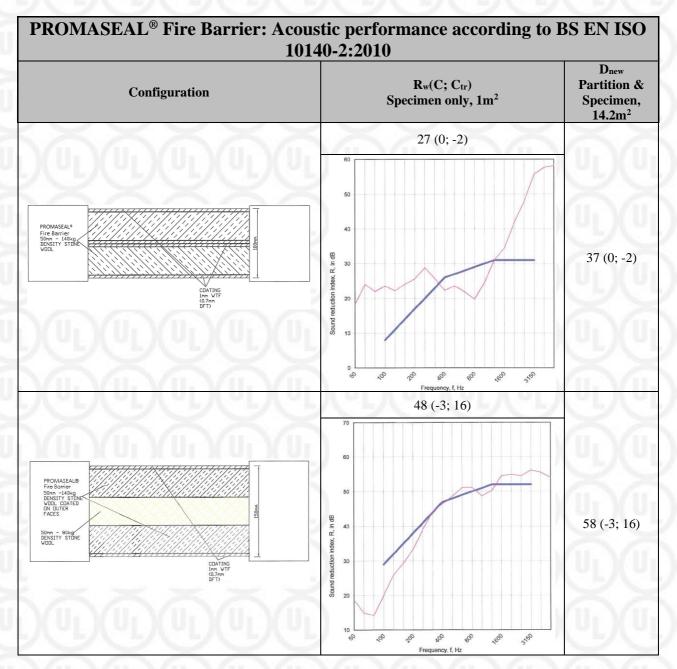
PROMA	SEAL® Fire B	arrier: Air Perme	ability according	g to BS EN 1026		
Pressure (Pa)	Results under pos	Results under positive chamber pressure		s under positive chamber pressure Results under negative chamber pressure		ative chamber pressure
Tressure (1 a)	Leakage (m³/h)	Leakage (m³/m²/ h)	Leakage (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-01105-CPR

Page 5/157

Date of Issue 2018-12-19

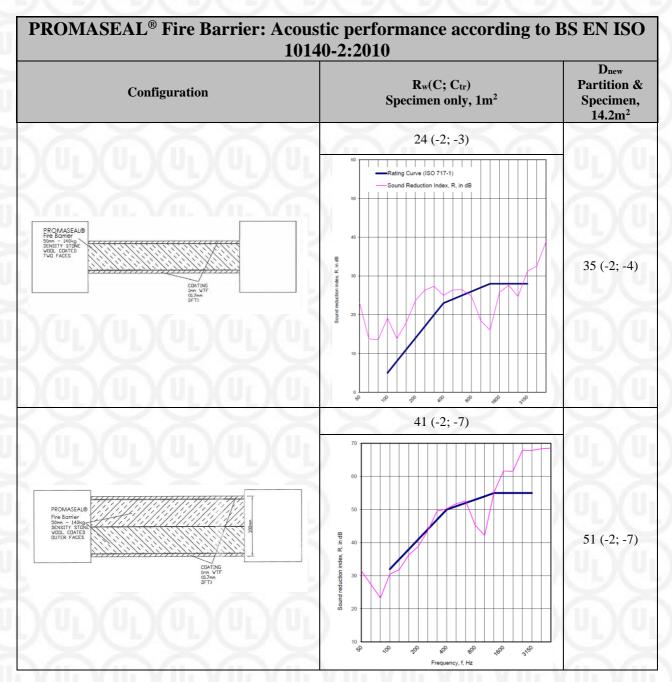




Certificate No. UL-EU-01105-CPR

Page 6/157

Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 7/157

Date of Issue 2018-12-19

Rigid Walls Minimum Thickness 70mm

Single Layer Pattress PROMASEAL® Fire Barrier 50 mm, Electrical Cables

70	Key Control
	1. Supporting Construction
	2. PROMASEAL® Intumescent Acrylic Sealant
1- .	H. AZH. WH. WH. W
`	3. PROMASEAL® Fire Barrier
25	4. <u>Service Penetration</u>
. 3 \	$U_{(1)}(U_{(1)}(U_{(1)}(U_{(1)})(U_{(1)})$
4	
	11. MI. MI. MI. M
	\times \times \times
Y I	u -
. 4	
	\times
Service(s)	Classification
ソトロントントントントントントント	
500mm wide x 60mm deep steel cable basket containing 3 x type 'B' cable and 20 bundle of telecoms cables	EI 90

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 8/157

Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

Max Aperture 730mm Wide x 1200mm High	j)(UL)(UL)(I
	<u>Key</u> 1.	Supporting Construction
1	2.	PROMASEAL® Intumescent Acrylic Sealant
3-2-1	3.	PROMASEAL® Fire Barrier
	4.	Service Penetration
Service(s)	IJ	Classification
20mm dia Adaptaflex SPL20 flexible conduit 20mm dia Kopex KSU 316 stainless steel flexible conduit	N	EI 90
150mm wide x 60mm deep steel cable tray containing 4 x FP200 Gold (Firealarm cable 7mm dia red) Cables	5/	E 90 EI 60

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 9/157

Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables

Max Aperture 2600mm Wide x 2600mm High Key **Supporting Construction** PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier Service Penetration \triangleleft Classification Service(s) 500mm wide x 60mm deep steel cable basket containing 3 x type 'B' cable and 20 x bundle of telecoms cables EI 60 500mm wide x 60mm deep steel cable tray containing 1 x type 'B' cable, 3 x type 'A1' cable, 3 x type 'A2' cable, and 3 x type 'A3' cable

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 10/157
Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

			Key	
	70)(ii)(i	1.	Supporting Construction
	1-)(UL)(U	2.	PROMASEAL® Intumescent Acrylic Sealant
	2		3.	PROMASEAL® Fire Barrier
4	VIII) ✓ VIIII)	VOLVO.	4.	Service Penetration
@mmm		mmme)		
)(UL)(U		
)(U _L)(U		
	. 4	$(U_L)(U_L)$		
	4	Vii.)	S	\times
ervice(s)	MANAGE	MARKET	١,	Classification
0mm dia Adaptaflex SPL20 fle	xible conduit	V/11 V/11 V/11	1	in Mar.M

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 11/157
Date of Issue 2018-12-19

Rigid Walls Minimum Thickness 75mm

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Cable Trunking

Max Aperture 2600mm Wide x 2600mm High	U <u>r</u>)(n ^r)(n ^r)(n
75	<u>Key</u> 1.	Supporting Construction
2- 3	2.	PROMASEAL® Intumescent Acrylic Sealant
4- 5-	3.	PROMASEAL® Fire Barrier
	4.	<u>Insulation</u>
	5.	Service Penetration
Service(s)	ũη/	Classification
150mm x 150mm Insulated steel cable trunking, Stone Wool 40mm thick, 45kg/m³ (LI 400mm). PROMASEAL® Fire Pillows tightly fitted around the cables in the section of trunking within the depth of the partition	757	EI 60 U/U
Cables 1xB1, 1xC1, 1xG1, 1xG2		
Cables 1xB1		EI 60
Cables 1xC1	+	22 00
Unsheathed electrical cables 0-24mm dia		

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 12/157
Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Cable Trunking

Max Aperture 2600mm Wide x	2600mm High		
4	75		Key 1. Supporting Construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Service Penetrations
Service(s)			Classification
50mm x 50mm Insulated steel c PROMASEAL® Fire Pillow stig the depth of the partition	able trunking, Stone Wool 40mm htly fitted around the cables in	m thick, 45kg/m³ (LI 400mm). the section of trunking within	EI 60 U/U
Cables 1xA1, 1xA2, 1xA3 Cables 1xA1 Cables 1xA2 Cables 1xA2)(4)(4)(4)(4)(U)(U)(U	EI 60

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



UL-EU-01105-CPR Certificate No.

13/157 Page 2018-12-19 **Date of Issue**

Single Layer PROMASEAL® Fire Barrier 50mm, Plastic Pipes

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier

75 	
5 4	,
	"
4	

Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- Service Penetration

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	$\times \times \rangle$
PVC Pipe 40mm Ø, 1.8mm wall thickness	40mm	
PVC Pipe 50mm Ø, 1.8mm wall thickness	50mm	
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	EI 60 U/C
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	EI 00 U/C
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	100mm	
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	



UL-EU-01105-CPR Certificate No.

14/157 Page 2018-12-19 **Date of Issue**

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier

Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- PROMASEAL® Fire Barrier
 PROMASEAL® Collar
- 5. Service Penetration

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	EI 60 U/C
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness	160mm	



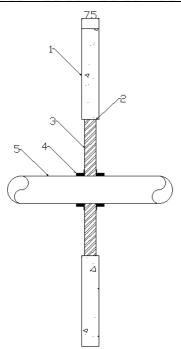
Certificate No. UL-EU-01105-CPR

Page 15/157
Date of Issue 2018-12-19

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Service Penetration

Service(s)	PROMASEAL® Collar Ref	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	32mm	
PP Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PP Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	EI 60 U/C
PP Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PP Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PP Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PP Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PP Pipe 140mm Ø, 3.5-8mm wall thickness	140mm	
PP Pipe 160mm Ø, 4-14.6mm wall thickness	160mm	



Certificate No. UL-EU-01105-CPR

Page 16/157
Date of Issue 2018-12-19

Rigid Walls Minimum Thickness 100mm

Double Layer PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

	Key
[100]	1. Supporting construction
1.3VII. 3VII.3V	2. PROMASEAL® Intur
1- - 4	Acrylic Sealant
\frac{1}{2}.	3. PROMASEAL® Fire
	4. Service Penetration
2 4	Ut X Ut X Ut X Ut
42	
	TIENTIE VIIEVIIE
	CIVE INCINCI
	\times \times \times
	n. VII. Vn. Vn.
	しんく ひとん ひとん ひと
. 4	
L WILL W	Ti-Vu-Vu-Vu-
	OT)(OT)(OT)
L WILL W	OT) (OT) (OT)
L WILL W	Classification
Service(s)	Classification EI 60
Service(s) Electrical cables 0mm to 21mm dia	GIVGPG-PG-P
Service(s)	EI 60 E 60 EI 45
Service(s) Electrical cables 0mm to 21mm dia Electrical cables 22mm to 50mm dia	EI 60 E 60 EI 45 E 60
Service(s) Electrical cables 0mm to 21mm dia	EI 60 E 60 EI 45 E 60 EI 30
Service(s) Electrical cables 0mm to 21mm dia Electrical cables 22mm to 50mm dia Electrical cables 51mm to 80mm dia	EI 60 E 60 EI 45 E 60 EI 30 E 60
Service(s) Electrical cables 0mm to 21mm dia Electrical cables 22mm to 50mm dia Electrical cables 51mm to 80mm dia Cable Trays and Ladders	EI 60 E 60 EI 45 E 60 EI 30
Service(s) Electrical cables 0mm to 21mm dia Electrical cables 22mm to 50mm dia Electrical cables 51mm to 80mm dia Cable Trays and Ladders 100 mm diameter bundle telecommunication cable type "F"	EI 60 E 60 EI 45 E 60 EI 30 E 60
Service(s) Electrical cables 0mm to 21mm dia Electrical cables 22mm to 50mm dia Electrical cables 51mm to 80mm dia Cable Trays and Ladders	EI 60 E 60 EI 45 E 60 EI 30 E 60 EI 45



Certificate No. UL-EU-01105-CPR

Page 17/157
Date of Issue 2018-12-19

Double Layer PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

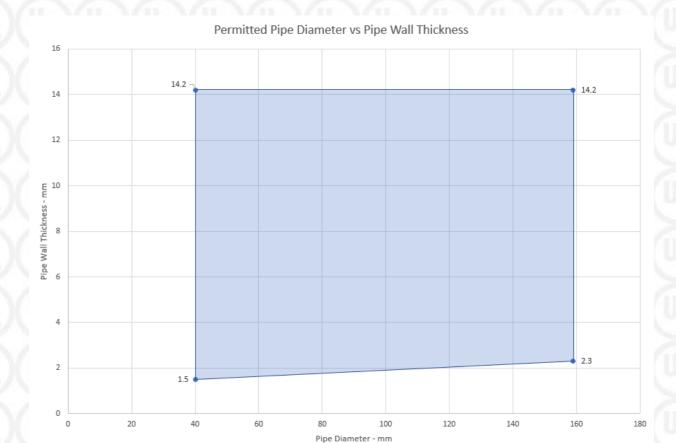
Max Aperture 730mm Wide x 1200mm High	Kev
100 1	1. Supporting construction 2. PROMASEAL® Intumescer Acrylic Sealant 3. PROMASEAL® Fire Barrie 4. Insulation 5. Penetration Service 6. PROMASEAL® HPEX Sealant
Service(s)	Classification
¹ Single copper or mild steel pipe 40mm diameter and 1.5 – 14.2 mm wall with sustained/continuous 20mm thick foil faced glass wool insulation (min 80Kg/m³)	E 90 U/C EI 60 U/C
¹ Single copper or mild steel pipe 40-159mm diameter and 1.5 – 14.2 mm wall (see graph below) with sustained/continuous 30mm thick foil faced glass wool insulation (min 80Kg/m³)	EI 60 U/C

¹15mm deep x 15mm wide annulus PROMASEAL® HPEx Sealant to both faces of the pipe



Certificate No. UL-EU-01105-CPR

Page 18/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 19/157
Date of Issue 2018-12-19

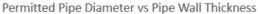
ax Aperture 2600mm Wide x 2600mm High	1. 2. 3. 4. 5. 6.	Supporting construction PROMASEAL® Intumescer Acrylic Sealant PROMASEAL® Fire Barrie PROMASEAL® HPEx Sealant Insulation Penetration Service
Service(s) Single copper or mild steel pipe 40mm diameter and 1.5 – 14.2 mm wall with		Classification
sustained/continuous 20mm thick foil faced glass wool insulation (min 80Kg/m³)	χu	EI 60 U/C
Single copper or mild steel pipe 40-159mm diameter and $1.5 - 14.2$ mm wall (see graph below) with sustained/continuous 30mm thick foil faced glass wool insulation (min 80Kg/m^3)	Vii	EI 60 U/C

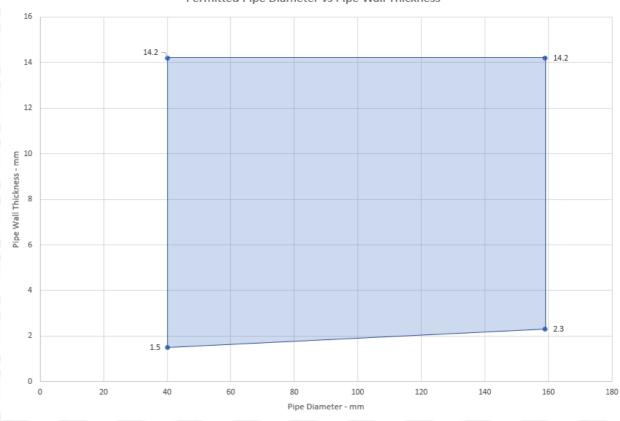
¹15mm deep x 15mm wide annulus PROMASEAL® HPEx Sealant to both faces of the pipe



Certificate No. UL-EU-01105-CPR

Page 20/157
Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

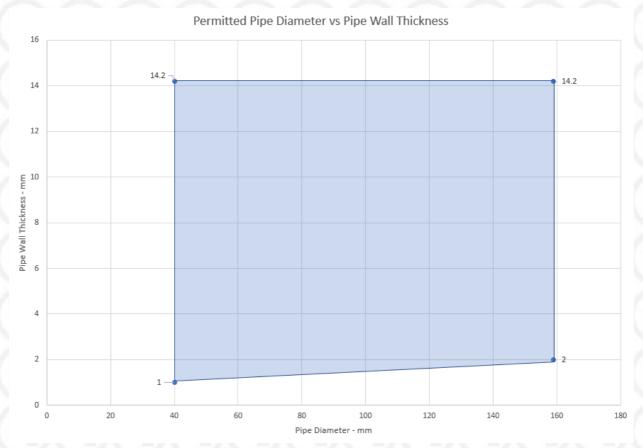
Page 21/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High	Supporting construction
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below). 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 60 C/U



Certificate No. UL-EU-01105-CPR

Page 22/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 23/157
Date of Issue 2018-12-19

