# UL-EU CERTIFICATE

Certificate No. Page Date of Issue Revised

UL-EU-00771-CPR 1/157 2015-04-19 2022-10-19

**Certificate Holder** 

FSi Ltd Westminster Industrial Estate Tamworth Rd Measham DE12 7DS United Kingdom

Fire Stop - Coated Board

Manufacturer A/008

Certified Product Type Product Trade Name

Trademark Rating/Classification

Stopseal Batt N/A See Appendix

Harmonised Technical Specifications Supporting Documentation

> Additional information Expiry date

ETAG 026-2 / EN 13501-2 / EN 13501-3 ETA 14/0005, EC – CERTIFICATE OF CONSTANCY OF PERFORMANCE - 1121 – CPR – JA5021, Classification Report No. 4789513566, Assessment Report No. 4790552307-1 Additional test evidence is held on file 2025-04-19

Stopseal 50 Coated Board / Stopseal 60 Coated Board /



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shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



www.ul.com Form-ULID-006104 (DCS:27-CP-F0855) 5.0

Certificate No. Page

UL-EU-00771-CPR 2/1572015-04-19 **Date of Issue** 

This certificate relates to the use of Stopseal 50 Coated Board / Stopseal 60 Coated Board / Stopseal Batt 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
- Classification in accordance with EN 13501-2 & EN 13501-3 iii)
- iv) Assessment report in accordance with EN 15725: 2010
- Durability and Servicability as defined in ETAG 026-2 v)

The durability class of Stopseal 50 Coated Board / Stopseal 60 Coated Board / Stopseal Batt is Z1 -

intended for use at conditions internal with high humidity, excluding temperatures below  $0^{\circ}C$ 

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

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

The term "Flexible Walls" covers both plasterboard walls and Promat DURASTEEL® walls. Where penetrations pass through Promat DURASTEEL® walls the aperture must be "letterboxed" out with the same sized channel as used for the main support frame. In addition, where the installed STOPSEAL® BATT is thinner than the overall thickness of the wall, the reveals must be lined with the same number of Promat DURASTEEL® layers that are over the main supporting frame.



Certificate No. Page Date of Issue UL-EU-00771-CPR 3/157 2015-04-19

Product-type: Coated board	Intende	d use: Penet	ration Seal
Basic requirement for construction work	Basic Requirement		Basic requirement for construction work
	WR 1 Mechanical resistance	and stabili	ty
አካአካለ	None	LAU	ւռութութ
$\times \times \times$	BWR 2 Safety in case of	of fire	$\times$ $\times$ $\times$
EN 13501-1	Reaction to fire	i Xth	Class E
EN 13501-2	Resistance to fire		See pages 7 to 156
VII. VII. VII.	BWR 3 Hygiene, health and e	environmen	
EN 1026:2000	Air permeability (material p	property)	See page 4
ETAG 026-3, Annex C	Water permeability (material	property)	No performance determined
Declaration of manufacturer	Release of dangerous subs	stances	Declaration of manufacturer
	BWR 4 Safety in us	se	
EOTA TR 001:2003	Mechanical resistance and	stability	No performance determined
EOTA TR 001:2003	Resistance to impact/mov	vement	No performance determined
EOTA TR 001:2003 ISO 11600	Adhesion	1)(4	No performance determined
XXX	BWR 5 Protection again	st noise	$\times$
EN 10140-2/ EN ISO 717-1	Airborne sound insulat	tion	Rw (C;C <sub>tr</sub> )= $24(-2;-3)$ and See pages 5&6
EN 10140-3/ EN ISO 717-2	Impact sound insulati	on	No performance determined
E CITAL CITA	WR 6 Energy economy and h	neat retention	on
EN 12664, EN 12667 or EN 12939	Thermal properties	32	No performance determined
EN ISO 12572 EN 12086	Water vapour permeab	ility	No performance determined
YUTYUTYU	General aspects relating to fit	tness for us	e
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceal	oility	$Z_1$
В	WR 7 Sustainable use of natu	iral resourc	es
			No performance determined

Certificate No.

Page

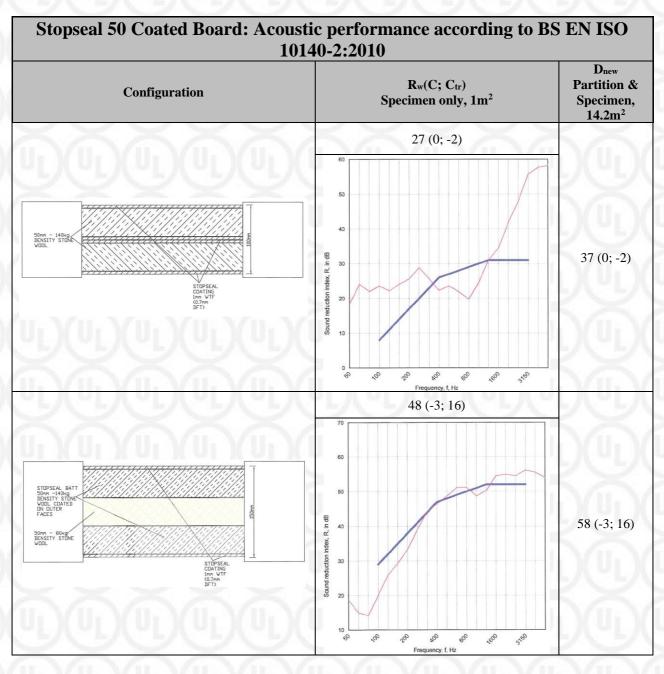
**Date of Issue** 

UL-EU-00771-CPR 4/157 2015-04-19

Stopseal 50 Coated Board: Air Permeability according to BS EN 1026					
Pressure (Pa)	Results under positive chamber pressure		Results under negative chamber pressure		
ressure (ra)	Leakage (m <sup>3</sup> /h)	Leakage (m <sup>3</sup> /m <sup>2</sup> / h)	Leakage (m <sup>3</sup> /h)	Leakage (m <sup>3</sup> /m <sup>2</sup> / 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	

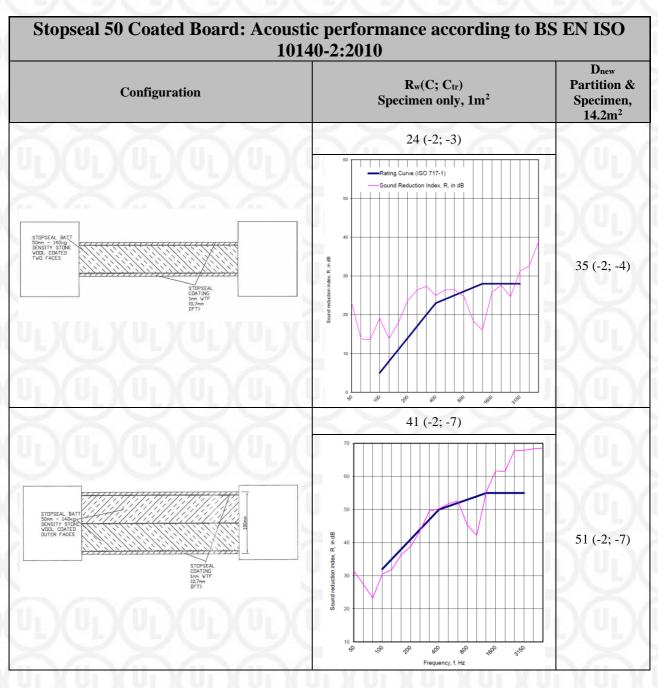


Certificate No. Page Date of Issue UL-EU-00771-CPR 5/157 2015-04-19





Certificate No. Page Date of Issue UL-EU-00771-CPR 6/157 2015-04-19



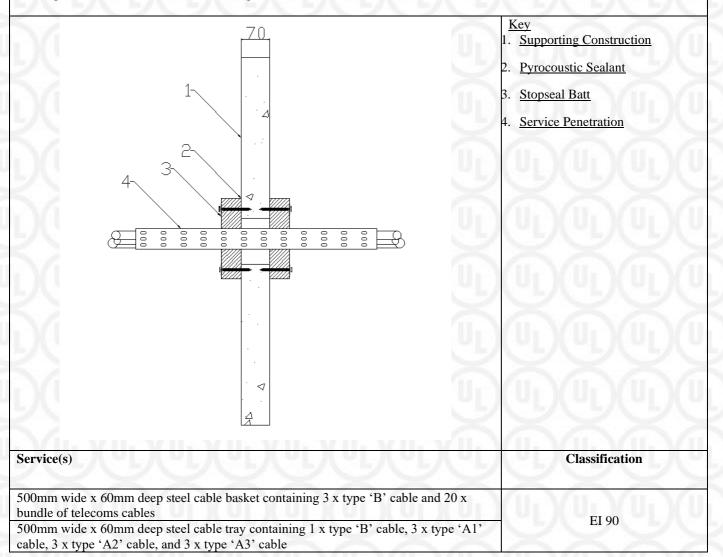


Certificate No. UL-EU-00771-CPR Page 7/157 Date of Issue 2015-04-19

#### **Rigid Walls Minimum Thickness 70mm**

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables

Max Aperture 730mm Wide x 1200mm High

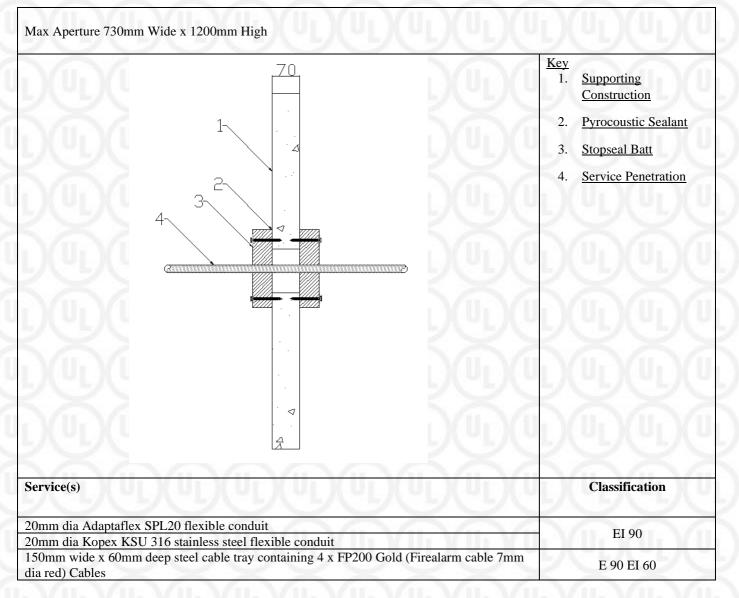


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-00771-CPR Page 8/157 Date of Issue 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Conduits



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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. Page

**Date of Issue** 

UL-EU-00771-CPR 9/157 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables

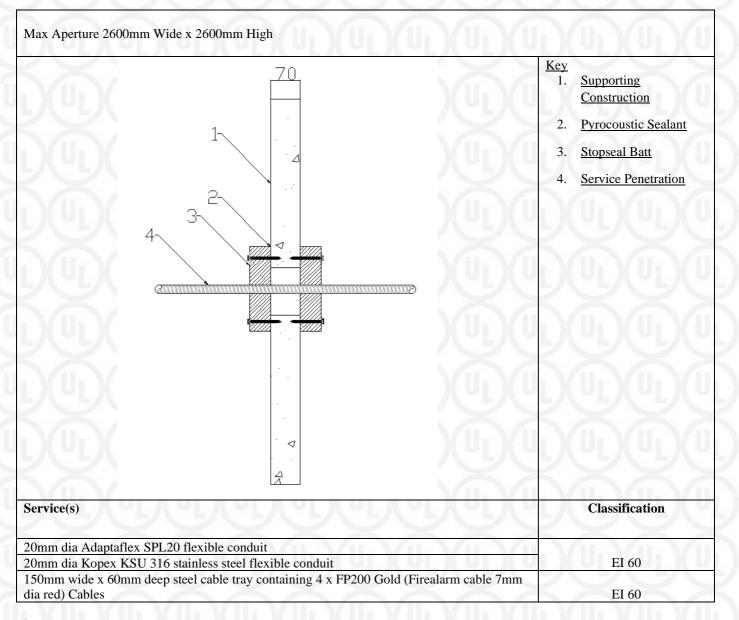
Max Aperture 2600mm Wide x 2600mm High Key 70 1. Supporting Construction 2. **Pyrocoustic Sealant** 1 3. Stopseal Batt Service Penetration 4. 4  $\triangleleft$ 000 000 000 000 000 0.00 200  $\triangleleft$ 4 Service(s) Classification 500mm wide x 60mm deep steel cable basket containing 3 x type 'B' 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

<sup>1</sup>Patress installation of Stopseal Coated Batt. 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-00771-CPR Page 10/157 Date of Issue 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Conduits



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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

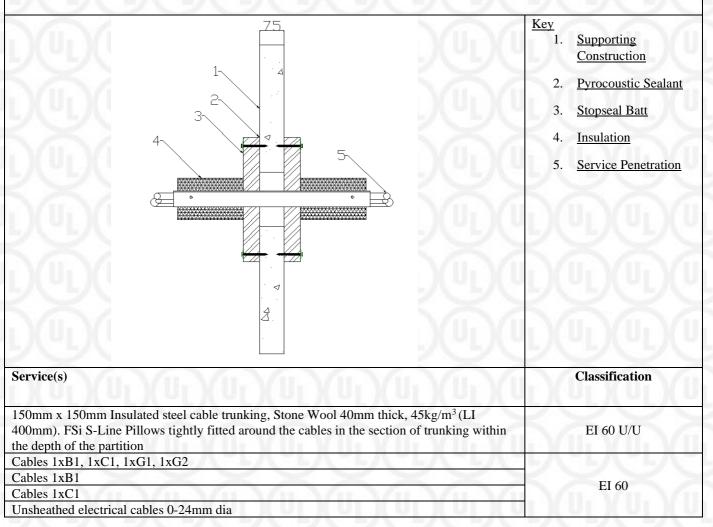


Certificate No. UL-EU-00771-CPR Page 11/157 Date of Issue 2015-04-19

#### **Rigid Walls Minimum Thickness 75mm**

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Cable Trunking

Max Aperture 2600mm Wide x 2600mm High



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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. Page Date of Issue UL-EU-00771-CPR 12/157 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Cable Trunking

Max Aperture 2600mm Wide x 2600mm High Key 75 1. Supporting Construction 2. Pyrocoustic Sealant 3. Stopseal Batt Δ 4. Insulation 5. Service Penetrations <1 0.0 00  $\triangleleft$ 4 Classification Service(s) 50mm x 50mm Insulated steel cable trunking, Stone Wool 40mm thick, 45kg/m<sup>3</sup> (LI 400mm). EI 60 U/U FSi S-Line Pillows tightly fitted around the cables in the section of trunking within the depth of the partition Cables 1xA1, 1xA2, 1xA3 Cables 1xA1 EI 60 Cables 1xA2 Cables 1xA3

<sup>1</sup>Patress installation of Stopseal Coated Batt. 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-00771-CPR Page 13/157 Date of Issue 2015-04-19

Single Layer Stopseal Fire Batt 50mm, Plastic Pipes

PVC Pipe 100mm Ø, 4.2-7.4mm wall thickness

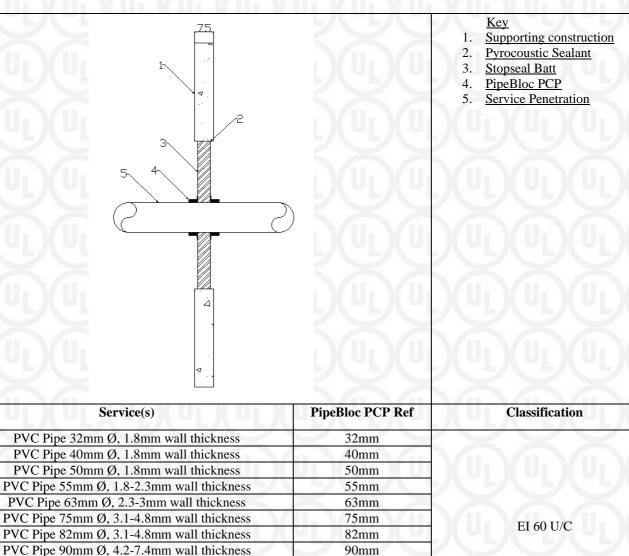
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness

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 Stopseal Fire Batt



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

100mm

110mm

125mm

140mm



UL-EU-00771-CPR

Certificate No. Page

PE Pipe 140mm Ø, 3.9-5.8mm wall thickness

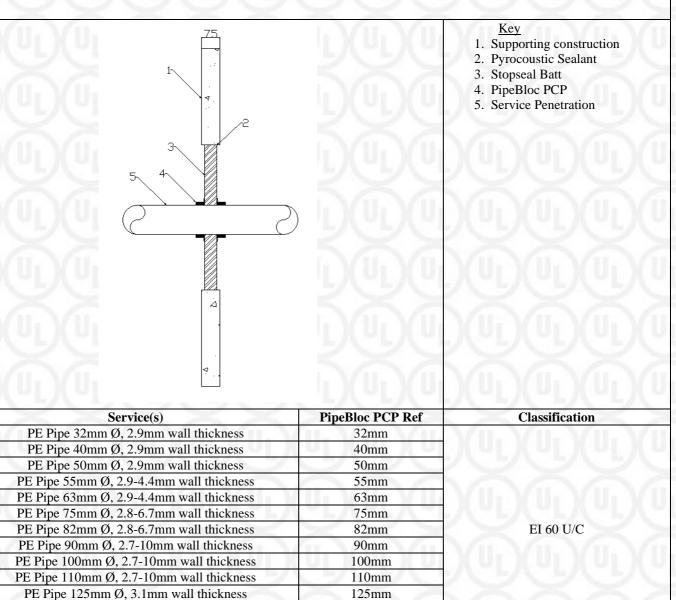
PE Pipe 160mm Ø, 4.9-9.5mm wall thickness

Page 14/157 Issue 2015-04-19

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 Stopseal Fire Batt



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

140mm

160mm



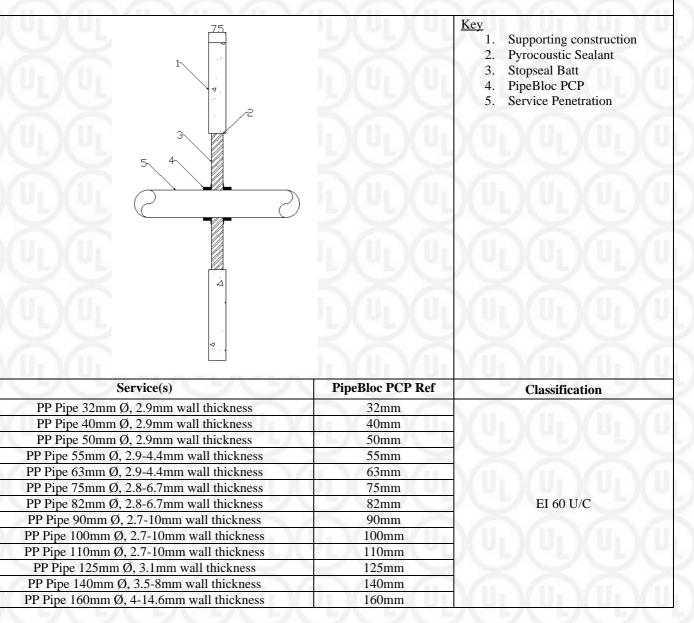
Certificate No. Page

**Date of Issue** 

UL-EU-00771-CPR 15/157 2015-04-19

#### 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 Stopseal Fire Batt

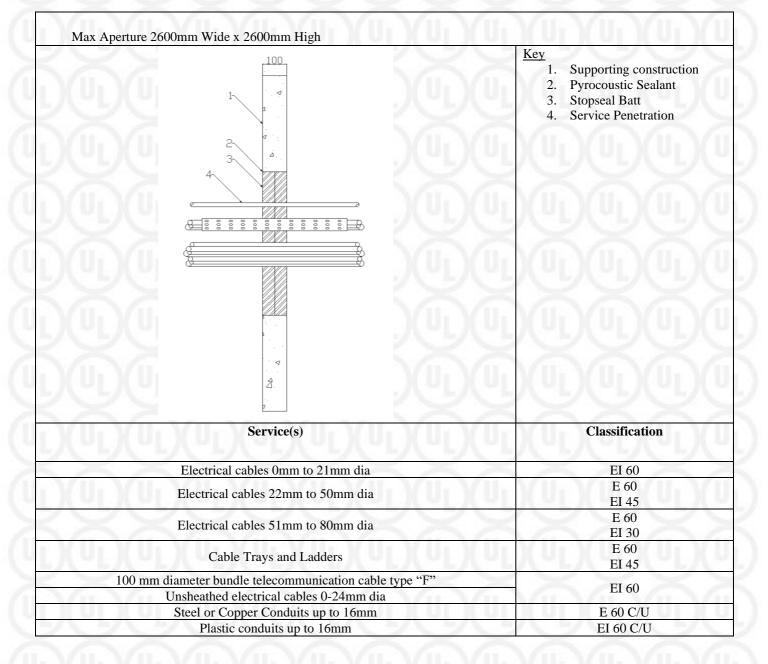




Certificate No. UL-EU-00771-CPR Page 16/157 Date of Issue 2015-04-19

#### **Rigid Walls Minimum Thickness 100mm**

Double Layer Stopseal Fire Batt 50mm, Electrical Cables and Conduits

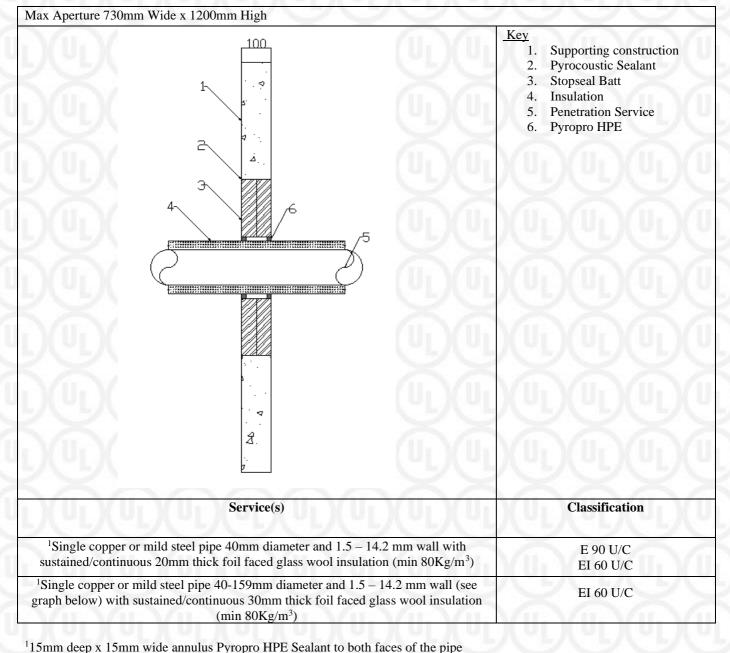




Certificate No. Page **Date of Issue** 

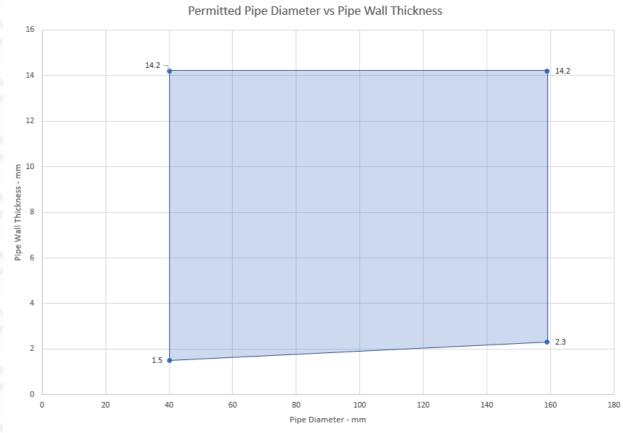
UL-EU-00771-CPR 17/157 2015-04-19

Double Layer Stopseal Fire Batt 50mm, Insulated Metallic Pipes





Certificate No. Page Date of Issue UL-EU-00771-CPR 18/157 2015-04-19

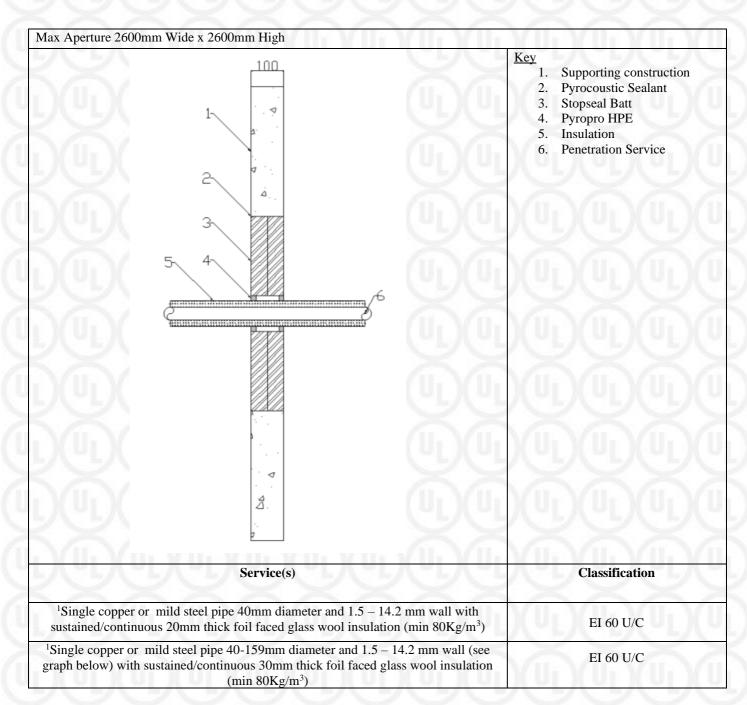


Certificate No.

