UL-EU CERTIFICATE

Certificate No. UL-EU-00910-CPR

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Date of Issue 2015-10-09 Revised 2023-04-26

Certificate Holder Polyseam Ltd

15. St. Andrews Road

Huddersfield, West Yorkshire

HD1 6SB, UK

Manufacturer Polyseam Ltd

15. St. Andrews Road

Huddersfield, West Yorkshire

HD1 6SB, UK

Certified Product Type Fire Stop - Sealant Product Trade Name Protecta FR IPT

Trademark N/A

Rating/Classification See Appendix

Harmonised Technical Specifications EAD 350454-00-1104, September 2017/ EAD 350141-00-

1106/EN 13501-2

Supporting Documentation 0843-UKTA-22/0028, 0843-UKTA-22/0029, UK -

CERTIFICATE OF CONSTANCY OF PERFORMANCE -

0843 - CPR - 1224, and Classification Report No.

13CA40986 Issue 1 / 4788672825 Issue 1 / 4788672830

Issue 1 / UL 4790592013 / UL 4790592005

Additional information Additional test evidence is held on file

Expiry date 2025-10-08





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shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



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This certificate relates to the use of Protecta FR IPT sealant for fire stopping where there are joints in or between walls and floors or service penetrations through floors and walls. The detailed scope is given in pages 3 to 24 of this Certificate. This shows the thickness and acceptable dimensions, substrates and orientations required to provide fire resistance periods of up to 240 minutes for differing services and wall/floor constructions.

The product is certificated on the basis of:

- i) UKTA 22/0028 & UKTA 22/0029
- ii) UK CERTIFICATE OF CONSTANCY OF PERFORMANCE 0843 CPR 1224
- iii) Inspection and surveillance of factory production control by UL
- iv) Fire resistance test data in accordance with EN 1366-3: 2009 and 1366-4: 2006
- v) Classification in accordance with EN 13501-2
- vi) Durability and Serviceability as defined in EAD 350141-00-1106

The movement capability of Protecta FR IPT joint seals is restricted to $\leq 7.5\%$

The durability class of Protecta FR IPT is X - intended for use at conditions exposed to weathering. Includes lower use categories.

Protecta FR IPT is a sealant used to form linear gap seals where gaps are present. The intended use is to reinstate the fire resistance performance of floor to floor/ floor to wall joints and wall gaps. Typical locations of linear joints include floors, the perimeter of floors, walls, ceilings and roofs. The sealant may also be used to form a penetration seal around cables, conduits, metallic pipes and plastic pipes to reinstate the fire resistance performance of wall and floor constructions, where they have been provided with apertures for the penetration of services.

The Protecta FR IPT sealant is supplied in liquid form contained within 200 ml, 300 ml, 380 mm and 600 ml containers. The sealant is gunned into the aperture in the separating element/elements to a specified depth.





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| Product-type: Sealant | Intended use: Linear | Intended use: Linear Joint, Gap Seal & Penetration Seal | | |
|--|--|---|--|--|
| Assessment method | Essential characteristic | Product Performance | | |
| X Ur X Ur X Ur | BWR 2 Safety in case of fire | I X U I X U I X I | | |
| EN 13501-1 | Reaction to fire | Class B-s1, d0 | | |
| EN 13501-2 | Resistance to fire | See pages 4 & 24 | | |
| X Ur X Ur X Ur | BWR 3 Hygiene, health and environment | r X Ur X Ur X I | | |
| Declaration of manufacturer & EN 16516 | Content, emission and/or release of dangerous substances | Declaration of manufacturer | | |
| EN 1026:2000 | Air permeability (material property) | See page 25# | | |
| EAD 350141-00-1106, Annex C & EN 12390-8 | Water permeability (material property) | No performance determined | | |
| VII. VII. VII. | BWR 4 Safety in use | - VIII- VIII- VI | | |
| EOTA TR 001:2003 | Mechanical resistance and stability | No performance determined | | |
| EOTA TR 001:2003 | Resistance to impact/movement | No performance determined | | |
| EOTA TR 001:2003 ISO 11600 & EAD 350141-00- 1106, Clause 2.2.13 | Adhesion | No performance determined | | |
| EAD 350141-00-1106, Clause 2.2.12 | Durability | X | | |
| EAD 350141-00-1106, Clause 2.2.13 | Movement capacity | No performance determined | | |
| EAD 350141-00-1106, Clause 2.2.14 | Cycling of perimeter seals for curtain walls | No performance determined | | |
| EAD 350141-00-1106, Clause 2.2.15 | Compression set | No performance determined | | |
| EAD 350141-00-1106, Clause 2.2.16 | Linear expansion on setting | No performance determined | | |
| | BWR 5 Protection against noise | | | |
| EN 10140-1,2,4,5/ EN ISO 717-1 | Airborne sound insulation | Rw (C;Ctr)= 62 (0;-4) dB* | | |
| XXX | BWR 6 Energy economy and heat retention | | | |
| EN 12664, EN 12667, EN 12939, EN ISO 8990, EN ISO 6946, EN ISO 10456 | Thermal properties | No performance determined | | |
| EN ISO 12572, EN 12086, EN ISO 10456 | Water vapour permeability | No performance determined | | |