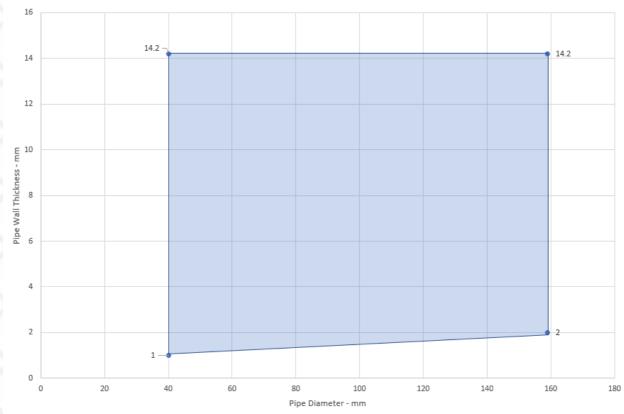
VII	<u>Key</u>
	1. Supporting construction
	2. PROMASEAL® Intumescen Acrylic Sealant
1 7	3. PROMASEAL® Fire Barrier
g	4. Insulation
	5. Penetration Service
2 7 .	(U)(U)(U)(U)(
۵. غ.	
	(u) \/ (u) \/ (u) \/ (u) \/
3	('UL)('UL)('UL)('UL)(
4	
	III. VIII. VIII. VIII. V
/5 / S	
	\times
	TIE VIII. VIII. VIII. V
	$X \times X \times X$
	(U i) (U i) (U i) (U i) (
)(U ₁	(U[)(U[)(U[)(U[)(U[)(
. 4	
Α	m > m > m > m > m
8.	
2	\times
VIII was was was was was a sur-wall V	an Mar Mar Mar Mar M
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see grap	
below). 25mm thick foil faced glassfibre insulation min. 30kg/m ³ (C/S)	EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick fo	il E 60 C/U
faced glassfibre insulation min. 30kg/m ³ (C/S)	EI 60 C/U



Certificate No. UL-EU-01105-CPR

Page 24/157
Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 25/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High	
(Penetrations positioned as per option 1 or 2 below, 0mm distance between ser	 Vices and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Fire Barrier Coating Penetration Service
Service(s)	Classification
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil	E 120 C/U
faced stonewool insulation min. 100kg/m³ (L/I 500mm)	EI 45 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil	E 120 C/U
faced stonewool insulation min. 100kg/m³ (C/I)	EI 60 C/U
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph	
below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm)	EI 45 C/U
	EI 45 C/U EI 45 C/U
below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm)	Viii. Viii. Viii. V
below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm)	EI 45 C/U
below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, PROMASEAL®	EI 45 C/U E 120 C/U

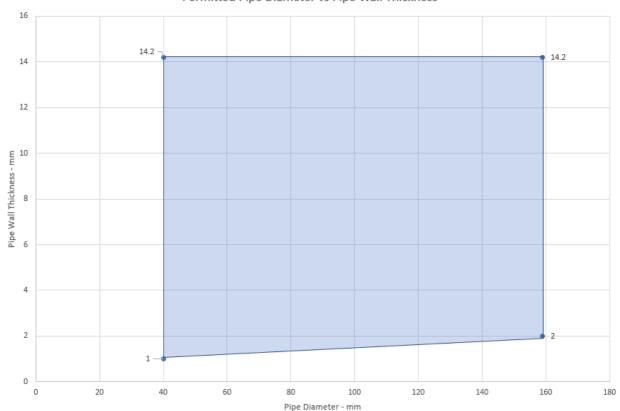


Certificate No. UL-EU-01105-CPR

Page 26/157

Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 27/157

Date of Issue 2018-12-19

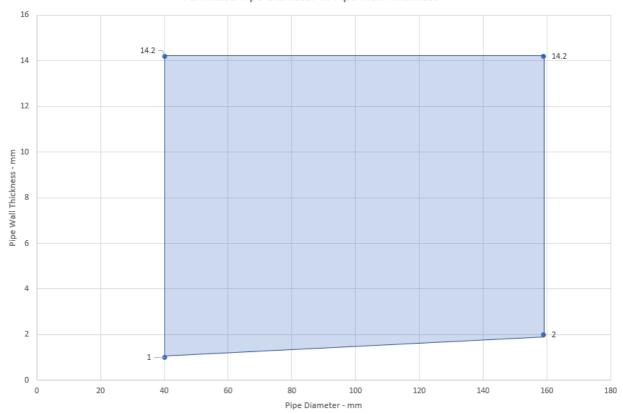
Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key 100 Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier Insulation Penetration Service 2 Classification Service(s) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil E 60 C/U faced stonewool insulation min. 100kg/m³ (L/I 500mm) EI 45 C/U Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil EI 60 C/U faced stonewool insulation min. 100kg/m³ (C/I) Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph EI 45 C/U below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool EI 45 C/U insulation min. 40kg/m^3 (L/I 400 mm) Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, PROMASEAL® E 60 C/U Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm) EI 45 C/U Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness (see graph E 60 C/U below), PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I EI 20 C/U 300mm) E 60 C/U Steel 42-324mm Ø, 16mm wall thickness. 14.2mm wall thickness PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I 400mm) EI 45 C/U



Certificate No. UL-EU-01105-CPR

Page 28/157
Date of Issue 2018-12-19

Permitted Pipe Diameter vs Pipe Wall Thickness





Certificate No. UL-EU-01105-CPR

Page 29/157
Date of Issue 2018-12-19

Max Aperture 750mm Wide x 1200mm Hig	;h
	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service 6. PROMASEAL® Wrap
Service(s)	Classification
¹ Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST Insulation ² (C/S)	E 120 C/U EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST insulation ² (C/S)	E 120 C/U EI 90 C/U
¹ Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25-40mm thick Kingspan Kooltherm FM insulation ³ (C/S)	E 120 C/U EI 60 C/U
Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25-40mm thick Kingspan Kooltherm FM insulation ³ (C/S)	E 120 C/U EI 90 C/U
¹ Steel or Copper Pipe 42mm Ø, 1.0–14.2mm wall thickness. 50mm thick glassfibre insulation (C/S)	E 120 C/U EI 90 C/U

¹2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the PROMASEAL® Fire Barrier

(II)

²Or equivalent elastomeric pipe insulation classified BL − s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 30/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm Hi	gh
1 100 1 2 4	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service 6. PROMASEAL® Wrap
Service(s)	Classification
¹ Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST Insulation ² (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST insulation ² (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25-40mm thick Kingspan Kooltherm FM insulation ³ (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25-40mm thick Kingspan Kooltherm FM insulation ³ (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1.02–14.2mm wall thickness. 50mm thick glassfibre insulation (C/S)	EI 60 C/U

¹2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the PROMASEAL® Fire Barrier

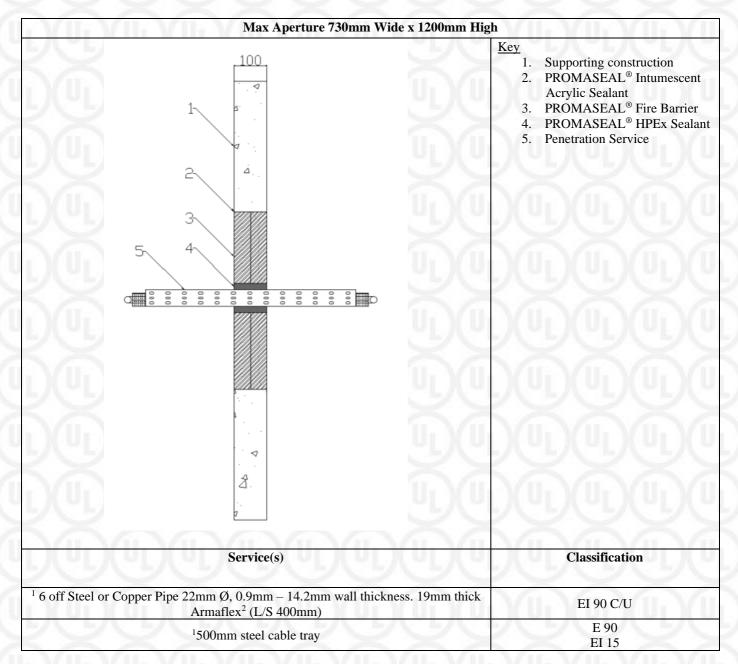
(II)

²Or equivalent elastomeric pipe insulation classified BL − s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 31/157
Date of Issue 2018-12-19



¹PROMASEAL[®] HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL[®] Fire Barrier

²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1



Certificate No. UL-EU-01105-CPR

Page 32/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm H	igh
Max Aperture 2000mm Wide x 2000mm H	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® HPEx Sealant 5. Penetration Service
¹ 6 off Steel or Copper Pipe 22mm Ø, 0.9mm – 14.2mm wall thickness. 19mm thick	EI 60 C/U
Armaflex ² (L/S 400mm)	E 60
¹ 500mm steel cable tray	EI 15

¹PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

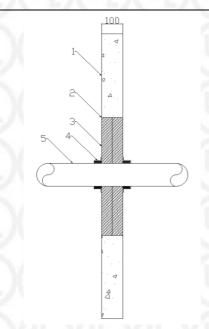
Page 33/157
Date of Issue 2018-12-19

Double Layer PROMASEAL® Fire Barrier 50mm, Plastic Pipes

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Kev

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	EI 120 U/C
PVC Pipe 40mm Ø, 1.8mm wall thickness	40mm	
PVC Pipe 50mm Ø, 1.8mm wall thickness	50mm	
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	100mm	
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	



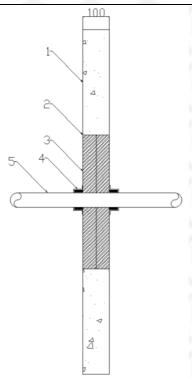
Certificate No. UL-EU-01105-CPR

Page 34/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	EI 60 U/C
PVC Pipe 40mm Ø, 1.8mm wall thickness	40mm	
PVC Pipe 50mm Ø, 1.8mm wall thickness	50mm	
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	100mm	
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	
PVC Pipe 160mm Ø, 6.2-9.5mm wall thickness	160mm	



UL-EU-01105-CPR Certificate No.

35/157 Page 2018-12-19 **Date of Issue**

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier

100 4 2

- Supporting construction
- PROMASEAL® Intumescent Acrylic Sealant
- PROMASEAL® Fire Barrier PROMASEAL® Collar
- Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	32mm	M OI M OI M A
PP Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PP Pipe 50mm Ø, 2.9mm wall thickness	50mm	EI 120 U/C
PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PP Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PP Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PP Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PP Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PP Pipe 140mm Ø, 3.5-8mm wall thickness	140mm	
PP Pipe 160mm Ø, 4-14.6mm wall thickness	160mm	

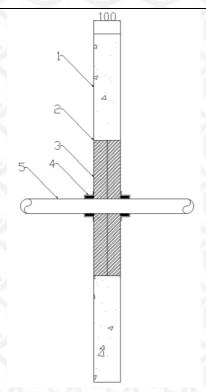


Certificate No. UL-EU-01105-CPR

Page 36/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 60 U/C
PP Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PP Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PP Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PP Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PP Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PP Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PP Pipe 140mm Ø, 3.5-8mm wall thickness	140mm	
PP Pipe 160mm Ø, 4-14.6mm wall thickness	160mm	

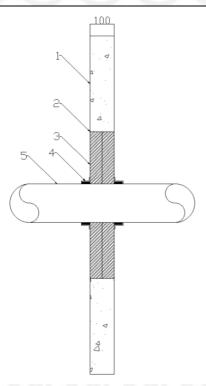


Certificate No. UL-EU-01105-CPR

Page 37/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	$U \cap V \cup V$
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	EI 120 U/C
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness	160mm	

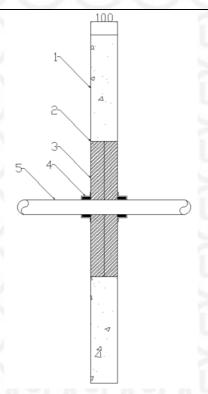


Certificate No. UL-EU-01105-CPR

Page 38/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	1 ''
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	EI 60 U/C
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø. 4.9-9.5mm wall thickness	160mm	



UL-EU-01105-CPR Certificate No.

39/157 Page 2018-12-19 **Date of Issue**

Double Layer PROMASEAL® Fire Barrier 50mm, Insulated Plastic Pipes

Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 100mm distance between services and 50mm to edge of seal)

	100	
	5 4	6
L) (UL) (UL)		
	2	

Key

- Supporting construction
- PROMASEAL® Intumescent Acrylic Sealant
- PROMASEAL® Fire Barrier
- PROMASEAL® Wrap
- Insulation
- Penetration Service

Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	E 120 II/C
PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	E 120 U/C EI 90 U/C
PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 120 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	E 120 U/C EI 90 U/C
PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	E 120 LVC
PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	E 120 U/C EI 90 U/C
PVC Pipe 110mm Ø, 4.2mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 120 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 13 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	E 120 U/C EI 90 U/C

¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier



²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

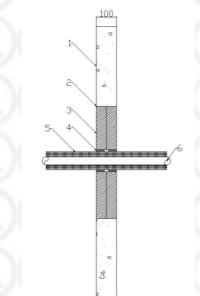
³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 40/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 100mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Wrap
- 5. Insulation
- 6. Penetration Service

	\times \times \times	
Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM insulation ³ (C/S)	3 x 2mm thickness	
PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	EI 60 U/C
PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 60 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 60 U/C
PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	
PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	EI 60 U/C
PVC Pipe 110mm Ø, 4.2mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 60 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 13 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 60 U/C

¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier

(II)

²Or equivalent elastomeric pipe insulation classified BL − s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 41/157

Date of Issue 2018-12-19

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

Max Aperture 750mm Wide x 1200mm	ı High
	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
² Electrical cables upto 80mm Ø	u[)(u[)(u[)(u[)(u[)(u
² Cable Trays and Ladders	
² 100 mm diameter bundle telecommunication cable type "F"	EI 120
² Unsheathed electrical cables up to 24mm Ø	
² Steel or Copper Conduits up to 16mm Ø	$\mathbb{Z} \times \mathbb{Z} \times \mathbb{Z}$
² Plastic conduits up to 16mm Ø	Un Y Un Y Un Y Un Y I

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

²Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m³ Stonewool (L/I 300mm)



Certificate No. UL-EU-01105-CPR

Page 42/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600m	ım High
	1. Supporting construction 2. PROMASEAL® Intumescent
Service(s)	Classification
² Electrical cables upto 80mm Ø	
² Cable Trays and Ladders	(11. \((11. \) (11. \((11. \) (11. \)
² 100 mm diameter bundle telecommunication cable type "F"	EI 60
² Unsheathed electrical cables up to 24mm Ø	1100
² Steel or Copper Conduits up to 16mm Ø	
² Plastic conduits up to 16mm Ø	

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



²Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m³ Stonewool (L/I 300mm)

Certificate No. UL-EU-01105-CPR

Page 43/157
Date of Issue 2018-12-19

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

Max Aperture 750mm Wide x 1200mm High	YUNYUNYUNYU
	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Wrap 5. Insulation 6. Penetration Service
Service(s)	Classification
² Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST Insulation ³ (C/S) ² Steel or Copper Pipe 42-159mm Ø, 1.2 – 14.2mm wall thickness. 25mm thick K Flex	E 120 C/U EI 60 C/U E 120 C/U
ST insulation ³ (C/S) ² Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST insulation ³ (C/S)	EI 90 C/U EI 120 C/U
² Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick	E 120 C/U
Kingspan Kooltherm FM insulation ⁴ (C/S)	EI 90 C/U
Kingspan Kooltherm FM insulation ⁴ (C/S) ² Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM insulation ⁴ (C/S) ² Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre	EI 90 C/U EI 120 C/U E 120 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

(UL)

²2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the substrate within the Pattress installation

³Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

⁴Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 44/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Wrap 5. Insulation 6. Penetration Service
Service(s)	Classification
 ²Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST³ Insulation (C/S) ²Steel or Copper Pipe 42-159mm Ø, 1.2 – 14.2mm wall thickness. 25mm thick K Flex ST³ insulation (C/S) ²Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST³ insulation (C/S) ²Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM⁴ insulation (C/S) ²Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM⁴ insulation (C/S) ²Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre 	EI 60 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

(II)

²2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the substrate within the Pattress installation

³Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

 $^{^4}$ Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 45/157
Date of Issue 2018-12-19

Max Aperture 750mm Wide x 1200mm High	
3	 Supporting construction PROMASEAL® Intumescen Acrylic Sealant PROMASEAL® Fire Barrier Insulation Penetration Service
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below). 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 90 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	EI 120 C/U

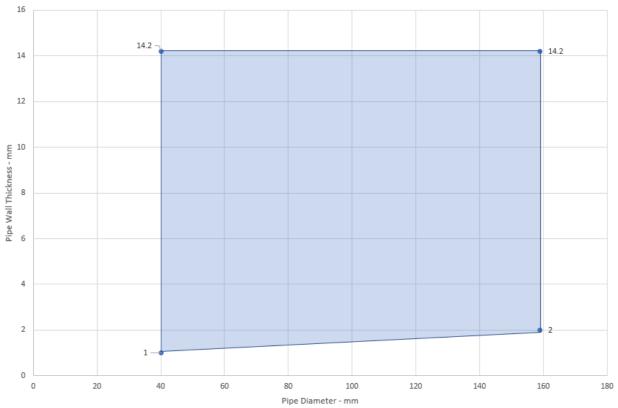
¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 46/157
Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 47/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm Hig	h
100	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
3 Å	
)(n ^r
)(U _L
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below). 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	EI 60 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	EI 60 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