UL-EU-00771-CPR 19/157 2015-04-19

Date of Issue

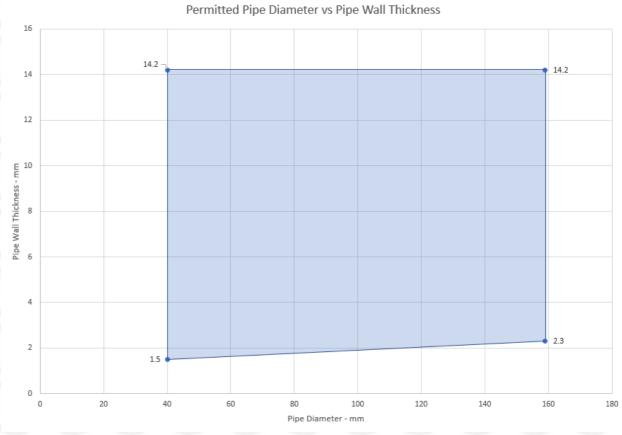
Page



<sup>1</sup>15mm deep x 15mm wide annulus Pyropro HPE Sealant to both faces of the pipe

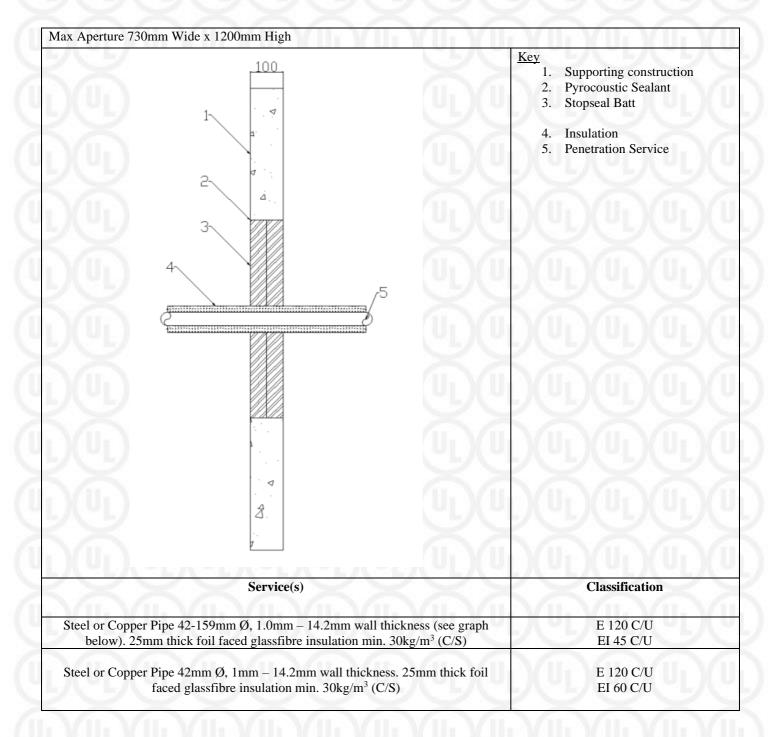


Certificate No. UL-EU-00771-CPR Page 20/157 Date of Issue 2015-04-19



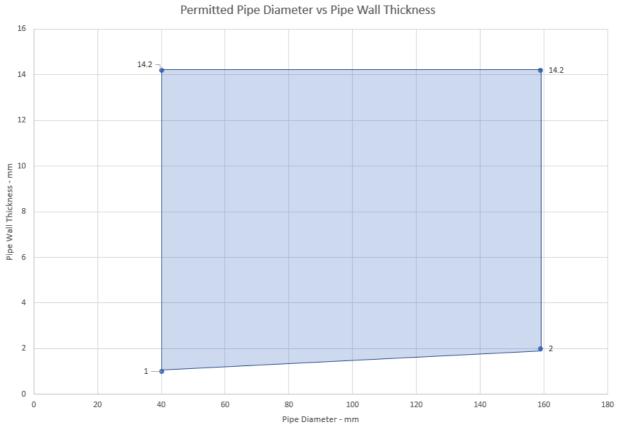
Certificate No. Page UL-EU-00771-CPR 21/157 2015-04-19

Date of Issue





Certificate No.UL-EU-00771-CPRPage22/157Date of Issue2015-04-19



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

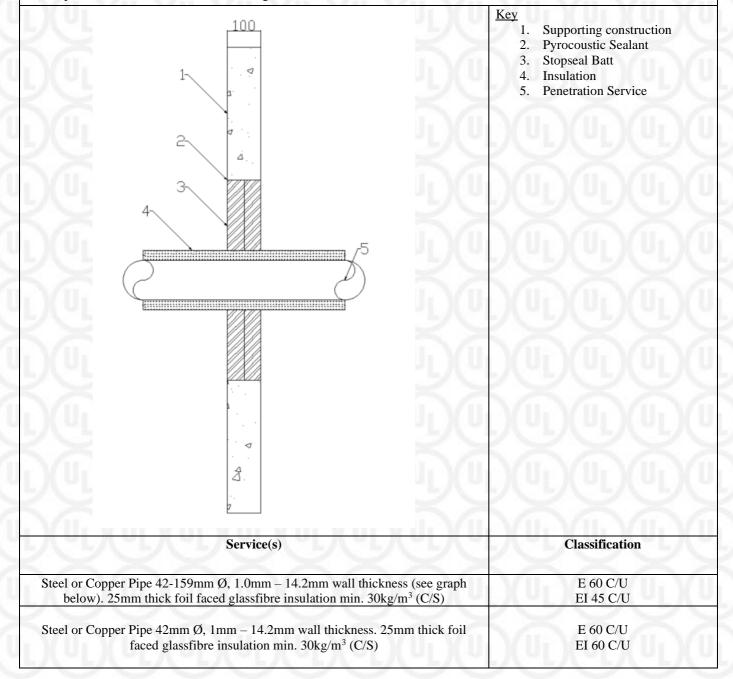
4

Certificate No. Page

**Date of Issue** 

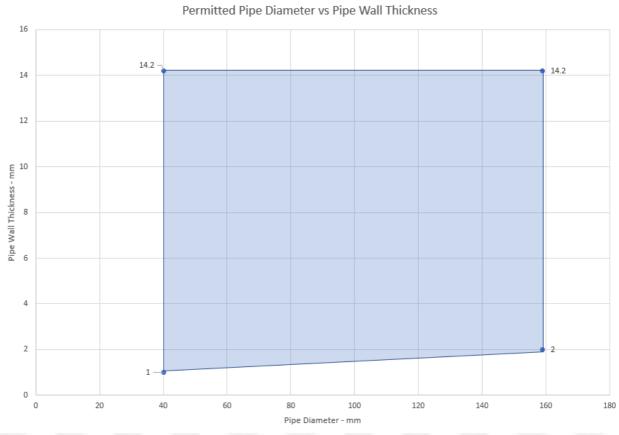
UL-EU-00771-CPR 23/157 2015-04-19

#### Max Aperture 2600mm Wide x 2600mm High





Certificate No. UL-EU-00771-CPR Page 24/157 Date of Issue 2015-04-19



Certificate No.

UL-EU-00771-CPR 25/157 2015-04-19

Date of Issue

along the penetration 2mm DFT (L/I 300mm)

Page

Max Aperture 730mm Wide x 1200mm High

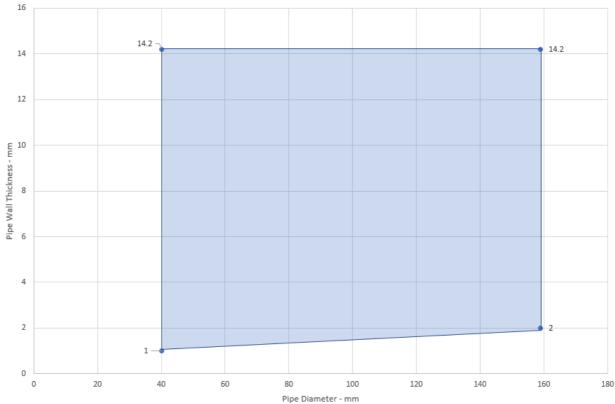
(Penetrations positioned as per option 1 or 2 below, 0mm distance between ser	
	<u>Key</u> <ol> <li>Supporting construction</li> <li>Pyrocoustic Sealant</li> <li>Stopseal Batt</li> <li>PST Coating</li> <li>Penetration Service</li> </ol>
2.	
Service(s)	Classification
Service(s)	Y Un Y Un Y Un
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil	E 120 C/U
Service(s) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm)	E 120 C/U EI 45 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil	E 120 C/U EI 45 C/U E 120 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (C/I)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)	E 120 C/U EI 45 C/U E 120 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         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 , FSi PST coating	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U EI 45 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         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, 10mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m³ (L/I 400mm)         Steel or Copper Pipe 42mm 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 , FSi PST coating along the penetration 2mm DFT (L/I 300mm)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 120 C/U E 120 C/U EI 45 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         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 , FSi PST coating along the penetration 2mm DFT (L/I 300mm)         Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 120 C/U EI 45 C/U E 120 C/U E 120 C/U E 120 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         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 , FSi PST coating along the penetration 2mm DFT (L/I 300mm)         Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), FSi PST coating along the penetration 2mm DFT (L/I 300mm)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 120 C/U EI 45 C/U E 120 C/U E 120 C/U E 120 C/U EI 20 C/U
Service(s)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (L/I 500mm)         Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m³ (C/I)         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)         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 , FSi PST coating along the penetration 2mm DFT (L/I 300mm)         Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below)	E 120 C/U EI 45 C/U E 120 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 120 C/U EI 45 C/U E 120 C/U E 120 C/U E 120 C/U

Form-ULID-006104 (DCS:27-CP-F0855) 5.0

EI 45 C/U

Certificate No. UL-EU-00771-CPR Page 26/157 Date of Issue 2015-04-19







Certificate No.

UL-EU-00771-CPR 27/157 2015-04-19

Date of Issue

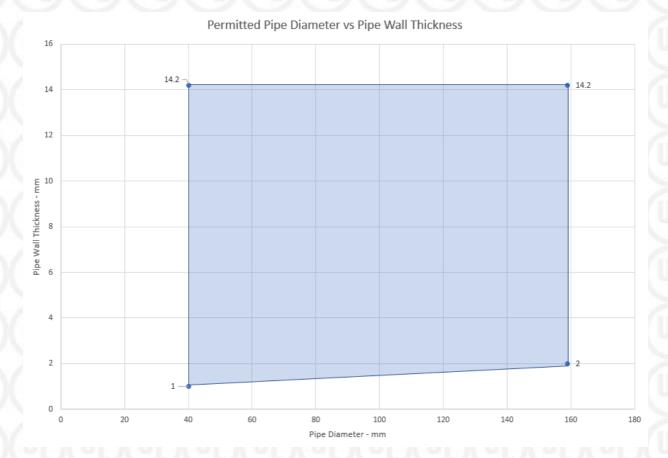
Page

Max Aperture 2600mm Wide x 2600mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between se	ervices and 50mm to edge of seal)
	Key       1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       Insulation         5.       Penetration Service
Service(s)	Classification
	- VII. VII. VII. V
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil	E 60 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm)	E 60 C/U EI 45 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (C/I)	EI 45 C/U EI 60 C/U
Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m <sup>3</sup> (L/I 500mm) Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil	EI 45 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool</li> </ul>	EI 45 C/U EI 60 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> </ul>	EI 45 C/U EI 60 C/U EI 45 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> </ul>	EI 45 C/U EI 60 C/U EI 45 C/U EI 45 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, FSi PST coating</li> </ul>	EI 45 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 60 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, FSi PST coating along the penetration 2mm DFT (L/I 300mm)</li> </ul>	EI 45 C/U EI 60 C/U EI 45 C/U EI 45 C/U E 60 C/U EI 45 C/U
<ul> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (L/I 500mm)</li> <li>Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm wall thickness, 50mm thick foil faced stonewool insulation min. 100kg/m<sup>3</sup> (C/I)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below), 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m<sup>3</sup> (L/I 400mm)</li> <li>Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness, FSi PST coating along the penetration 2mm DFT (L/I 300mm)</li> <li>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness (see graph</li> </ul>	EI 45 C/U EI 60 C/U EI 45 C/U EI 45 C/U EI 45 C/U EI 45 C/U EI 45 C/U EI 60 C/U E 60 C/U

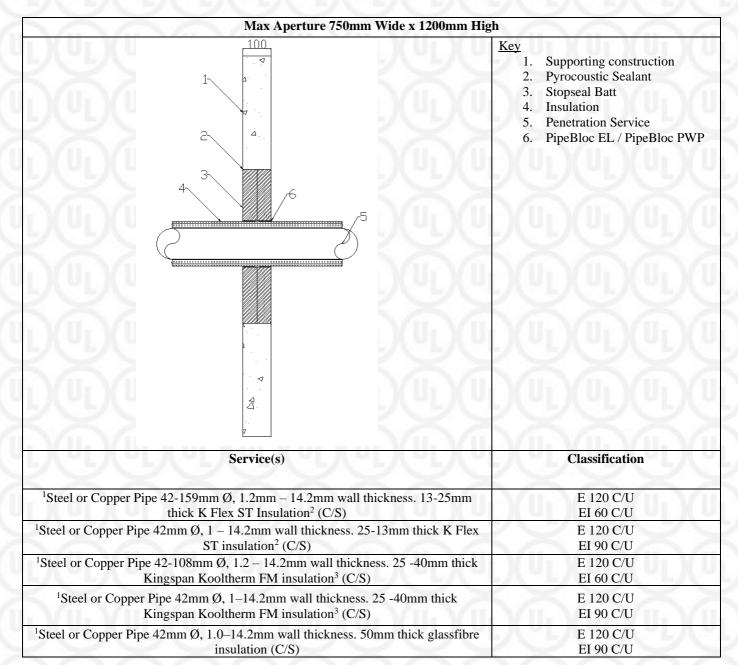


Certificate No. Page Date of Issue UL-EU-00771-CPR 28/157 2015-04-19





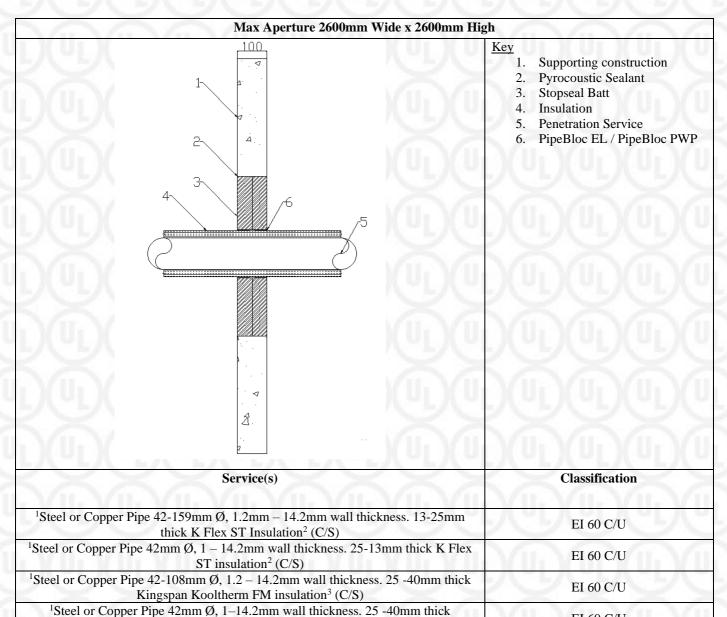
Certificate No. Page Date of Issue UL-EU-00771-CPR 29/157 2015-04-19



<sup>1</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the Stopseal Fire Batt
 <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1
 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1



Certificate No. Page Date of Issue UL-EU-00771-CPR 30/157 2015-04-19



insulation (C/S)
 <sup>1</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the Stopseal Fire Batt
 <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1
 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

Kingspan Kooltherm FM insulation<sup>3</sup> (C/S) <sup>1</sup>Steel or Copper Pipe 42mm Ø, 1.02–14.2mm wall thickness. 50mm thick glassfibre

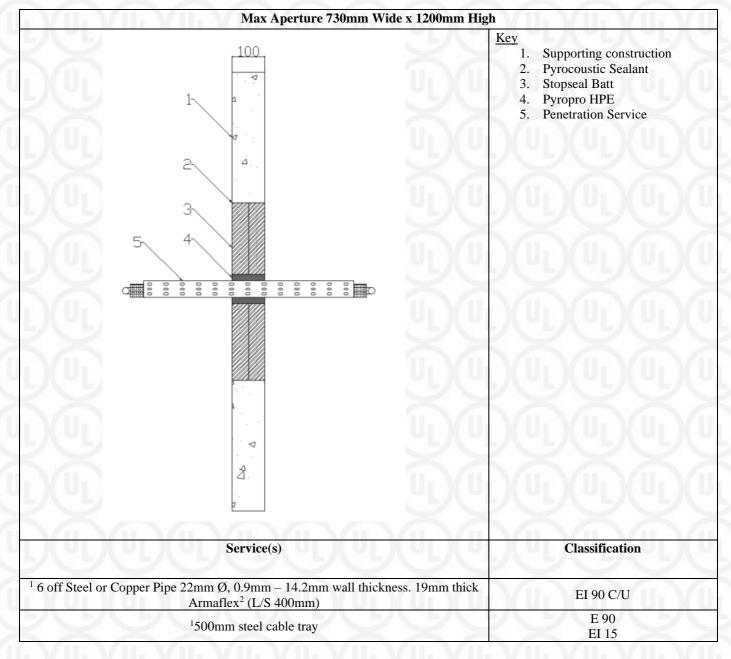
Form-ULID-006104 (DCS:27-CP-F0855) 5.0



EI 60 C/U

EI 60 C/U

Certificate No. Page Date of Issue UL-EU-00771-CPR 31/157 2015-04-19

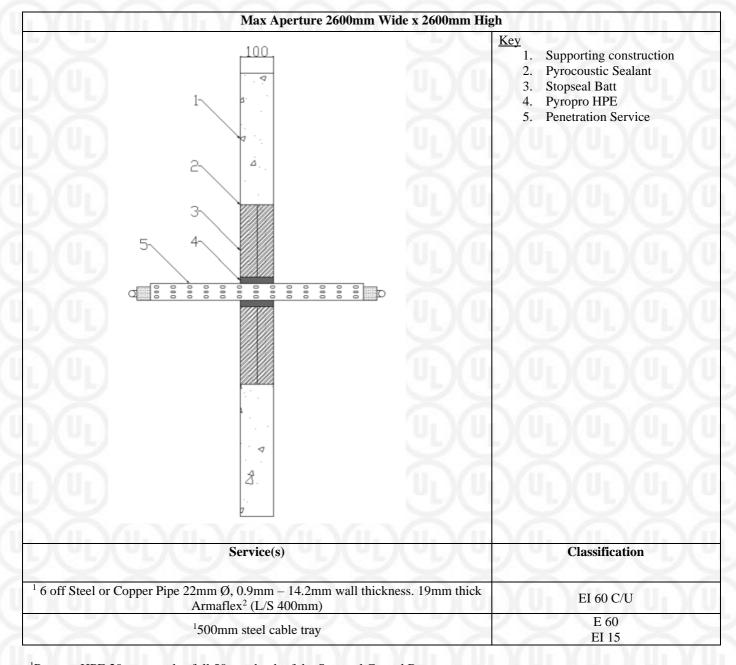


 $^1\text{Pyropro}$  HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt  $^2\text{Or}$  equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1



Certificate No. Page **Date of Issue** 

UL-EU-00771-CPR 32/157 2015-04-19



<sup>1</sup>Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL - s2, d0 or better to EN 13501-1



Certificate No.

**Date of Issue** 

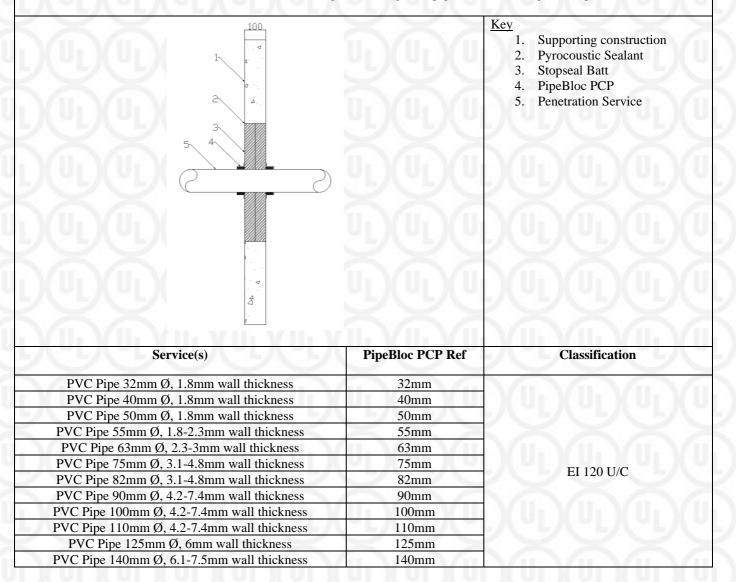
Page

UL-EU-00771-CPR 33/157 2015-04-19

Double Layer Stopseal Fire Batt 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 Stopseal Fire Batt



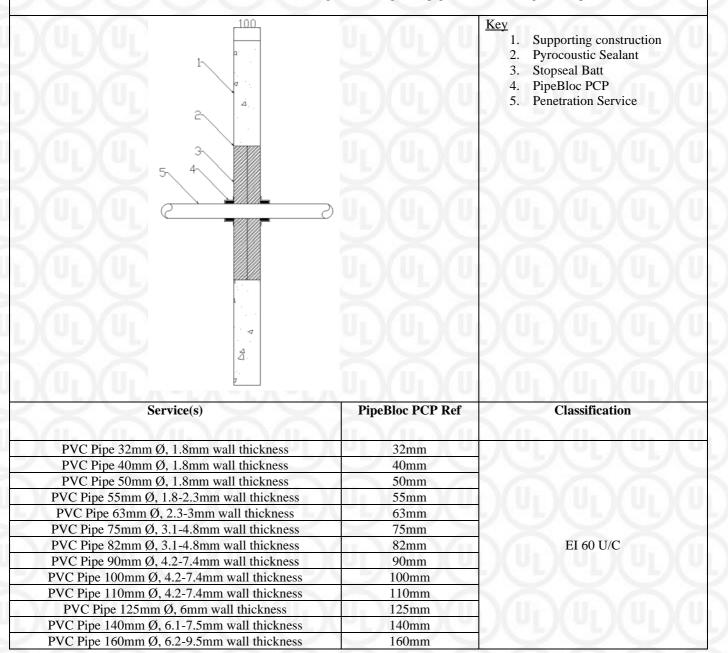
UL-EU-00771-CPR

Certificate No. Page

Page 34/157 Date of Issue 2015-04-19

#### 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 Stopseal Fire Batt





Certificate No.

PP Pipe 63mm Ø, 2.9-4.4mm wall thickness

PP Pipe 75mm Ø, 2.8-6.7mm wall thickness

PP Pipe 82mm Ø, 2.8-6.7mm wall thickness

PP Pipe 90mm Ø, 2.7-10mm wall thickness

PP Pipe 100mm Ø, 2.7-10mm wall thickness

PP Pipe 110mm Ø, 2.7-10mm wall thickness

PP Pipe 125mm Ø, 3.1mm wall thickness

PP Pipe 140mm Ø, 3.5-8mm wall thickness

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

UL-EU-00771-CPR

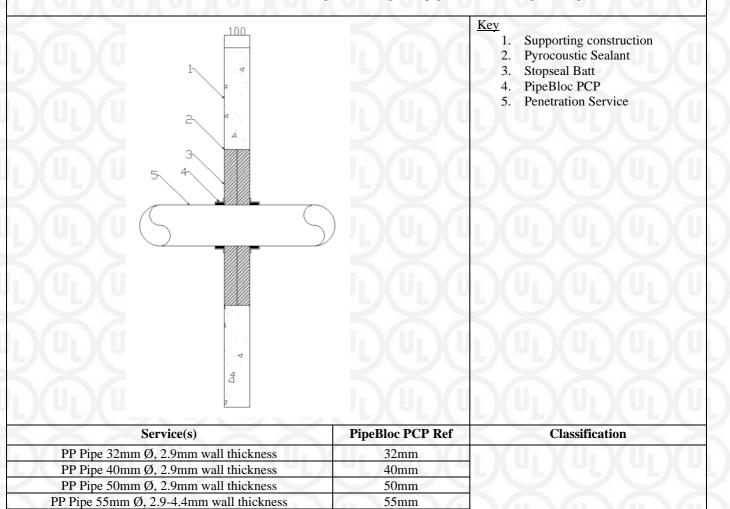
35/157 2015-04-19

Date of Issue

Page

#### 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 Stopseal Fire Batt



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

63mm

75mm

82mm

90mm

100mm

110mm

125mm

140mm

160mm

EI 120 U/C

Certificate No.

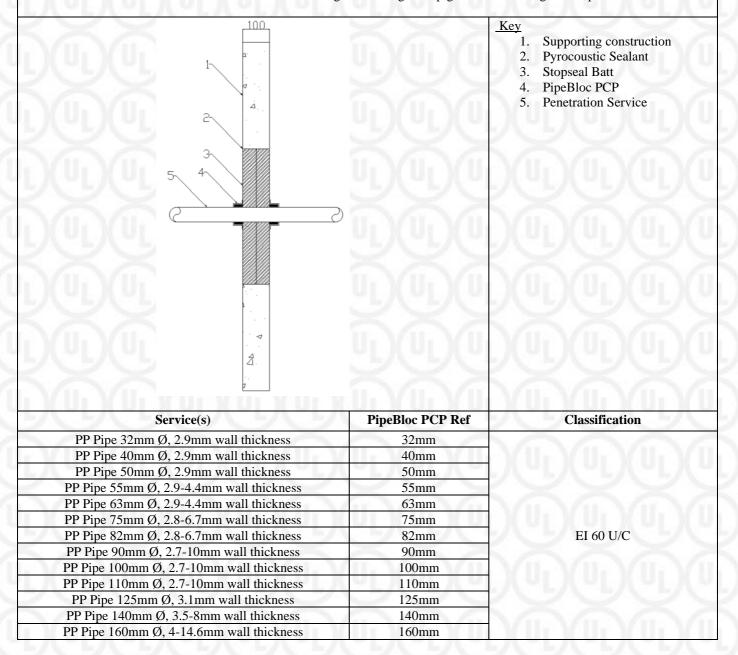
UL-EU-00771-CPR

36/157

Page 2015-04-19 **Date of Issue** 

#### 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 Stopseal Fire Batt



Certificate No.

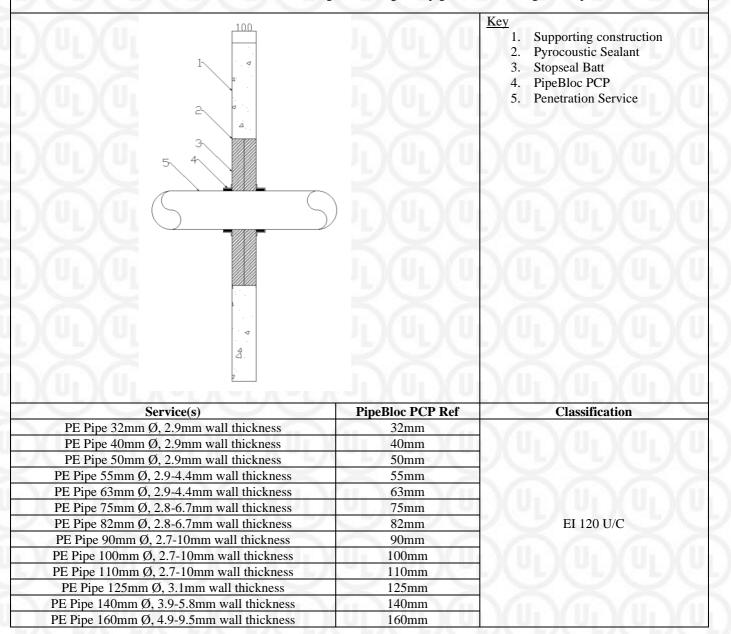
UL-EU-00771-CPR 37/157

Page 37/157 Issue 2015-04-19

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 Stopseal Fire Batt



Certificate No.

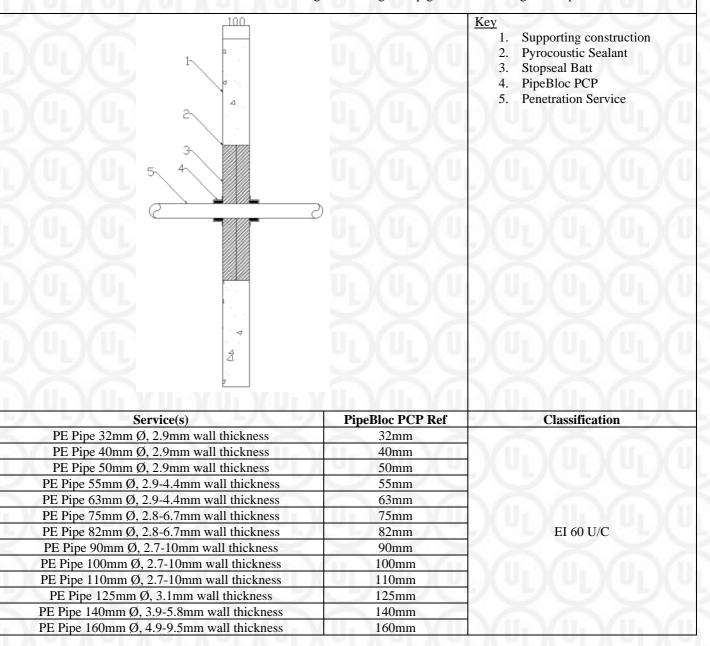
UL-EU-00771-CPR

38/157

Page 2015-04-19 **Date of Issue** 

#### 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 Stopseal Fire Batt



Certificate No. UL-EU-00771-CPR Page 39/157 Date of Issue 2015-04-19

Double Layer Stopseal Fire Batt 50mm, Insulated Plastic Pipes

(Penetrations positioned as per option 1 or 2 below	<b>30mm Wide x 1200mm High</b> w, 100mm distance between se	
		Key         1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       PipeBloc EL / PipeBloc PWP         5.       Insulation         6.       Penetration Service
2. ;	$\times$ $\times$ $\times$	
Service(s)	PipeBloc EL / PipeBloc PWP Ref	Classification
Service(s) PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S)	PWP Ref	Classification E 120 U/C EI 90 U/C
Service(s)  PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm	PWP Ref 3 x 2mm thickness	E 120 U/C
Service(s) PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm	PWP Ref         3 x 2mm thickness         3 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C
Service(s) PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm	PWP Ref         3 x 2mm thickness         3 x 2mm thickness         5 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C EI 90 U/C
Service(s) PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O <sup>2</sup> (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick	PWP Ref3 x 2mm thickness3 x 2mm thickness5 x 2mm thickness5 x 2mm thickness5 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C
Service(s) PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm	PWP Ref3 x 2mm thickness3 x 2mm thickness5 x 2mm thickness5 x 2mm thickness3 x 2mm thickness3 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C EI 90 U/C E 120 U/C

<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1



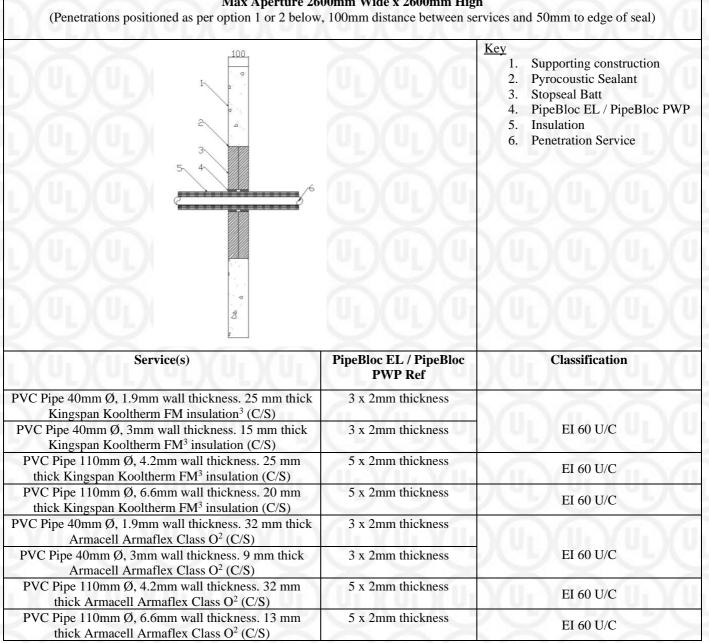
Certificate No.