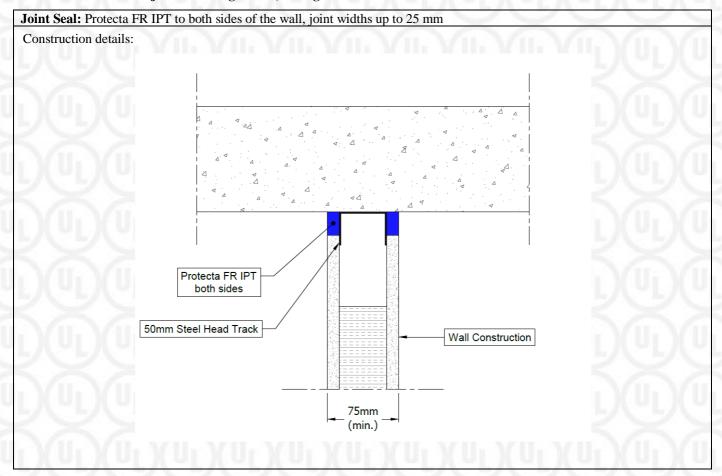
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Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 75 mm

Linear horizontal wall joints abutting a floor, ceiling or roof



| Substrate | Depth (mm) | Backing | Classification |
|------------|------------|---|---|
| Wall/Floor | 12.5 min. | Minimum 50 mm steel partition head track/ stud | E 60 – T – X – F – W 25 EI 45 – T – X – F – W 25 |



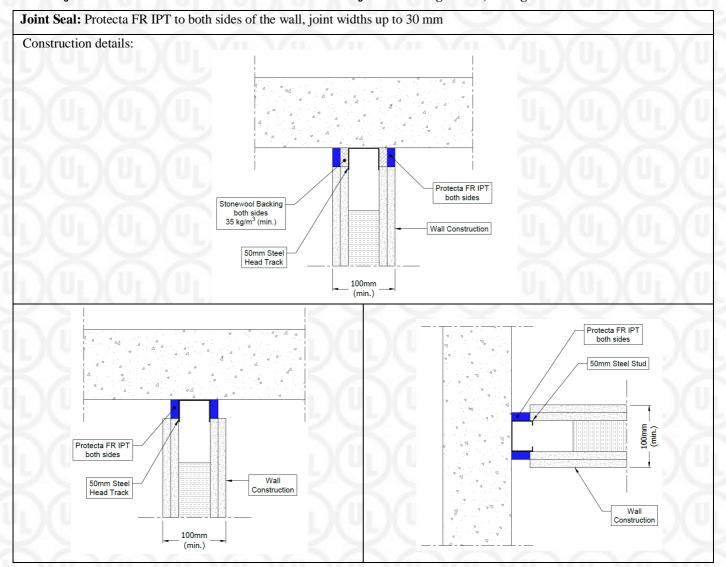
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Flexible and rigid wall constructions with wall thickness of minimum 100 mm

Linear joints in a vertical construction and horizontal wall joints abutting a floor, ceiling or roof



| Substrate | Depth (mm) | Backing | Classification |
|-------------|--|--|---|
| V/2/2/2/2/2 | 12.5 mm stonewool minimum 35 kg/m³ plus minimum 50 mm steel partition head track | EI 120 – T – X – F – W 30 | |
| Wall/Floor | 12.5 min. | Minimum 50 mm steel partition head track | E 90 – T – X – F – W 25 EI 60 – T – X – F – W 25 |
| | Mil. Mil. Mil. | /stud | EI 120 – V– X – F – W 15 |