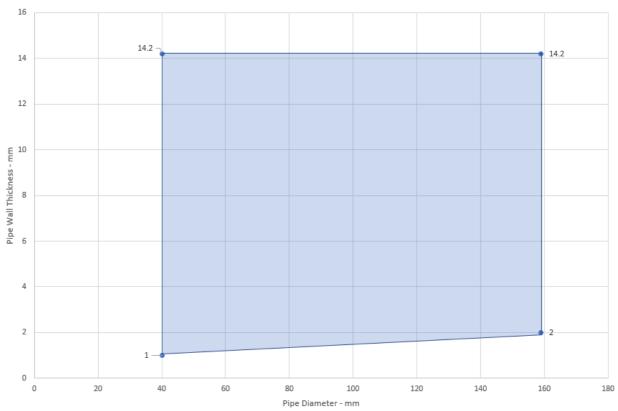


Certificate No. UL-EU-01105-CPR

Page 48/157

Date of Issue 2018-12-19

Permitted Pipe Diameter vs Pipe Wall Thickness





Certificate No. UL-EU-01105-CPR

Page 49/157
Date of Issue 2018-12-19

Dute of issue 2010 12 10

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Plastic Pipes

	m Wide x 1200mm High	
(Penetrations positioned as per option 1 or 2 below, 0		
		 Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service
	PROMASEAL® Collar Ref	Classification
Service(s)		Classification
	Collar Ref	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness	Collar Ref 32mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness	Collar Ref 32mm 40mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness	32mm 40mm 50mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	20mm 40mm 50mm 55mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm	Classification EI 120 U/C
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm 100mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm 100mm 110mm	

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 50/157
Date of Issue 2018-12-19

	m Wide x 2600mm High	
(Penetrations positioned as per option 1 or 2 below, 0		
100 1 2 4 3 5 4 4 5 4 5 4 5 4 5 4 5 6 6 6 6 6 6 6 6	<u>Ke</u>	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Collar 5. Penetration Service
. d. .d. .d.	JL)(UL)(UL)(
Service(s)	PROMASEAL® Collar Ref	Classification
	PROMASEAL® Collar Ref 32mm	Classification
Service(s)	Collar Ref	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness	Collar Ref 32mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness	Collar Ref 32mm 40mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness	Collar Ref 32mm 40mm 50mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm	Classification EI 60 U/C
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm	
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 63mm Ø, 3.1-4.8mm wall thickness PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	Collar Ref 32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm 100mm	

¹Pattress installation of PROMASEAL[®] Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 51/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service Service(s) PROMASEAL® Classification Collar Ref PP Pipe 32mm Ø, 2.9mm wall thickness 32mm PP Pipe 40mm Ø, 2.9mm wall thickness 40mm PP Pipe 50mm Ø, 2.9mm wall thickness 50mm PP Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PP Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PP Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 120 U/C PP Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PP Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PP Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PP Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PP Pipe 125mm Ø, 3.1mm wall thickness 125mm PP Pipe 140mm Ø, 3.5-8mm wall thickness 140mm

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

160mm

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier

PP Pipe 160mm Ø, 4-14.6mm wall thickness



Certificate No. UL-EU-01105-CPR

Page 52/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service PROMASEAL® Classification Service(s) Collar Ref PP Pipe 32mm Ø, 2.9mm wall thickness 32mm PP Pipe 40mm Ø, 2.9mm wall thickness 40mm PP Pipe 50mm Ø, 2.9mm wall thickness 50mm PP Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PP Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PP Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 60 U/C PP Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PP Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PP Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PP Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PP Pipe 125mm Ø, 3.1mm wall thickness 125mm PP Pipe 140mm Ø, 3.5-8mm wall thickness 140mm PP Pipe 160mm Ø, 4-14.6mm wall thickness 160mm

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 53/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service PROMASEAL® Classification Service(s) Collar Ref PE Pipe 32mm Ø, 2.9mm wall thickness 32mm PE Pipe 40mm Ø, 2.9mm wall thickness 40mm PE Pipe 50mm Ø, 2.9mm wall thickness 50mm PE Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PE Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PE Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 120 U/C PE Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PE Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PE Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PE Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PE Pipe 125mm Ø, 3.1mm wall thickness 125mm PE Pipe 140mm Ø, 3.9-5.8mm wall thickness 140mm PE Pipe 160mm Ø, 4.9-9.5mm wall thickness 160mm

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 54/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key 1. Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service Service(s) PROMASEAL® Classification Collar Ref PE Pipe 32mm Ø, 2.9mm wall thickness 32mm PE Pipe 40mm Ø, 2.9mm wall thickness 40mm PE Pipe 50mm Ø, 2.9mm wall thickness 50mm PE Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PE Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PE Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 60 U/C PE Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PE Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PE Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PE Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PE Pipe 125mm Ø, 3.1mm wall thickness 125mm PE Pipe 140mm Ø, 3.9-5.8mm wall thickness 140mm PE Pipe 160mm Ø, 4.9-9.5mm wall thickness 160mm

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier

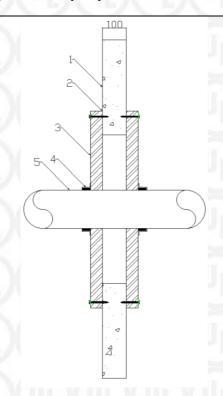


Certificate No. UL-EU-01105-CPR

Page 55/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL®
 Intumescent Acrylic
 Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Scope and Classifications as below

Intumescent Thickness		
Pipe Diameter	Intumescent Material	
ø 32 mm - ø 50 mm	40 mm (W) x 2 mm (T)	
ø 51 mm - ø 82 mm	40 mm (W) x 4 mm (T)	
ø 83 mm - ø 115 mm	40 mm (W) x 6 mm (T)	
ø 116 mm - ø 160 mm	40 mm (W) x 8 mm (T)	
ø 161 mm - ø 200 mm	40 mm (W) x 10 mm (T)	
ø 201 mm - ø 250 mm	40 mm (W) x 12 mm (T)	

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

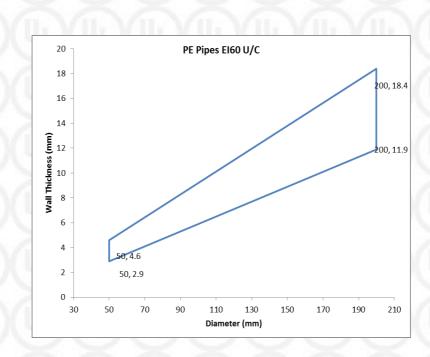
Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier

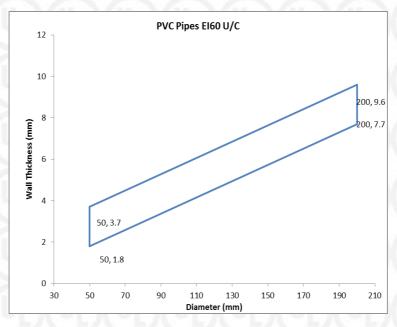


Certificate No. UL-EU-01105-CPR

Page 56/157

Date of Issue 2018-12-19



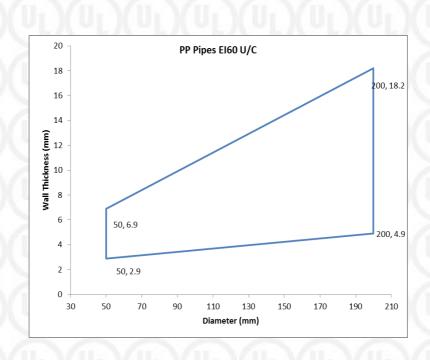




Certificate No. UL-EU-01105-CPR

Page 57/157

Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 58/157

Date of Issue 2018-12-19

Rigid Walls Minimum Thickness 150mm

Double Layer, PROMASEAL® Fire Barrier 50mm, Electrical Cables

Max Aperture 750mm Wide x 1100mm High	
Variation Va	<u>Key</u>
150	Supporting construction PROMASEAL® Intumescent
	2. PROMASEAL® Intumescent
4 4	Acrylic Sealant
1	Acrylic Sealant 3. PROMASEAL® Fire Barrier
	4. Penetration Service
4	
2	In 30 Un 30 Un 30 Un 30 Un 30
2 4	シベラくりくりくり
\	\times \times \times \times
3~	r. Mar. Mar. Mar. Mar. M
	ソレス ヤレス ヒヒス ヒレス ヒレス
4	
	1- 3/ 11- 3/ 11- 3/ 11- 3/ 11- 3/
	`L)\(``L)\(``L)\(``L)\(``L)\
	11 30 U1 30 U1 30 U1 30 U1 30
	クトラトラトラ
	i. 3/11. 3/11. 3/11. 3/11. 3/
A	ユストヤレスト マレス・コレス・コレス
Δ	
4	h: 36 H:: 36 H:: 36 H:: 36 H:: 36
ハニレ トニー 八二	
4	
V/II. V	i. Nai. Nai. Nai. Nai. Nai. N
// / / / / / / / / / / / / / / / / / /	ユスくりに パッヒン(りに バッヒン(
Service(s)	Classification
$\mathcal{H}_{\mathcal{A}}$	E120
Electrical cables up to 0-21mm Ø	EI90
Cable Tray	EI 60



Certificate No. UL-EU-01105-CPR

Page 59/157
Date of Issue 2018-12-19

Single Layer, PROMASEAL® Fire Barrier 50mm, Electrical Cables

Max Aperture 750mm Wide x 1100mm High	
1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
3-4-5-5-1	
Service(s)	Classification
¹ Electrical cables up to 80mm Ø ¹ Cable Trays and Ladders	EI 60 EI 60
¹ 100 mm diameter bundle telecommunication cable type "F"	EI 60
¹ Unsheathed electrical cables up to 24mmØ	EI 60

¹Cables and cable trays wrapped with a single layer of 6 mm foil faced ceramic fibre insulation (L/I 300mm)



Certificate No. UL-EU-01105-CPR

Page 60/157
Date of Issue 2018-12-19

Max Aperture 750mm Wide x 1100mm H	ligh
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Penetration Specification	Classification
*500mm perforated cable tray	EI 30
*Electrical cables up to 21mm ø	$\langle \times \times \times \rangle$
*1 off 'C1' Cable	EI 45
*1 off 'C2' Cable	E1 43
*1 off 'C3' Cable	J_)(U_)(U_)(U_)(U_)

^{*}All cables coated with 2mm DFT PROMASEAL® Fire Barrier Coating 300mm along the cables both sides of the seal



Certificate No. UL-EU-01105-CPR

Page 61/157
Date of Issue 2018-12-19

Single Layer, PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

Max Aperture 750mm Wide x 1100mm High	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
¹ Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm Wall Thickness. (C/S) 40mm stone wool insulation (min 140Kg/m³)	E60 C/U EI45 C/U
Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	EI45 C/U
Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	E45 C/U EI20 C/U
Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (C/I) 40mm stone wool insulation (min 40Kg/m³)	E45 C/U EI30 C/U



Certificate No. UL-EU-01105-CPR

Page 62/157

Date of Issue 2018-12-19

Single Layer, PROMASEAL® Fire Barrier 50mm, Plastic Pipes

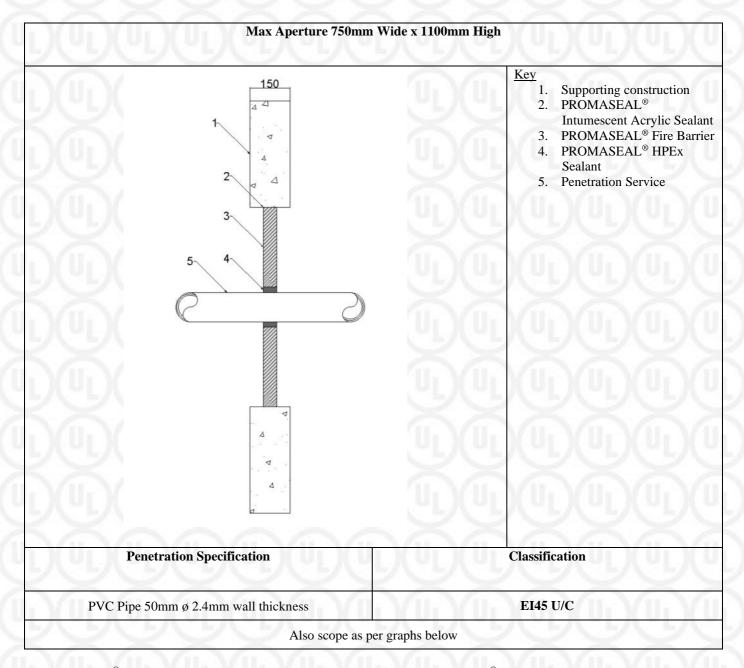
	Key
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrie 4. PROMASEAL® HPEX Sealant 5. Penetration Service
Penetration Specification	Classification
Tenetration Specification	
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	(UL)(UL)(UL)(U
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	E 45 U/C
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness	E 45 U/C

PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 63/157
Date of Issue 2018-12-19

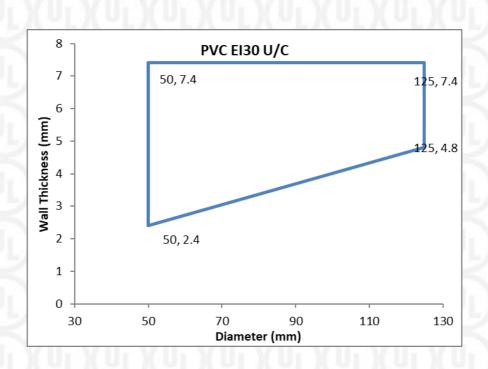


PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 64/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 65/157
Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Electrical Cables

Max Aperture 730mm Wide x 1200mm High	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
¹ Electrical cables up to 21mm dia	EI 120
¹ Electrical cables 22mm – 80mm dia	E 120 EI 90
¹ Cable Trays and Ladders	EI 120
¹ 100 mm diameter bundle telecommunication cable type "F"	EI 120
¹ Unsheathed electrical cables up to 24mm dia	EI 120

¹Cables and cable trays wrapped with Stone Wool Insulation 45mm thick, 40Kg/m³ (L/I 200mm)



Certificate No. UL-EU-01105-CPR

Page 66/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
¹ Electrical cables up to 21mm dia	AL VII. VII. VII. VII.
¹ Electrical cables 22mm – 80mm dia	てい スペレスペレスペレス
¹ Cable Trays and Ladders	EI 60
¹ 100 mm diameter bundle telecommunication cable type "F"	
¹ Unsheathed electrical cables up to 24mm dia	elli Villi Villi Villi Villi Vill

 1 Cables and cable trays wrapped with Stone Wool Insulation 45mm thick, 40Kg/m^{3} (L/I 200mm)



Certificate No. UL-EU-01105-CPR

Page 67/157
Date of Issue 2018-12-19

Max Aperture 750mm Wide x 1100m	nm High
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® HPEX Sealant 5. PROMASEAL® Fire Barrier Coating 6. Penetration Service
Penetration Specification	Classification
*500mm perforated cable tray	
*Electrical cables up to 21mm ø	EI120
*1 off 'C1' Cable	$\times\times\times\times\times$
*1 off 'C2' Cable	E120 EI90
*1 off 'C3' Cable	EI120

^{*}All cables coated with 2mm DFT PROMASEAL® Fire Barrier Coating 300mm along the cables both sides of the seal PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 68/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® HPEX Sealant 5. PROMASEAL® Fire Barrier Coating 6. Penetration Service
Penetration Specification	Classification
*500mm perforated cable tray	
*Electrical cables up to 21mm ø	EI 60
*1 off 'C1' Cable	EI 00
*1 off 'C2' Cable	
*1 off 'C3' Cable	

^{*}All cables coated with 2mm DFT PROMASEAL® Fire Barrier Coating 300mm along the cables both sides of the seal PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 69/157

Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

Max Aperture 730mm Wide x 1200mm High Service(s) Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service 4 Classification **Penetration Specification** Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness. (L/I 300mm) 40mm E 120 C/U stone wool insulation (min 40Kg/m³) EI 60 C/U Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I E 120 C/U 300mm) 40mm stone wool insulation (min 40Kg/m³) EI 30 C/U