UL-EU-00771-CPR 40/157 2015-04-19

**Date of Issue** 

Page

Max Aperture 2600mm Wide x 2600mm High

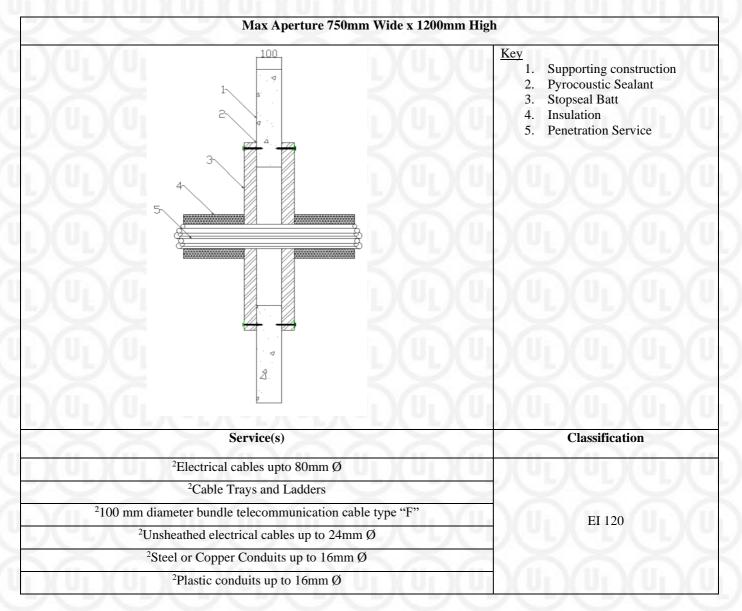


<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1



Certificate No. Page Date of Issue UL-EU-00771-CPR 41/157 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Electrical Cables and Conduits

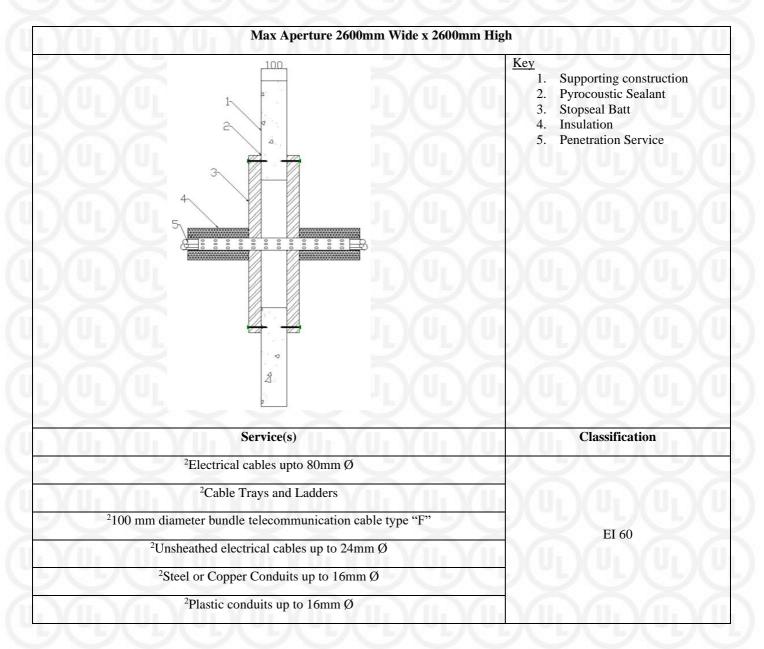


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

<sup>2</sup>Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m<sup>3</sup> Stonewool (L/I 300mm)



Certificate No. Page Date of Issue UL-EU-00771-CPR 42/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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

<sup>2</sup>Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m<sup>3</sup> Stonewool (L/I 300mm)



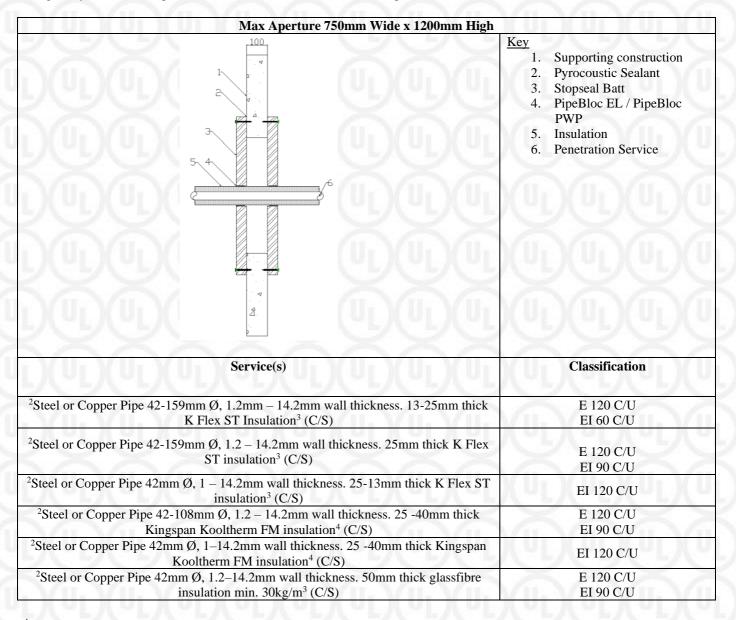
Certificate No.

**Date of Issue** 

Page

UL-EU-00771-CPR 43/157 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Insulated Metallic Pipes

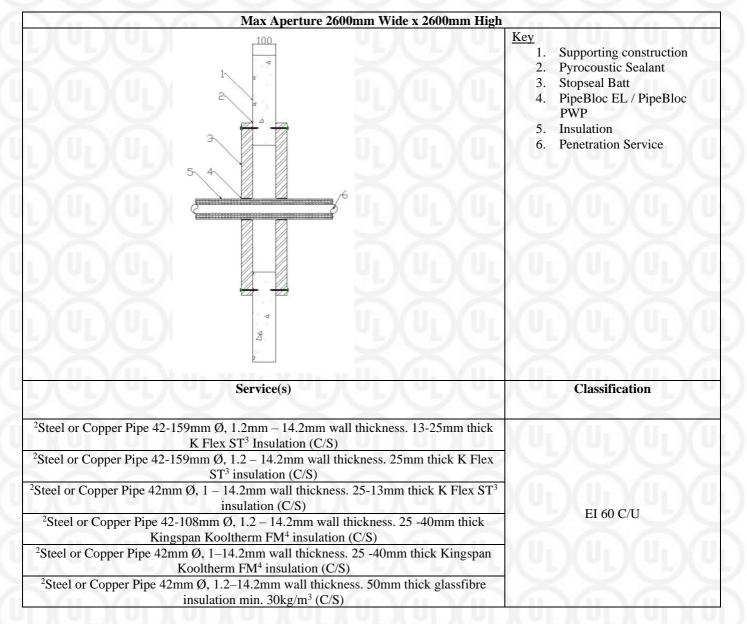


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

<sup>2</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation <sup>3</sup>Or 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. Page Date of Issue UL-EU-00771-CPR 44/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.

<sup>2</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation <sup>3</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1 <sup>4</sup>Or equivalent Phenleic form nine insulation elastified PL – s1 d0 or better to EN 12501-1

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



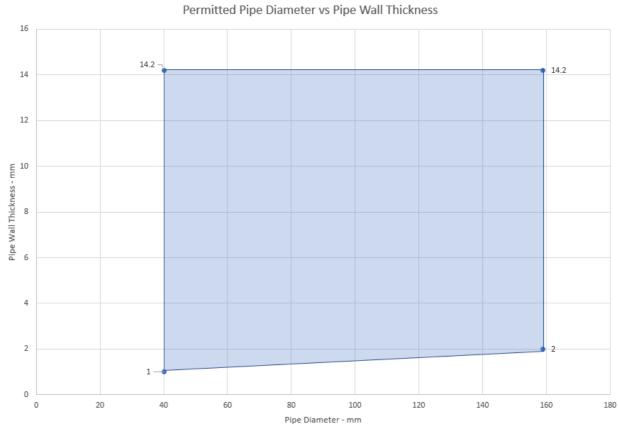
Certificate No. Page Date of Issue UL-EU-00771-CPR 45/157 2015-04-19

Max Aperture 750mm Wide x 1200mm High	Key
	<ol> <li>Supporting construction</li> <li>Pyrocoustic Sealant</li> <li>Stopseal Batt</li> <li>Insulation</li> <li>Penetration Service</li> </ol>
Service(s)	Classification
teel or Copper Pipe 42-159mm Ø, 1.0mm – 14.2mm wall thickness (see graph below). 25mm thick foil faced glassfibre insulation min. 30kg/m <sup>3</sup> (C/S)	E 120 C/U EI 90 C/U
l or Copper Pipe 42mm Ø, 1mm – 14.2mm wall thickness. 25mm thick foil faced glassfibre insulation min. 30kg/m <sup>3</sup> (C/S)	EI 120 C/U

<sup>1</sup>Patress installation of Stopseal Coated Batt. 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-00771-CPRPage46/157Date of Issue2015-04-19

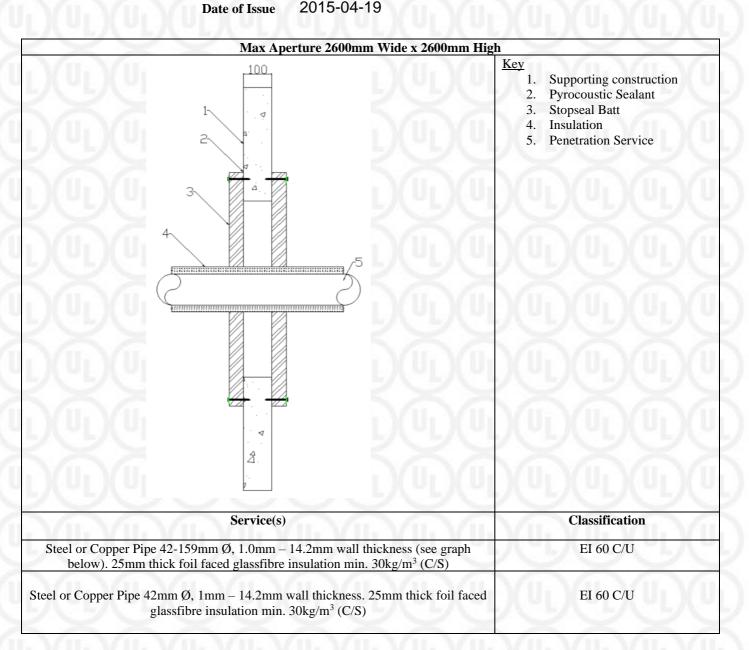




Certificate No.

Page

UL-EU-00771-CPR 47/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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-00771-CPR Page 48/157 Date of Issue 2015-04-19

Permitted Pipe Diameter vs Pipe Wall Thickness 16 14.2 -14.2 14 12 Pipe Wall Thickness - mm a 800 01 4 2 1 -0 0 20 40 60 80 100 120 140 160 Pipe Diameter - mm

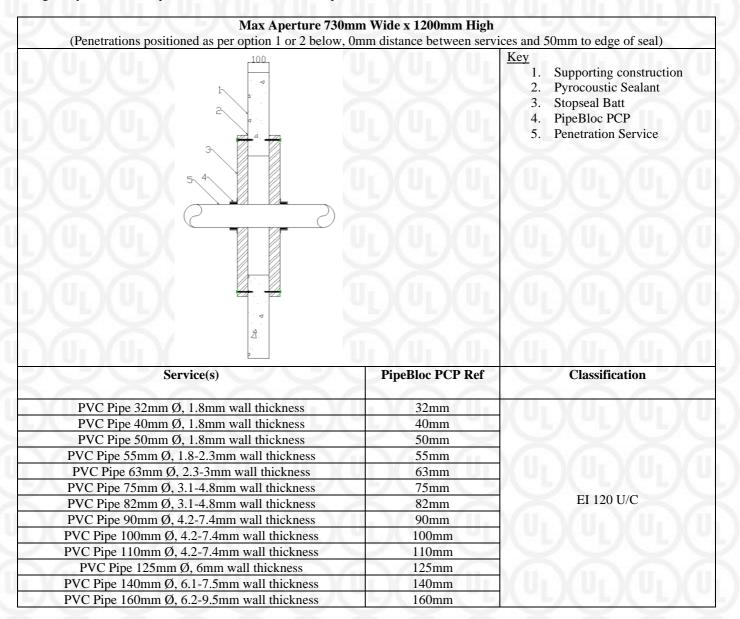
Form-ULID-006104 (DCS:27-CP-F0855) 5.0



180

Certificate No. UL-EU-00771-CPR Page 49/157 Date of Issue 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Plastic Pipes



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.

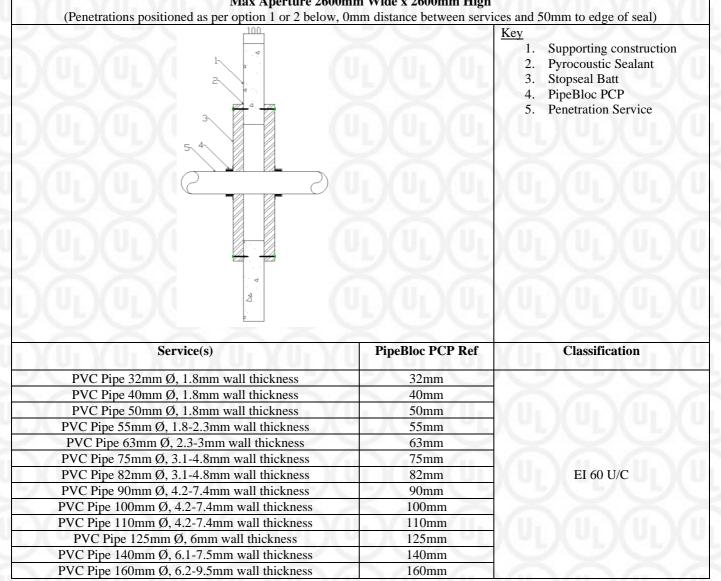
Collars secured both faces of the substrate utlising 80mm long pig tail screw through to the Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 50/157 2015-04-19

Date of Issue



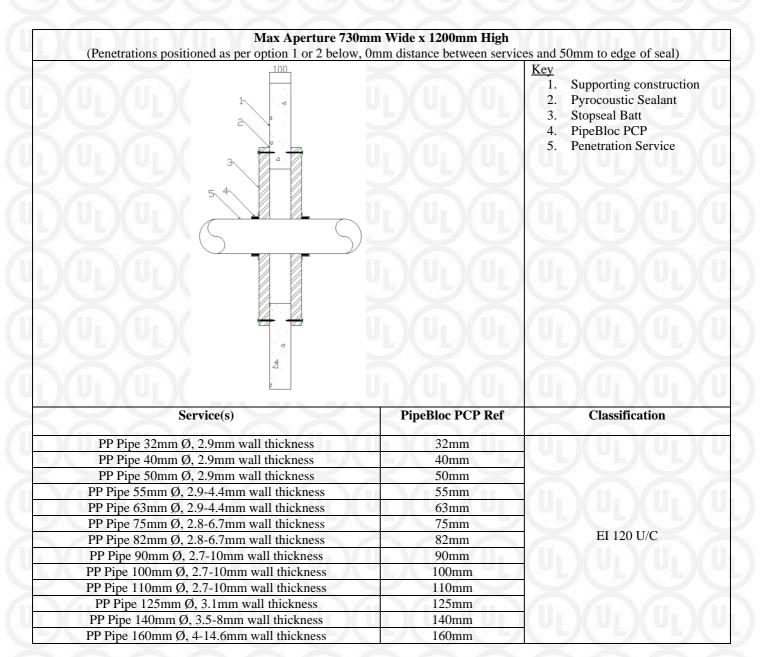


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the Stopseal Fire Batt

Certificate No. Page UL-EU-00771-CPR 51/157 2015-04-19

Date of Issue



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.

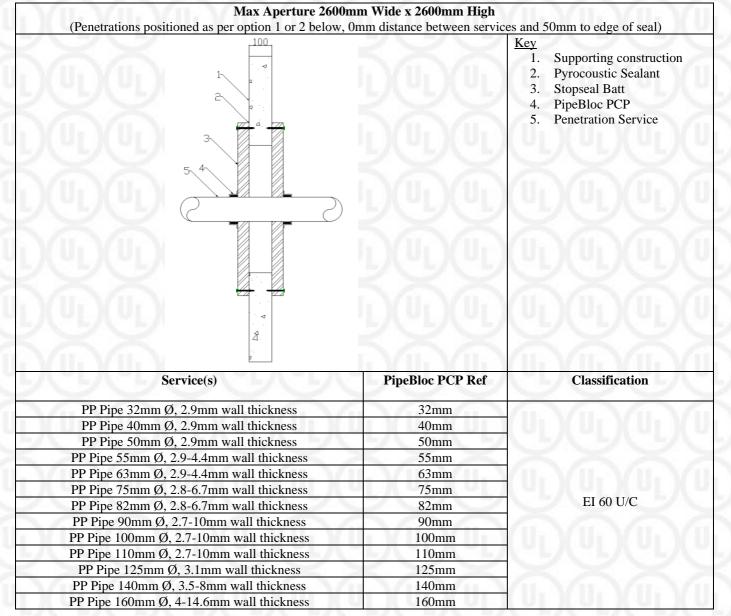
Collars secured both faces of the substrate utlising 80mm long pig tail screw through to the Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 52/157 2015-04-19

Date of Issue





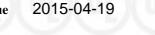
<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

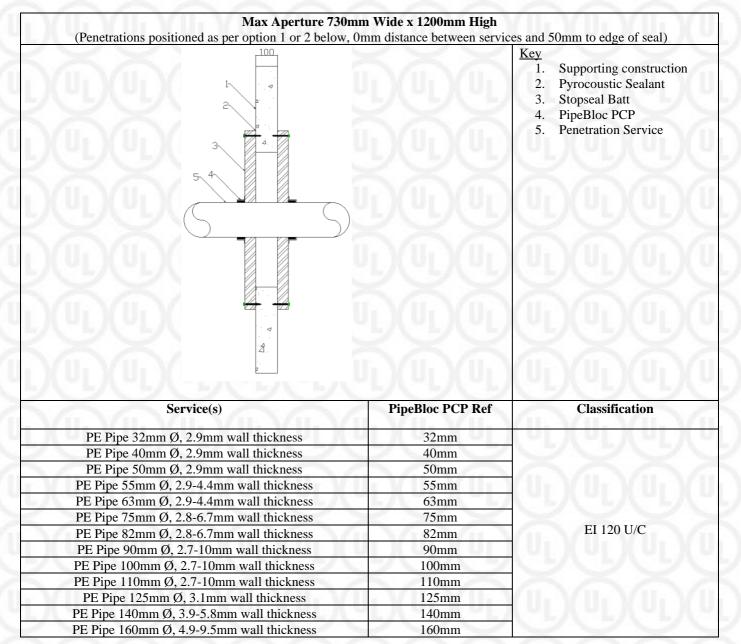
Collars secured both faces of the substrate utlising 80mm long pig tail screw through to the Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 53/157

Date of Issue





<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.

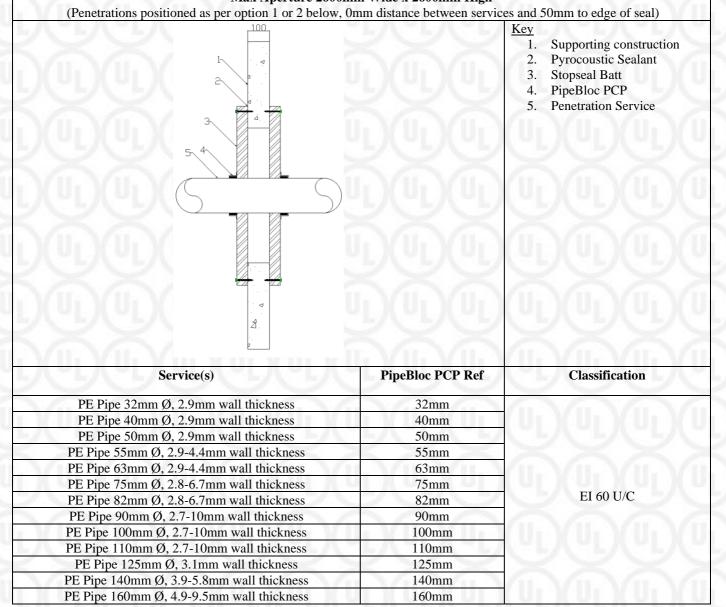
Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 54/157 2015-04-19

Date of Issue





<sup>1</sup>Patress installation of Stopseal Coated Batt. 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 Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 55/157

Date of Issue 2015-04-19

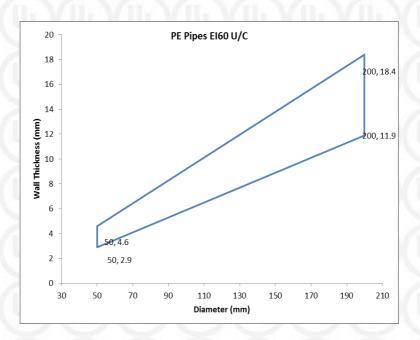
Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) 100 Key Supporting construction 1. **Pyrocoustic Sealant** 2. Stopseal Batt 3. 4. PipeBloc PCP Penetration Service 5. -1 2 Scope and Classifications as below 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)

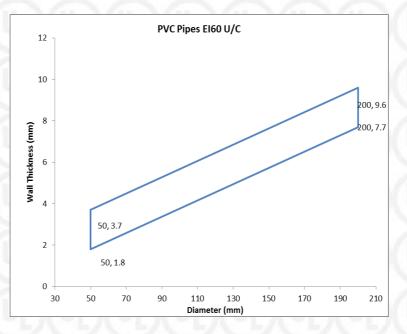
<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the Stopseal Fire Batt



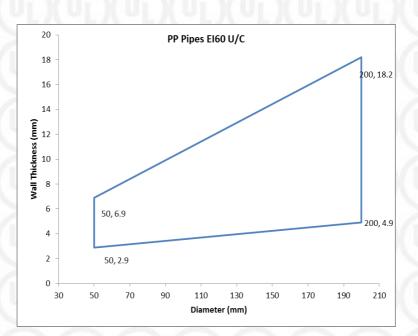
Certificate No. UL-EU-00771-CPR Page 56/157 Date of Issue 2015-04-19







Certificate No. UL-EU-00771-CPR Page 57/157 Date of Issue 2015-04-19

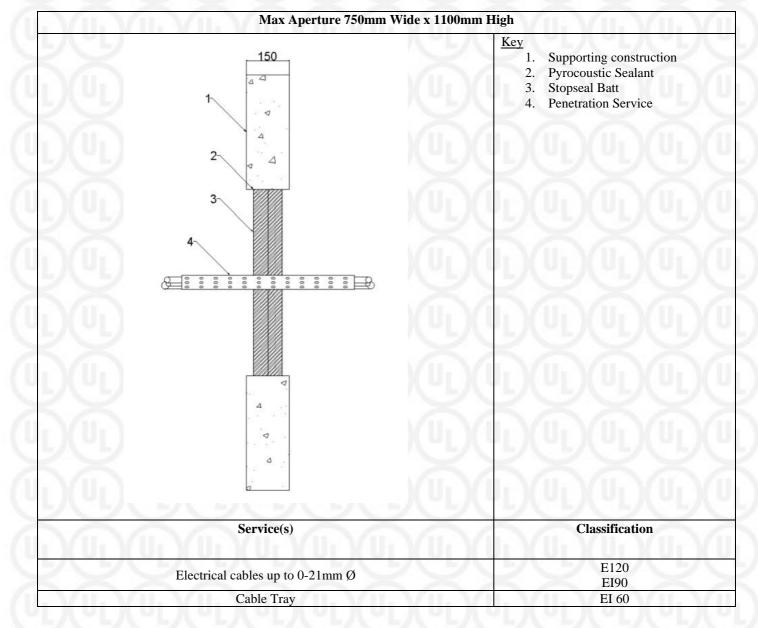




Certificate No. UL-EU-00771-CPR Page 58/157 Date of Issue 2015-04-19

#### **Rigid Walls Minimum Thickness 150mm**

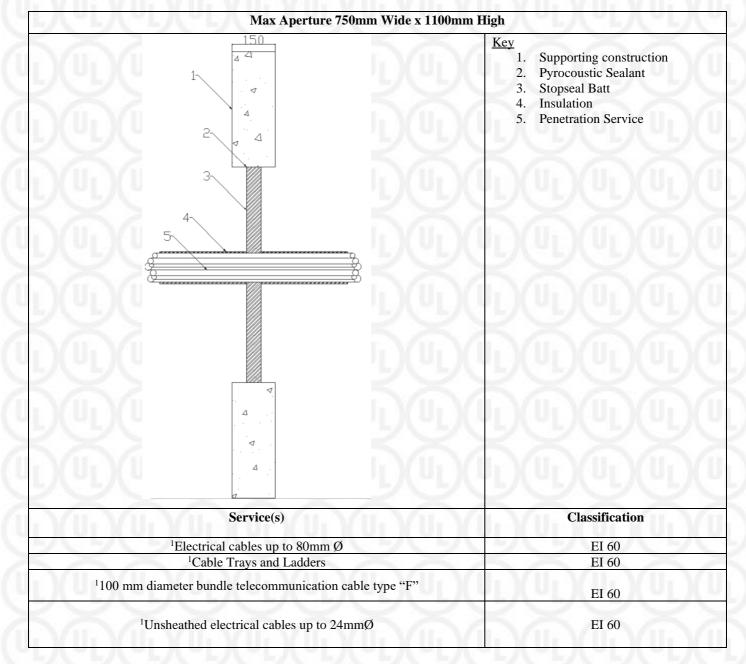
Double Layer, Stopseal Fire Batt 50mm, Electrical Cables





Certificate No. UL-EU-00771-CPR Page 59/157 Date of Issue 2015-04-19

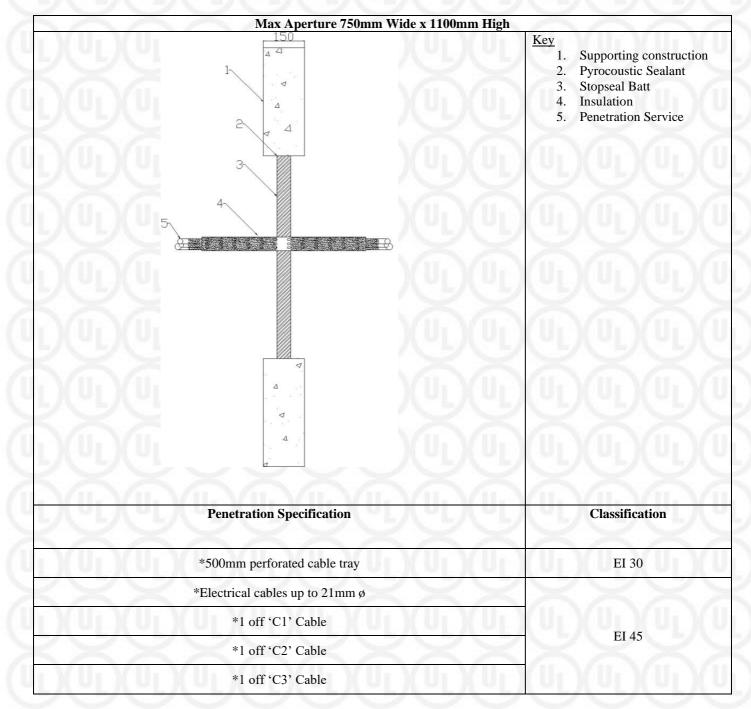
Single Layer, Stopseal Fire Batt 50mm, Electrical Cables



<sup>1</sup>Cables and cable trays wrapped with a single layer of 6mm thick FSi Thermal Defense Wrap (L/I 300mm)



Certificate No. Page Date of Issue UL-EU-00771-CPR 60/157 2015-04-19



\*All cables coated with 2mm DFT PST Coating 300mm along the cables both sides of the seal



Certificate No. UL-EU-00771-CPR Page 61/157 Date of Issue 2015-04-19

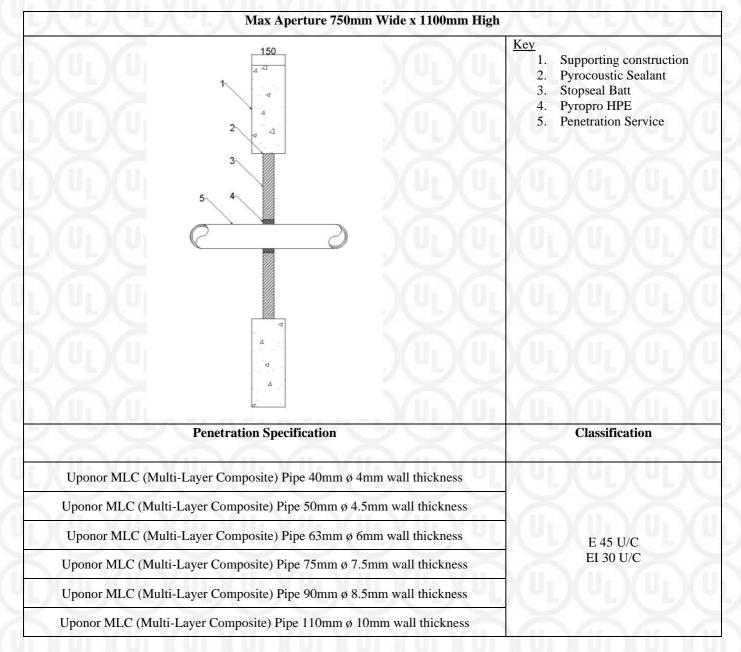
Single Layer, Stopseal Fire Batt 50mm, Insulated Metallic Pipes