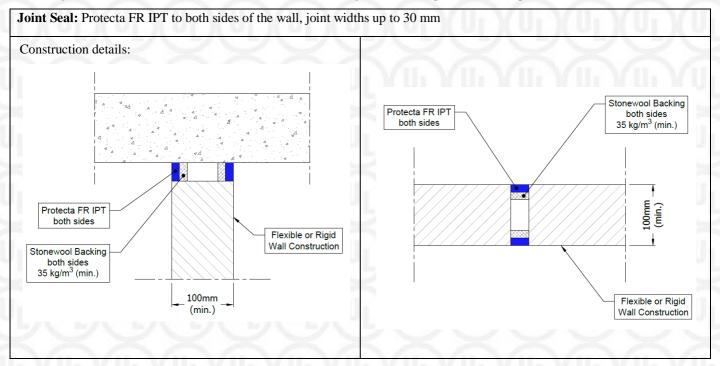


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Linear joints in a vertical construction and horizontal wall joints abutting a floor, ceiling or roof



| Substrate | Depth (mm) | Backing | Classification |
|------------|------------|--|--|
| Wall/Floor | 12.5 min. | 12.5 mm stonewool minimum 35 kg/m ³ | EI 120 – T – X – F – W 30 EI 120 – V – X – F – W 30 |

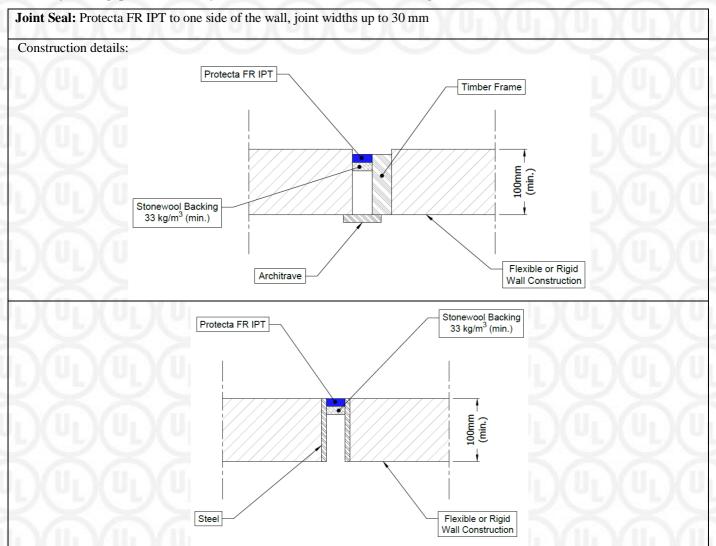


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Linear joint or gap seals, vertically or horizontal orientated with backing materials



| Substrate | Depth (mm) | Facing (minimum) | Backing | Classification |
|--------------------------------------|---------------|---|--|--|
| Flexible or rigid wall / | 12.5 min. | Single sided linear seals in flexible or rigid walls against wooden frames covered with architraves on the other side fixed with 27 mm steel pins at nominal 280 mm centres | 12.5 mm stone- wool min. 33 kg/m ³ | EI 30 - T - X - F - W 30 |
| Flexible or rigid wall / Steel | 12.5 min. | Single sided linear seals in flexible or rigid walls against steel frames, or in-between two steel surfaces | 12.5 mm stone- wool min. 33 kg/m ³ | E 120 - T - X - F - W 30 EI 30 - T - X - F - W 30 |

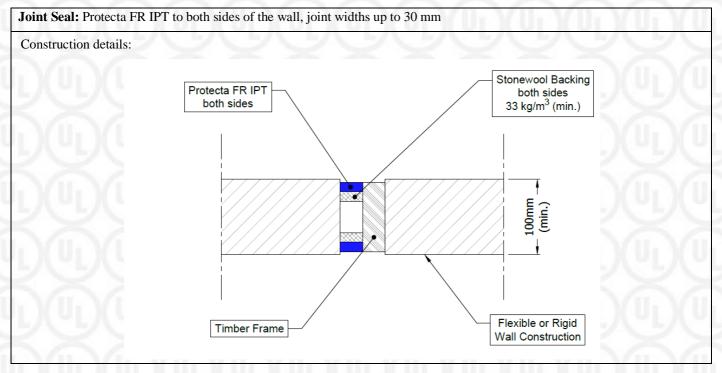


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Linear joint or gap seals, vertically or horizontal orientated with backing materials



| Substrate | Depth (mm) | Facing | Backing | Classification |
|--------------------------|---------------|--|-------------------------|--------------------------|
| Flexible or rigid wall / | 12.5 min. | Double sided linear seals in flexible or rigid walls against | 12.5 mm stone-wool min. | EI 60 - V - X - F - W 30 |
| Timber | | wooden frames | 33 kg/m ³ | EI 90 - T - X - F - W 30 |