Certificate No. UL-EU-01105-CPR

Page 70/157

Date of Issue 2018-12-19

 $\sim \sim \sim \sim$

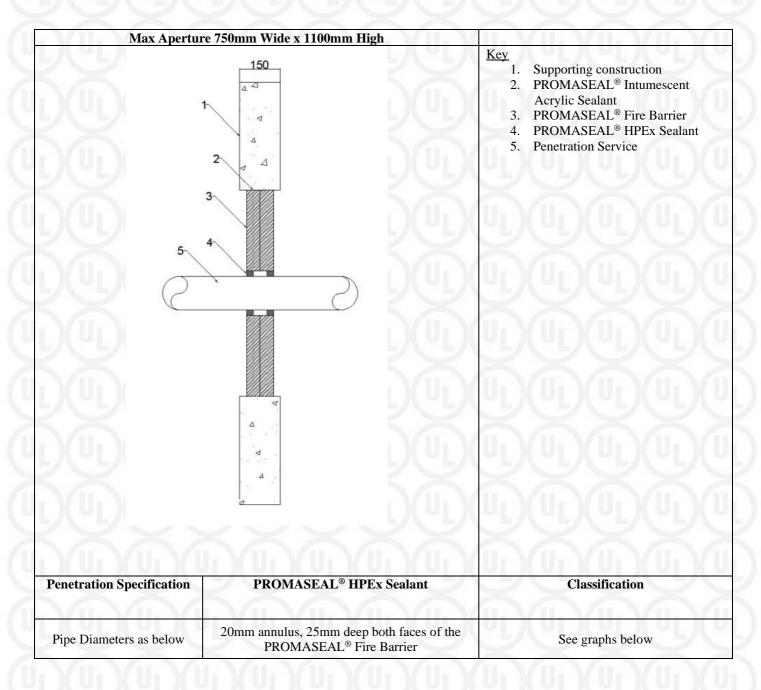
Max Aperture 2600mm Wide x 2600mm High Service(s) 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier ø Insulation Penetration Service 4 4 4 **Penetration Specification** Classification Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness. (L/I 300mm) 40mm EI 60 C/U stone wool insulation (min 40Kg/m³) Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I E 60 C/U 300mm) 40mm stone wool insulation (min 40Kg/m³) EI 30 C/U



Certificate No. UL-EU-01105-CPR

Page 71/157

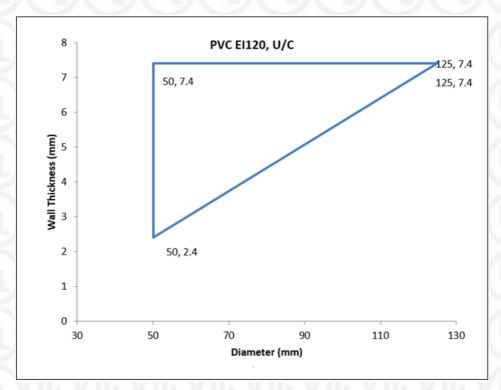
Date of Issue 2018-12-19

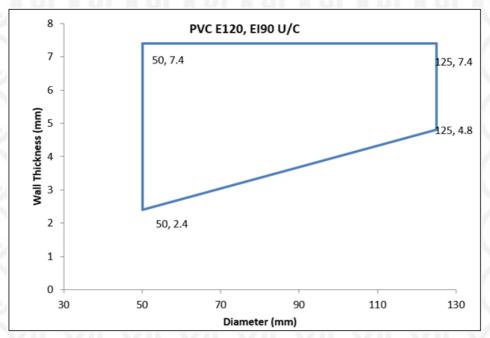




Certificate No. UL-EU-01105-CPR

Page 72/157
Date of Issue 2018-12-19



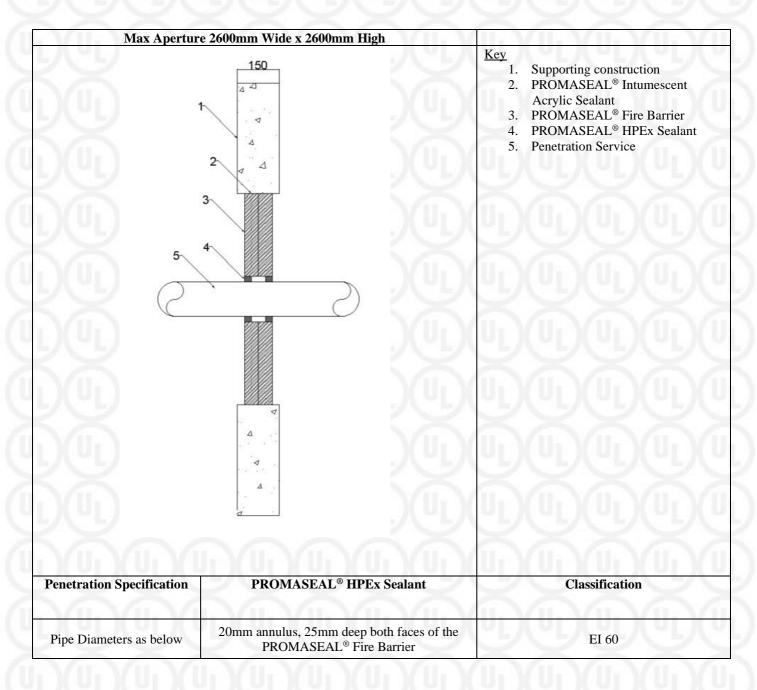




Certificate No. UL-EU-01105-CPR

Page 73/157

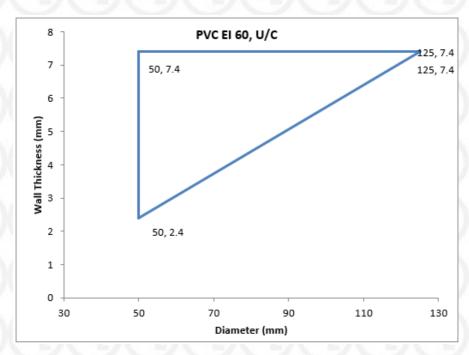
Date of Issue 2018-12-19

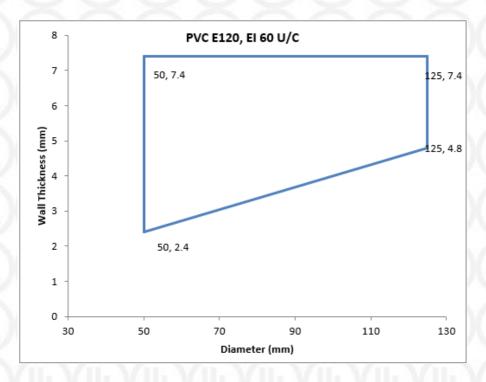




Certificate No. UL-EU-01105-CPR

Page 74/157
Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 75/157
Date of Issue 2018-12-19

Max Aperture 750mm Wide x 1100mm High	
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® HPEX Sealant 5. Penetration Service
Penetration Specification	Classification
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	(41)(41)(41)
Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness	EI 120 U/C
Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 110mm ø 10mm wall thickness	

PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier

(II)

Certificate No. UL-EU-01105-CPR

Page 76/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm	n High
	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® HPEX Sealant 5. Penetration Service
Penetration Specification	Classification
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	THE PERSON
Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thicknes	SS
Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness	EI 60 U/C
Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thicknes	SS
Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thicknes	SS
Uponor MLC (Multi-Layer Composite) Pipe 110mm ø 10mm wall thicknes	SS

PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier

(II)

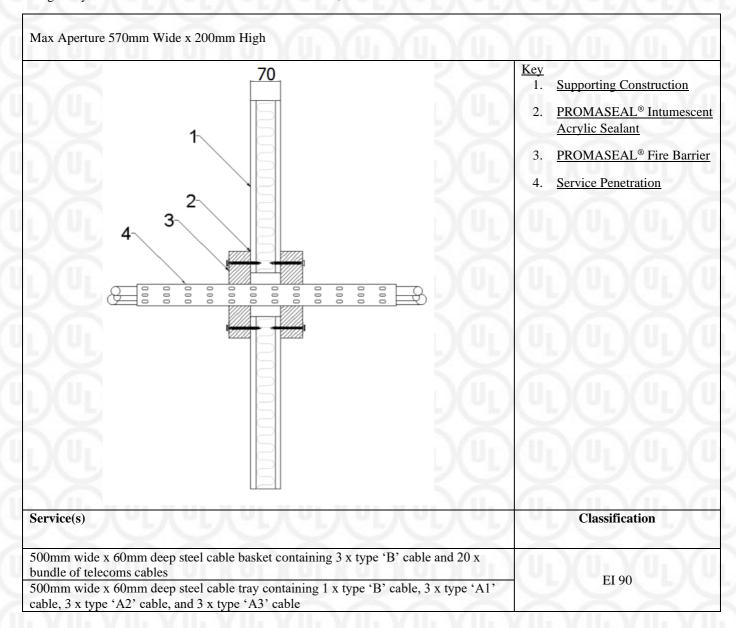
Certificate No. UL-EU-01105-CPR

Page 77/157

Date of Issue 2018-12-19

Flexible Walls Minimum Thickness 70mm

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables



 $^{^{1}}$ Pattress installation of PROMASEAL $^{\otimes}$ Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 78/157

Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

Max Aperture 570mm Wide x 200mm High	\mathbb{N}	ir \/ ir \/
70	<u>Key</u> 1.	Supporting Construction
	2.	PROMASEAL® Intumescent Acrylic Sealant
3	3.	PROMASEAL® Fire Barrier
	4.	Service Penetration
Service(s)	<u>)(</u>	Classification
20mm dia Adaptaflex SPL20 flexible conduit	-/\	עויעוין
20mm dia Kopex KSU 316 stainless steel flexible conduit		EI 90
150mm wide x 60mm deep steel cable tray containing 4 x FP200 Gold (Firealarm cable 7mm dia red) Cables		E 90 EI 60

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 79/157
Date of Issue 2018-12-19

Flexible Walls Minimum Thickness 75mm

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables

Service(s)	Classification

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 80/157
Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

Mill Mill Mill Mill Mill Mill Mill Mill	Vov
75	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Penetration Service
Service(s)	Classification
20mm dia Adaptaflex SPL20 flexible conduit	X OL X OL X OL X OL X
20mm dia Kopex KSU 316 stainless steel flexible conduit	
50mm wide x 60mm deep steel cable tray	EI 90
x FP200 Gold (Firealarm cable 7mm dia red) Cables	E 90 EI 60

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 81/157

Date of Issue 2018-12-19

Flexible Walls Minimum Thickness 75mm

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Cable Trunking

Max Aperture 70mm Wide x 70mm High	
4 3 2	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
50mm x 50mm Insulated steel cable trunking, Stone Wool 40mm thick, 45kg/m³ (LI 400mm). PROMASEAL® Fire Pillow tightly fitted around the cables in the section of trunking within the depth of the partition.	EI 60 U/U
Cables 1xA1, 1xA2, 1xA3 Cables 1xA1 Cables 1xA2 Cables 1xA2	EI 60

 1 Pattress installation of PROMASEAL $^{@}$ Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 82/157
Date of Issue 2018-12-19

Single Layer Pattress PROMASEAL® Fire Barrier 50mm, Electrical Cables and Cable Trunking

Max Aperture 170mm Wide x 170mm High	X	
	Key 1. 2. 3. 4. 5.	Intumescent Acrylic Sealant PROMASEAL® Fire Barrier
Service(s)	41)(Classification
150mm x 150mm Insulated steel cable trunking, Stone Wool 40mm thick, 45kg/m³ (LI 400mm). PROMASEAL® Fire Pillow tightly fitted around the cables in the section of trunking within the depth of the partition.	T	EI 60 U/U
Cables 1xB1, 1xC1, 1xG1, 1xG2 Cables 1xB1 Cables 1xC1 Unsheathed electrical cables 0-24mm dia	3	EI 60

 1 Pattress installation of PROMASEAL $^{\otimes}$ Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-01105-CPR

Page 83/157
Date of Issue 2018-12-19

Single Layer PROMASEAL® Fire Barrier 50mm, Plastic Pipes

PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness

PVC Pipe 125mm Ø, 6mm wall thickness

PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier

1 2 3 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Collar 5. Penetration Service
Service(s)	PROMASEAL® Collar Ref	Classification
Service(s) PVC Pipe 32mm Ø, 1.8mm wall thickness		Classification
VII.A/II.A/II.A/II.A/II	Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	Ref 32mm	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	Ref 32mm 40mm	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness	Ref 32mm 40mm 50mm	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	Ref 32mm 40mm 50mm 55mm	
PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness	Ref 32mm 40mm 50mm 55mm 63mm	Classification EI 60 U/C
PVC Pipe 32mm Ø, 1.8mm wall thickness PVC Pipe 40mm Ø, 1.8mm wall thickness PVC Pipe 50mm Ø, 1.8mm wall thickness PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness PVC Pipe 63mm Ø, 2.3-3mm wall thickness PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	Ref 32mm 40mm 50mm 55mm 63mm 75mm	

110mm

125mm

140mm



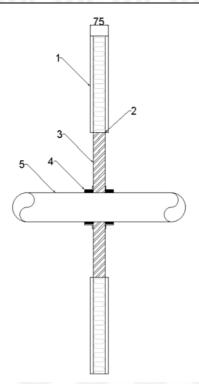
Certificate No. UL-EU-01105-CPR

Page 84/157
Date of Issue 2018-12-19

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 60 U/C
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness	160mm	



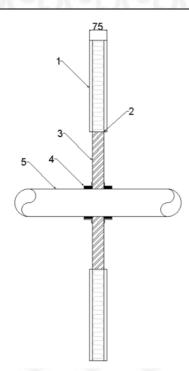
Certificate No. UL-EU-01105-CPR

Page 85/157
Date of Issue 2018-12-19

Max Aperture 600mm Wide x 600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Classification	PROMASEAL® Collar Ref	Service(s)
	32mm	PP Pipe 32mm Ø, 2.9mm wall thickness
	40mm	PP Pipe 40mm Ø, 2.9mm wall thickness
EI 60 U/C	50mm	PP Pipe 50mm Ø, 2.9mm wall thickness
	55mm	PP Pipe 55mm Ø, 2.9-4.4mm wall thickness
	63mm	PP Pipe 63mm Ø, 2.9-4.4mm wall thickness
	75mm	PP Pipe 75mm Ø, 2.8-6.7mm wall thickness
	82mm	PP Pipe 82mm Ø, 2.8-6.7mm wall thickness
	90mm	PP Pipe 90mm Ø, 2.7-10mm wall thickness
	100mm	PP Pipe 100mm Ø, 2.7-10mm wall thickness
	110mm	PP Pipe 110mm Ø, 2.7-10mm wall thickness
	125mm	PP Pipe 125mm Ø, 3.1mm wall thickness
	140mm	PP Pipe 140mm Ø, 3.5-8mm wall thickness
	160mm	PP Pipe 160mm Ø, 4-14.6mm wall thickness



Certificate No. UL-EU-01105-CPR

Page 86/157

Date of Issue 2018-12-19

Flexible Walls Minimum Thickness 100mm

Double Layer PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

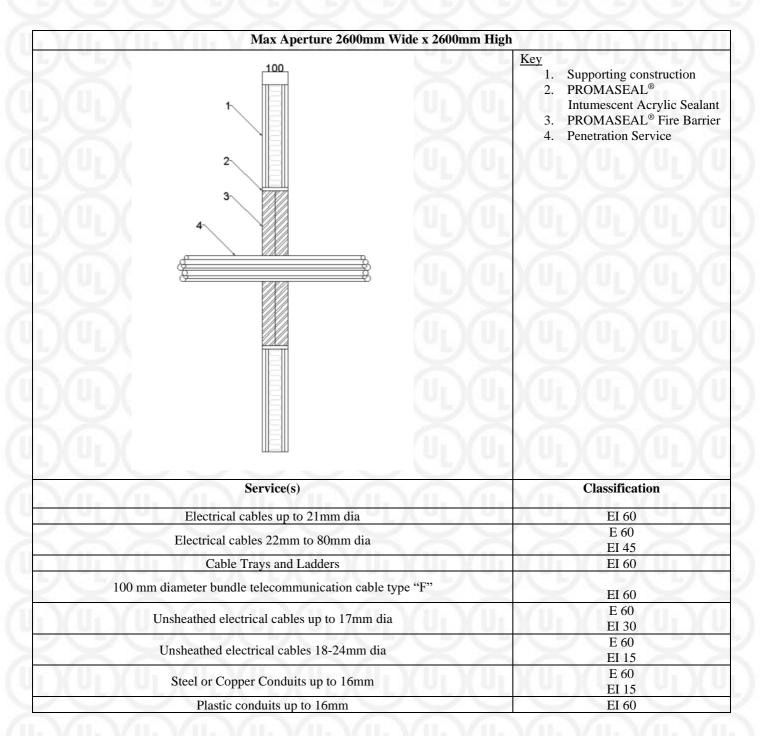
Max Aperture 2600mm Wide x 2600mm	m High
	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Penetration Service
Service(s)	Classification
Electrical cables 0mm to 21mm dia	EI 60
Electrical cables 22mm to 50mm dia	E 60 EI 45
Electrical cables 51mm to 80mm dia	E 60 EI 30
Cable Trays and Ladders	E 60 EI 45
100 mm diameter bundle telecommunication cable type "F"	EI 60
Unsheathed electrical cables 0-24mm dia	THE WILL WILL WILL WILL
Steel or Copper Conduits up to 16mm	E 60 C/U
Plastic conduits up to 16mm	EI 60 C/U