Max Aperture 750mm Wide x 1100mm I	High
	Key         1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       Insulation         5.       Penetration Service
Service(s)	Classification
<sup>1</sup> Steel or Copper Pipe 108mm Ø, 1.5mm – 14.2mm Wall Thickness. (C/S) 40mm stone wool insulation (min 140Kg/m <sup>3</sup> )	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/m <sup>3</sup> )	EI45 C/U
Steel or Copper Pipe 42mm – 159mm Ø, 2mm – 14.2mm wall thickness. (L/I 300mm) 40mm stone wool insulation (min 40Kg/m <sup>3</sup> )	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/m <sup>3</sup> )	E45 C/U EI30 C/U



Certificate No. UL-EU-00771-CPR Page 62/157 Date of Issue 2015-04-19

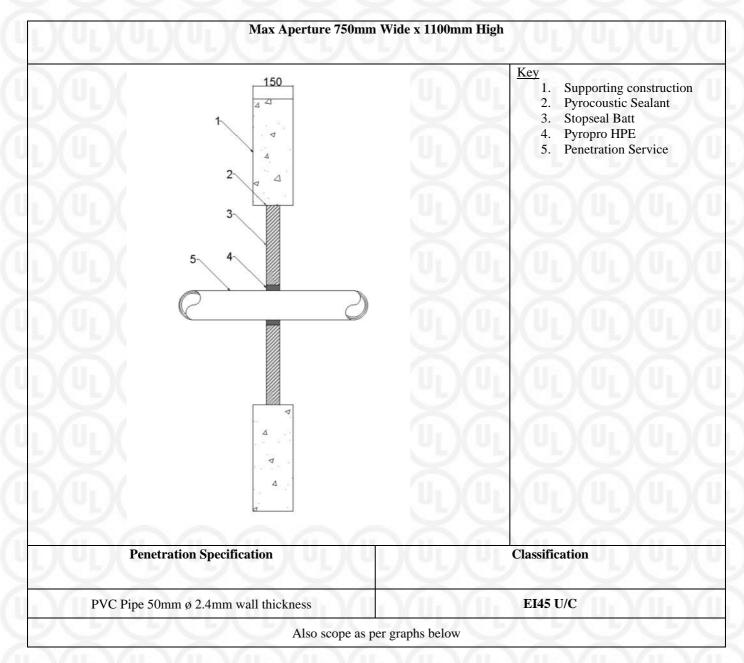
Single Layer, Stopseal Fire Batt 50mm, Plastic Pipes



Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



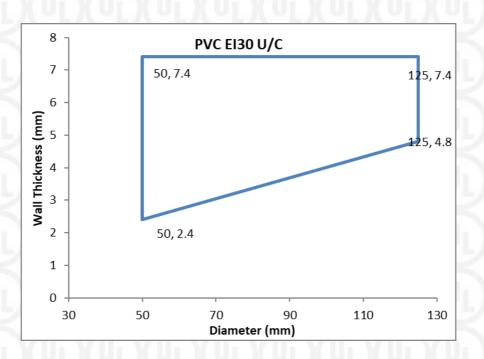
Certificate No. Page Date of Issue UL-EU-00771-CPR 63/157 2015-04-19



Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



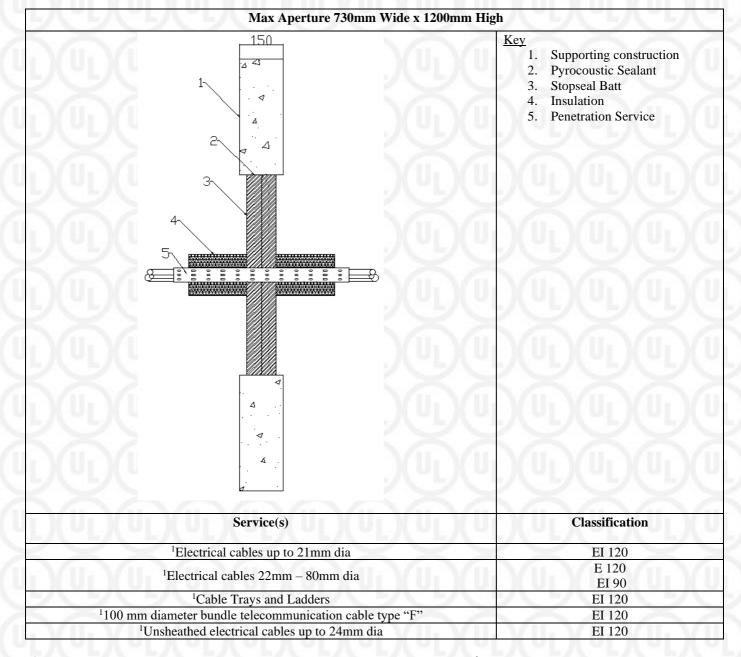
Certificate No. UL-EU-00771-CPR Page 64/157 Date of Issue 2015-04-19





Certificate No. UL-EU-00771-CPR Page 65/157 Date of Issue 2015-04-19

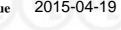
Double Layer, Stopseal Fire Batt 50mm, Electrical Cables

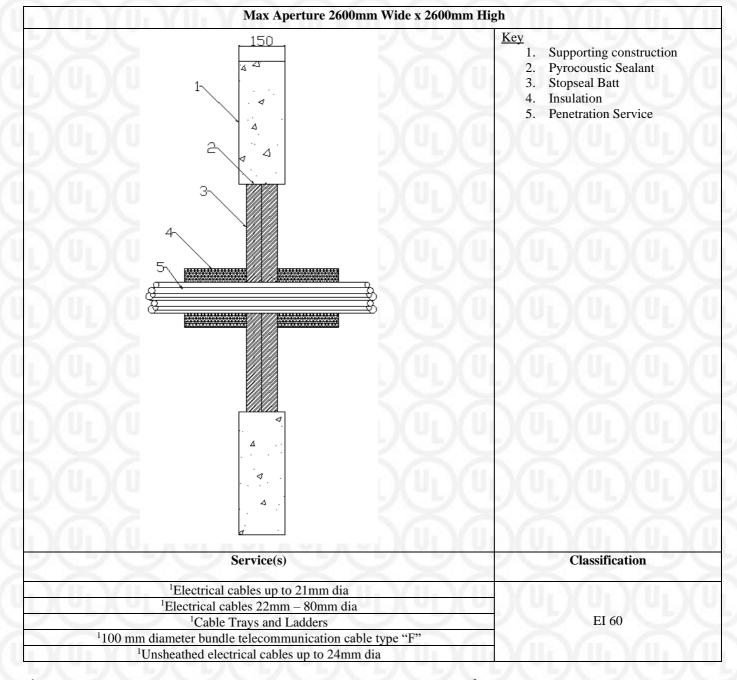


<sup>1</sup>Cables and cable trays wrapped with Stone Wool Insulation 45mm thick, 40Kg/m<sup>3</sup> (L/I 200mm)



Certificate No. Page **Date of Issue**  UL-EU-00771-CPR 66/157 2015-04-19

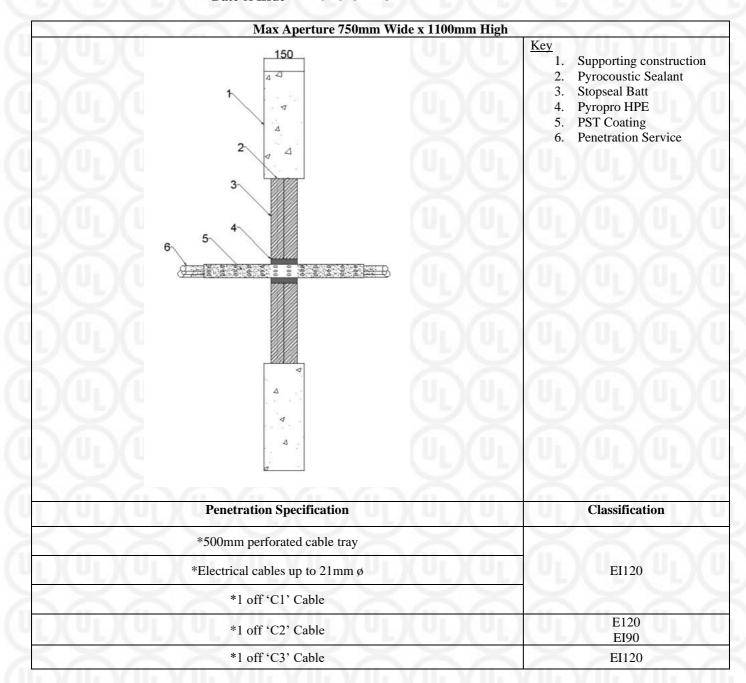




<sup>1</sup>Cables and cable trays wrapped with Stone Wool Insulation 45mm thick, 40Kg/m<sup>3</sup> (L/I 200mm)



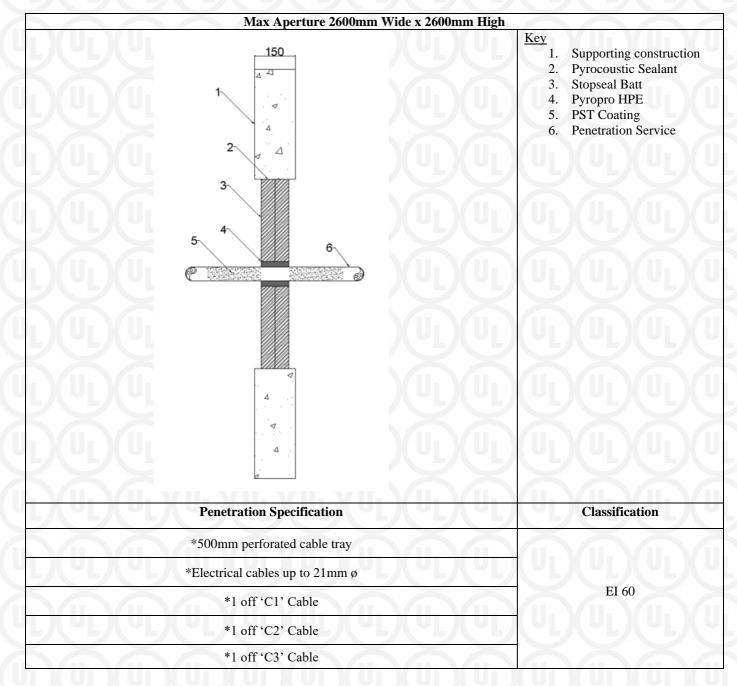
Certificate No. Page Date of Issue UL-EU-00771-CPR 67/157 2015-04-19



\*All cables coated with 2mm DFT PST Coating 300mm along the cables both sides of the seal Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



Certificate No. Page Date of Issue UL-EU-00771-CPR 68/157 2015-04-19

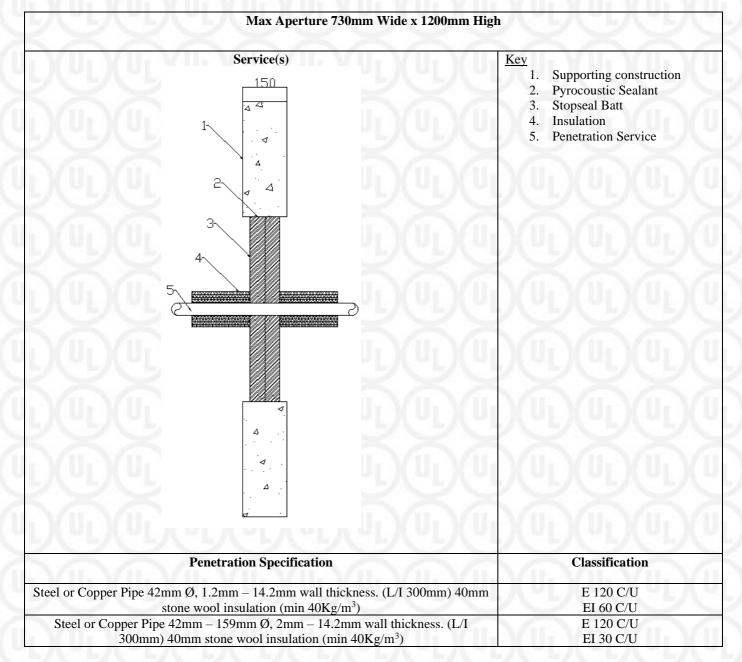


\*All cables coated with 2mm DFT PST Coating 300mm along the cables both sides of the seal Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



Certificate No. UL-EU-00771-CPR Page 69/157 Date of Issue 2015-04-19

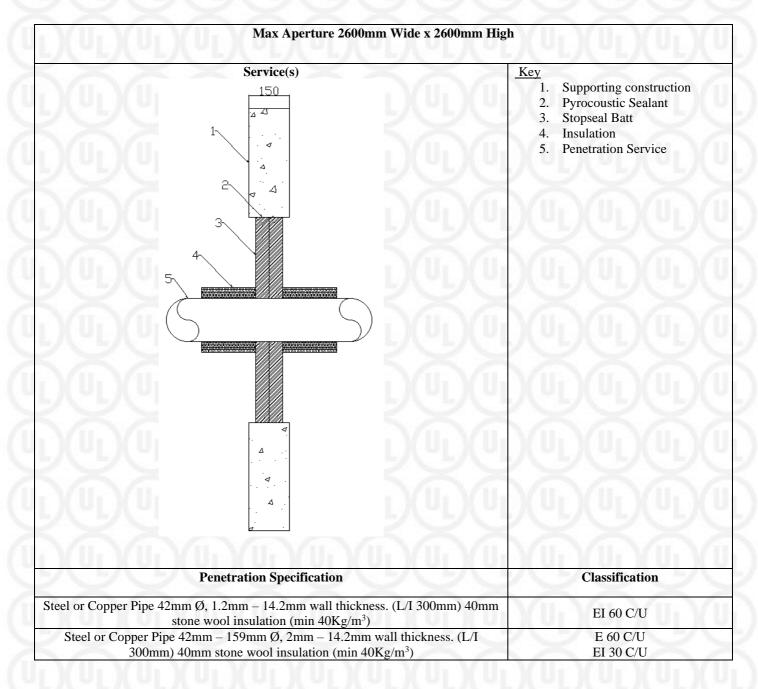
Double Layer, Stopseal Fire Batt 50mm, Insulated Metallic Pipes





Certificate No. Ul Page 70 Date of Issue 20

UL-EU-00771-CPR 70/157 2015-04-19





Certificate No. Page UL-EU-00771-CPR 71/157

Date of Issue

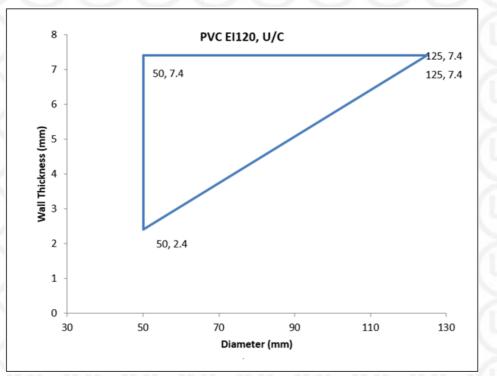
Issue 2015-04-19

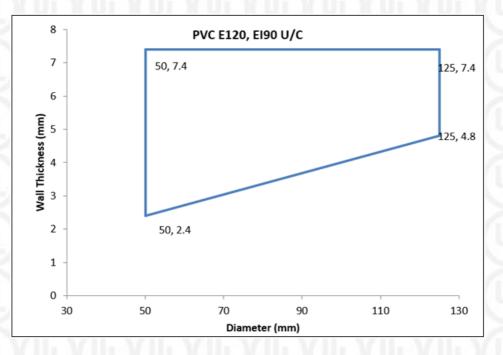
Max Aperture 750mm Wide x 1100mm High	I. MIL VII. VII. VII.
	Key1.Supporting construction2.Pyrocoustic Sealant3.Stopseal Batt4.Pyropro HPE5.Penetration Service

Penetration Specification	Pyropro HPE	Classification
Pipe Diameters as below	20mm annulus, 25mm deep both faces of the Stopseal Coated Batt	See graphs below



Certificate No. UL-EU-00771-CPR Page 72/157 Date of Issue 2015-04-19







Certificate No.

UL-EU-00771-CPR 73/157

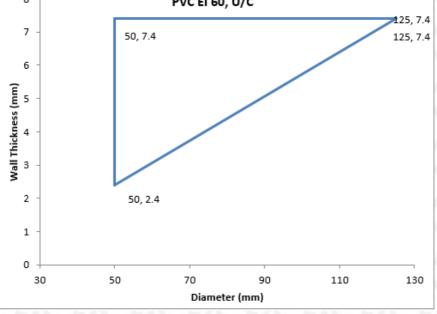
**Date of Issue** 

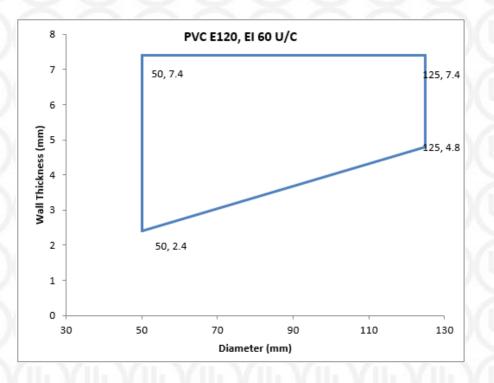
Page 2015-04-19

Max Aperture 2600mm Wide x 2600mm High		Key
		1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       Pyropro HPE         5.       Penetration Service
Penetration Specification	Ругорго НРЕ	Classification
Pipe Diameters as below	20mm annulus, 25mm deep both faces of the Stopseal Coated Batt	EI 60



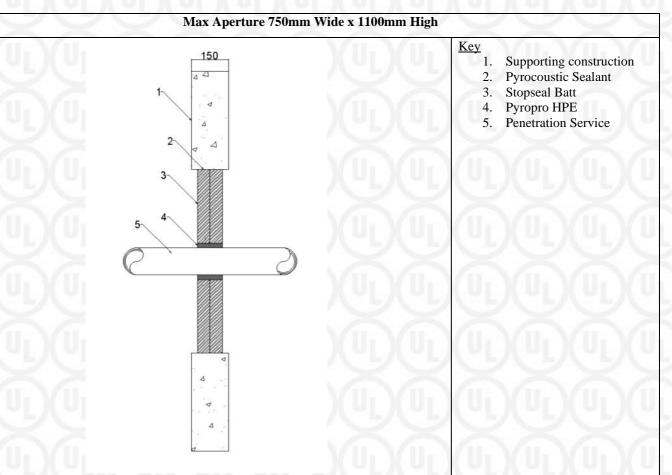








Certificate No. UL-EU-00771-CPR Page 75/157 Date of Issue 2015-04-19

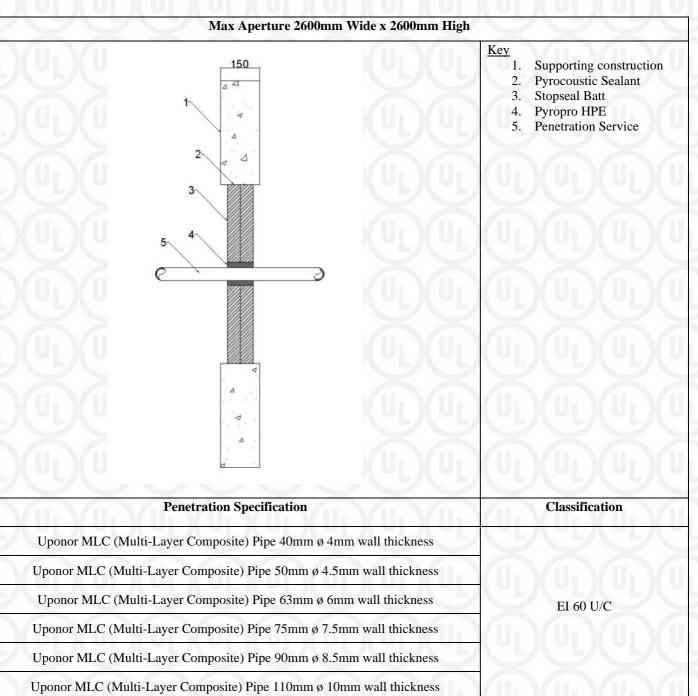


Penetration Specification	Classification
Uponor MLC (Multi-Layer Composite) Pipe 40mm ø 4mm wall thickness	EI 120 U/C
Uponor MLC (Multi-Layer Composite) Pipe 50mm ø 4.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 63mm ø 6mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 75mm ø 7.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 90mm ø 8.5mm wall thickness	
Uponor MLC (Multi-Layer Composite) Pipe 110mm ø 10mm wall thickness	

Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



Certificate No. UL-EU-00771-CPR Page 76/157 Date of Issue 2015-04-19



Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



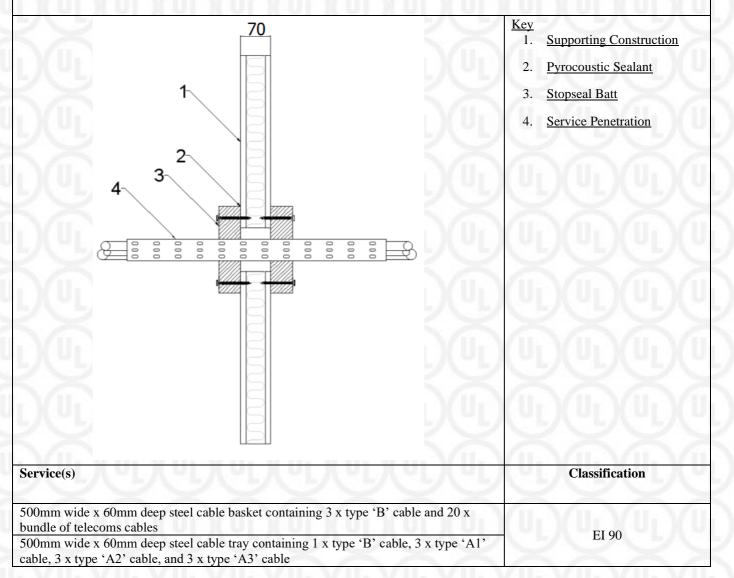
Certificate No.

UL-EU-00771-CPR 77/157 Page 2015-04-19 **Date of Issue** 

### **Flexible Walls Minimum Thickness 70mm**

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables

Max Aperture 570mm Wide x 200mm High

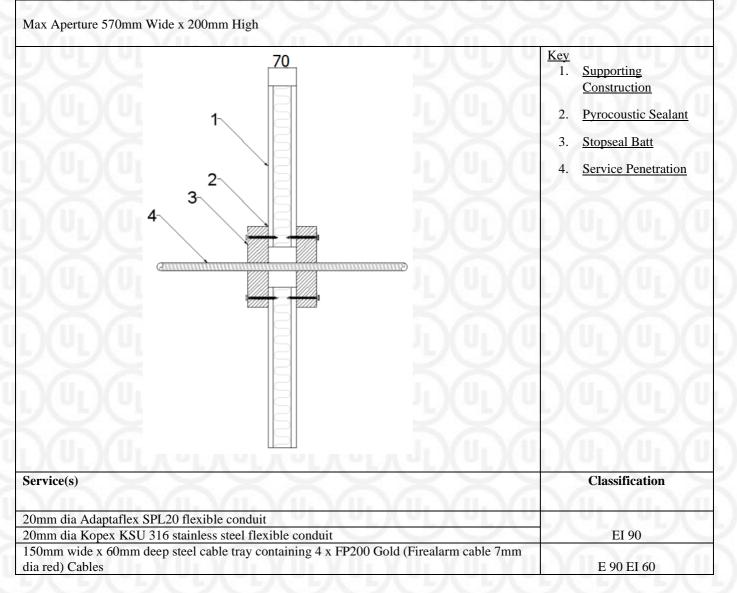


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-00771-CPR Page 78/157 Date of Issue 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Conduits



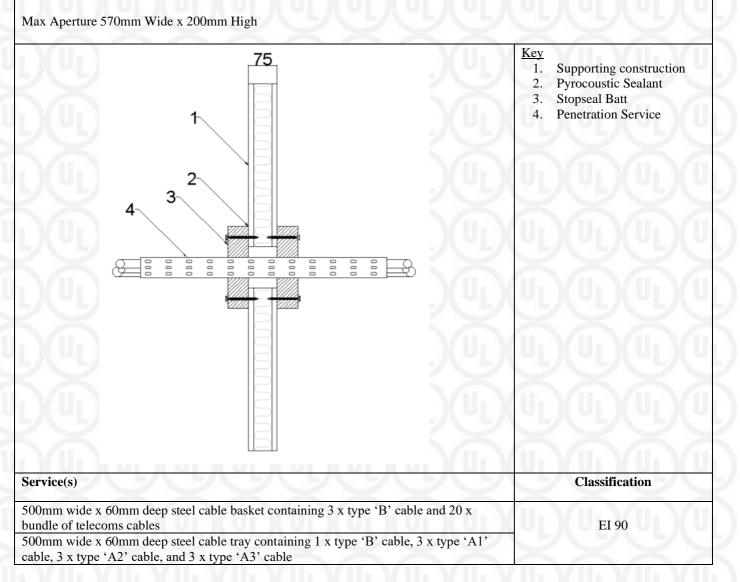
<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed on all edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-00771-CPR Page 79/157 Date of Issue 2015-04-19

### **Flexible Walls Minimum Thickness 75mm**

Single Layer Patress Stopseal Fire Batt 50mm, Electrical Cables

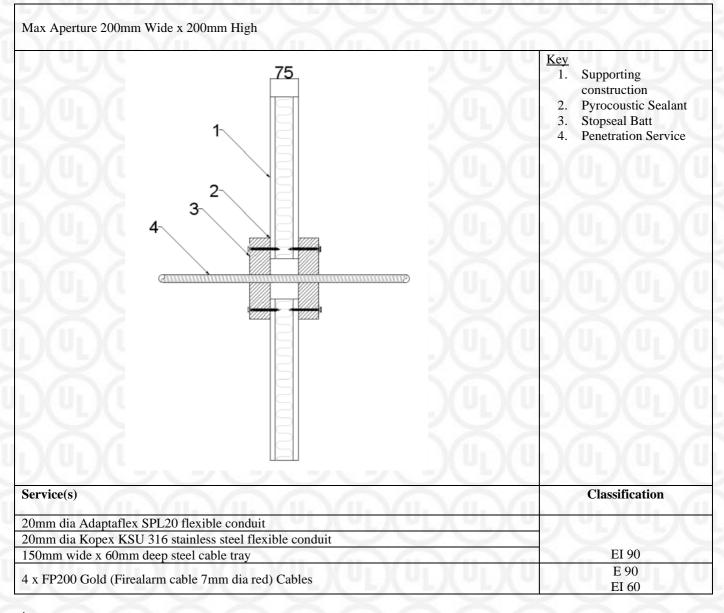


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres



Certificate No. UL-EU-00771-CPR Page 80/157 Date of Issue 2015-04-19

Single Layer Patress Stopseal Fire Batt 50mm, Electrical Cables and Conduits

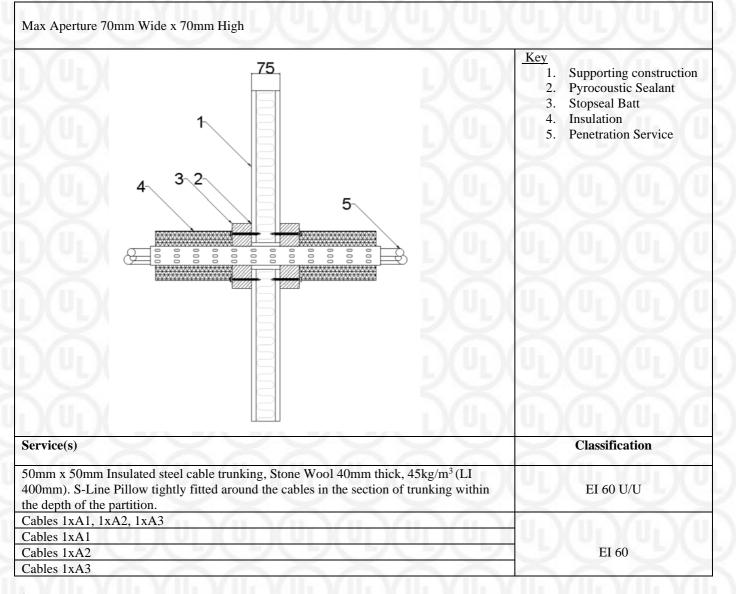


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

Certificate No. UL-EU-00771-CPR Page 81/157 Date of Issue 2015-04-19

### **Flexible Walls Minimum Thickness 75mm**

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Cable Trunking

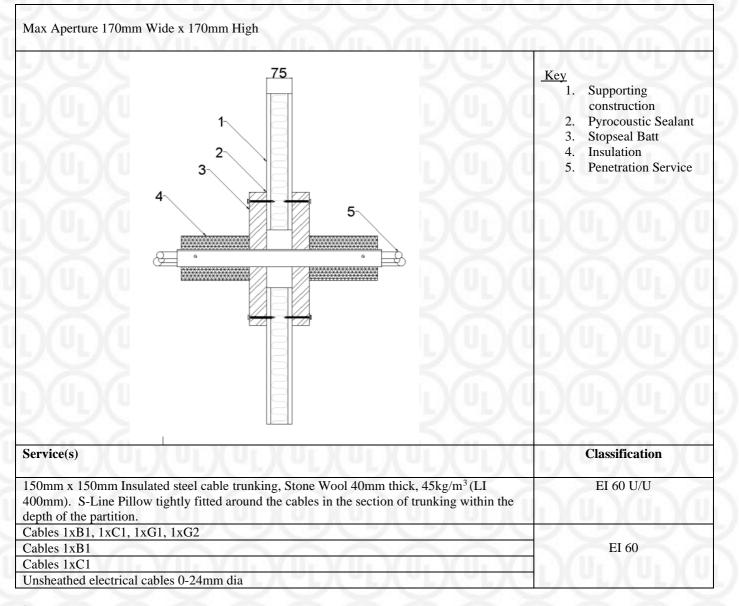


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 50mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

Certificate No. UL-EU-Page 82/157 Date of Issue 2015-0

UL-EU-00771-CPR 82/157 2015-04-19

Single Layer Pattress Stopseal Fire Batt 50mm, Electrical Cables and Cable Trunking



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.