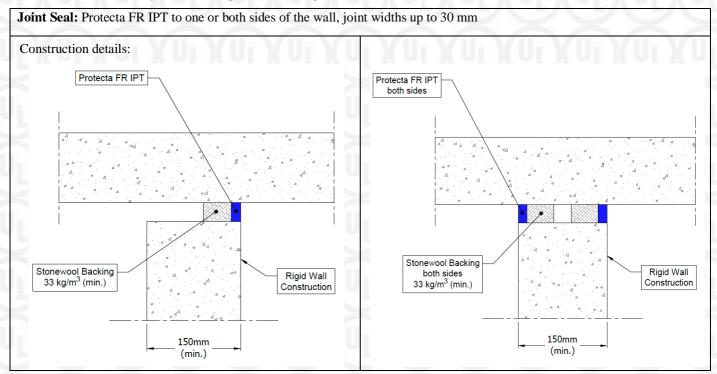
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Rigid wall constructions with wall thickness of minimum 150 mm

Linear horizontal wall joints abutting a floor, ceiling or roof



| Substrate | Depth (mm) | Backing | Classification |
|-----------|------------------------|---|--|
| Concrete/ | 15 min. (one side) | 45 mm stone wool minimum 33 kg/m ³ | E 240 – T – X – F – W 30 EI 60 – T – X – F – W 30 |
| masonry | 15 min. (both side) | 45 mm stone wool minimum 33 kg/m ³ | EI 240 – T – X – F – W 30 |



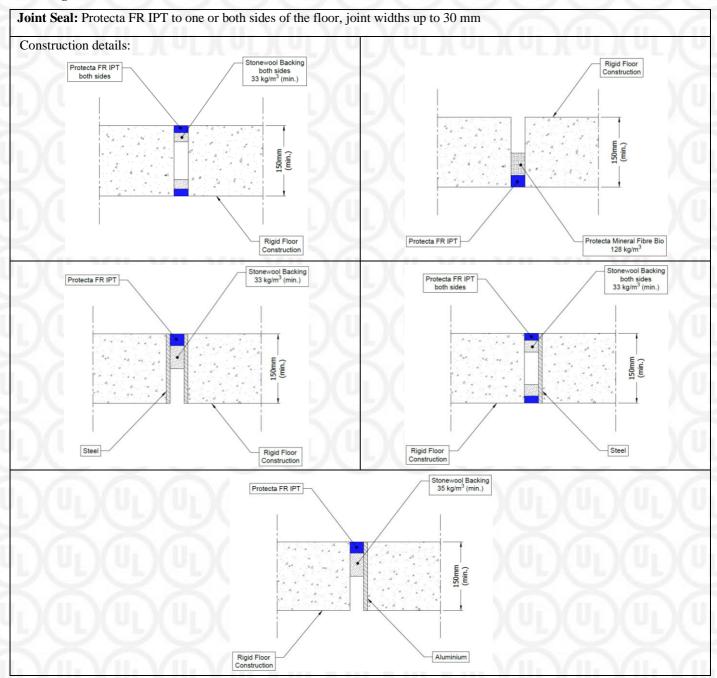
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Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

Linear joints in a horizontal construction, horizontal linear joints in a vertical construction and horizontal floor joints abutting a wall



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| Substrate | Depth (min) | Backing | Position | Classification |
|----------------------|-------------|---|----------|---|
| L)(PL)(| 15 mm | 20 mm stonewool minimum 33 kg/m ³ | Both | EI 240 – H – X – F – W 30 |
| Concrete | 25 mm | 48 mm Protecta Mineral Fibre BIO 128 kg/m ³ | Any | E 240 – H – X – F – W 30 EI 180 – H – X – F – W 30 |
| Steel/steel or | 25 mm | 50 mm stonewool minimum 33 kg/m ³ | Тор | E 240 – H – X – F – W 30 EI 20 – H – X – F – W 30 ¹ |
| steel/ concrete | 15 mm | 25 mm stonewool minimum 33 kg/m ³ | Both | E 180 – H – X – F – W 30 EI 45 – H – X – F – W 30 ² |
| Aluminium / concrete | 25 mm | 50 mm stonewool minimum 35 kg/m ³ | Тор | E 240 – H – X – F – W 30 EI 15 – H – X – F – W 30 ³ |

^{*}Additional and for information only.

The classifications provided in Table A.3.1.1 consider the insulation performance of all components within the firestopping system as per the requirements of EN 1366-4. This includes temperature evaluation of the steel substrate.