Certificate No. UL-EU-01105-CPR

Page 87/157

Date of Issue 2018-12-19

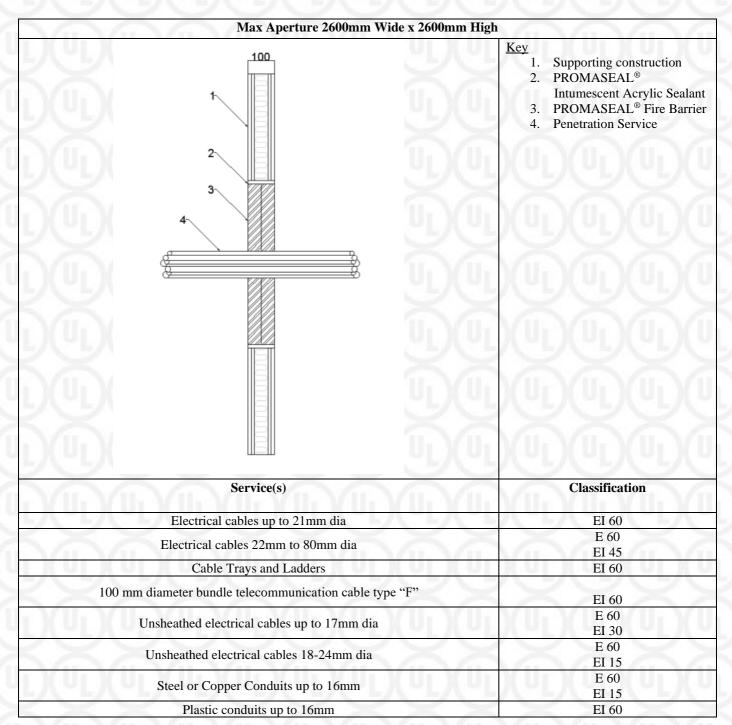




Certificate No. UL-EU-01105-CPR

Page 88/157

Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 89/157

Date of Issue 2018-12-19

Double Layer PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

100	Kev
1 5	 Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barried Insulation PROMASEAL® HPEX Sealant Penetration Service
Service(s)	Classification
¹ Single copper or mild steel pipe 40mm diameter and 1.5 – 14.2 mm wall with	E 90 U/C
sustained/continuous 20mm thick foil faced glass wool insulation (min 80Kg/m³)	EI 60 U/C
Single copper or mild steel pipe 40-159mm diameter and 2.3 – 14.2 mm wall with	

¹15mm deep x 15mm wide annulus PROMASEAL® HPEx Sealant to both faces of the pipe



Certificate No. UL-EU-01105-CPR

Page 90/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High	VIII. VIII. VIII. VII
	Supporting construction
Service(s)	Classification
¹ Single copper or mild steel pipe 40mm diameter and 1.5 – 14.2 mm wall with sustained/continuous 20mm thick foil faced glass wool insulation (min 80Kg/m³)	EI 60 U/C
1 Single copper or mild steel pipe 40-159mm diameter and 2.3 – 14.2 mm wall with sustained/continuous 30mm thick foil faced glass wool insulation (min 80 Kg/m 3)	EI 60 U/C

¹15mm deep x 15mm wide annulus PROMASEAL® HPEx Sealant to both faces of the pipe



Certificate No. UL-EU-01105-CPR

Page 91/157

Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High	VII. VII. VII. VI
100	1. Supporting construction 2. PROMASEAL® Intumescen Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 60 C/U

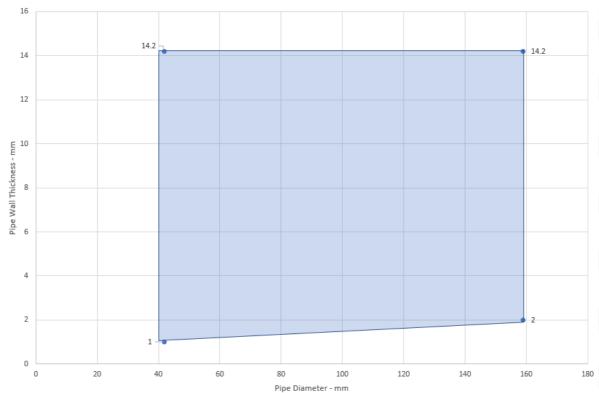


Certificate No. UL-EU-01105-CPR

Page 92/157

Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 93/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm Hig	h
	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 60 C/U EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 60 C/U EI 60 C/U

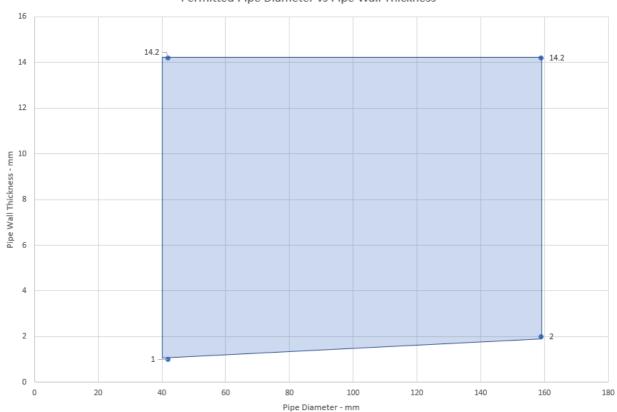


Certificate No. UL-EU-01105-CPR

Page 94/157

Date of Issue 2018-12-19







Certificate No. UL-EU-01105-CPR

Page 95/157
Date of Issue 2018-12-19

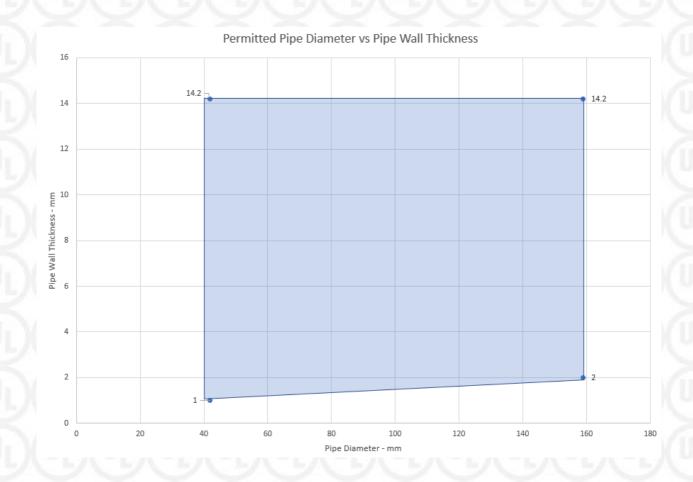
Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier PROMASEAL® Fire Barrier Coating 5. Penetration Service Classification Service(s) Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness 40mm thick EI 45 C/U foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool EI 45 C/U insulation min. 40kg/m^3 (L/I 400 mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool EI 60 C/U insulation min. 40kg/m^3 (C/I) Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness PROMASEAL® E 120 C/U Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm) EI 45 C/U Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness E 120 C/U PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I EI 20 C/U 300mm) Steel 42-324mm Ø, 16mm wall thickness. 14.2mm wall thickness E 120 C/U PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I EI 45 C/U 300mm)



Certificate No. UL-EU-01105-CPR

Page 96/157

Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 97/157
of Issue 2018-12-19

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High	
(Penetrations positioned as per option 1 or 2 below, 0mm distance between serv	ices and 50mm to edge of seal) Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool	EI 45 C/U
insulation min. 40kg/m³ (L/I 400mm) Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool	EI 45 C/U
insulation min. 40kg/m³ (C/I)	EI 60 C/U
Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm)	E 60 C/U EI 45 C/U
Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness	E 60 C/U
PROMASEAL® Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm)	EI 20 C/U
Steel 42-324mm Ø, 16mm wall thickness. 14.2mm wall thickness PROMASEAL®	E 60 C/U
Fire Barrier Coating along the penetration 2mm DFT (L/I 300mm)	EI 45 C/U

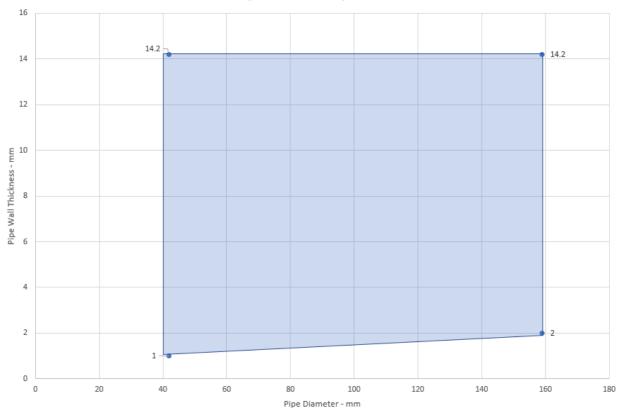


Certificate No. UL-EU-01105-CPR

Page 98/157

Date of Issue 2018-12-19

Permitted Pipe Diameter vs Pipe Wall Thickness





Certificate No. UL-EU-01105-CPR

Page 99/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm Hig	h
	Key 1. Supporting construction 2. PROMASEAL® Intumescen Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. PROMASEAL® Wrap 6. Penetration Service
Service(s) Service(s) Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm	Classification E 120 C/U
thick K Flex ST ² Insulation (C/S)	EI 60 C/U
1Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST^2 insulation (C/S)	E 120 C/U EI 90 C/U
¹ Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM3 insulation (C/S)	E 120 C/U EI 60 C/U
Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM³ insulation (C/S)	E 120 C/U EI 90 C/U
¹ Steel or Copper Pipe 42mm Ø, 1.0–14.2mm wall thickness. 50mm thick glassfibre insulation (C/S)	E 120 C/U EI 90 C/U

¹2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the PROMASEAL® Fire Barrier

(UL)

²Or equivalent elastomeric pipe insulation classified BL − s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 100/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm Hig	gh
1- 100	 Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier Insulation PROMASEAL® Wrap Penetration Service
Souries(s)	Classification
Service(s)	Classification
¹ Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST ² Insulation (C/S)	EI 60 C/U
¹Steel or Copper Pipe 42mm Ø, 1 − 14.2mm wall thickness. 25-13mm thick K Flex ST² insulation (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM ³ insulation (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM ³ insulation (C/S)	EI 60 C/U
¹ Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre insulation (C/S)	EI 60 C/U

¹2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the PROMASEAL® Fire Barrier

(II)

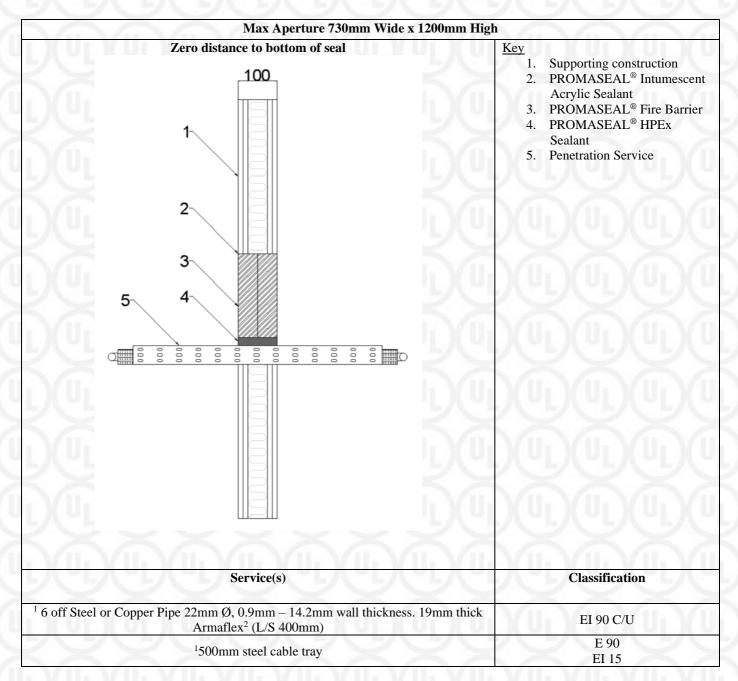
²Or equivalent elastomeric pipe insulation classified BL − s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 101/157

Date of Issue 2018-12-19



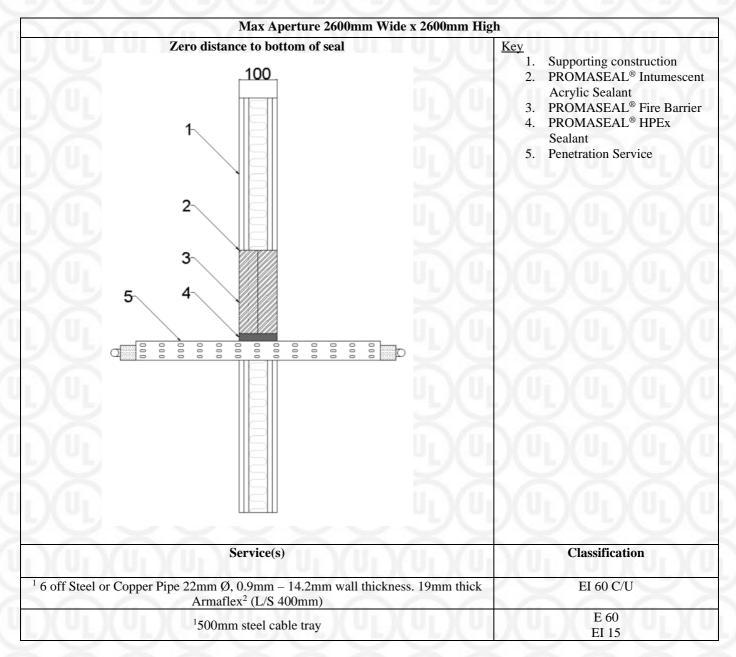
¹PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 102/157
Date of Issue 2018-12-19



 $^1PROMASEAL^{\circledast}$ HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL $^{\$}$ Fire Barrier 2Or equivalent elastomeric pipe insulation classified BL - s2, d0 or better to EN 13501-1



Certificate No. UL-EU-01105-CPR

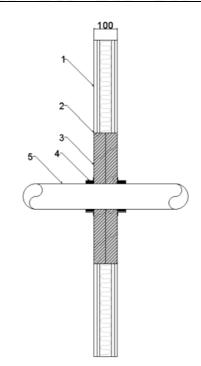
Page 103/157
Date of Issue 2018-12-19

Double Layer PROMASEAL® Fire Barrier 50mm, Plastic Pipes

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- B. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	EI 120 U/C
PVC Pipe 40mm Ø, 1.8mm wall thickness	40mm	
PVC Pipe 50mm Ø, 1.8mm wall thickness	50mm	
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	100mm	
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	



Certificate No. UL-EU-01105-CPR

Page 104/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier

100

Key

- 1. Supporting construction
- PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	
PVC Pipe 40mm Ø, 1.8mm wall thickness	40mm	
PVC Pipe 50mm Ø, 1.8mm wall thickness	50mm	
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	EI 60 U/C
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness	100mm	
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	
PVC Pipe 160mm Ø, 6.2-9.5mm wall thickness	160mm	



Certificate No. UL-EU-01105-CPR

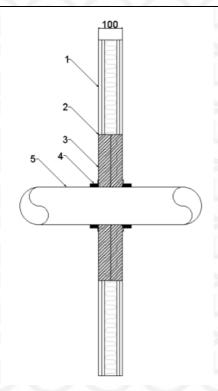
Page 105/157

Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 120 U/C
PP Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PP Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PP Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PP Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PP Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PP Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PP Pipe 140mm Ø, 3.5-8mm wall thickness	140mm	
PP Pipe 160mm Ø, 4-14.6mm wall thickness	160mm	



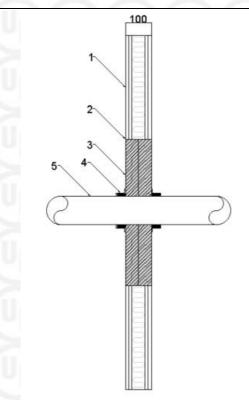
Certificate No. UL-EU-01105-CPR

Page 106/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)

Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 60 U/C
PP Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PP Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PP Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PP Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PP Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PP Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PP Pipe 140mm Ø, 3.5-8mm wall thickness	140mm	
PP Pipe 160mm Ø, 4-14.6mm wall thickness	160mm	



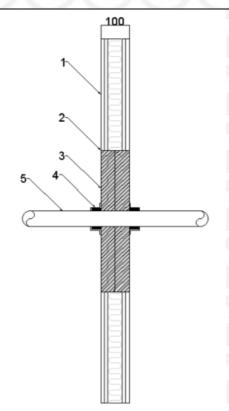
Certificate No. UL-EU-01105-CPR

Page 107/157

Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



<u>Key</u>

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 120 U/C
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø. 4.9-9.5mm wall thickness	160mm	



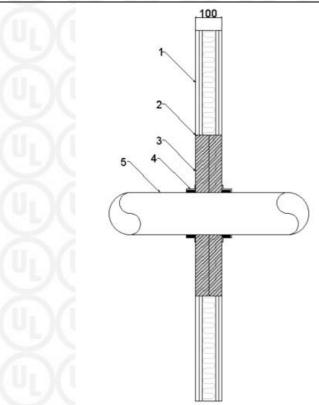
Certificate No. UL-EU-01105-CPR

Page 108/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Collars secured both faces of the substrate utilising 80mm long steel pig tail screw through to PROMASEAL® Fire Barrier