**Date of Issue** 

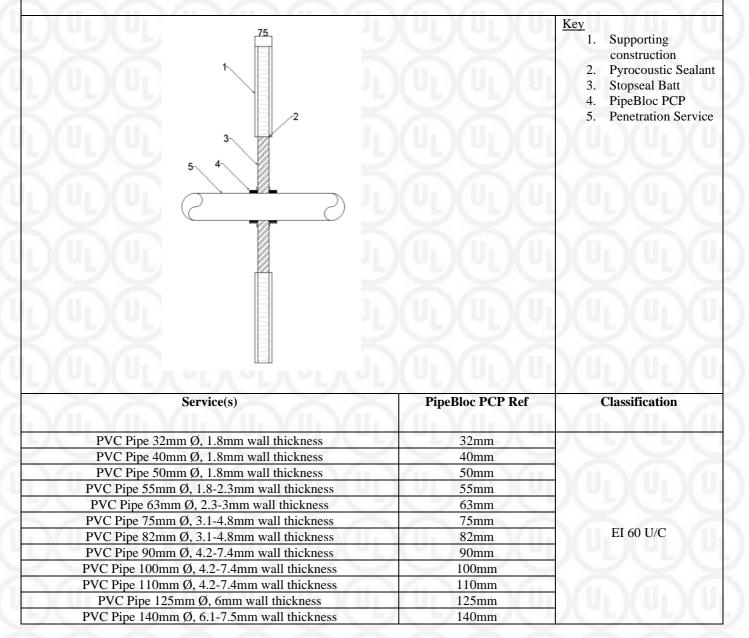
Page

UL-EU-00771-CPR 83/157 2015-04-19

Single Layer Stopseal Fire Batt 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 Stopseal Fire Batt

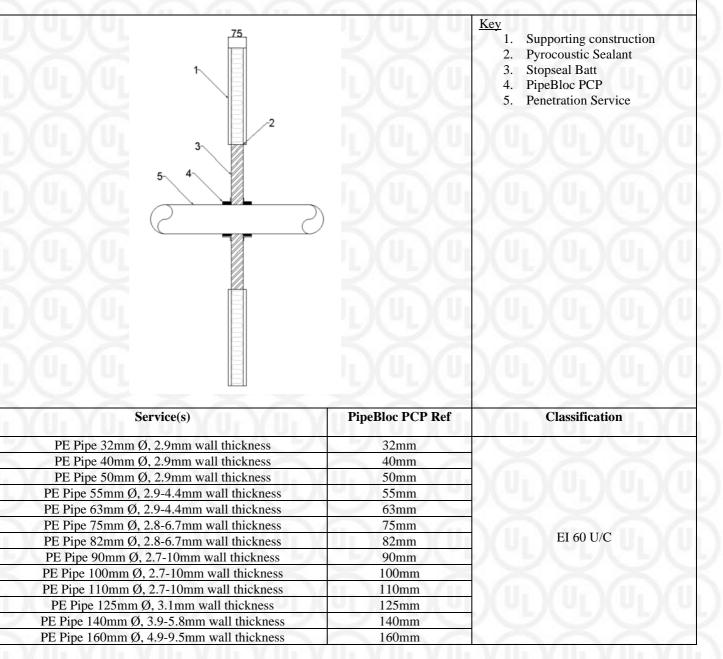




Certificate No. UL-EU-00771-CPR Page 84/157 Date of Issue 2015-04-19

#### 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 Stopseal Fire Batt





Certificate No. UL-EU-00771-CPR Page 85/157 Date of Issue 2015-04-19

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 Stopseal Fire Batt

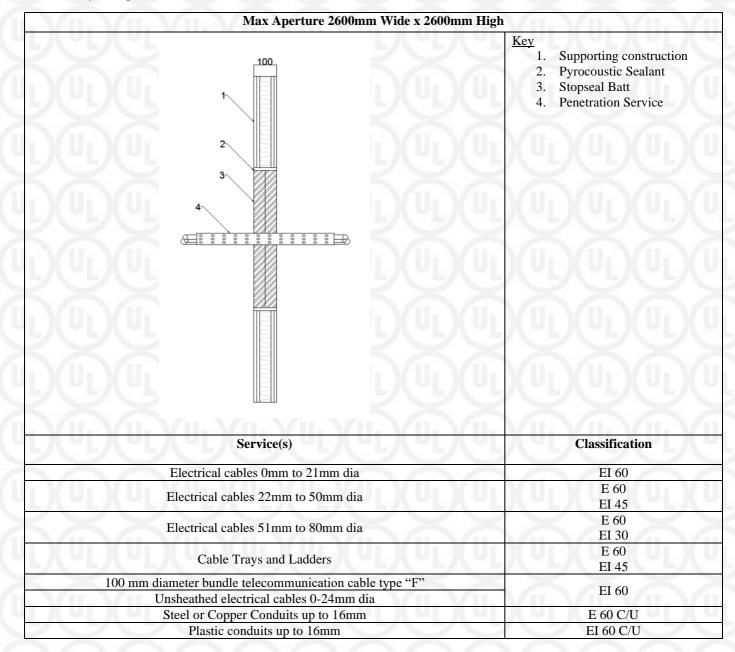
		<u>Key</u> <ol> <li>Supporting construction</li> <li>Pyrocoustic Sealant</li> <li>Stopseal Batt</li> <li>PipeBloc PCP</li> <li>Penetration Service</li> </ol>
	200	
Service(s)	PipeBloc PCP Ref	Classification
	for the for	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness	PipeBloc PCP Ref 32mm 40mm	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness	32mm	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness	32mm 40mm	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	32mm 40mm 50mm	Classification
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness	32mm 40mm 50mm 55mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness	32mm 40mm 50mm 55mm 63mm	Classification EI 60 U/C
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 75mm Ø, 2.8-6.7mm wall thickness	32mm 40mm 50mm 55mm 63mm 75mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 75mm Ø, 2.8-6.7mm wall thickness PP Pipe 82mm Ø, 2.8-6.7mm wall thickness	32mm 40mm 50mm 55mm 63mm 75mm 82mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 75mm Ø, 2.8-6.7mm wall thickness PP Pipe 82mm Ø, 2.8-6.7mm wall thickness PP Pipe 90mm Ø, 2.7-10mm wall thickness PP Pipe 100mm Ø, 2.7-10mm wall thickness	32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 75mm Ø, 2.8-6.7mm wall thickness PP Pipe 82mm Ø, 2.8-6.7mm wall thickness PP Pipe 90mm Ø, 2.7-10mm wall thickness	32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm 100mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
PP Pipe 32mm Ø, 2.9mm wall thickness PP Pipe 40mm Ø, 2.9mm wall thickness PP Pipe 50mm Ø, 2.9mm wall thickness PP Pipe 55mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 63mm Ø, 2.9-4.4mm wall thickness PP Pipe 75mm Ø, 2.8-6.7mm wall thickness PP Pipe 82mm Ø, 2.8-6.7mm wall thickness PP Pipe 90mm Ø, 2.7-10mm wall thickness PP Pipe 100mm Ø, 2.7-10mm wall thickness	32mm 40mm 50mm 55mm 63mm 75mm 82mm 90mm 100mm 110mm	) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (



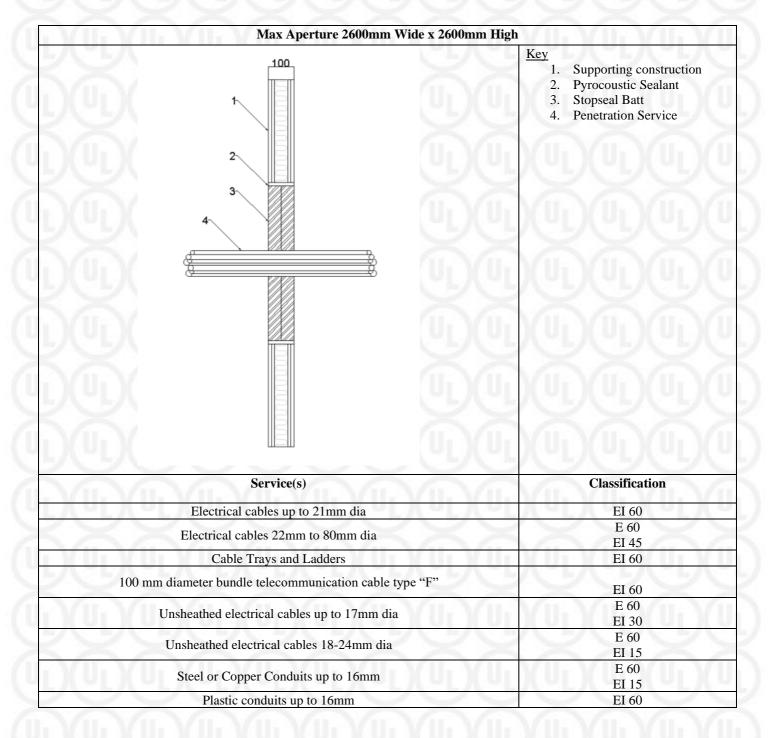
Certificate No. UL-EU-00771-CPR Page 86/157 Date of Issue 2015-04-19

### **Flexible Walls Minimum Thickness 100mm**

Double Layer Stopseal Fire Batt 50mm, Electrical Cables and Conduits

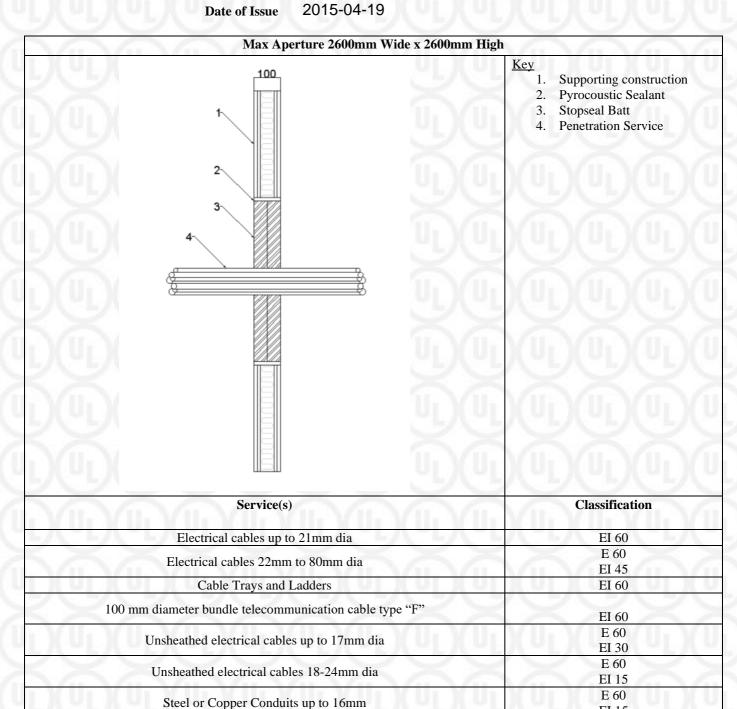


Certificate No. Page **Date of Issue**  UL-EU-00771-CPR 87/157 2015-04-19





Certificate No. Page UL-EU-00771-CPR 88/157



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

Plastic conduits up to 16mm

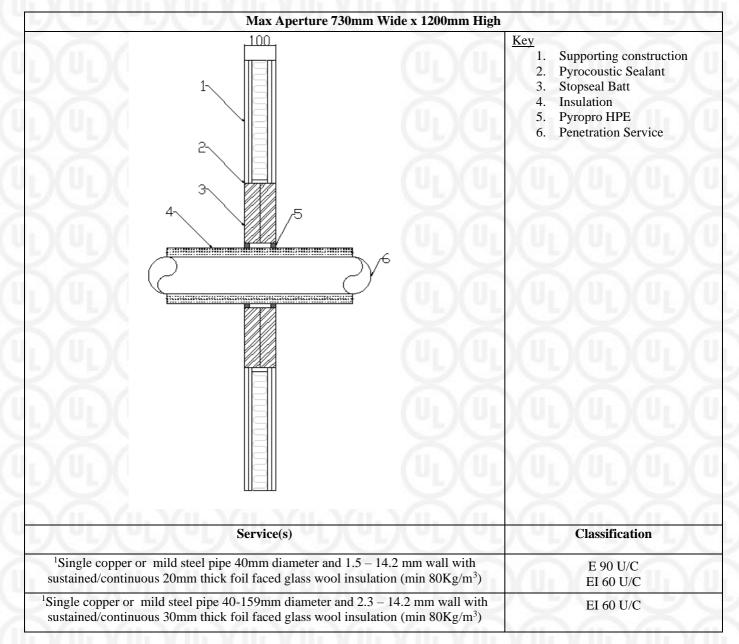


EI 15

EI 60

Certificate No. UL-EU-00771-CPR Page 89/157 Date of Issue 2015-04-19

Double Layer Stopseal Fire Batt 50mm, Insulated Metallic Pipes

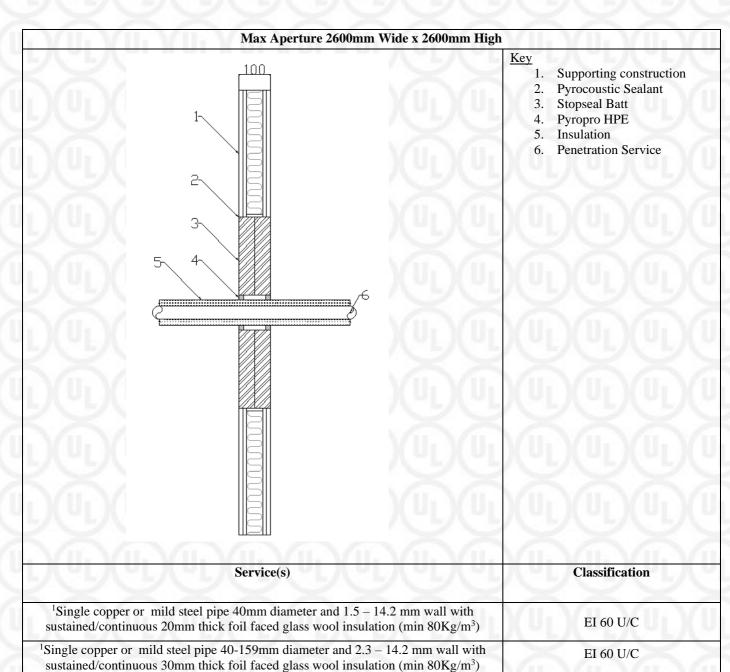


<sup>1</sup>15mm deep x 15mm wide annulus Pyropro HPE Sealant to both faces of the pipe



Certificate No. Page UL-EU-00771-CPR 90/157 2015-04-19

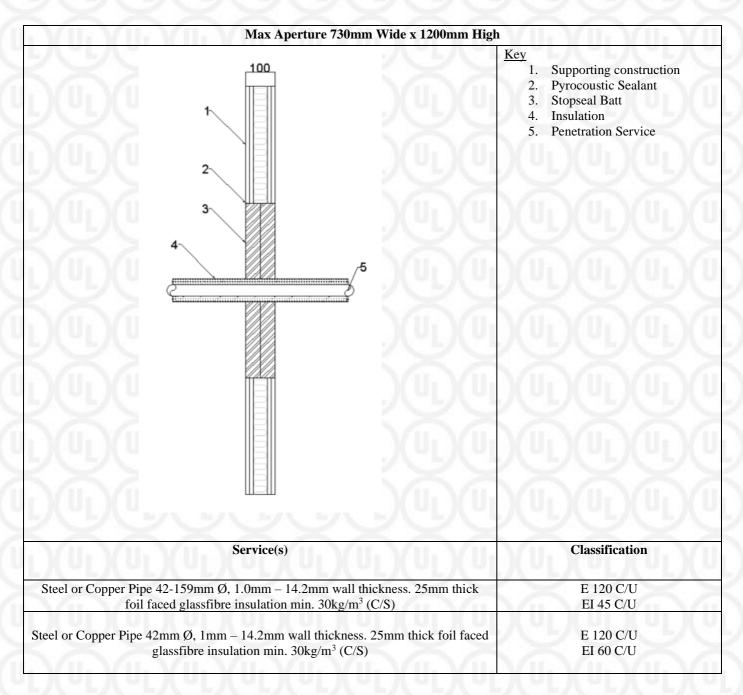
Date of Issue



<sup>1</sup>15mm deep x 15mm wide annulus Pyropro HPE Sealant to both faces of the pipe

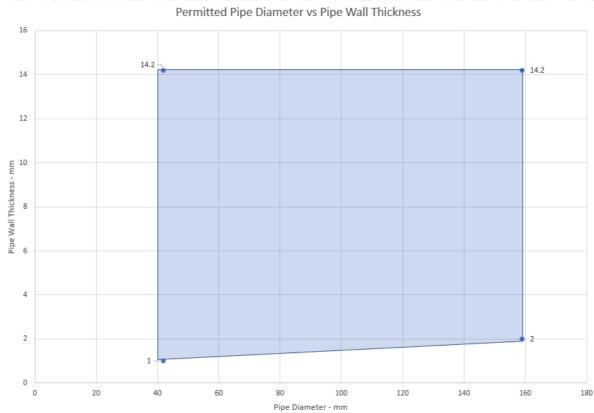


Certificate No. Page **Date of Issue**  UL-EU-00771-CPR 91/157 2015-04-19





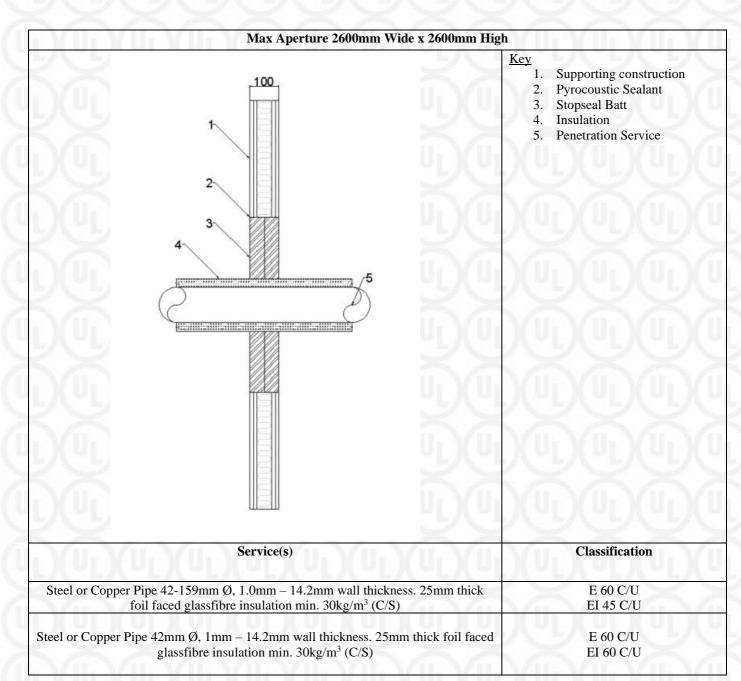
Certificate No. UL-EU-00771-CPR Page 92/157 Date of Issue 2015-04-19





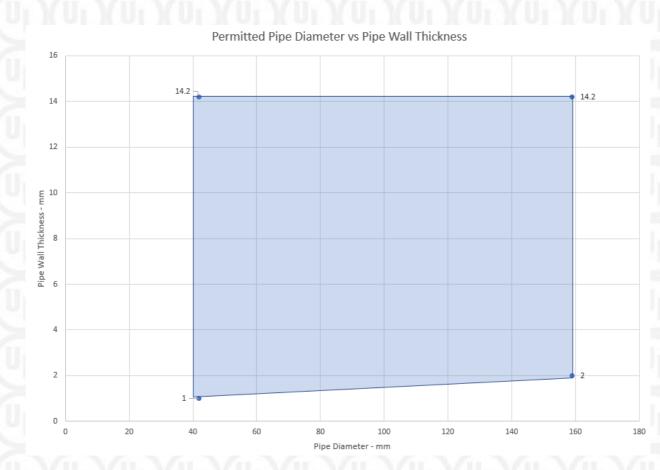
Certificate No. Page UL-EU-00771-CPR 93/157 2015-04-19

Date of Issue





Certificate No. UL-EU-00771-CPR Page 94/157 Date of Issue 2015-04-19





Certificate No. Page UL-EU-00771-CPR 95/157 2015-04-19

Date of Issue

### Max Aperture 730mm Wide x 1200mm High

(Penetrations positioned as per option 1 or 2 below, 0mm distance between	8
	Key1.Supporting construction2.Pyrocoustic Sealant3.Stopseal Batt4.PST Coating5.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/m <sup>3</sup> (L/I 400mm)	EI 45 C/U
Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m <sup>3</sup> (L/I 400mm)	EI 45 C/U
Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m <sup>3</sup> (C/I)	EI 60 C/U
	E 120 C/U
Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness FSi PST coating along the penetration 2mm DFT (L/I 300mm)	EI 45 C/U
Steel or Copper Pipe 42mm Ø, 1.0mm – 14.2mm wall thickness FSi PST coating	the second se

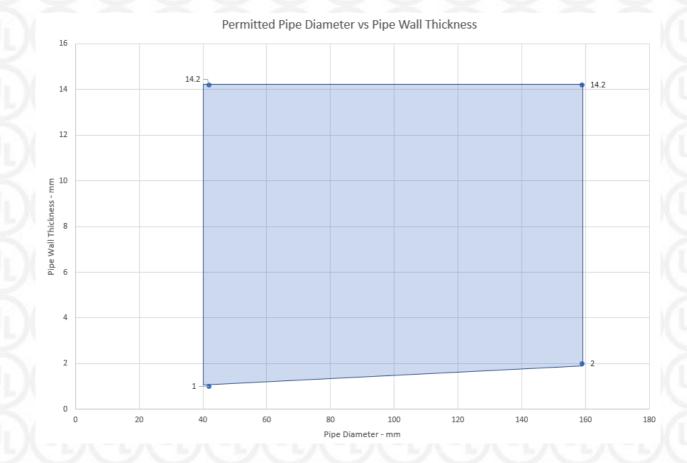
Form-ULID-006104 (DCS:27-CP-F0855) 5.0

coating along the penetration 2mm DFT (L/I 300mm)



EI 45 C/U

Certificate No. UL-EU-00771-CPR Page 96/157 Date of Issue 2015-04-19





Certificate No. Page UL-EU-00771-CPR 97/157 2015-04-19

**Date of Issue** 

Max Aperture 2600mm Wide x 2600mm Hig (Penetrations positioned as per option 1 or 2 below, 0mm distance between se	
(reneutions positioned as per option r or 2 below, onin distance between se	
	Key         1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         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/m <sup>3</sup> (L/I 400mm)	EI 45 C/U
Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool	. 저 먹는 저 먹는 저 먹는 ?
insulation min. 40kg/m <sup>3</sup> (L/I 400mm)	EI 45 C/U
Steel 42-324mm Ø, 16mm wall thickness. 40mm thick foil faced stonewool insulation min. 40kg/m <sup>3</sup> (C/I)	EI 60 C/U
Steel or Copper Pipe 42mm Ø, 1.2mm – 14.2mm wall thickness FSi PST coating	E 60 C/U
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 FSi PST	E 60 C/U
coating along the penetration 2mm DFT (L/I 300mm)	EI 20 C/U
Steel 42-324mm Ø, 16mm wall thickness. 14.2mm wall thickness FSi PST coating	E 60 C/U
along the population 2mm DET (L/L 300mm)	EL 45 C/U

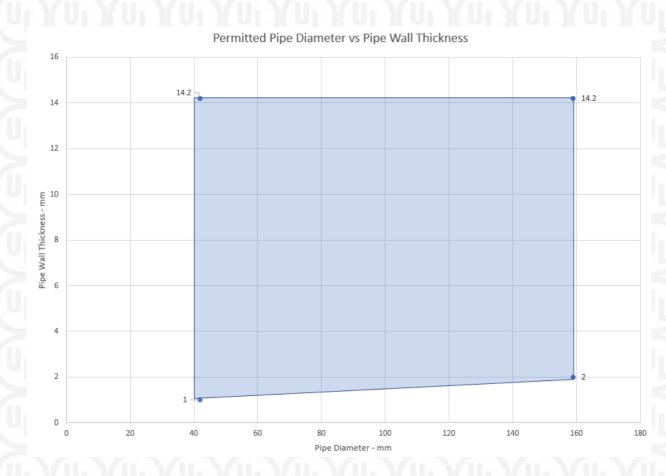
Form-ULID-006104 (DCS:27-CP-F0855) 5.0

along the penetration 2mm DFT (L/I 300mm)



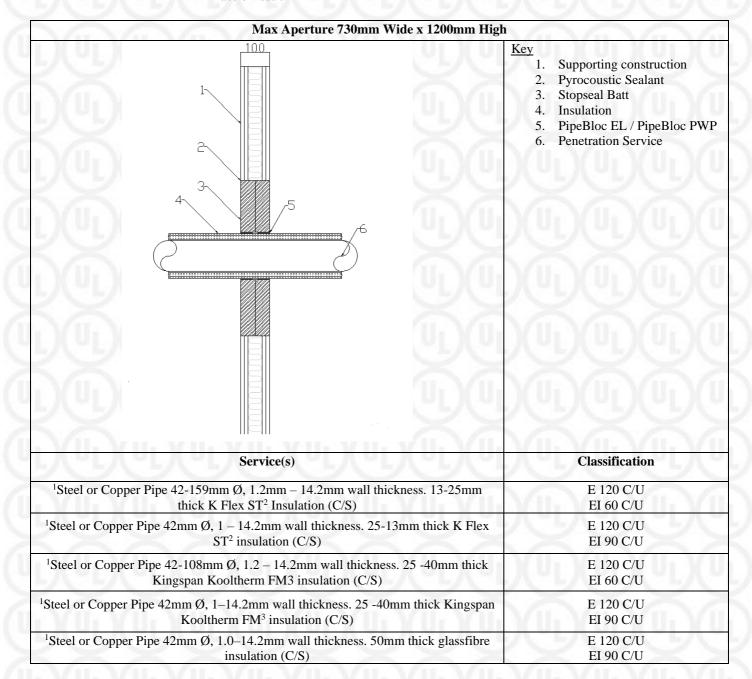
EI 45 C/U

Certificate No. UL-EU-00771-CPR Page 98/157 Date of Issue 2015-04-19



Ŀ) Ŀ) Ŀ) Ŀ)

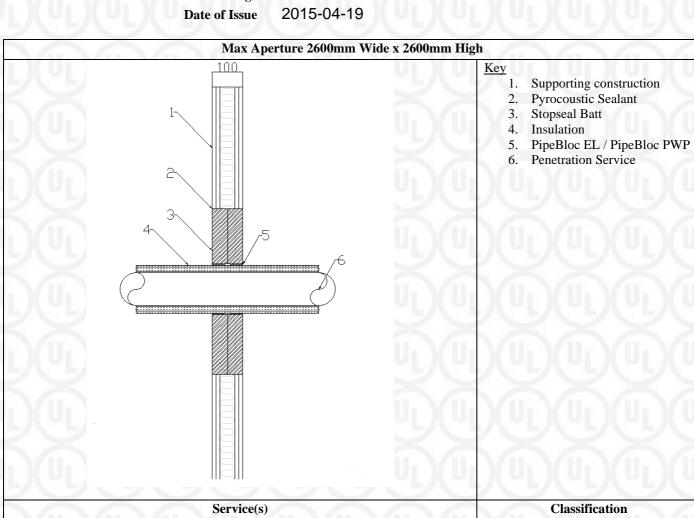
Certificate No. Page Date of Issue UL-EU-00771-CPR 99/157 2015-04-19



<sup>1</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the Stopseal Fire Batt
 <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1
 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1



Certificate No. Page UL-EU-00771-CPR 100/157 2015-04-19

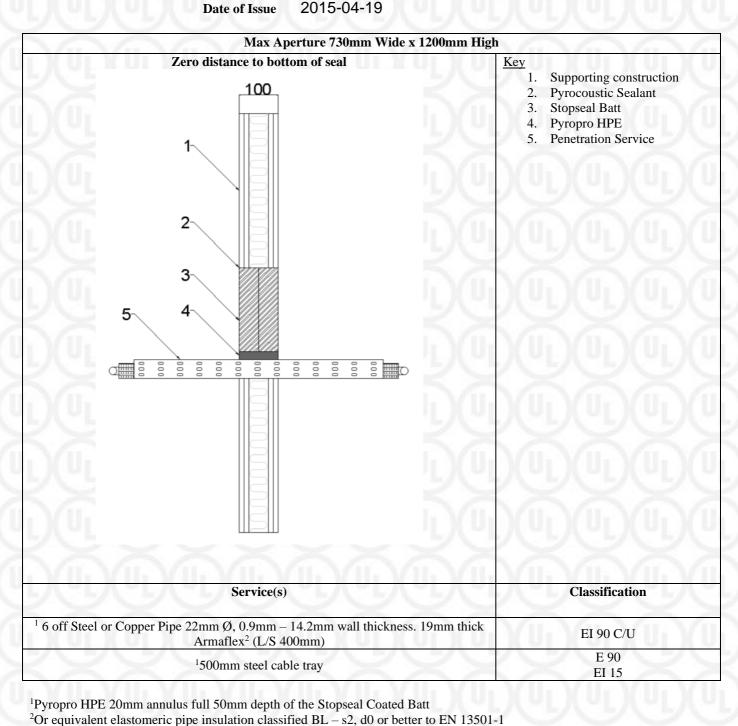


Service(s)	Classification
<sup>1</sup> Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST <sup>2</sup> Insulation (C/S)	EI 60 C/U
<sup>1</sup> Steel or Copper Pipe 42mm Ø, 1 – 14.2mm wall thickness. 25-13mm thick K Flex $ST^2$ insulation (C/S)	EI 60 C/U
<sup>1</sup> Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S)	EI 60 C/U
<sup>1</sup> Steel or Copper Pipe 42mm Ø, 1–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S)	EI 60 C/U
<sup>1</sup> Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 50mm thick glassfibre insulation (C/S)	EI 60 C/U

 $^{1}2$  x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the Stopseal Fire Batt  $^{2}$ Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1  $^{3}$ Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1



Certificate No. Page UL-EU-00771-CPR 101/157 2015-04-19

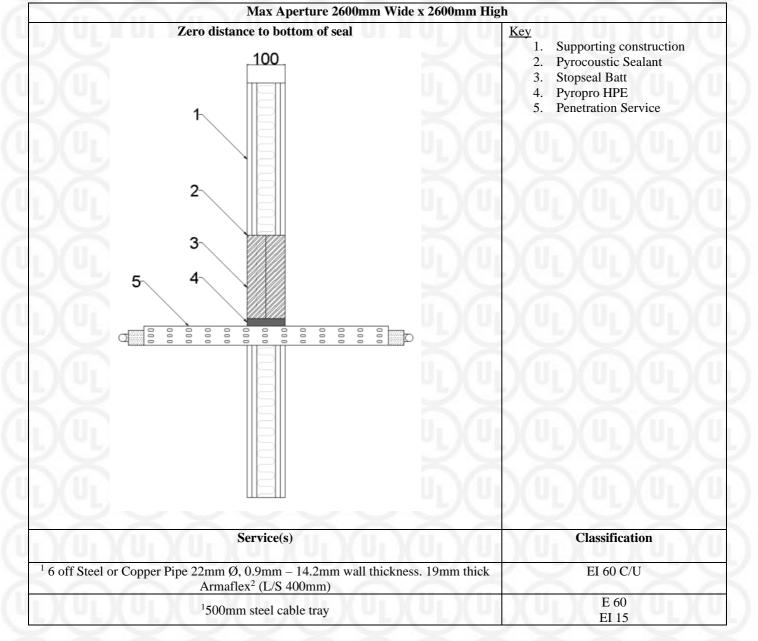




Certificate No.