In relation to each of the above classifications, temperatures recorded on the seal (exclusive of the supporting construction) exceeded the maximum allowable after the following times (rounded down):

¹ 60, ² 120, ³ 90



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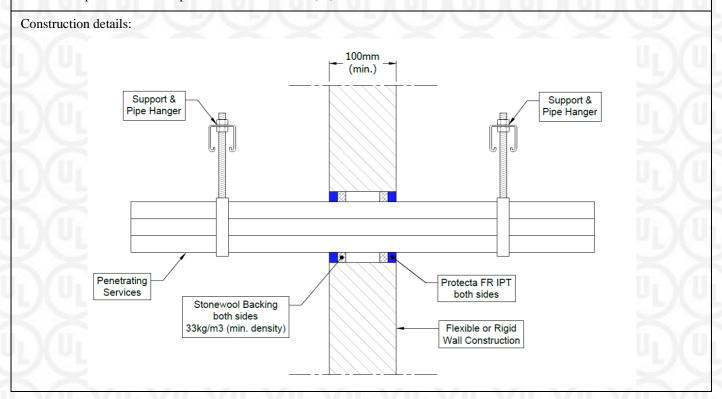
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Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm

Double side penetration seal with cables and conduits

Penetration Seal: Cables (single or bundles up to 100 mm Ø) and conduits fitted at any position within the aperture, with Protecta FR IPT sealant to both sides of the wall, backed with stone wool insulation. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2).



Double sided penetration seal with cables

| Services | Sealant depth (min.) | Backing (min.) | Aperture Ø | Classification |
|--|----------------------|-------------------------------|----------------------|----------------|
| Cables up to 21 mm Ø | | | | E 90, EI 60 |
| Cables up to 21 mm Ø, in bundles up to 50 mm Ø | 12.5 mm | Stone wool 12.5 mm deep 33 | Maximum annular ring | EI 60 |
| Cables up to 21 mm \emptyset , in bundles up to 100 mm \emptyset | | kg/m³ | width 30 mm | E 60, EI 45 |



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Double sided penetration seal with conduits

| Services | Sealant depth (min.) | Backing (min.) | Maximum Annular | Classification |
|--|----------------------|--|--------------------|-----------------|
| PVC pipe | | | space | |
| Diameter 32 mm, wall thickness 1.6 mm for PVC pipes, fully or partially filled conduits with cables up to 21 mm diameter | 12.5 mm | Stone wool 12.5 mm deep 33 kg/m ³ | 30 mm | E 90, EI 60 C/C |
| Maximum diameter 32 mm, wall thickness 1.0-2.4 mm for PVC pipes, fully or partially filled conduits with cables up to 21 mm diameter | 25 mm | None | 30 mm | E 90, EI 60 C/C |
| PP pipe | | | | |
| Diameter 32 mm, wall thickness 4.4 mm for PP pipes, fully or partially filled conduits with cables up to 21 mm diameter | 12.5 mm | Stone wool 12.5 mm deep 33 kg/m ³ | 30 mm | E 90, EI 60 C/C |
| Maximum diameter 32 mm, wall thickness 1.8-4.4 mm for PP pipes, fully or partially filled conduits with cables up to 21 mm diameter | 25 mm | None | 30 mm | E 90, EI 60 C/C |



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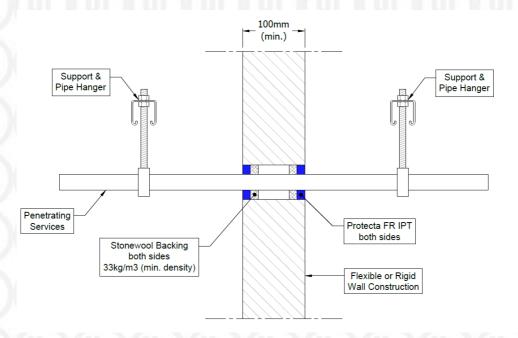
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Double side penetration seal with metallic (and composite) pipes

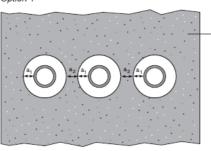
Penetration Seal: Pipe (single) fitted at any position within the aperture, with 12.5 mm deep Protecta FR IPT Sealant to both sides of the wall, backed with 12.5 mm deep stone wool insulation minimum 33kg/m3. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2).