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 60 U/C
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness	160mm	



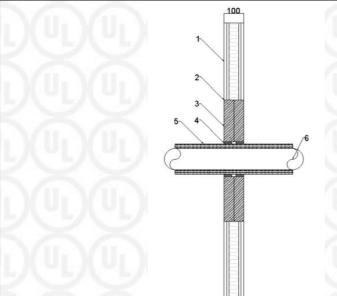
Certificate No. UL-EU-01105-CPR

Page 109/157
Date of Issue 2018-12-19

Double Layer PROMASEAL® Fire Barrier 50mm, Insulated Plastic Pipes

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 100mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Wrap
- 5. Insulation
- 6. Penetration Service

	$\times \times \times$	
Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	E 120 U/C
PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	EI 90 U/C
PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 120 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	E 120 U/C EI 90 U/C
PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	EI 120 U/C
PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	
PVC Pipe 110mm Ø, 4.2mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 120 U/C
PVC Pipe 110mm Ø, 6.6mm wall thickness. 13 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 120 U/C

¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier

(II)

²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

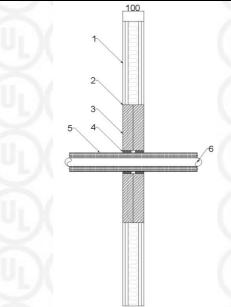
Certificate No. UL-EU-01105-CPR

Page 110/157

Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 100mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Wrap
- 5. Insulation
- 6. Penetration Service

	\sim		
Service(s)	PROMASEAL® Wrap Ref	Classification	
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	11-2/11-2/11-2/1	
PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	3 x 2mm thickness	EI 60 U/C	
PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 60 U/C	
PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM ³ insulation (C/S)	5 x 2mm thickness	EI 60 U/C	
PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness	EI 60 U/C	
PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick Armacell Armaflex Class O ² (C/S)	3 x 2mm thickness		
PVC Pipe 110mm Ø, 4.2mm wall thickness. 32 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 60 U/C	
PVC Pipe 110mm Ø, 6.6mm wall thickness. 13 mm thick Armacell Armaflex Class O ² (C/S)	5 x 2mm thickness	EI 60 U/C	

¹PROMASEAL[®] Wrap secured internally within both faces of the PROMASEAL[®] Fire Barrier

(II)

²Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

³Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 111/157
Date of Issue 2018-12-19

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Electrical Cables and Conduits

Max Aperture 730mm Wide x 1200mm	n High
100	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. Insulation 5. Penetration Service
Service(s)	Classification
² Electrical cables up to 80mm Ø	XXXXX
² Cable Trays and Ladders	"" ")("")("")("")("")("")("")("")("")(""
² 100 mm diameter bundle telecommunication cable type "F"	
² Unsheathed electrical cables up to 24mm Ø	EI 120
² Steel or Copper Conduits up to 16mm Ø	KYXXX
² Plastic conduits up to 16mm Ø	'UI YUI YUI YU

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

²Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m³ Stonewool (L/I 300mm)



Certificate No. UL-EU-01105-CPR

Page 112/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm	n High
1 2 3 4 5	Supporting construction
Service(s)	Classification
² Electrical cables upto 80mm Ø	
² Cable Trays and Ladders	
² 100 mm diameter bundle telecommunication cable type "F"	
² Unsheathed electrical cables up to 24mm Ø	EI 60
² Steel or Copper Conduits up to 16mm Ø	
² Plastic conduits up to 16mm Ø	(nf)(nf)(nf)(nf)(n

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

²Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m³ Stonewool (L/I 300mm)



UL-EU-01105-CPR Certificate No.

113/157 **Page** 2018-12-19 **Date of Issue**

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

Max Aperture 730mm Wide x 1200mm High	ヘットットット
3	1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Wrap 5. Insulation 6. Penetration Service
Service(s)	Classification
² Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST ³ Insulation (C/S) ² Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex ST ³ insulation (C/S)	E 120 C/U EI 60 C/U E 120 C/U EI 90 C/U
² Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM ⁴ insulation (C/S)	E 120 C/U EI 60 C/U
² Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM ⁴ insulation (C/S)	E 120 C/U EI 90 C/U
² Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre insulation min. 30kg/m ³ (C/S)	E 120 C/U EI 90 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. 2 2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the substrate within the Pattress installation

³Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

⁴Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 114/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High		
	1. 2. 3. 4. 5. 6.	Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Wrap Insulation Penetration Service
Service(s)		Classification
 ²Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST³ Insulation (C/S) ²Steel or Copper Pipe 42-159mm Ø, 1.2 – 14.2mm wall thickness. 25mm thick K Flex ST³ insulation (C/S) ²Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex ST³ insulation (C/S) ²Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM⁴ insulation (C/S) ²Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan 		EI 60 C/U
Kooltherm FM ⁴ insulation (C/S) ² Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre insulation min. 30kg/m ³ (C/S)	X	

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

²2 x 2mm thick layers of PROMASEAL® Wrap installed both sides of the substrate within the Pattress installation

³Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1

⁴Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Certificate No. UL-EU-01105-CPR

Page 115/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High	
1 100	Supporting construction
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 2mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 120 C/U EI 60 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 116/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High	
	Key 1. Supporting construction 2. PROMASEAL® Intumescent
Service(s)	Classification
Steel or Copper Pipe 42-159mm Ø, 2mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 60 C/U EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m³ (C/S)	E 60 C/U EI 60 C/U

¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 117/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 12	00mm High
30mm overlap Pattress installed flush to soffit	Supporting construction
Service(s)	Classification
Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness. 50mm Kingspan ³ (C/S 400mm)	n thick EI 60 C/U

 $^1\text{Pattress}$ installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 30mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. No fixing is applied to the head flush to the soffit $^2\text{2}$ x 2mm thick layers of PROMASEAL® Wrap installed both sides of the substrate within the Pattress installation ^3Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1



Certificate No. UL-EU-01105-CPR

Page 118/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600m	
30mm overlap Pattress installed flush to soffit	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Wrap 5. Insulation 6. Penetration Service
Service(s)	Classification
Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness. 50mm thic Kingspan ³ (C/S 400mm)	k EI 60 C/U

 $^1\text{Pattress}$ installation of PROMASEAL $^{\otimes}$ Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 30mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. No fixing is applied to the head flush to the soffit $^2\text{2}$ x 2mm thick layers of PROMASEAL $^{\otimes}$ Wrap installed both sides of the substrate within the Pattress installation ^3Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1



Certificate No. UL-EU-01105-CPR

Page 119/157

Date of Issue 2018-12-19

Single Layer Pattress, PROMASEAL® Fire Barrier 50mm, Plastic Pipes

Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service PROMASEAL® Classification Service(s) Collar Ref PVC Pipe 32mm Ø, 1.8mm wall thickness 32mm PVC Pipe 40mm Ø, 1.8mm wall thickness 40mm PVC Pipe 50mm Ø, 1.8mm wall thickness 50mm PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness 55mm PVC Pipe 63mm Ø, 2.3-3mm wall thickness 63mm PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness 75mm EI 60 U/C PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness 82mm PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness 90mm PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness 100mm PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness 110mm PVC Pipe 125mm Ø, 6mm wall thickness 125mm PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness 140mm PVC Pipe 160mm Ø, 6.2-9.5mm wall thickness 160mm

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

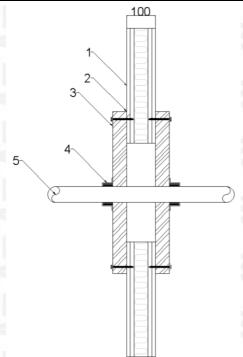


UL-EU-01105-CPR Certificate No.

120/157 Page 2018-12-19 **Date of Issue**

Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL® Intumescent Acrylic Sealant
 3. PROMASEAL® Fire Barrier
- PROMASEAL® Collar
- Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PVC Pipe 32mm Ø, 1.8mm wall thickness	32mm	UL KUL KUL K
PVC Pipe 40mm Ø, 1.8mm wall thickness		
PVC Pipe 50mm Ø, 1.8mm wall thickness		
PVC Pipe 55mm Ø, 1.8-2.3mm wall thickness	55mm	
PVC Pipe 63mm Ø, 2.3-3mm wall thickness	63mm	
PVC Pipe 75mm Ø, 3.1-4.8mm wall thickness	75mm	
PVC Pipe 82mm Ø, 3.1-4.8mm wall thickness	82mm	EI 120 U/C
PVC Pipe 90mm Ø, 4.2-7.4mm wall thickness	90mm	
PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness	100mm	
	110mm	
PVC Pipe 125mm Ø, 6mm wall thickness	125mm	
PVC Pipe 140mm Ø, 6.1-7.5mm wall thickness	140mm	
PVC Pipe 160mm Ø, 6.2-9.5mm wall thickness	160mm	

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 121/157

Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service **PROMASEAL®** Classification Service(s) Collar Ref PP Pipe 32mm Ø, 2.9mm wall thickness 32mm PP Pipe 40mm Ø, 2.9mm wall thickness 40mm PP Pipe 50mm Ø, 2.9mm wall thickness 50mm PP Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PP Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PP Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 120 U/C PP Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PP Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PP Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PP Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PP Pipe 125mm Ø, 3.1mm wall thickness 125mm PP Pipe 140mm Ø, 3.5-8mm wall thickness 140mm PP Pipe 160mm Ø, 4-14.6mm wall thickness 160mm

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 122/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service PROMASEAL® Classification Service(s) Collar Ref PP Pipe 32mm Ø, 2.9mm wall thickness 32mm PP Pipe 40mm Ø, 2.9mm wall thickness 40mm PP Pipe 50mm Ø, 2.9mm wall thickness 50mm PP Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PP Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PP Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 60 U/C PP Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PP Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PP Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PP Pipe 110mm Ø, 2.7-10mm wall thickness 110mm PP Pipe 125mm Ø, 3.1mm wall thickness 125mm PP Pipe 140mm Ø, 3.5-8mm wall thickness 140mm PP Pipe 160mm Ø, 4-14.6mm wall thickness 160mm

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 123/157
Date of Issue 2018-12-19

Max Aperture 730mm Wide x 1200mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key Supporting construction PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® Fire Barrier PROMASEAL® Collar Penetration Service PROMASEAL® Classification Service(s) Collar Ref PE Pipe 32mm Ø, 2.9mm wall thickness 32mm PE Pipe 40mm Ø, 2.9mm wall thickness 40mm PE Pipe 50mm Ø, 2.9mm wall thickness 50mm PE Pipe 55mm Ø, 2.9-4.4mm wall thickness 55mm PE Pipe 63mm Ø, 2.9-4.4mm wall thickness 63mm PE Pipe 75mm Ø, 2.8-6.7mm wall thickness 75mm EI 120 U/C PE Pipe 82mm Ø, 2.8-6.7mm wall thickness 82mm PE Pipe 90mm Ø, 2.7-10mm wall thickness 90mm PE Pipe 100mm Ø, 2.7-10mm wall thickness 100mm PE Pipe 110mm Ø, 2.7-10mm wall thickness 110mm 125mm PE Pipe 125mm Ø, 3.1mm wall thickness PE Pipe 140mm Ø, 3.9-5.8mm wall thickness 140mm PE Pipe 160mm Ø, 4.9-9.5mm wall thickness 160mm

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

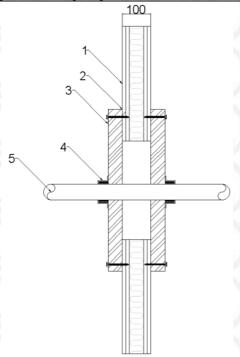


Certificate No. UL-EU-01105-CPR

Page 124/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL®
 Intumescent Acrylic Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Service(s)	PROMASEAL® Collar Ref	Classification
PE Pipe 32mm Ø, 2.9mm wall thickness	32mm	EI 60 U/C
PE Pipe 40mm Ø, 2.9mm wall thickness	40mm	
PE Pipe 50mm Ø, 2.9mm wall thickness	50mm	
PE Pipe 55mm Ø, 2.9-4.4mm wall thickness	55mm	
PE Pipe 63mm Ø, 2.9-4.4mm wall thickness	63mm	
PE Pipe 75mm Ø, 2.8-6.7mm wall thickness	75mm	
PE Pipe 82mm Ø, 2.8-6.7mm wall thickness	82mm	
PE Pipe 90mm Ø, 2.7-10mm wall thickness	90mm	
PE Pipe 100mm Ø, 2.7-10mm wall thickness	100mm	
PE Pipe 110mm Ø, 2.7-10mm wall thickness	110mm	
PE Pipe 125mm Ø, 3.1mm wall thickness	125mm	
PE Pipe 140mm Ø, 3.9-5.8mm wall thickness	140mm	
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness	160mm	

Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the PROMASEAL® Fire Barrier ¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

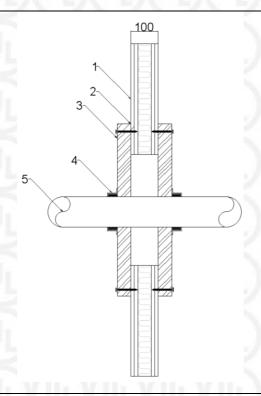


Certificate No. UL-EU-01105-CPR

Page 125/157
Date of Issue 2018-12-19

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal)



Key

- 1. Supporting construction
- 2. PROMASEAL®
 Intumescent Acrylic
 Sealant
- 3. PROMASEAL® Fire Barrier
- 4. PROMASEAL® Collar
- 5. Penetration Service

Scope and Classifications as below

Intumescent Thickness		
Pipe Diameter Intumescent Mate		
ø 32 mm - ø 50 mm	40 mm (W) x 2 mm (T)	
ø 51 mm - ø 82 mm	40 mm (W) x 4 mm (T)	
ø 83 mm - ø 115 mm	40 mm (W) x 6 mm (T)	
ø 116 mm - ø 160 mm	40 mm (W) x 8 mm (T)	
ø 161 mm - ø 200 mm	40 mm (W) x 10 mm (T)	
ø 201 mm - ø 250 mm	40 mm (W) x 12 mm (T)	

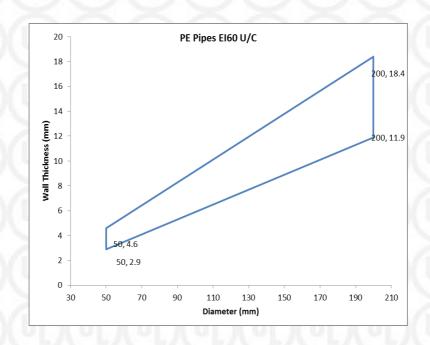
Wrap secured internally within both faces of the PROMASEAL® Fire Barrier

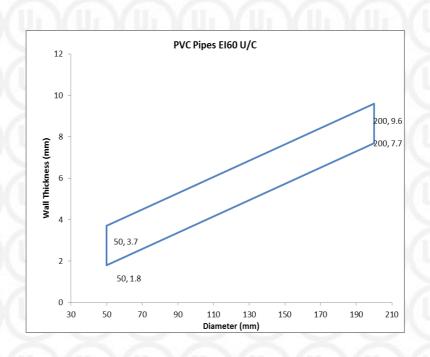
¹Pattress installation of PROMASEAL® Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. UL-EU-01105-CPR

Page 126/157
Date of Issue 2018-12-19

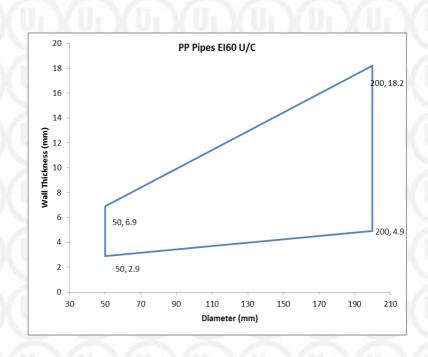






Certificate No. UL-EU-01105-CPR

Page 127/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 128/157
Date of Issue 2018-12-19