UL-EU-00771-CPR 102/157 2015-04-19





<sup>1</sup>Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL - s2, d0 or better to EN 13501-1



Certificate No. UL-EU-00771-CPR Page 103/157 Date of Issue 2015-04-19

Double Layer Stopseal Fire Batt 50mm, Plastic Pipes

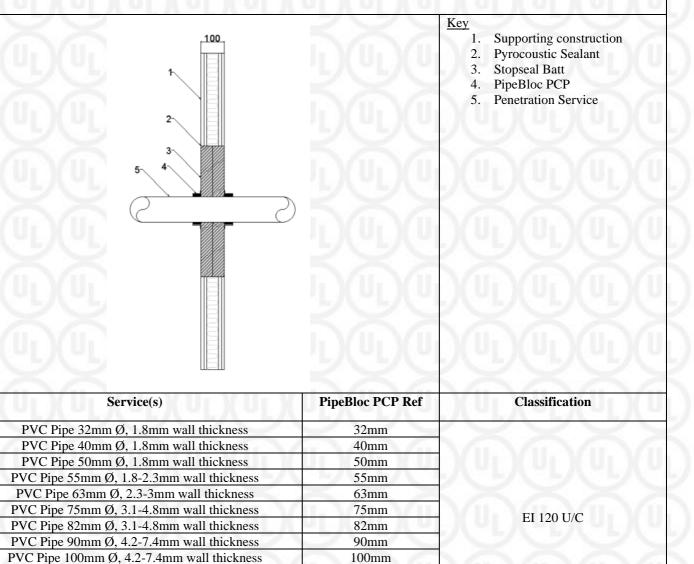
PVC Pipe 110mm Ø, 4.2-7.4mm wall thickness

PVC Pipe 125mm Ø, 6mm wall thickness

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

### Max Aperture 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 Stopseal Fire Batt



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

110mm

125mm

140mm

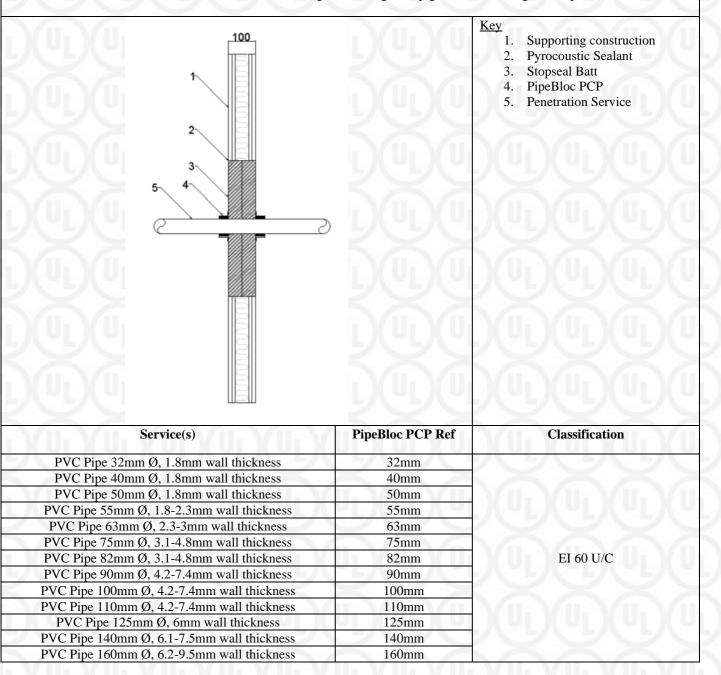


Certificate No. Page UL-EU-00771-CPR 104/157

Date of Issue 2015-04-19

#### 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 Stopseal Fire Batt





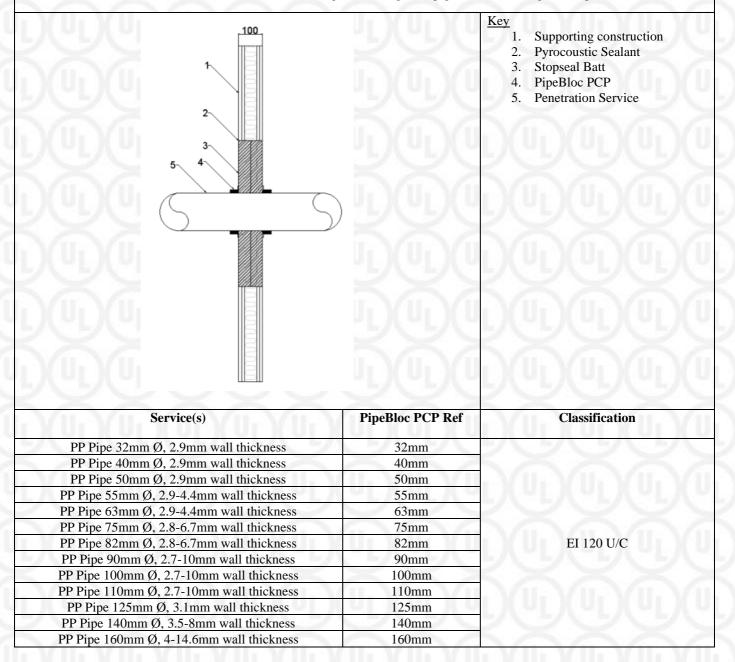
Certificate No. Page

**Date of Issue** 

UL-EU-00771-CPR 105/157 2015-04-19

#### 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 Stopseal Fire Batt

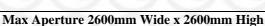




Certificate No.

UL-EU-00771-CPR 106/157

Page 106/157 Date of Issue 2015-04-19



(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 Stopseal Fire Batt Key 100 Supporting construction 1. 2. Pyrocoustic Sealant Stopseal Batt 3. PipeBloc PCP 4. 5. Penetration Service 2 3 Service(s) **PipeBloc PCP 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 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



Certificate No. Page UL-EU-00771-CPR 107/157

2015-04-19 **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 Stopseal Fire Batt Key 100 Supporting construction 1. Pyrocoustic Sealant 2. Stopseal Batt 3. PipeBloc PCP 4. 5. Penetration Service 3 **PipeBloc PCP Ref** Service(s) 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 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



Certificate No. Page

PE Pipe 160mm Ø, 4.9-9.5mm wall thickness

UL-EU-00771-CPR 108/157

Date of Issue 2015-04-19

### 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 Stopseal Fire Batt Key 100 Supporting construction 1. Pyrocoustic Sealant 2. 3. Stopseal Batt PipeBloc PCP 4. 5. Penetration Service 2 3 **PipeBloc PCP Ref** Classification Service(s) 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

Form-ULID-006104 (DCS:27-CP-F0855) 5.0

160mm



Certificate No.

**Date of Issue** 

Page

UL-EU-00771-CPR 109/157 2015-04-19

Double Layer Stopseal Fire Batt 50mm, Insulated Plastic Pipes

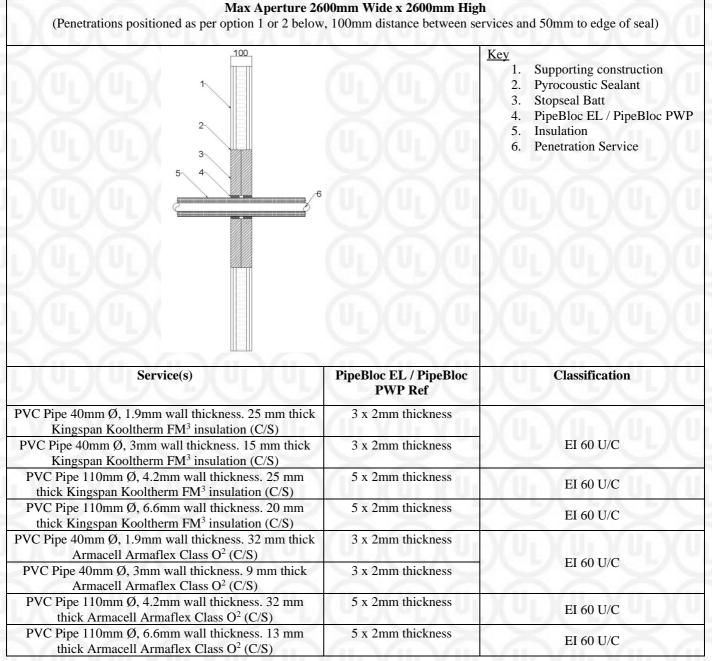
		Key         1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       PipeBloc EL / PipeBloc PWP         5.       Insulation         6.       Penetration Service
Service(s)	PipeBloc EL / PipeBloc PWP Ref	Classification
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick		
PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM <sup>3</sup> insulation (C/S) PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick	PWP Ref	Classification E 120 U/C EI 90 U/C
<ul> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm</li> </ul>	PWP Ref 3 x 2mm thickness	E 120 U/C
<ul> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm</li> </ul>	PWP Ref         3 x 2mm thickness         3 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C
<ul> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> </ul>	PWP Ref         3 x 2mm thickness         3 x 2mm thickness         5 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C
<ul> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O<sup>2</sup> (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 9 mm thick</li> </ul>	PWP Ref         3 x 2mm thickness         3 x 2mm thickness         5 x 2mm thickness         5 x 2mm thickness         5 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C EI 90 U/C
<ul> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 3mm wall thickness. 15 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 4.2mm wall thickness. 25 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 6.6mm wall thickness. 20 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 110mm Ø, 6.6mm wall thickness. 32 mm thick Kingspan Kooltherm FM<sup>3</sup> insulation (C/S)</li> <li>PVC Pipe 40mm Ø, 1.9mm wall thickness. 32 mm thick Armacell Armaflex Class O<sup>2</sup> (C/S)</li> </ul>	PWP Ref         3 x 2mm thickness         3 x 2mm thickness         5 x 2mm thickness         5 x 2mm thickness         3 x 2mm thickness         3 x 2mm thickness	E 120 U/C EI 90 U/C EI 120 U/C E 120 U/C EI 90 U/C

<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt <sup>2</sup>Or equivalent elastomeric pipe insulation classified BL - s2, d0 or better to EN 13501-1 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1



Certificate No. Page UL-EU-00771-CPR 110/157 2015-04-19

**Date of Issue** 

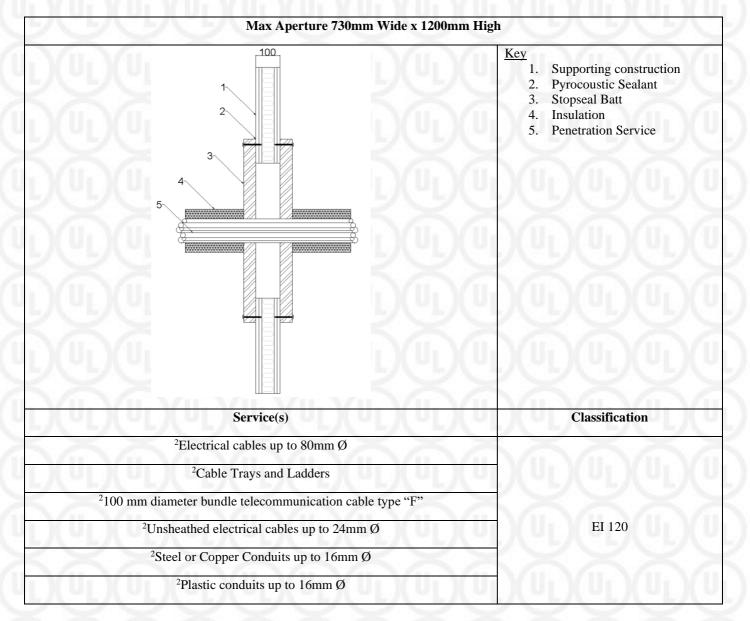


<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt  $^{2}$ Or equivalent elastomeric pipe insulation classified BL – s2, d0 or better to EN 13501-1 <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL - s1, d0 or better to EN 13501-1



Certificate No. UL-EU-00771-CPR Page 111/157 Date of Issue 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Electrical Cables and Conduits

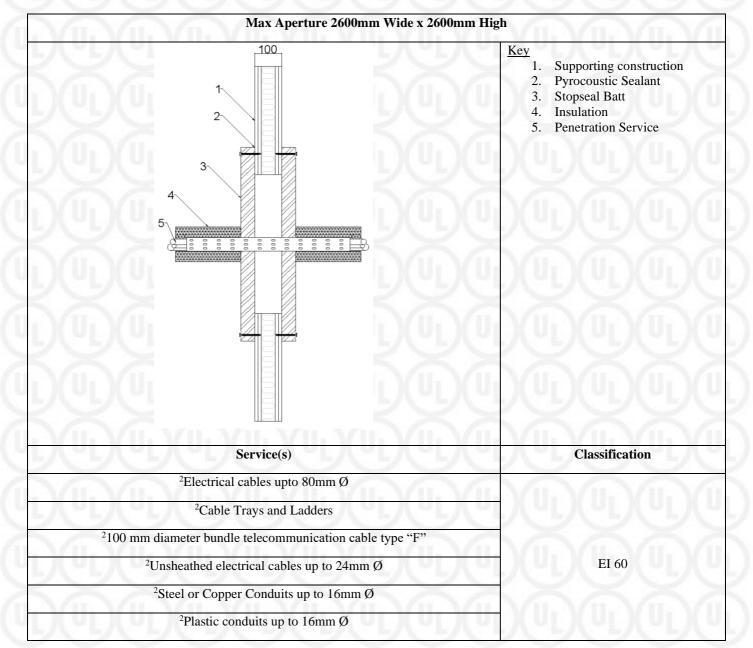


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres

<sup>2</sup>Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m<sup>3</sup> Stonewool (L/I 300mm)



Certificate No. Page **Date of Issue**  UL-EU-00771-CPR 112/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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

<sup>2</sup>Cables and cable trays wrapped with a single layer of 40mm thick, 40kg/m<sup>3</sup> Stonewool (L/I 300mm)



Certificate No. UL-EU-00771-CPR Page 113/157 Date of Issue 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Insulated Metallic Pipes

Max Aperture 730mm Wide x 1200mm High	
	Key         1.       Supporting construction         2.       Pyrocoustic Sealant         3.       Stopseal Batt         4.       PipeBloc EL / PipeBloc PWP         5.       Insulation         6.       Penetration Service
	<u>Ն</u> ան Հայուն
Service(s)	Classification
Ma Ma Ma Ma Ma Ma Ma Ma Ma	Classification E 120 C/U
Ma Ma Ma Ma Ma Ma Ma Ma Ma	
<ul> <li><sup>2</sup>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> Insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex</li> </ul>	E 120 C/U
<sup>2</sup> Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST <sup>3</sup> Insulation (C/S)	E 120 C/U EI 60 C/U
<ul> <li><sup>2</sup>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> Insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex</li> </ul>	E 120 C/U EI 60 C/U E 120 C/U
<ul> <li><sup>2</sup>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> Insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM<sup>4</sup> insulation (C/S)</li> </ul>	E 120 C/U EI 60 C/U E 120 C/U EI 90 C/U E 120 C/U
<ul> <li><sup>2</sup>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> Insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM<sup>4</sup> insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM<sup>4</sup> insulation (C/S)</li> </ul>	E 120 C/U EI 60 C/U E 120 C/U EI 90 C/U E 120 C/U EI 60 C/U
<ul> <li><sup>2</sup>Steel or Copper Pipe 42-159mm Ø, 1.2mm – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> Insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2 – 14.2mm wall thickness. 13-25mm thick K Flex ST<sup>3</sup> insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42-108mm Ø, 1.2 – 14.2mm wall thickness. 25 -40mm thick Kingspan Kooltherm FM<sup>4</sup> insulation (C/S)</li> <li><sup>2</sup>Steel or Copper Pipe 42mm Ø, 1.2–14.2mm wall thickness. 25 -40mm thick Kingspan</li> </ul>	E 120 C/U EI 60 C/U E 120 C/U EI 90 C/U E 120 C/U EI 60 C/U E 120 C/U

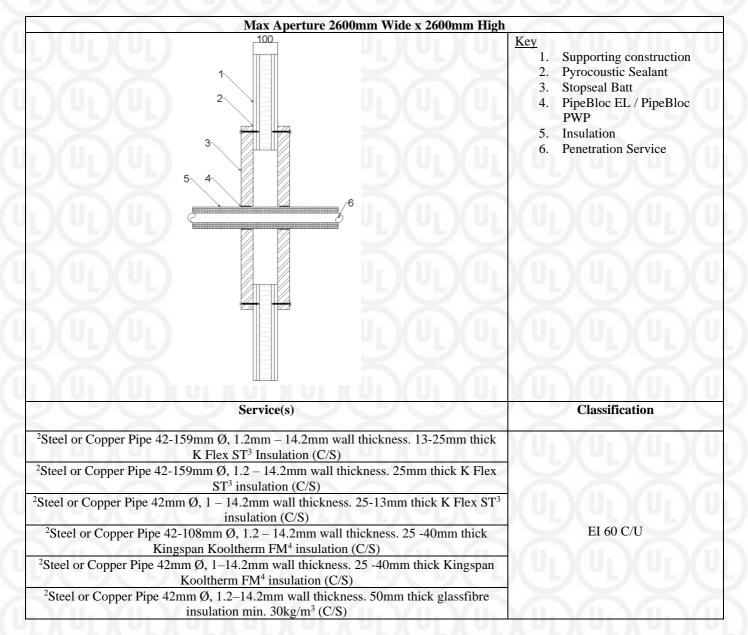
<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

<sup>2</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation <sup>3</sup>Or 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. Page Date of Issue UL-EU-00771-CPR 114/157 2015-04-19

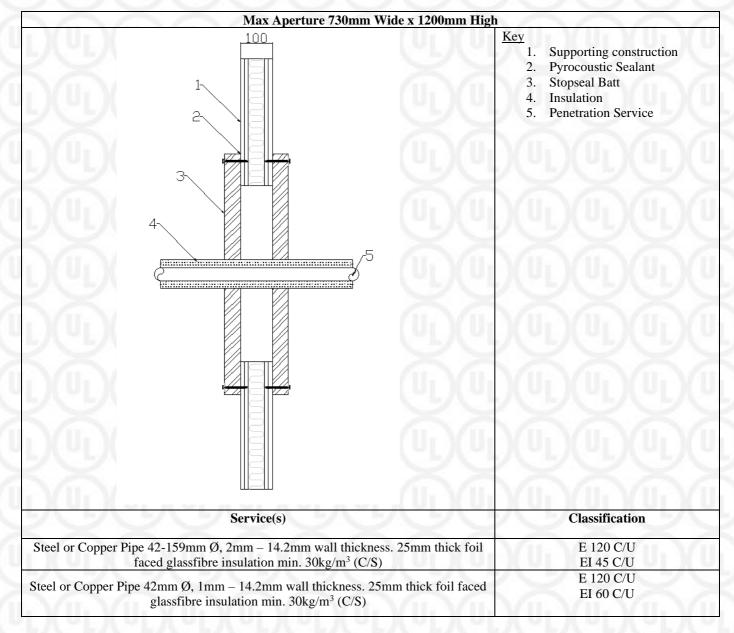


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

 $^{2}2$  x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation  $^{3}$ Or 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. Page Date of Issue UL-EU-00771-CPR 115/157 2015-04-19

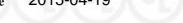


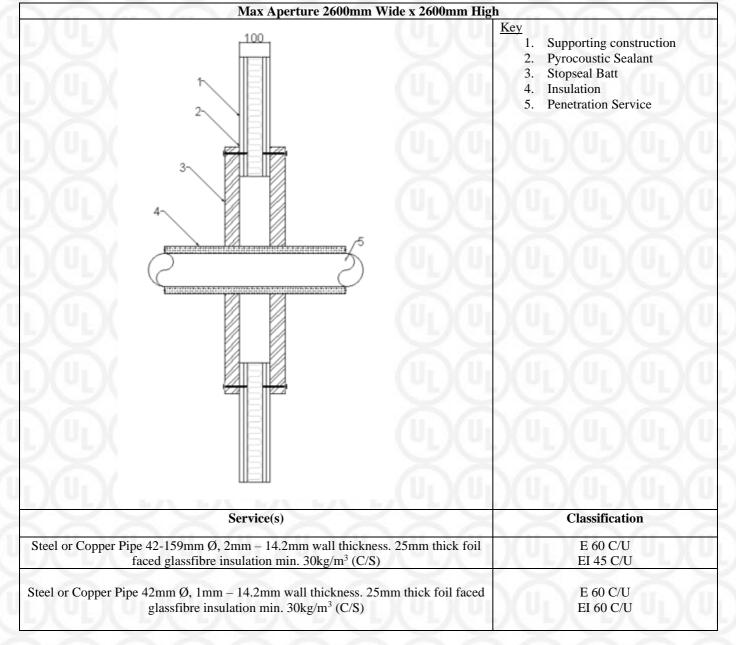
<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.



Certificate No. Page UL-EU-00771-CPR 116/157 2015-04-19



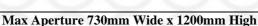


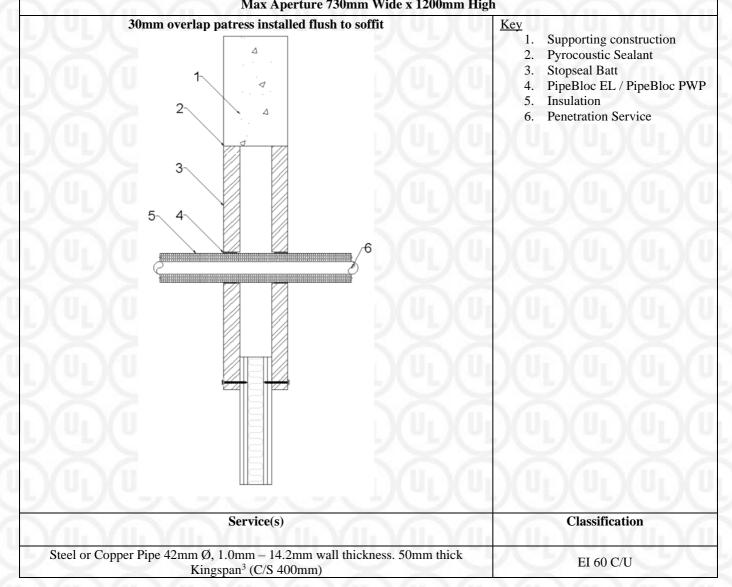


<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

Certificate No. Page UL-EU-00771-CPR 117/157 2015-04-19



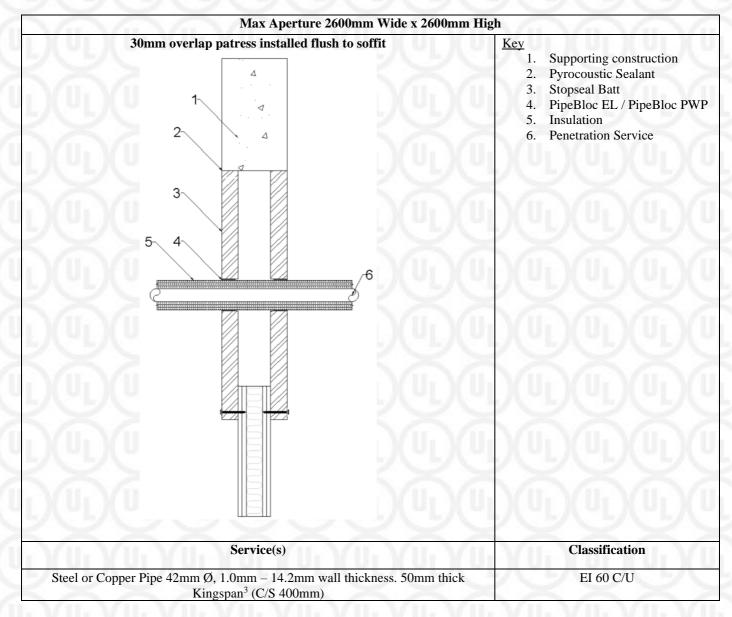




<sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 30mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres. No fixing is applied to the head flush to the soffit <sup>2</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1



Certificate No. Page Date of Issue UL-EU-00771-CPR 118/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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 <sup>2</sup>2 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation <sup>3</sup>Or equivalent Phenloic foam pipe insulation classified BL – s1, d0 or better to EN 13501-1

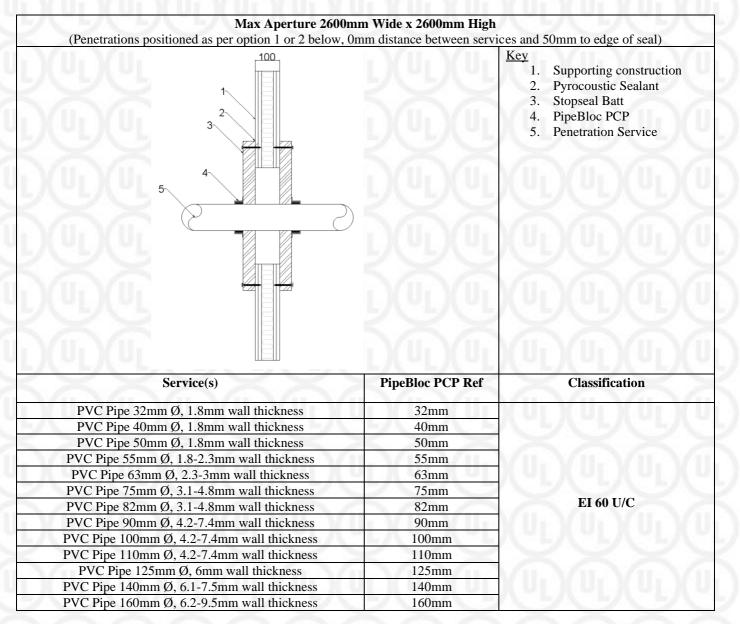


 Certificate No.
 UL-EU-00771-CPR

 Page
 119/157

 Date of Issue
 2015-04-19

Single Layer Patress, Stopseal Fire Batt 50mm, Plastic Pipes



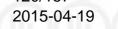
Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts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

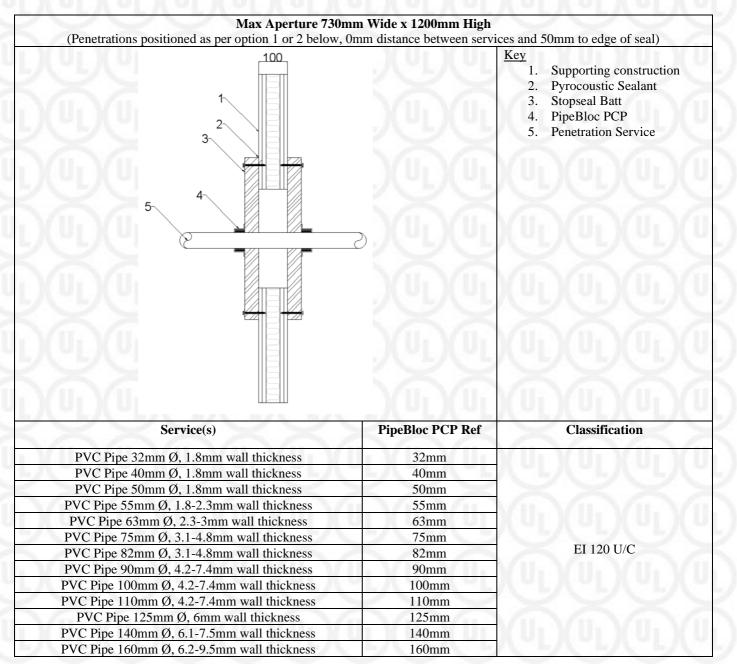
Certificate No.