Construction details:

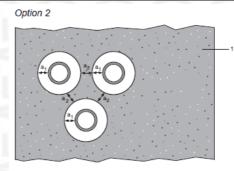


Configuration 1:

Option 1



Configuration 2:



Kev

- 1 Supporting construction
- al Pipe / top edge of seal separation
- a2 Pipe / side edge of seal separation
- a3 Pipe / pipe separation



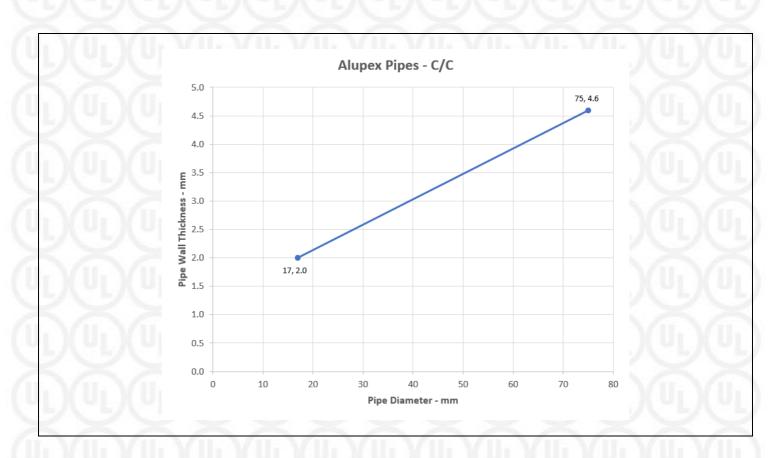
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| Services | Sealant depth (min.) | Backing (min.) | Aperture Ø | Classification |
|---|----------------------|--|--|---|
| Alupex composite pipe 16-20 mm diameter/2.0 mm wall Alupex composite pipe 17-75 mm diameter/ * Steel pipe 4-22 mm diameter/1.0-11.0 mm wall Copper or steel pipe 6-12 mm diameter/0.8-6.0 mm wall Copper or steel pipe 13-54 mm diameter/0.8-14.2 mm wall | - 12.5 mm | Stone wool 12.5 mm deep 33 kg/m ³ | Maximum annular ring width 30 mm | EI 120 C/C E 90, EI 15 C/C EI 120 C/U E 120, EI 60 C/C E 90 C/C |

^{*} See below graphs for interpolated pipe sizes





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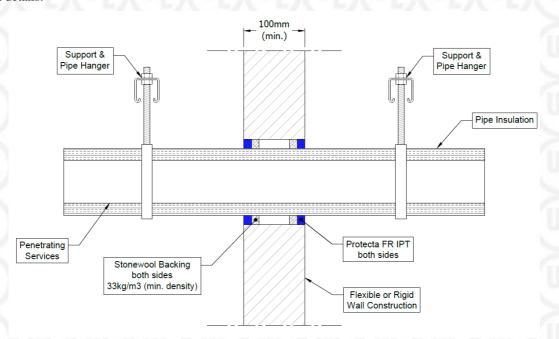
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Double side penetration seal with metallic pipes

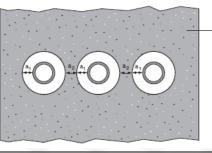
Penetration Seal: CS (Continuous Sustained) insulated metallic pipes (single) fitted at any position within the aperture, with minimum 12.5 mm Protecta FR IPT to both sides of the wall, backed with minimum 12.5 mm deep stone wool insulation minimum 33 kg/m3. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2). Maximum annular ring width 30 mm.

Construction details:

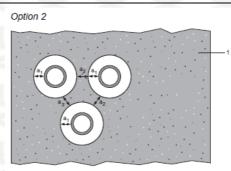


Configuration 1:

Option 1



Configuration 2:



Key

- 1 Supporting construction
- al Pipe / top edge of seal separation
- a2 Pipe / side edge of seal separation
- a3 Pipe / pipe separation



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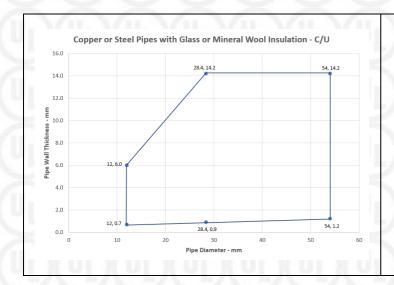
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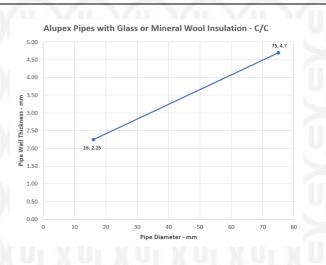
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Double sided penetration seal with pipes