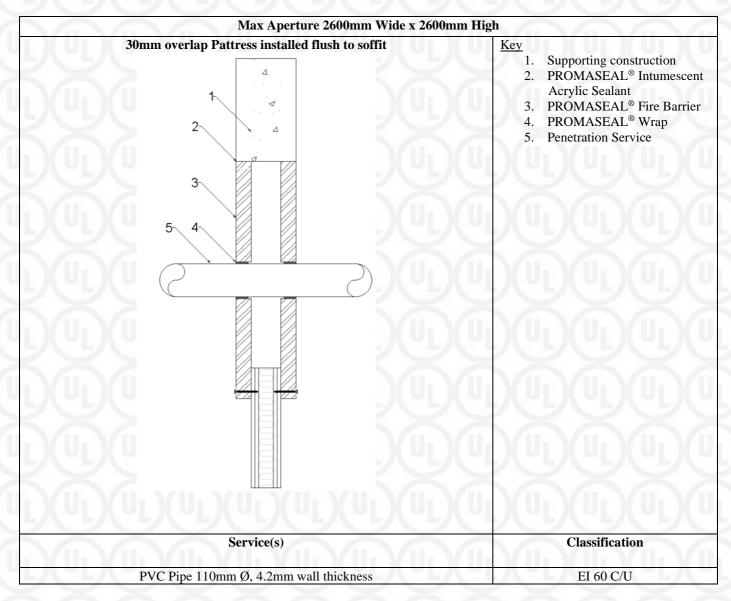
Max Aperture 2600mm Wide x 2600mm High	
30mm overlap Pattress installed flush to soffit	Key 1. Supporting construction 2. PROMASEAL® Intumescent Acrylic Sealant 3. PROMASEAL® Fire Barrier 4. PROMASEAL® Wrap 5. Penetration Service
Service(s)	Classification
PVC Pipe 110mm Ø, 4.2mm wall thickness	EI 60 C/U

¹Pattress installation of PROMASEAL[®] Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 30mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. No fixing is applied to the head flush to the soffit ²4 x 2mm thick layers of PROMASEAL[®] Wrap installed both sides of the substrate within the Pattress installation



Certificate No. UL-EU-01105-CPR

Page 129/157
Date of Issue 2018-12-19



¹Pattress installation of PROMASEAL[®] Fire Barrier. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 30mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. No fixing is applied to the head flush to the soffit ²4 x 2mm thick layers of PROMASEAL[®] Wrap installed both sides of the substrate within the Pattress installation



Certificate No. UL-EU-01105-CPR

Page 130/157
Date of Issue 2018-12-19

Rigid Floors Minimum Thickness 150mm

Double Layer, PROMASEAL® Fire Barrier 50mm, Electrical Cables

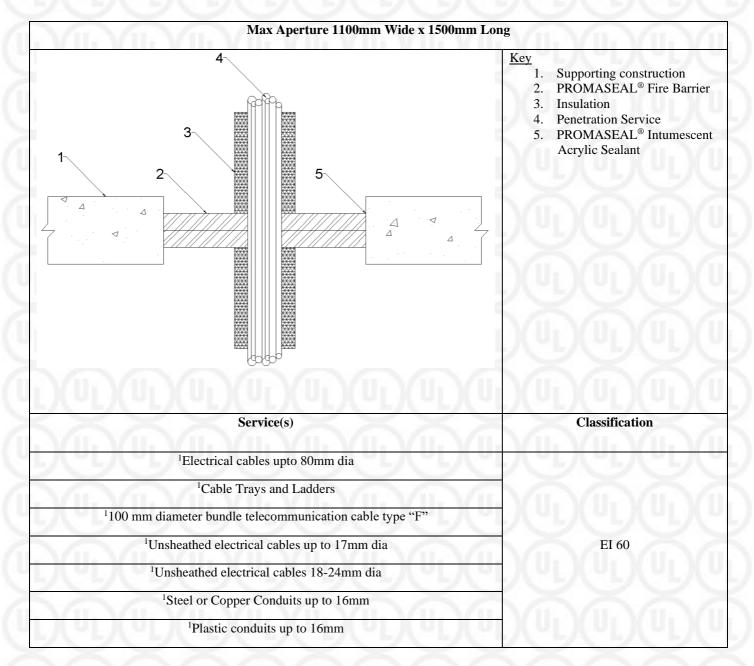
Max Aperture 1100mm Wide x 1500mm l	Long
	Key 1. Supporting construction 2. PROMASEAL® Fire Barrier 3. PROMASEAL® HPEX Sealant 4. PROMASEAL® Fire Barrier Coating 5. Penetration Service 6. PROMASEAL® Intumescent Acrylic Sealant
Penetration Specification	Classification
*500mm perforated cable tray	Than an article
*Electrical cables up to 21mm ø	
*1 off 'C1' Cable	EI 60
*1 off 'C2' Cable	
*1 off 'C3' Cable	TANGEROUS

^{*}All cables coated with 2mm DFT PROMASEAL® Fire Barrier Coating 300mm along the cables upper side of the seal PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

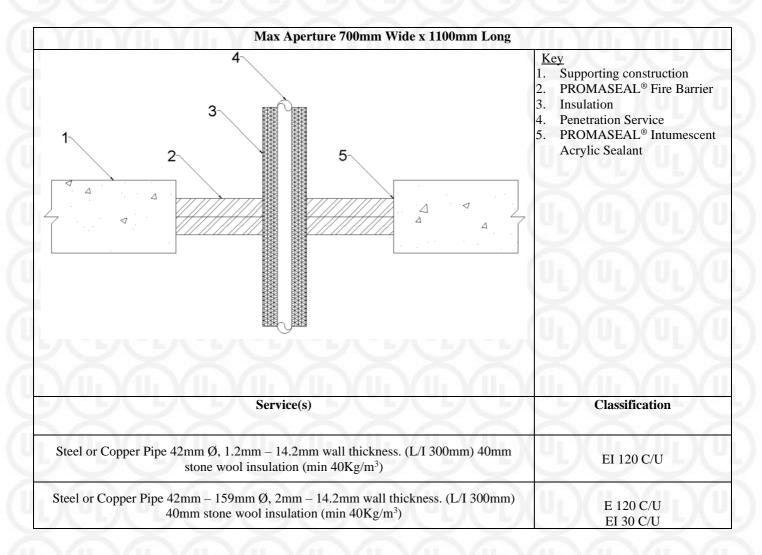
Page 131/157
Date of Issue 2018-12-19



¹Cables and cable trays wrapped with a single layer of 40mm thick stonewool, min 40kg/m³ (L/I 300mm)

Certificate No. UL-EU-01105-CPR

Page 132/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 133/157
Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Insulated Metallic Pipes

Max Aperture 1100mm Wide x 1500mm Long	
	Key 1. Supporting construction 2. PROMASEAL® Fire Barrier 3. Insulation 4. Penetration Service 5. PROMASEAL® Intumescent Acrylic Sealant
Service(s)	Classification
Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	E 90 C/U EI 60 C/U
Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	E 90 C/U EI 30 C/U

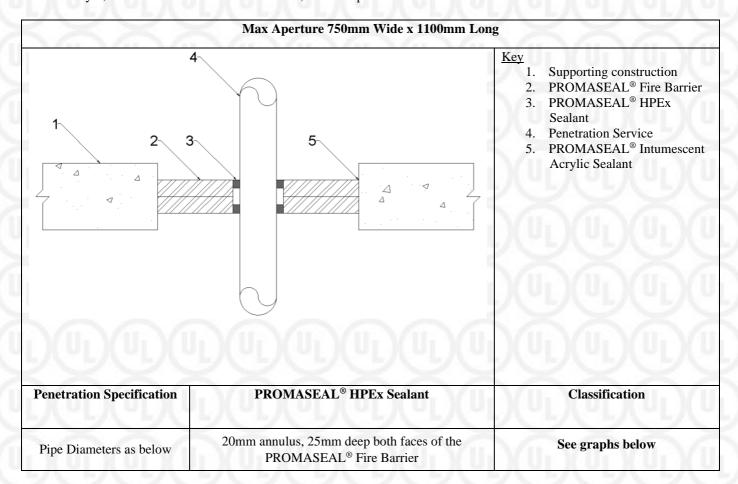


Certificate No. UL-EU-01105-CPR

Page 134/157

Date of Issue 2018-12-19

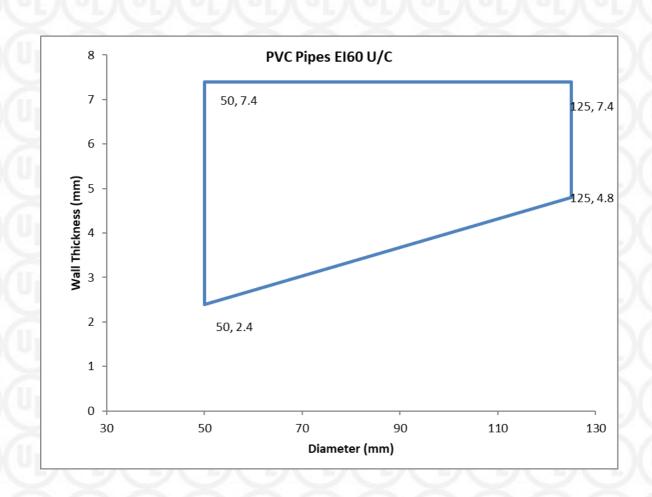
Double Layer, PROMASEAL® Fire Barrier 50mm, Plastic Pipes





Certificate No. UL-EU-01105-CPR

Page 135/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 136/157
Date of Issue 2018-12-19

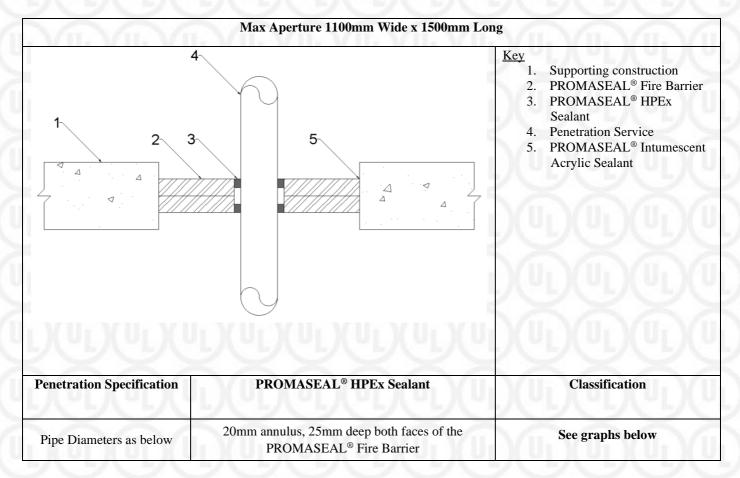
Max Aperture 750mm Wide x 1100mm Long Key 4-Supporting construction 2. PROMASEAL® Fire Barrier 3. PROMASEAL® HPEx Sealant Penetration Service 3-5 PROMASEAL® Intumescent Acrylic Sealant **Penetration Specification** Classification Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness EI 60 U/C Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 110mm ø 10mm wall thickness

PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

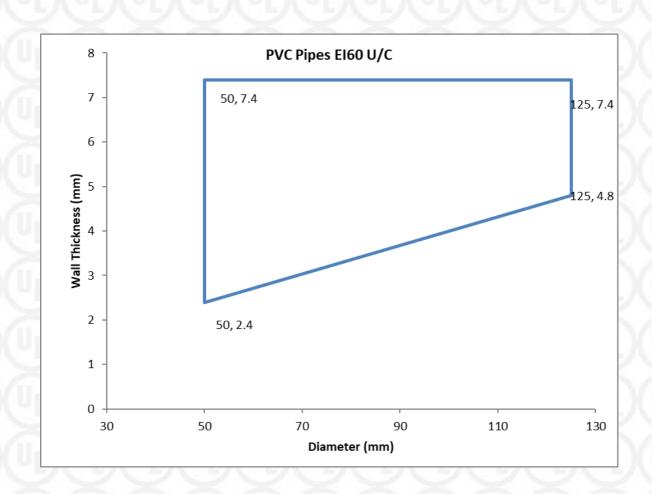
Page 137/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 138/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 139/157
Date of Issue 2018-12-19

Max Aperture 1100mm Wide x 1500mm Lo	1. Supporting construction 2. PROMASEAL® Fire Barrie 3. PROMASEAL® HPEX Sealant 4. Penetration Service 5. PROMASEAL® Intumescent Acrylic Sealan
Penetration Specification	Classification
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	(U_{L})
Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness	EI 60 U/C
Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thickness	

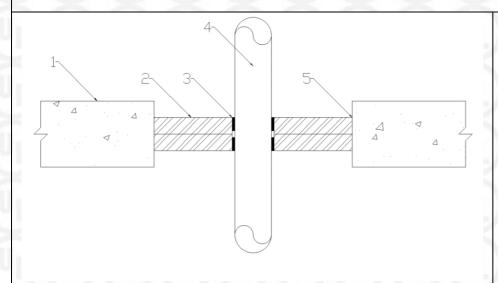
PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



UL-EU-01105-CPR Certificate No.

140/157 Page 2018-12-19 **Date of Issue**

Max Aperture 350mm Wide x 1000mm Long



Key

- Supporting construction
- PROMASEAL® Fire Barrier PROMASEAL® Wrap
- 4. Penetration Service
- PROMASEAL® Intumescent Acrylic Sealant

Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe up to 125mm Ø, 4.8-7.4mm wall thickness.	2mm thickness	\times
PP Pipe up to 40mm Ø, 3.1-17.1mm wall thickness.	2mm thickness	EI 120 U/C
PE Pipe up to 125mm Ø, 11.4mm wall thickness.	2mm thickness	リレバ・レーバ・サレノ
DE Ding up to 125mm Ø 2 1 11 4mm well thickness	2mm thickness	E 120 U/C
PE Pipe up to 125mm Ø, 3.1-11.4mm wall thickness.		EI 90 U/C

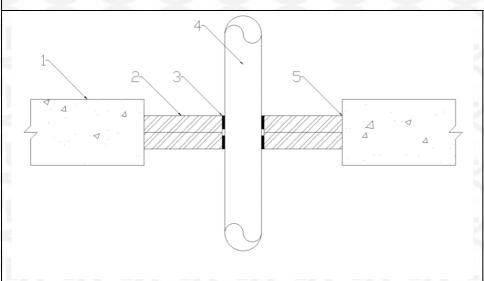
¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 141/157
Date of Issue 2018-12-19

Max Aperture 1100mm Wide x 1500mm Long



Key

- 1. Supporting construction
- 2. PROMASEAL® Fire Barrier
- B. PROMASEAL® Wrap
- 4. Penetration Service
- 5. PROMASEAL® Intumescent Acrylic Sealant

Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe up to 125mm Ø, 4.8-7.4mm wall thickness.	2mm thickness	EI 60 U/C
PP Pipe up to 40mm Ø, 3.1-17.1mm wall thickness.	2mm thickness	
PE Pipe up to 125mm Ø, 11.4mm wall thickness.	2mm thickness	
PE Pipe up to 125mm Ø, 3.1-11.4mm wall thickness.	2mm thickness	

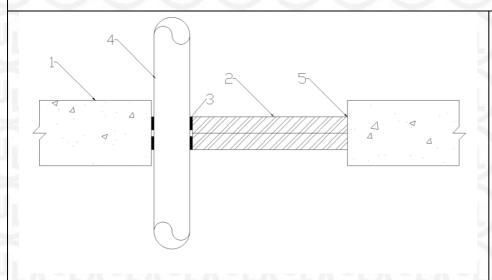
¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier



UL-EU-01105-CPR Certificate No.

142/157 Page 2018-12-19 **Date of Issue**

Max Aperture 350mm Wide x 1000mm Long



Key

- Supporting construction
- PROMASEAL® Fire Barrier PROMASEAL® Wrap
- 4. Penetration Service
- PROMASEAL® Intumescent Acrylic Sealant

Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe up to 125mm Ø, 4.8-7.4mm wall thickness.	2mm thickness	シマシマシマ
PP Pipe up to 40mm Ø, 3.1-17.1mm wall thickness.	2mm thickness	EI 120 U/C
PE Pipe up to 125mm Ø, 11.4mm wall thickness.	2mm thickness	
DE Discours to 125 and 0/2 1 11 4 and small this land of	2mm thickness	E 120 U/C
PE Pipe up to 125mm Ø, 3.1-11.4mm wall thickness.		EI 90 U/C

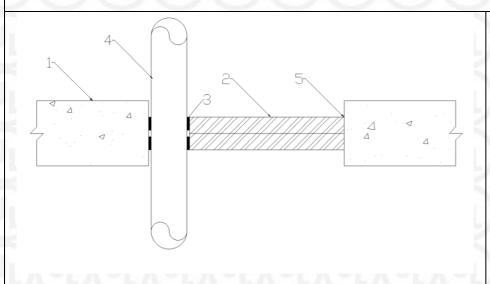
¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier



UL-EU-01105-CPR Certificate No.