UL-EU-00771-CPR 120/157

Date of Issue

Page





Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. 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.



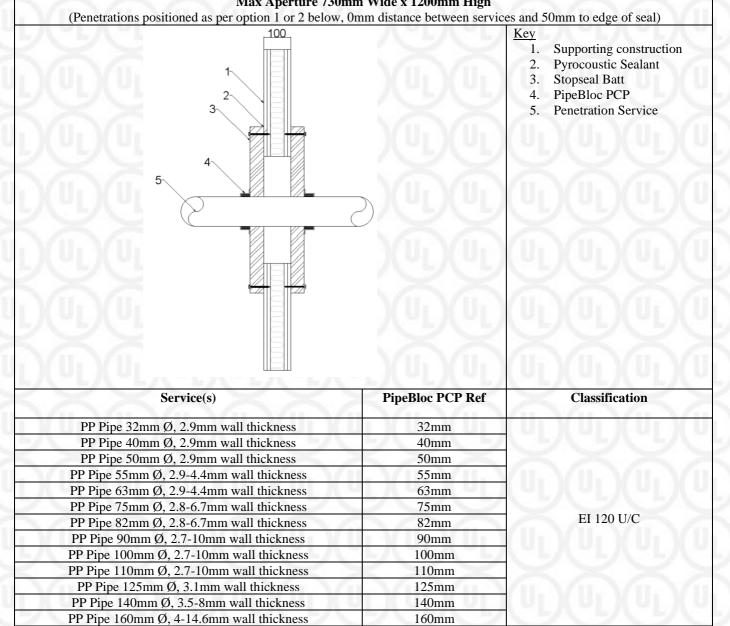
Certificate No.

UL-EU-00771-CPR 121/157 2015-04-19

**Date of Issue** 

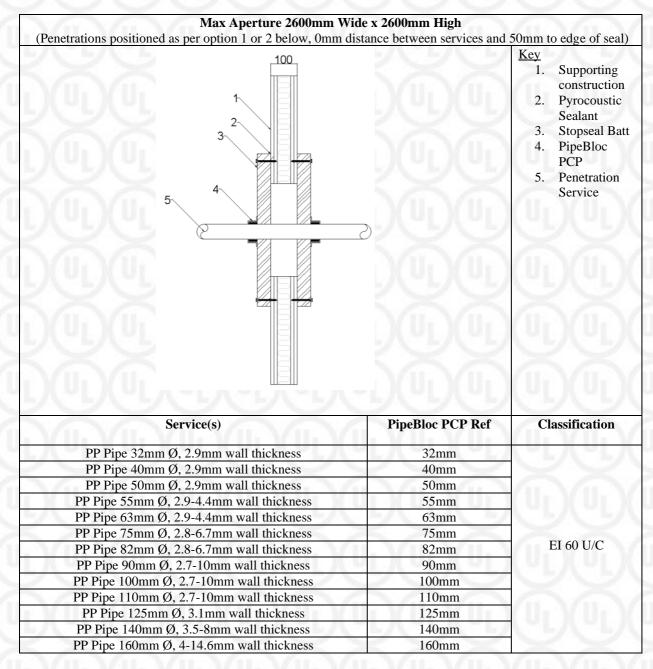
Page





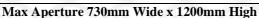
Collars secured both faces of the substrate utilsing 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. The Batts are installed in horizontal rows and fixed in minimum two vertical edges. Overlap of batts to substrate min 100mm. Batts mechanically fixed to substrate with min 6mm x 80mm steel screws and steel retaining washer. Fixings installed at max 300mm centres.

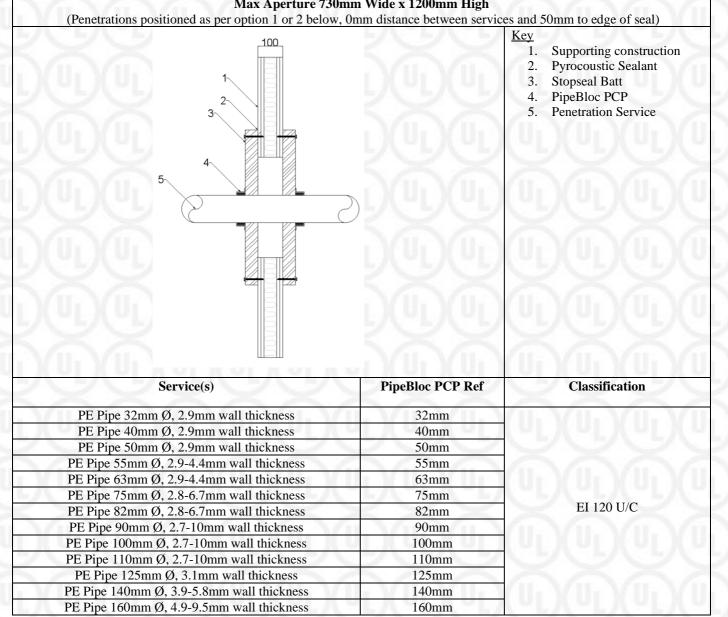
Certificate No. UL-EU-00771-CPR Page 122/157 Date of Issue 2015-04-19



Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. 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. Page **Date of Issue**  UL-EU-00771-CPR 123/157 2015-04-19





Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. 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.



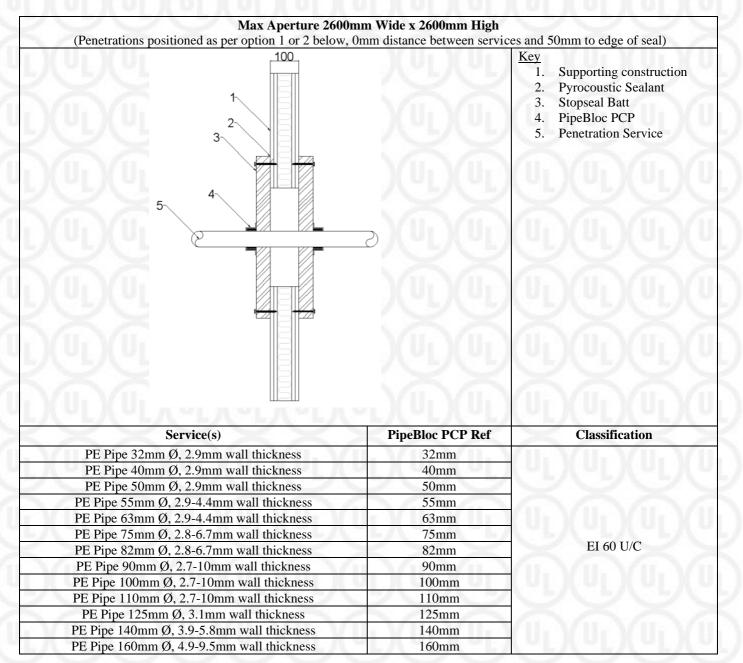
Certificate No.

UL-EU-00771-CPR 124/157

**Date of Issue** 

Page

2015-04-19



Collars secured both faces of the substrate utilising 80mm long pig tail screw through to the Stopseal Fire Batt <sup>1</sup>Patress installation of Stopseal Coated Batt. 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. Page **Date of Issue**  UL-EU-00771-CPR 125/157 2015-04-19

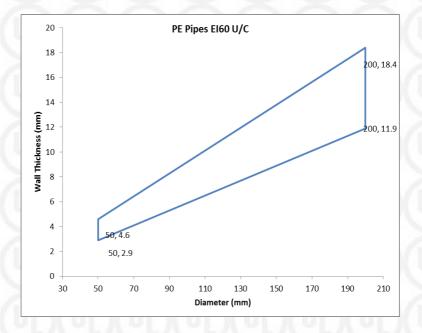
Max Aperture 2600mm Wide x 2600mm High (Penetrations positioned as per option 1 or 2 below, 0mm distance between services and 50mm to edge of seal) Key 100 Supporting construction 1. Pyrocoustic Sealant 2. 3. Stopseal Batt PipeBloc PCP 4. 2 5. Penetration Service 3 Scope and Classifications as below 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) 40 mm (W) x 10 mm (T) ø 161 mm - ø 200 mm ø 201 mm - ø 250 mm 40 mm (W) x 12 mm (T)

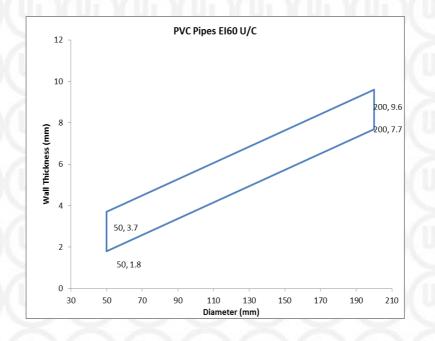
Wrap secured internally within both faces of the Stopseal Fire Batt

<sup>1</sup>Patress installation of Stopseal Coated Batt. 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.



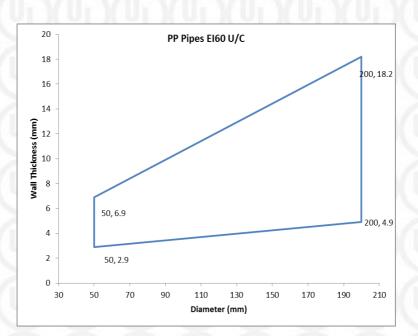
Certificate No. UL-EU-00771-CPR Page 126/157 Date of Issue 2015-04-19







Certificate No. UL-EU-00771-CPR Page 127/157 Date of Issue 2015-04-19

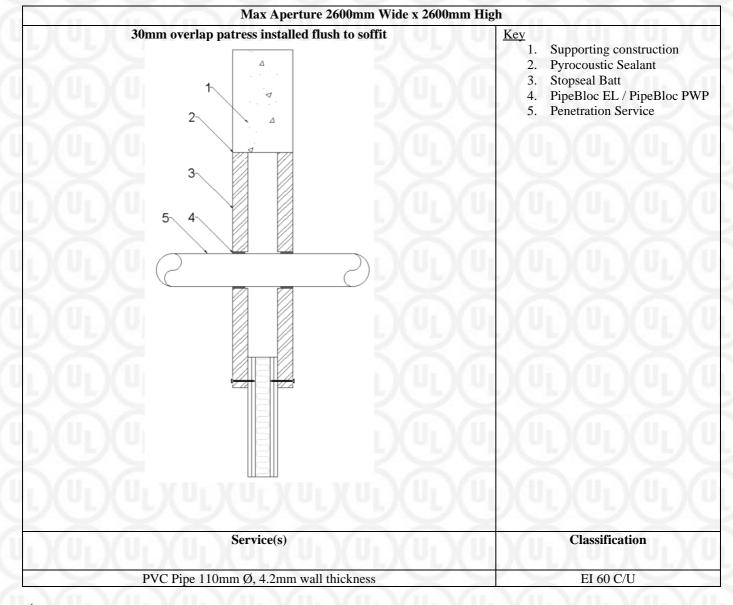




Certificate No. Page UL-EU-00771-CPR 128/157 2015-04-19

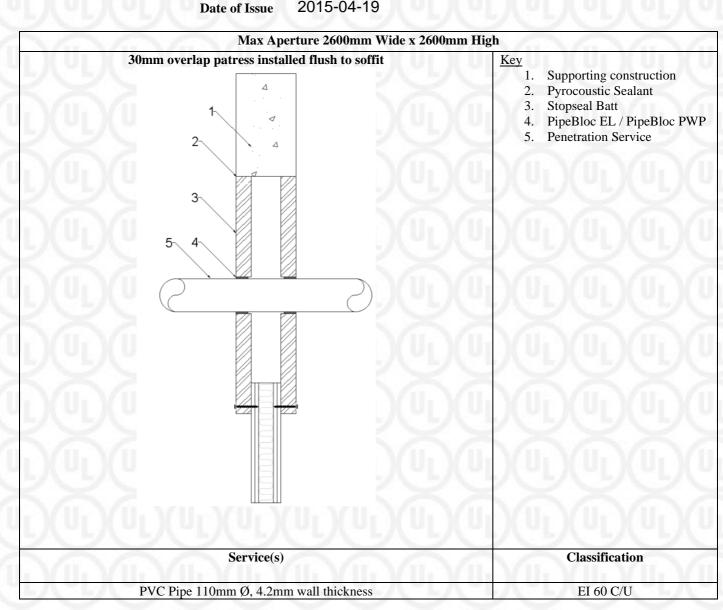
Date of Issue

sue 2015-0



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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 <sup>2</sup>4 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation

Certificate No. Page UL-EU-00771-CPR 129/157 2015-04-19



<sup>1</sup>Patress installation of Stopseal Coated Batt. 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 <sup>2</sup>4 x 2mm thick layers of PipeBloc EL / PipeBloc PWP installed both sides of the substrate within the patress installation

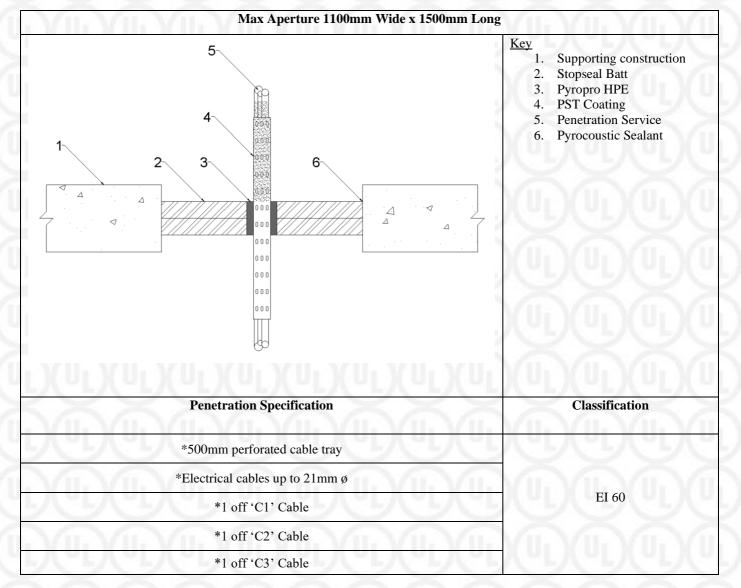


Certificate No. UL-Page 130. Date of Issue 201

UL-EU-00771-CPR 130/157 2015-04-19

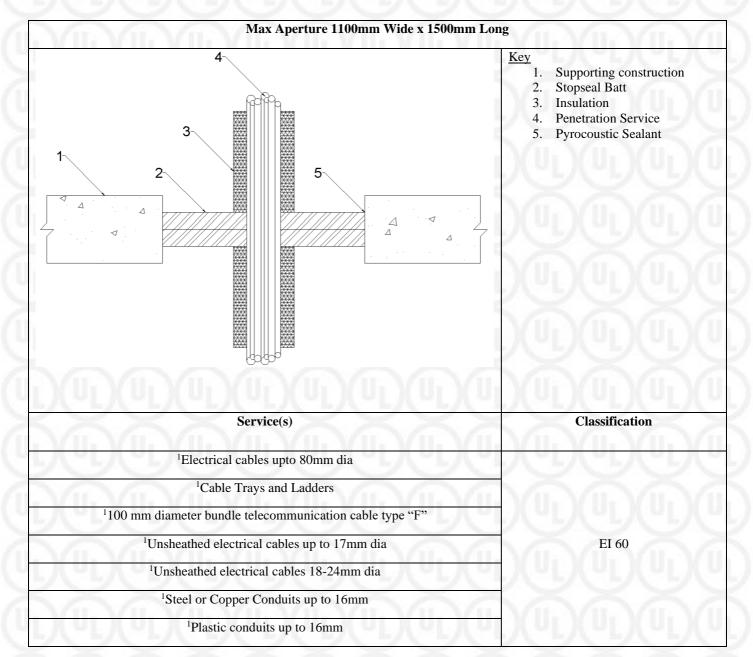
#### **Rigid Floors Minimum Thickness 150mm**

Double Layer, Stopseal Fire Batt 50mm, Electrical Cables



\*All cables coated with 2mm DFT PST Coating 300mm along the cables upper side of the seal Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt

Certificate No. Page Date of Issue UL-EU-00771-CPR 131/157 2015-04-19

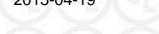


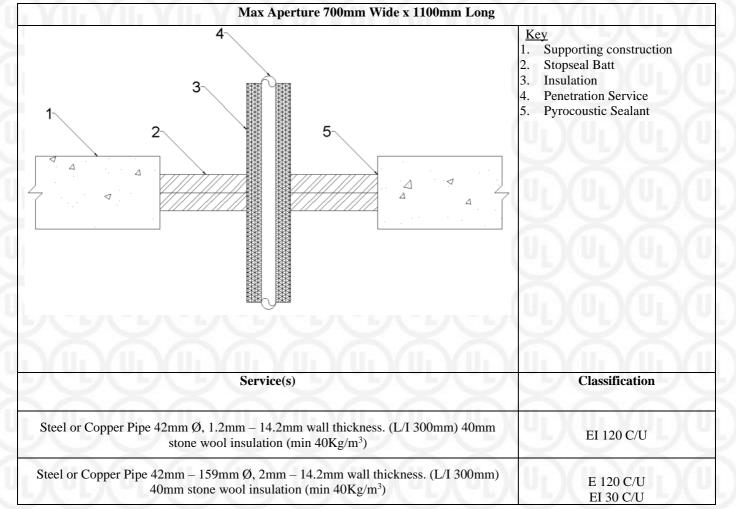
<sup>1</sup>Cables and cable trays wrapped with a single layer of 40mm thick stonewool, min 40kg/m<sup>3</sup> (L/I 300mm)



Certificate No. Page **Date of Issue**  UL-EU-00771-CPR 132/157 2015-04-19



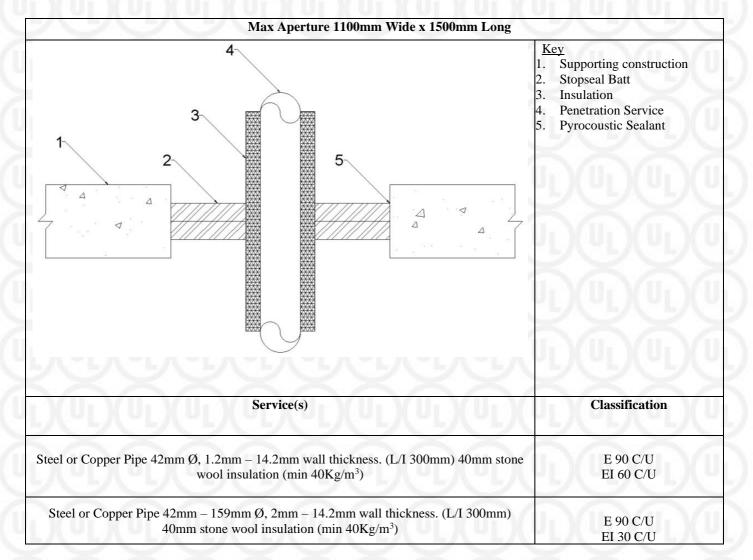






Certificate No. UL-EU-00771-CPR Page 133/157 Date of Issue 2015-04-19

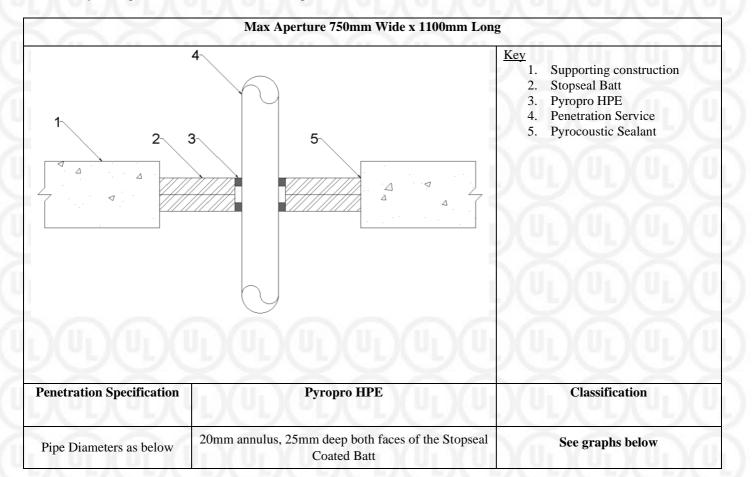
Double Layer, Stopseal Fire Batt 50mm, Insulated Metallic Pipes



Certificate No.

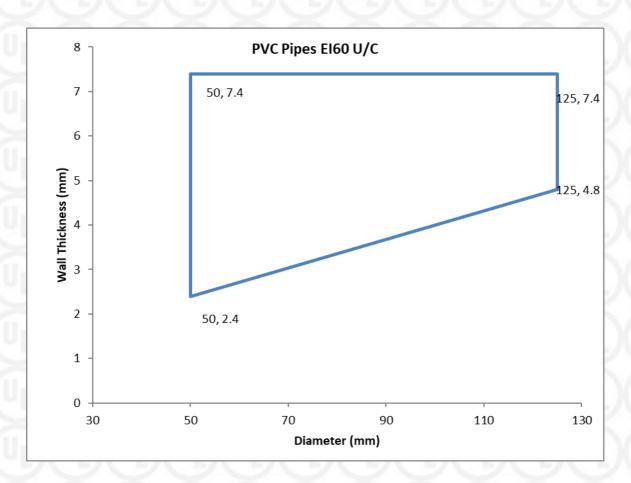
UL-EU-00771-CPR 134/157 Page 2015-04-19 **Date of Issue** 

Double Layer, Stopseal Fire Batt 50mm, Plastic Pipes





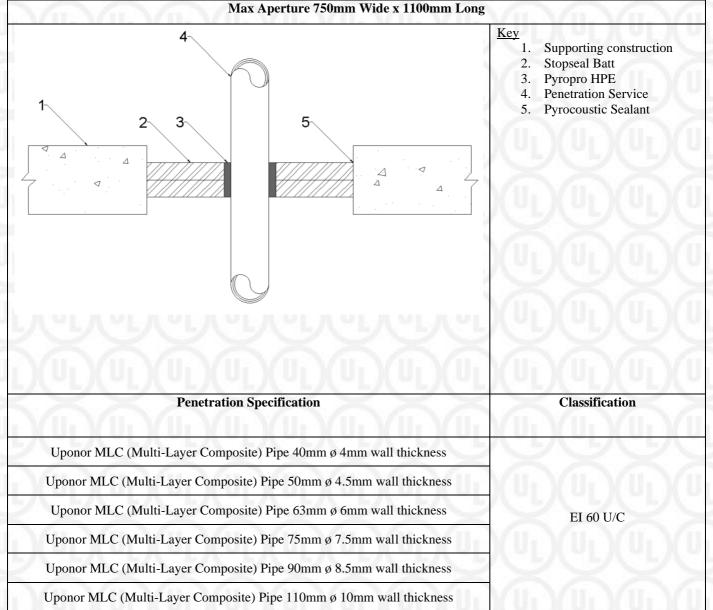
Certificate No. UL-EU-00771-CPR Page 135/157 Date of Issue 2015-04-19





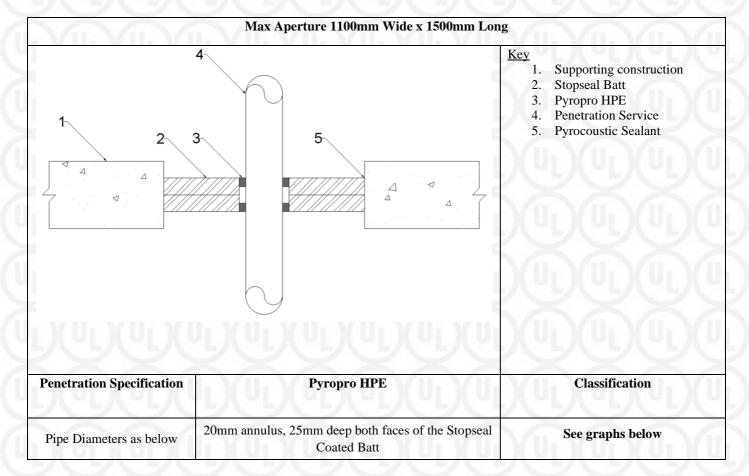
Certificate No. Page UL-EU-00771-CPR 136/157 2015-04-19





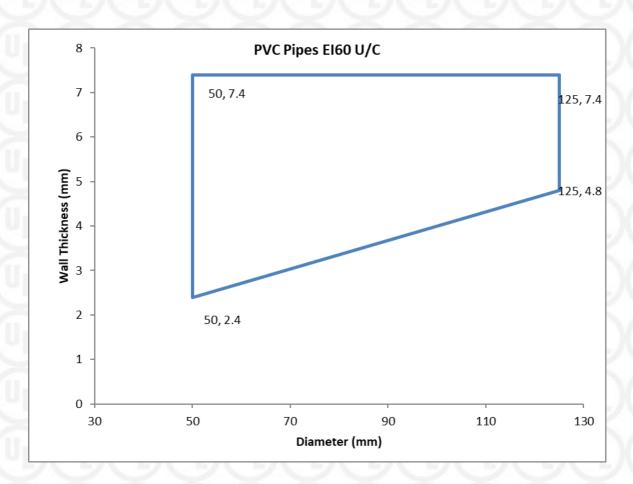
Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt

Certificate No. Page Date of Issue UL-EU-00771-CPR 137/157 2015-04-19





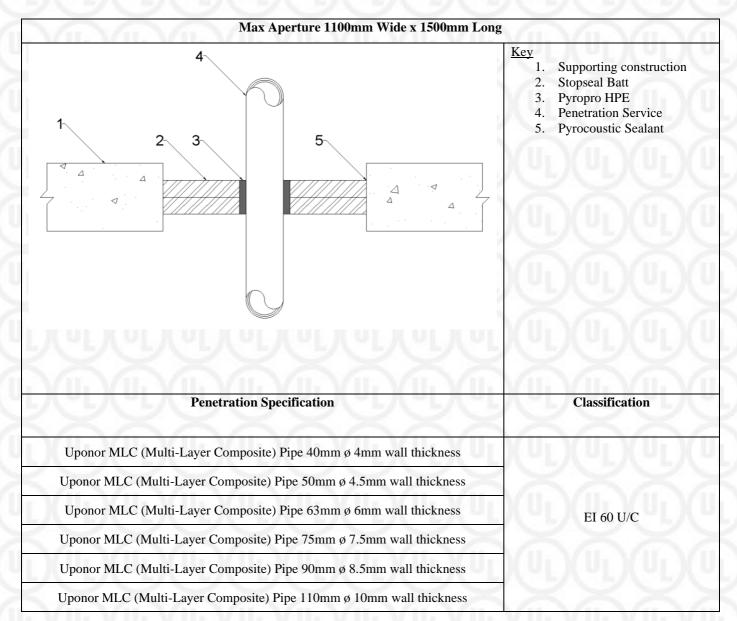
Certificate No. UL-EU-00771-CPR Page 138/157 Date of Issue 2015-04-19