| Services | Insulation | Classification |
|--|--|-----------------|
| Copper or steel pipe maximum 54 mm diameter/0.7-14.2 mm wall * | 20 mm thick glass or stone, mineral wool min. 75 kg/m ³ | EI 90 C/U |
| Copper or steel pipe maximum 54 mm diameter/0.7-14.2 mm wall * | 20-40 mm thick glass or stone, mineral wool min. 75 kg/m ³ | E 90, EI 60 C/U |
| Alupex composite pipe 75 mm diameter/ 4.7 mm wall | 60 mm thick glass or stone, mineral wool min. 75 kg/m ³ | EI 120 C/C |
| Alupex composite pipe maximum 75 mm diameter/ * | 20-60 mm thick glass or stone, mineral wool min. 75 kg/m ³ | EI 90 C/C |

^{*} See below graphs for interpolated pipe sizes







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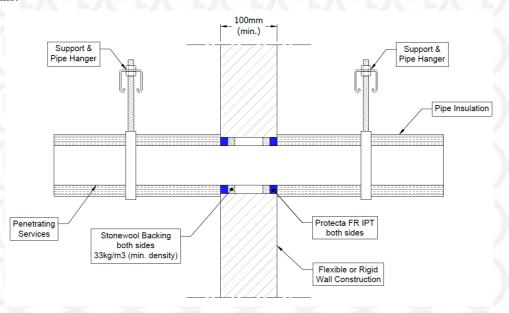
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Double side penetration seal with metallic (and composite) pipes

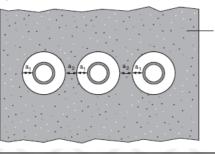
Penetration Seal: LI (Local Interrupted) of minimum length stated below or CI (Continuous Interrupted) insulated metallic pipes and composite (single) fitted at any position within the aperture, with minimum 12.5 mm Protecta FR IPT to both sides of the wall, backed with minimum 12.5 mm deep stone wool insulation minimum 33 kg/m3. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2). Maximum annular ring width 30 mm.

Construction details:

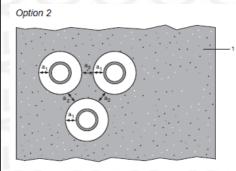


Configuration 1:

Option 1



Configuration 2:



Key

- 1 Supporting construction
- al Pipe / top edge of seal separation
- a2 Pipe / side edge of seal separation
- a3 Pipe / pipe separation



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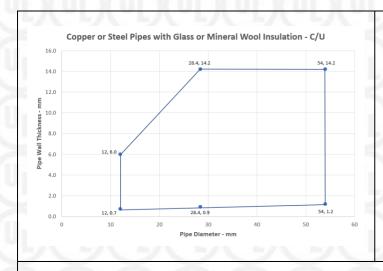
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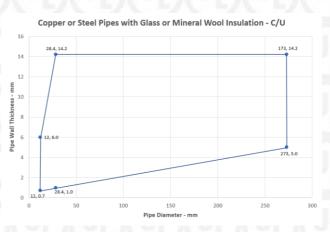
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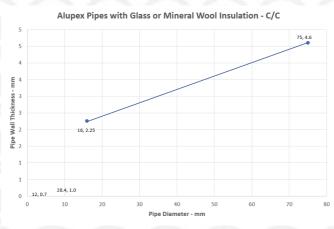
Double sided penetration seal with pipes

| Services | Insulation (minimum) | Classification |
|--|--|------------------|
| Copper or steel pipe maximum 54 mm diameter/0.7-14.2 mm wall * | 500 mm length of 20 mm thick glass or stone, mineral wool 75 kg/m ³ | E 90, EI 60 C/U |
| Steel pipe maximum 273 mm diameter/0.7-14.2 mm wall * | 500 mm length of 30 mm thick glass or stone, mineral wool 75 kg/m ³ | E 90, EI 60 C/U |
| Alupex composite pipe 16 mm diameter/ 2.25 mm wall | 500 mm length of 20 mm thick glass or stone, mineral wool 75 kg/m ³ | EI 120 C/C |
| Alupex composite pipe maximum 75 mm diameter/ * | 500 mm length of 25 mm thick glass or stone, mineral wool 75 kg/m ³ | E 120, EI 90 C/C |