143/157 Page 2018-12-19 **Date of Issue**

Max Aperture 1100mm Wide x 1500mm Long



- 1. Supporting construction
- PROMASEAL® Fire Barrier PROMASEAL® Wrap
- 4. Penetration Service
- PROMASEAL® Intumescent Acrylic Sealant

Service(s)	PROMASEAL® Wrap Ref	Classification
PVC Pipe up to 125mm Ø, 4.8-7.4mm wall thickness.	2mm thickness	/ · · · / · · · / · · · / · ·
PP Pipe up to 40mm Ø, 3.1-17.1mm wall thickness.	2mm thickness	EL COLLIC
PE Pipe up to 125mm Ø, 11.4mm wall thickness.	2mm thickness	EI 60 U/C
PE Pipe up to 125mm Ø, 3.1-11.4mm wall thickness.	2mm thickness	

¹PROMASEAL® Wrap secured internally within both faces of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 144/157

Date of Issue 2018-12-19

Max Aperture 350mm Wide x 1000mm Long Key Supporting construction 1. Penetration Service PROMASEAL® Fire Barrier PROMASEAL® Intumescent Acrylic Sealant 5. PROMASEAL® Collar PROMASEAL® Collar **Penetration Specification** Classification Pipe Diameters as below. Fixed to the underside of the PROMASEAL® Fire EI 120 U/C Zero Distance Barrier utilising steel pig tail fixings

Penetration Specification	Collar Reference	Intumescent Material
PVC Pipe 32mm Ø 1.8mm wall thickness	32mm PROMASEAL® Collar	/a \ /a \ /a \ /a \ /a
PVC Pipe 40mm Ø 1.8mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)
PVC Pipe 50mm Ø 1.8mm wall thickness	50mm PROMASEAL® Collar	しゃくらくらく
PVC Pipe 55mm Ø 2.3-2.8mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)
PVC Pipe 63mm Ø 2.3-2.8mm wall thickness	63mm PROMASEAL® Collar	rii - Mii - Mii - Mi
PVC Pipe 75mm Ø 3.1-4.4mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)
PVC Pipe 82mm Ø 3.1-4.4mm wall thickness	82mm PROMASEAL® Collar	
PVC Pipe 90mm Ø 4.2-6.6mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)
PVC Pipe 100mm Ø 4.2-6.6mm wall thickness	100mm PROMASEAL® Collar	
PVC Pipe 110mm Ø 4.2-6.6mm wall thickness	110mm PROMASEAL® Collar	
PVC Pipe 125mm Ø 6.0mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)
PVC Pipe 140mm Ø 6.1-7.5mm wall thickness	140mm PROMASEAL® Collar	
PVC Pipe 160mm Ø 6.2-9.5mm wall thickness	160mm PROMASEAL® Collar	



Certificate No. UL-EU-01105-CPR

Page 145/157
Date of Issue 2018-12-19

Penetration Specification	Collar Reference	Intumescent Material	
PP Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar		
PP Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PP Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar	 	
PP Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PP Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar	$\times \times \times$	
PP Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)	
PP Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar	マレハッレハッレハ	
PP Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PP Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar	/n \/ (n \/ (n \/	
PP Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar		
PP Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PP Pipe 140mm Ø 3.5-8.0mm wall thickness	140mm PROMASEAL® Collar		
PP Pipe 160mm Ø 4.0-14.6mm wall thickness	160mm PROMASEAL® Collar	rus Wus Wus W	

Penetration Specification	Collar Reference	Intumescent Material	
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar	シンシンシ	
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar	THE VIII. VIII.	
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar	\times	
PE Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)	
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar		
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar		
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar	u naun vala	
PE Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PROMASEAL® Collar	$\times \times \times$	
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PROMASEAL® Collar	711. VIII. VIII. Y	



Certificate No. UL-EU-01105-CPR

Page 146/157

Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Pattress Installed Electrical Cables

Max Aperture 1000mm Wide x 1300mm	Long
	1. Supporting construction 2. PROMASEAL® Fire Barrier 3. PROMASEAL® HPEX Sealant 4. PROMASEAL® Fire Barrier Coating 5. Penetration Service 6. PROMASEAL® Intumescent Acrylic Sealant
Penetration Specification	Classification
*500mm perforated cable tray	un Vun Vun Vun Vu
*Electrical cables up to 21mm ø	
*1 off 'C1' Cable	EI 60
*1 off 'C2' Cable	PARTICE OF THE PARTY OF THE PAR
*1 off 'C3' Cable	\ / \ / \ / \ /

^{*}All cables coated with 2mm DFT PROMASEAL® Fire Barrier Coating 300mm along the cables upper side of the seal PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 147/157
Date of Issue 2018-12-19

Max Aperture 1000mm Wide x 1300mm Lon	ng
	1. Supporting construction 2. PROMASEAL® Fire Barrier 3. Insulation 4. Penetration Service 5. PROMASEAL® Intumescent Acrylic Sealant
Service(s)	Classification
¹ Electrical cables upto 80mm dia ¹ Cable Trays and Ladders)(UL)(UL)(UL)(U
¹ 100 mm diameter bundle telecommunication cable type "F"	$(U_1)(U_1)(U_1)(U_1)(U_1)$
¹ Unsheathed electrical cables up to 17mm dia	EI 60
¹ Unsheathed electrical cables 18-24mm dia	YU YU YU YU YU
¹ Steel or Copper Conduits up to 16mm	
¹ Plastic conduits up to 16mm	VII.VII.VII.VII

¹Cables and cable trays wrapped with a single layer of 40mm thick stonewool, min 40kg/m³ (L/I 300mm)

(II)

Certificate No. UL-EU-01105-CPR

Page 148/157
Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Pattress Installed Insulated Metallic Pipes

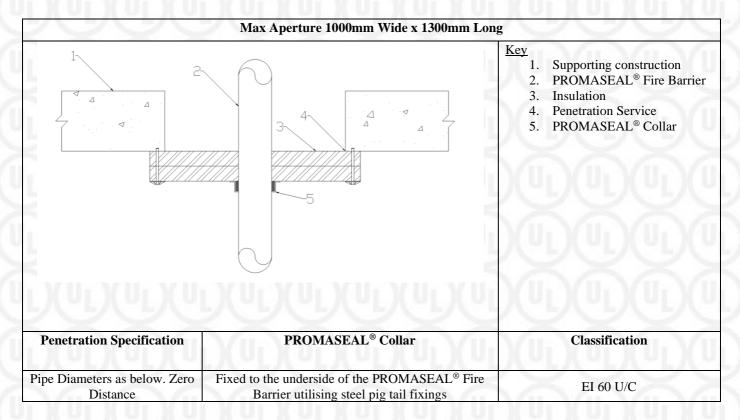
Max Aperture 1000mm Wide x 1300mm Loi	ng
	1. Supporting construction 2. PROMASEAL® Fire Barrier 3. Insulation 4. Penetration Service 5. PROMASEAL® Intumescent Acrylic Sealant
Service(s)	Classification
Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	EI 60 C/U
Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m³)	E 60 C/U EI 30 C/U



Certificate No. UL-EU-01105-CPR

Page 149/157
Date of Issue 2018-12-19

Double Layer, PROMASEAL® Fire Barrier 50mm, Pattress Installed Plastic Pipes



Penetration Specification	Collar Reference	Intumescent Material	
PVC Pipe 32mm Ø 1.8mm wall thickness	32mm PROMASEAL® Collar	ALVILVII. VII.	
PVC Pipe 40mm Ø 1.8mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PVC Pipe 50mm Ø 1.8mm wall thickness	50mm PROMASEAL® Collar		
PVC Pipe 55mm Ø 2.3-2.8mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PVC Pipe 63mm Ø 2.3-2.8mm wall thickness	63mm PROMASEAL® Collar	U 1 3 U U 1 3 U U 1 3 U	
PVC Pipe 75mm Ø 3.1-4.4mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)	
PVC Pipe 82mm Ø 3.1-4.4mm wall thickness	82mm PROMASEAL® Collar		
PVC Pipe 90mm Ø 4.2-6.6mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PVC Pipe 100mm Ø 4.2-6.6mm wall thickness	100mm PROMASEAL® Collar	こりにりにりに	
PVC Pipe 110mm Ø 4.2-6.6mm wall thickness	110mm PROMASEAL® Collar	\times \times \times \times	
PVC Pipe 125mm Ø 6.0mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PVC Pipe 140mm Ø 6.1-7.5mm wall thickness	140mm PROMASEAL® Collar	ひしんせいんせいんせ	
PVC Pipe 160mm Ø 6.2-9.5mm wall thickness	160mm PROMASEAL® Collar		



Certificate No. UL-EU-01105-CPR
Page 150/157
Date of Issue 2018-12-19

Penetration Specification	Collar Reference	Intumescent Material	
PP Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar	$\times \times \times$	
PP Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PP Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar	ピレル ピレル ピレル	
PP Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PP Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar		
PP Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)	
PP Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar		
PP Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PP Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar		
PP Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar	こりにしにり	
PP Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PP Pipe 140mm Ø 3.5-8.0mm wall thickness	140mm PROMASEAL® Collar	/III. \/III. \/III. \/	
PP Pipe 160mm Ø 4.0-14.6mm wall thickness	160mm PROMASEAL® Collar		

Penetration Specification	Collar Reference	Intumescent Material
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar	A A A A A
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar	GINGRIGHT
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar	(iii.)/(ii.)/(ii.)/(ii
PE Pipe 75mm Ø 2.8-6.7mm wall thickness	Ø 2.8-6.7mm wall thickness 75mm PROMASEAL® Collar 30mm (W) x 8mm (T)	
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar	
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar	U n X U n X U n X U
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar	
PE Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PROMASEAL® Collar	an a a ann a ann a ann a
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PROMASEAL® Collar	G FV AFV AFV



Certificate No. UL-EU-01105-CPR

Page 151/157
Date of Issue 2018-12-19

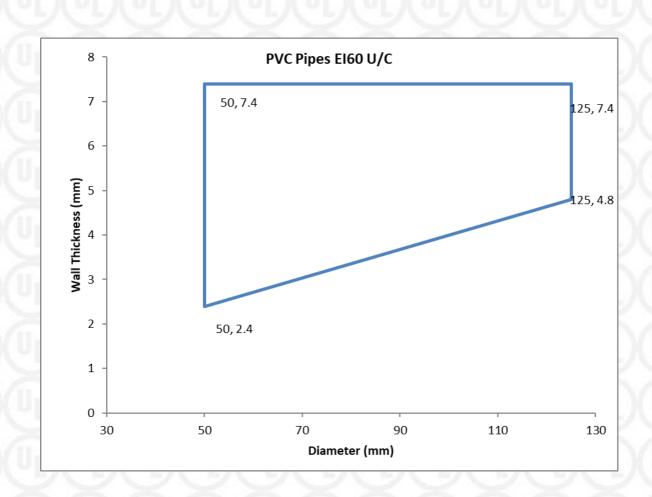
Double Layer, PROMASEAL® Fire Barrier 50mm, Plastic Pipes

Max Aperture 1000mm Wide x 1300mm Long Key 1. Supporting construction 2. PROMASEAL® Fire Barrier PROMASEAL® HPEx Sealant 4. Penetration Service 5. PROMASEAL® Intumescent Acrylic Sealant PROMASEAL® HPEx Sealant Classification **Penetration Specification** 20mm annulus, 25mm deep both faces of the See graphs below Pipe Diameters as below PROMASEAL® Fire Barrier



Certificate No. UL-EU-01105-CPR

Page 152/157
Date of Issue 2018-12-19





Certificate No. UL-EU-01105-CPR

Page 153/157
Date of Issue 2018-12-19

Max Aperture 1000mm Wide x 1300mm Long Key Supporting construction 2. PROMASEAL® Fire Barrier 3. PROMASEAL® HPEx Sealant 4. Penetration Service PROMASEAL® Intumescent Acrylic Sealant **Penetration Specification** Classification Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness EI 60 U/C Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thickness Uponor MLC (Multi-Layer Composite) Pipe 110mm ø 10mm wall thickness

PROMASEAL® HPEx Sealant 20mm annulus full 50mm depth of the PROMASEAL® Fire Barrier

(UL)

Certificate No. UL-EU-01105-CPR

Page 154/157
Date of Issue 2018-12-19

Penetration Specification Promaseal Collar Penetration Specification Promaseal Collar Promaseal Fire Barrier Acrylic Sealant 5. PROMASEAL Collar Penetration Specification Promaseal Collar Penetration Specification Promaseal Collar Promas

Penetration Specification	Collar Reference	Intumescent Material	
PVC Pipe 32mm Ø 1.8mm wall thickness	32mm PROMASEAL® Collar	A A A	
PVC Pipe 40mm Ø 1.8mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PVC Pipe 50mm Ø 1.8mm wall thickness	50mm PROMASEAL® Collar	こしハンレハンレハ	
PVC Pipe 55mm Ø 2.3-2.8mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PVC Pipe 63mm Ø 2.3-2.8mm wall thickness	63mm PROMASEAL® Collar	A Vii Vii V	
PVC Pipe 75mm Ø 3.1-4.4mm wall thickness	nm wall thickness 75mm PROMASEAL® Collar		
PVC Pipe 82mm Ø 3.1-4.4mm wall thickness	82mm PROMASEAL® Collar		
PVC Pipe 90mm Ø 4.2-6.6mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PVC Pipe 100mm Ø 4.2-6.6mm wall thickness	100mm PROMASEAL® Collar	u ny un ny un ny	
PVC Pipe 110mm Ø 4.2-6.6mm wall thickness	110mm PROMASEAL® Collar		
PVC Pipe 125mm Ø 6.0mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PVC Pipe 140mm Ø 6.1-7.5mm wall thickness	140mm PROMASEAL® Collar	ali. Vii. Vii. V	
PVC Pipe 160mm Ø 6.2-9.5mm wall thickness	160mm PROMASEAL® Collar	ヒハニレハニレハ	



Certificate No. UL-EU-01105-CPR
Page 155/157
Date of Issue 2018-12-19

Penetration Specification	Collar Reference	Intumescent Material	
PP Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar	/n - Wm. Wm. W	
PP Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)	
PP Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar		
PP Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)	
PP Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar	TU1 3(U1 3(U1 3(
PP Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)	
PP Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar	$\overline{}$	
PP Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)	
PP Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar		
PP Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar		
PP Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)	
PP Pipe 140mm Ø 3.5-8.0mm wall thickness	140mm PROMASEAL® Collar		
PP Pipe 160mm Ø 4.0-14.6mm wall thickness	160mm PROMASEAL® Collar		

Penetration Specification	Collar Reference	Intumescent Material
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PROMASEAL® Collar	CALVALVE LVE
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PROMASEAL® Collar	30mm (W) x 4mm (T)
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PROMASEAL® Collar	
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PROMASEAL® Collar	30mm (W) x 6mm (T)
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PROMASEAL® Collar	
PE Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PROMASEAL® Collar	30mm (W) x 8mm (T)
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PROMASEAL® Collar	
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PROMASEAL® Collar	30mm (W) x 10mm (T)
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PROMASEAL® Collar	\times \times \times $>$
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PROMASEAL® Collar	an National
PE Pipe 125mm Ø 3.1mm wall thickness	125mm PROMASEAL® Collar	40mm (W) x 12mm (T)
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PROMASEAL® Collar	
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PROMASEAL® Collar	(a) (a) (a) (a)



Certificate No. UL-EU-01105-CPR

Page 156/157
Date of Issue 2018-12-19

Substrate	Minimum Substrate	Maximum Seal width	Minimum Seal	Duct A	Duct Specification (Duct must be classified in accordance with	Fire Re	
Substrate	Thickness (mm)	(mm)	Depth (mm)	Duct B	EN 13501-3/4 for the required period)	E	S
Drywall/ Concrete/	100	100	200*	A	r)(nr)(nr)(nr)(n	60	120
Masonry wall	100	100	200	В		120	7/1
Concrete	150	250	275**	A	EN 13501-3 - Uninsulated 1.0mm GMS steel, rectangular duct, maximum dimensions 1250 mm wide by 1000 mm high.	120	120
floor	floor 150 250	273	В		120	火	
Drywall/ Concrete/ Masonry wall	100	100	400***	A	I_L (U_L) (U_L) (U_L)	60	120
Drywall/ Concrete/ Masonry wall	100	100	200*	В	EN 13501-3 - Uninsulated 1.0mm GMS steel, rectangular duct, maximum dimensions 1250 mm wide by 1000 mm high. Duct insulated with Insulfrax 128 kg/m³, 25 mm thick for a length of 400 mm through the penetration seal (100 mm extending from both faces of the seal)	120	
Drywall/ Concrete/ Masonry wall	100	100	200*	С	EN 13501-4 - Uninsulated 1.0mm GMS steel, rectangular duct, maximum dimensions 1250 mm wide by 1000 mm high. Duct insulated with Insulfrax 128 kg/m³, 25 mm thick for a length of 400 mm through the penetration seal (100 mm extending from both faces of the seal)	120	120

^{* 4} layers, outer layers overlapped



^{** 50} mm PROMASEAL® Fire Barrier/100 mm PROMASEAL® Fire Compound Extra Strength /125 mm PROMASEAL® Fire Barrier

^{*** 2} layers + 1 layer, 150 mm long fixed (with 75 and 100 mm pigtail screws and bedded on PROMASEAL® HPEx Sealant sealant) around the duct to form a collar on both faces of the main seal.

Appendix UL-EU Certificate

Certification Mark UL-EU mark

Certificate No. UL-EU-01105-CPR

Page 157/157

Date of Issue 2018-12-19

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.