Form-ULID-006104 (DCS:27-CP-F0855) 5.0



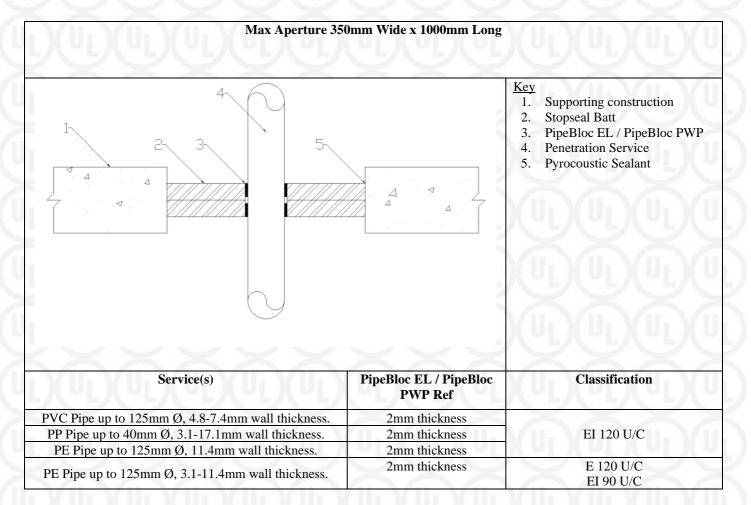
Certificate No. Page Date of Issue UL-EU-00771-CPR 139/157 2015-04-19



Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt



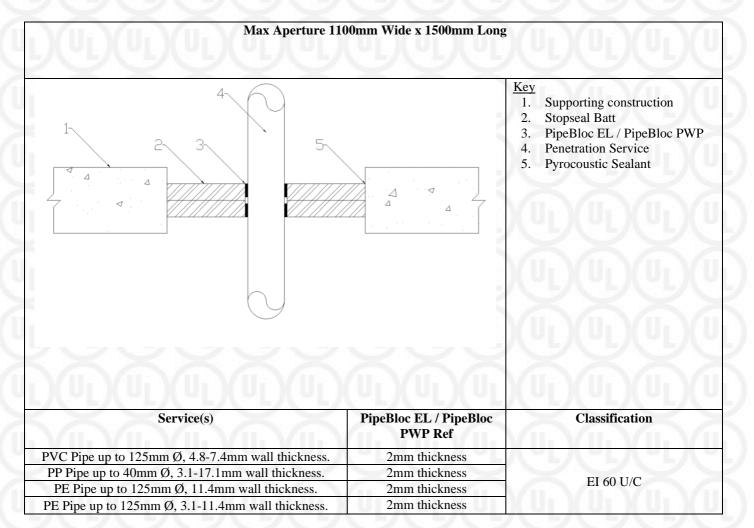
Certificate No. Page Date of Issue UL-EU-00771-CPR 140/157 2015-04-19



<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt



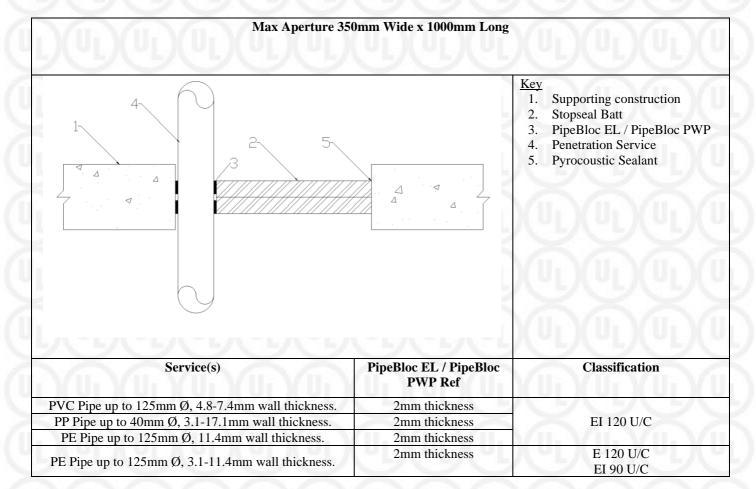
Certificate No. Page Date of Issue UL-EU-00771-CPR 141/157 2015-04-19



<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt



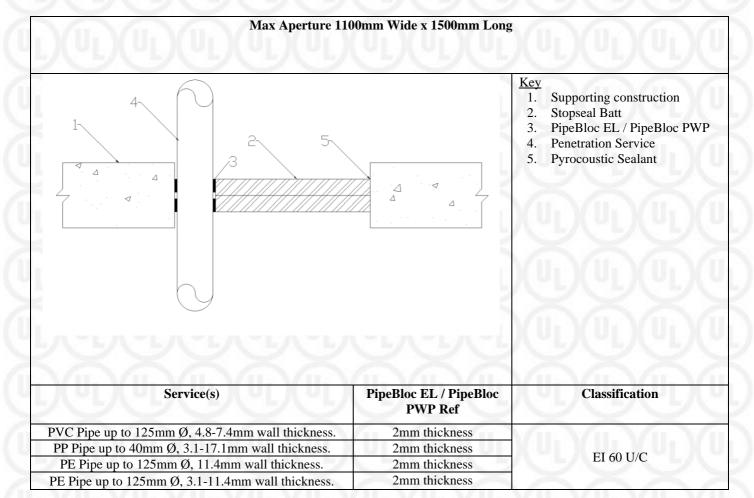
Certificate No. UL-EU-00771-CPR Page 142/157 Date of Issue 2015-04-19



<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt



Certificate No. UL-EU-00771-CPR Page 143/157 Date of Issue 2015-04-19

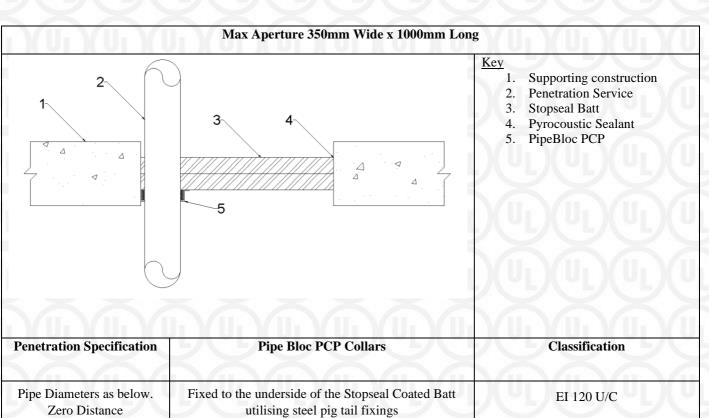


<sup>1</sup>PipeBloc EL / PipeBloc PWP secured internally within both faces of the Stopseal Fire Batt



Certificate No. Page UL-EU-00771-CPR 144/157 2015-04-19





Penetration Specification	Collar Reference	Intumescent Material
PVC Pipe 32mm Ø 1.8mm wall thickness	32mm PipeBloc PCP	30mm (W) x 4mm (T)
PVC Pipe 40mm Ø 1.8mm wall thickness	40mm PipeBloc PCP	
PVC Pipe 50mm Ø 1.8mm wall thickness	50mm PipeBloc PCP	
PVC Pipe 55mm Ø 2.3-2.8mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)
PVC Pipe 63mm Ø 2.3-2.8mm wall thickness	63mm PipeBloc PCP	VII. VII. VII.
PVC Pipe 75mm Ø 3.1-4.4mm wall thickness	75mm PipeBloc PCP	30mm (W) x 8mm (T)
PVC Pipe 82mm Ø 3.1-4.4mm wall thickness	82mm PipeBloc PCP	
PVC Pipe 90mm Ø 4.2-6.6mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)
PVC Pipe 100mm Ø 4.2-6.6mm wall thickness	100mm PipeBloc PCP	
PVC Pipe 110mm Ø 4.2-6.6mm wall thickness	110mm PipeBloc PCP	
PVC Pipe 125mm Ø 6.0mm wall thickness	125mm PipeBloc PCP	40mm (W) x 12mm (T)
PVC Pipe 140mm Ø 6.1-7.5mm wall thickness	140mm PipeBloc PCP	
PVC Pipe 160mm Ø 6.2-9.5mm wall thickness	160mm PipeBloc PCP	



Certificate No. Page

**Date of Issue** 

UL-EU-00771-CPR 145/157 2015-04-19

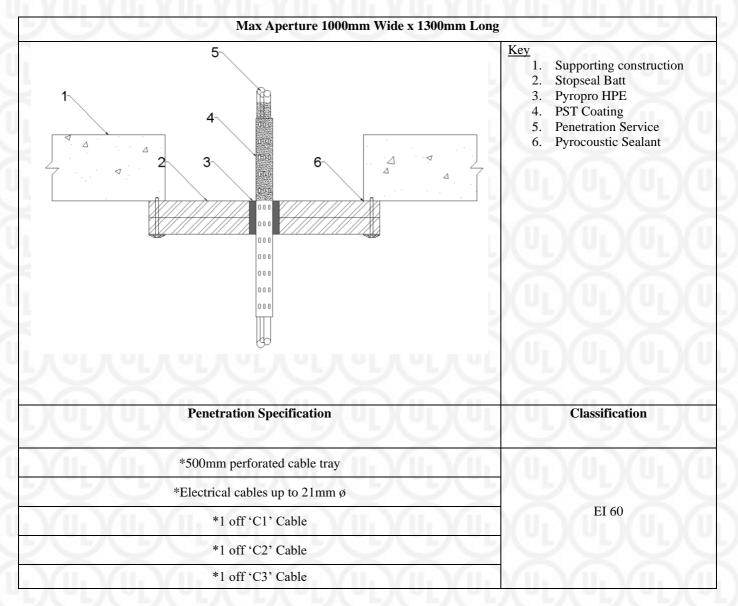
**Penetration Specification Collar Reference Intumescent Material** PP Pipe 32mm Ø 2.9mm wall thickness 32mm PipeBloc PCP 30mm (W) x 4mm (T) PP Pipe 40mm Ø 2.9mm wall thickness 40mm PipeBloc PCP PP Pipe 50mm Ø 2.9mm wall thickness 50mm PipeBloc PCP PP Pipe 55mm Ø 2.9-4.4mm wall thickness 55mm PipeBloc PCP 30mm (W) x 6mm (T) PP Pipe 63mm Ø 2.9-4.4mm wall thickness 63mm PipeBloc PCP PP Pipe 75mm Ø 2.8-6.7mm wall thickness 75mm PipeBloc PCP 30mm (W) x 8mm (T) PP Pipe 82mm Ø 2.8-6.7mm wall thickness 82mm PipeBloc PCP PP Pipe 90mm Ø 2.7-10.0mm wall thickness 90mm PipeBloc PCP 30mm (W) x 10mm (T) PP Pipe 100mm Ø 2.7-10.0mm wall thickness 100mm PipeBloc PCP PP Pipe 110mm Ø 2.7-10.0mm wall thickness 110mm PipeBloc PCP 40mm (W) x 12mm (T) PP Pipe 125mm Ø 3.1mm wall thickness 125mm PipeBloc PCP PP Pipe 140mm Ø 3.5-8.0mm wall thickness 140mm PipeBloc PCP PP Pipe 160mm Ø 4.0-14.6mm wall thickness 160mm PipeBloc PCP

Penetration Specification	Collar Reference	Intumescent Material	
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PipeBloc PCP		
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)	
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PipeBloc PCP	VII. VII. VII.	
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)	
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PipeBloc PCP		
PE Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PipeBloc PCP	30mm (W) x 8mm (T)	
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PipeBloc PCP	지 여 더 지 여 지 여	
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)	
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PipeBloc PCP		
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PipeBloc PCP	DOUR YOUR YOUR	
PE Pipe 125mm Ø 3.1mm wall thickness	125mm PipeBloc PCP	40mm (W) x 12mm (T)	
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PipeBloc PCP		
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PipeBloc PCP	VII. VII. VII.	



Certificate No. UL-EU-00771-CPR Page 146/157 Date of Issue 2015-04-19

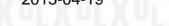
Double Layer, Stopseal Fire Batt 50mm, Patress Installed Electrical Cables

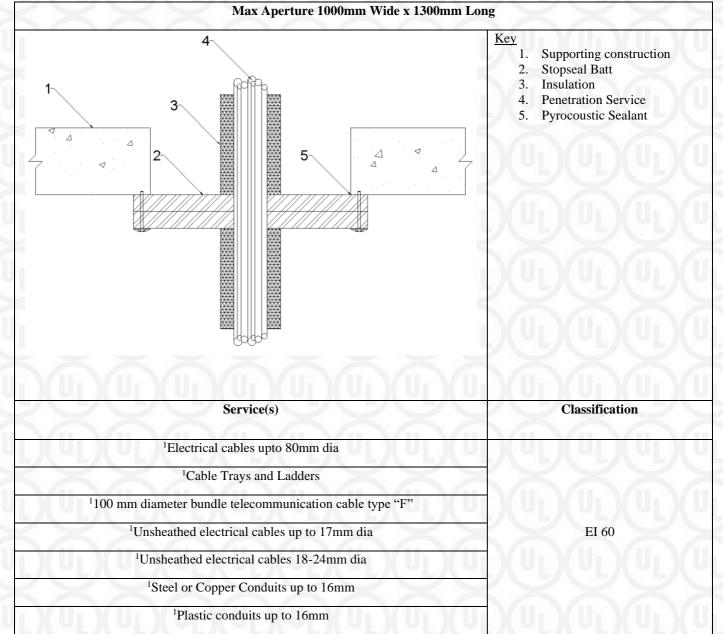


\*All cables coated with 2mm DFT PST Coating 300mm along the cables upper side of the seal Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt

Certificate No. Page UL-EU-00771-CPR 147/157 2015-04-19







<sup>1</sup>Cables and cable trays wrapped with a single layer of 40mm thick stonewool, min 40kg/m<sup>3</sup> (L/I 300mm)

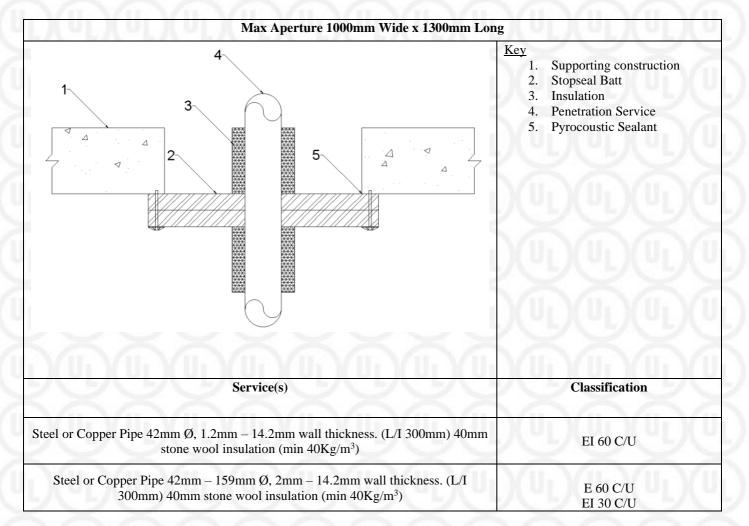
Certificate No.

Date of Issue

UL-EU-00771-CPR 148/157 2015-04-19

Double Layer, Stopseal Fire Batt 50mm, Pattress Installed Insulated Metallic Pipes

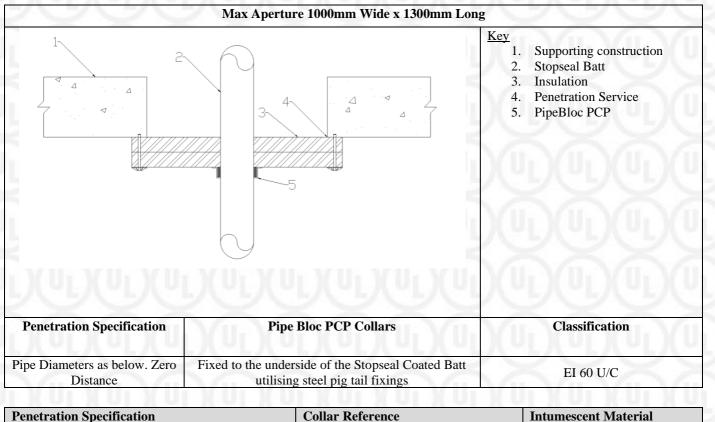
Page





Certificate No. Page Date of Issue UL-EU-00771-CPR 149/157 2015-04-19

Double Layer, Stopseal Fire Batt 50mm, Pattress Installed Plastic Pipes



Penetration Specification	Collar Reference	Intumescent Material	
PVC Pipe 32mm Ø 1.8mm wall thickness	32mm PipeBloc PCP	VI. VII. VII. VII	
PVC Pipe 40mm Ø 1.8mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)	
PVC Pipe 50mm Ø 1.8mm wall thickness	50mm PipeBloc PCP		
PVC Pipe 55mm Ø 2.3-2.8mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)	
PVC Pipe 63mm Ø 2.3-2.8mm wall thickness	63mm PipeBloc PCP		
PVC Pipe 75mm Ø 3.1-4.4mm wall thickness	75mm PipeBloc PCP	30mm (W) x 8mm (T)	
PVC Pipe 82mm Ø 3.1-4.4mm wall thickness	82mm PipeBloc PCP		
PVC Pipe 90mm Ø 4.2-6.6mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)	
PVC Pipe 100mm Ø 4.2-6.6mm wall thickness	100mm PipeBloc PCP		
PVC Pipe 110mm Ø 4.2-6.6mm wall thickness	110mm PipeBloc PCP	$\propto \times \times \times >$	
PVC Pipe 125mm Ø 6.0mm wall thickness	125mm PipeBloc PCP	40mm (W) x 12mm (T)	
PVC Pipe 140mm Ø 6.1-7.5mm wall thickness	140mm PipeBloc PCP		
PVC Pipe 160mm Ø 6.2-9.5mm wall thickness	160mm PipeBloc PCP		

Certificate No. Page Date of Issue UL-EU-00771-CPR 150/157 2015-04-19

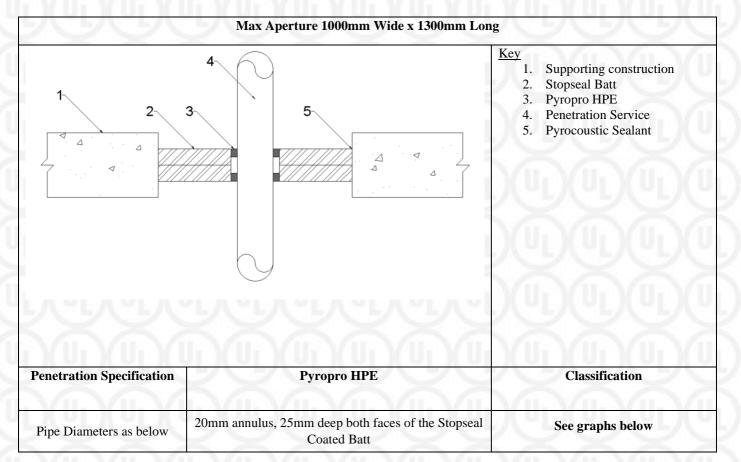
Penetration Specification	Collar Reference	Intumescent Material
PP Pipe 32mm Ø 2.9mm wall thickness	32mm PipeBloc PCP	
PP Pipe 40mm Ø 2.9mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)
PP Pipe 50mm Ø 2.9mm wall thickness	50mm PipeBloc PCP	
PP Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)
PP Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PipeBloc PCP	
PP Pipe 75mm Ø 2.8-6.7mm wall thickness 75mm PipeBloc PCP		30mm (W) x 8mm (T)
PP Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PipeBloc PCP	
PP Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)
PP Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PipeBloc PCP	VII. VII. VII. V
PP Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PipeBloc PCP	
PP Pipe 125mm Ø 3.1mm wall thickness 125mm PipeBloc PCP		40mm (W) x 12mm (T)
PP Pipe 140mm Ø 3.5-8.0mm wall thickness	140mm PipeBloc PCP	VII. VII. VII. V
PP Pipe 160mm Ø 4.0-14.6mm wall thickness	160mm PipeBloc PCP	그 저 먹 난 사 먹 난 사 먹 난 사

Penetration Specification	Collar Reference	Intumescent Material	
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PipeBloc PCP		
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)	
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PipeBloc PCP		
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)	
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PipeBloc PCP	VI VI VI	
PE Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PipeBloc PCP	30mm (W) x 8mm (T)	
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PipeBloc PCP		
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)	
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PipeBloc PCP	CUENCUENCUE	
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PipeBloc PCP	アロシビシビシ	
PE Pipe 125mm Ø 3.1mm wall thickness	n wall thickness 125mm PipeBloc PCP 40mm (		
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PipeBloc PCP	VII. VII. VII.	
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PipeBloc PCP		



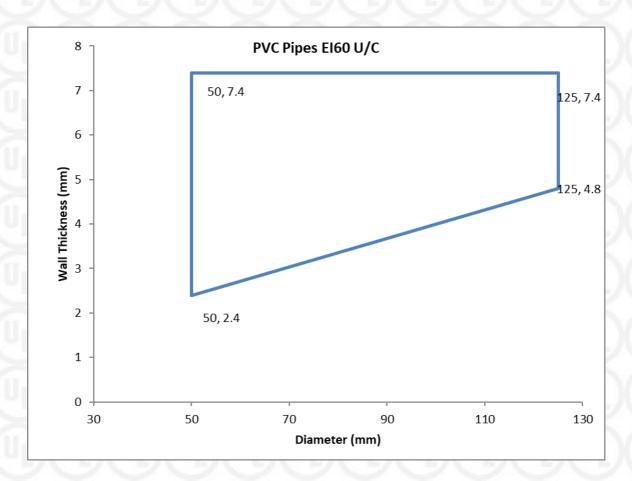
Certificate No. Page Date of Issue UL-EU-00771-CPR 151/157 2015-04-19

Double Layer, Stopseal Fire Batt 50mm, Plastic Pipes





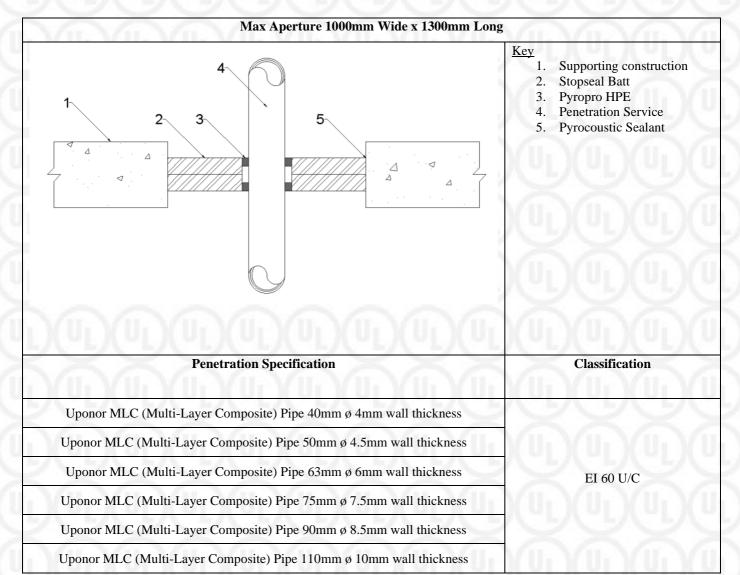
Certificate No. UL-EU-00771-CPR Page 152/157 Date of Issue 2015-04-19



Form-ULID-006104 (DCS:27-CP-F0855) 5.0



Certificate No. Page Date of Issue UL-EU-00771-CPR 153/157 2015-04-19



Pyropro HPE 20mm annulus full 50mm depth of the Stopseal Coated Batt

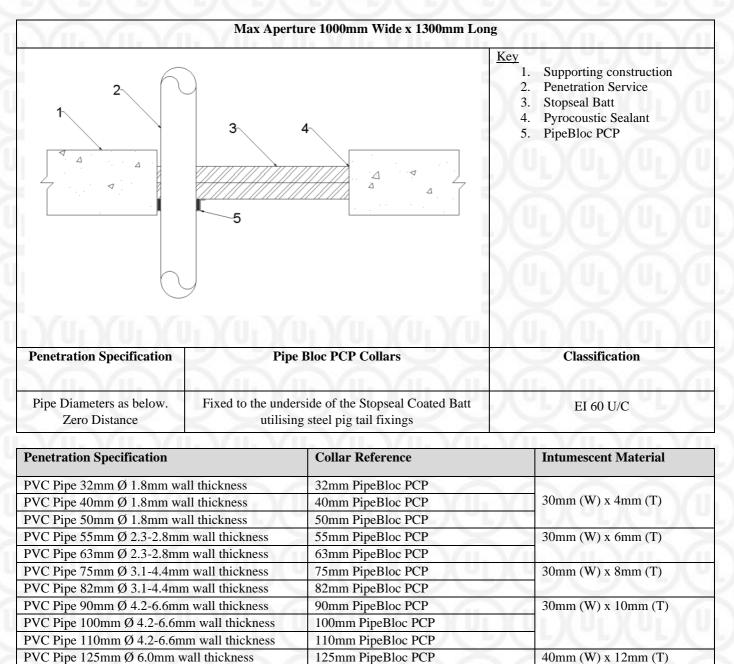


Certificate No. Page Date of Issue

PVC Pipe 140mm Ø 6.1-7.5mm wall thickness

PVC Pipe 160mm Ø 6.2-9.5mm wall thickness

UL-EU-00771-CPR 154/157 2015-04-19



Form-ULID-006104 (DCS:27-CP-F0855) 5.0

140mm PipeBloc PCP

160mm PipeBloc PCP



Certificate No. Page Date of Issue UL-EU-00771-CPR 155/157 2015-04-19

Penetration Specification	Collar Reference	Intumescent Material
PP Pipe 32mm Ø 2.9mm wall thickness	32mm PipeBloc PCP	VI VII. VII. V
PP Pipe 40mm Ø 2.9mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)
PP Pipe 50mm Ø 2.9mm wall thickness	50mm PipeBloc PCP	
PP Pipe 55mm Ø 2.9-4.4mm wall thickness		
PP Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PipeBloc PCP	
PP Pipe 75mm Ø 2.8-6.7mm wall thickness	75mm PipeBloc PCP	30mm (W) x 8mm (T)
PP Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PipeBloc PCP	
PP Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)
PP Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PipeBloc PCP	
PP Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PipeBloc PCP	
PP Pipe 125mm Ø 3.1mm wall thickness	125mm PipeBloc PCP	40mm (W) x 12mm (T)
PP Pipe 140mm Ø 3.5-8.0mm wall thickness	140mm PipeBloc PCP	しんりしんりしんりしん
PP Pipe 160mm Ø 4.0-14.6mm wall thickness	160mm PipeBloc PCP	1000

Penetration Specification	Collar Reference	Intumescent Material	
PE Pipe 32mm Ø 2.9mm wall thickness	32mm PipeBloc PCP		
PE Pipe 40mm Ø 2.9mm wall thickness	40mm PipeBloc PCP	30mm (W) x 4mm (T)	
PE Pipe 50mm Ø 2.9mm wall thickness	50mm PipeBloc PCP		
PE Pipe 55mm Ø 2.9-4.4mm wall thickness	55mm PipeBloc PCP	30mm (W) x 6mm (T)	
PE Pipe 63mm Ø 2.9-4.4mm wall thickness	63mm PipeBloc PCP		
PE Pipe 75mm Ø 2.8-6.7mm wall thickness 75mm PipeBloc PCP		30mm (W) x 8mm (T)	
PE Pipe 82mm Ø 2.8-6.7mm wall thickness	82mm PipeBloc PCP	VIII VIII VIII V	
PE Pipe 90mm Ø 2.7-10.0mm wall thickness	90mm PipeBloc PCP	30mm (W) x 10mm (T)	
PE Pipe 100mm Ø 2.7-10.0mm wall thickness	100mm PipeBloc PCP	$\times \times \times$	
PE Pipe 110mm Ø 2.7-10.0mm wall thickness	110mm PipeBloc PCP	VII. VII. VII. V	
PE Pipe 125mm Ø 3.1mm wall thickness 125mm PipeBloc PCP		40mm (W) x 12mm (T)	
PE Pipe 140mm Ø 3.9-5.8mm wall thickness	140mm PipeBloc PCP		
PE Pipe 160mm Ø 4.9-9.5mm wall thickness	160mm PipeBloc PCP	Va Va Va	



Certificate No. Page UL-EU-00771-CPR 156/157

Date of Issue

2015-04-19

Substrate Substrate	bubstrate Seal width Seal	Minimum Seal		Duct Specification (Duct must be classified in accordance with	Fire Resistance (mins.)			
Substrate	Thickness (mm)	(mm)	Depth (mm)	Duct B	EN 13501-3/4 for the required period)	E S		
Drywall/ Concrete/	100	100	200*	А	ԿՆ(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(ԿՆ)(Կ	60	120	
Masonry wall	Masonry	100		В		120	Y	
Concrete floor 150	Concrete 150	150	250	275** -	А	EN 13501-3 - Uninsulated 1.0mm GMS steel, rectangular duct, maximum dimensions 1250 mm wide by 1000 mm high.	120	120
	230	215	В	DUDUDUDU	120	火		
Drywall/ Concrete/ Masonry wall	100	100	400***	А	ԽԽԽԽԽ	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/m <sup>3</sup> , 25 mm thick for a length of 400 mm through the penetration seal (100 mm extending from both faces of the seal)	120	X	
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/m <sup>3</sup> , 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 Stopseal Batt/100 mm Silverseal HS Compound/125 mm Stopseal Batt

\*\*\* 2 layers + 1 layer, 150 mm long fixed (with 75 and 100 mm pigtail screws and bedded on Pyropro HPE 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-00771-CPR Page 157/157 Date of Issue 2015-04-19

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 <sup>®</sup> 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.