^{*} See below graphs for interpolated pipe sizes









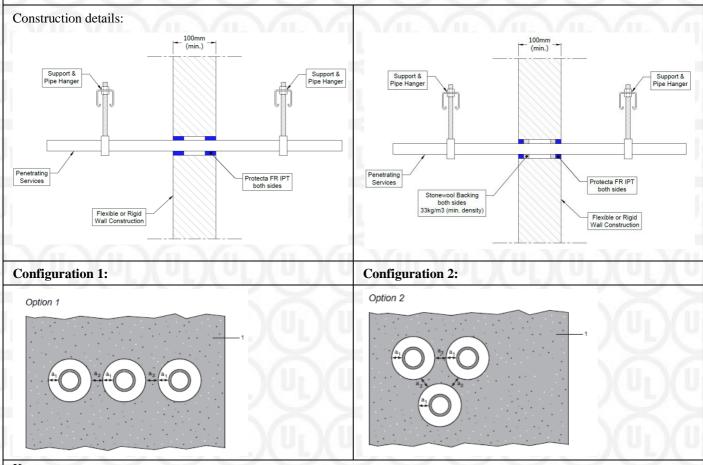
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Double side penetration seal with plastic pipes

Penetration Seal: Plastic pipes (single) fitted at any position within the aperture, with 25 mm Protecta FR IPT to both sides of the wall. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2).



Key

- 1 Supporting construction
- al Pipe / top edge of seal separation
- a2 Pipe / side edge of seal separation
- a3 Pipe / pipe separation



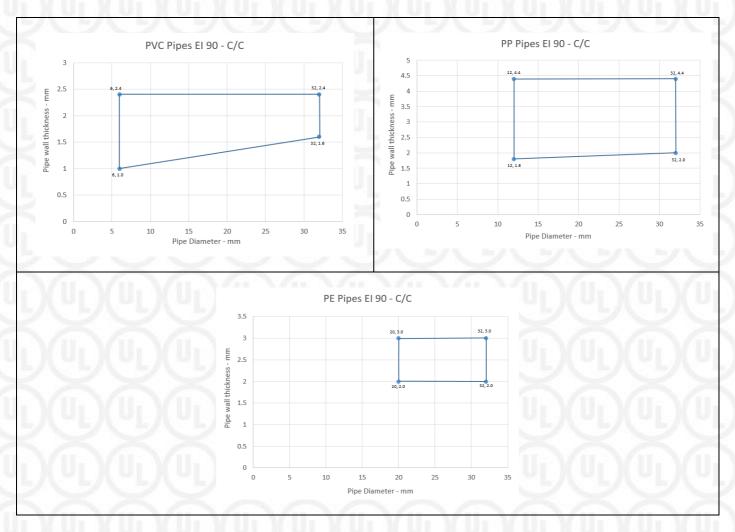
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| Services PVC pipe | Sealant depth (minimum) | Backing (minimum) | Classification |
|-----------------------------|-------------------------|--|-----------------|
| 32 mm Ø/1.6 mm wall | 12.5 mm | Stone wool 12.5 mm deep 33 kg/m ³ | E 90, EI 60 C/C |
| 6-32 mm Ø/1.0-2.4 mm wall* | 25 mm | None | EI 90 C/C |
| PP pipe | | | |
| 32 mm Ø/4.4 mm wall | 12.5 mm | Stone wool 12.5 mm deep 33 kg/m ³ | E 90, EI 60 C/C |
| 12-32 mm Ø/1.8-4.4 mm wall* | 25 mm | None | EI 90 C/C |
| PE pipe | | | |
| 20-32 mm Ø/2.0-3.0 mm wall* | 25 mm | None | EI 90 C/C |

^{*}See below graphs for interpolated pipe sizes and permitted pipe wall thicknesses



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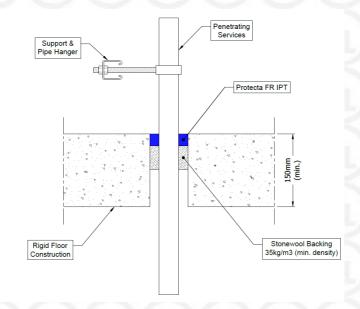
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Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

Single side penetration seal with pipes

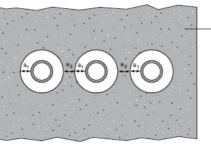
Penetration Seal: Pipes fitted at any position within the aperture, with Protecta FR IPT to the top face of the floor, backed with 48 mm stone wool minimum 35kg/m3. Minimum annular space 10 mm (a1) and minimum separation between penetration seals 30 mm (a2).

Construction details:

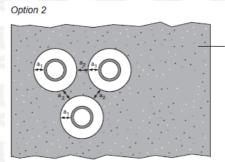


Configuration 1:

Option 1



Configuration 2:



Key

- 1 Supporting construction
- al Pipe / top edge of seal separation
- a2 Pipe / side edge of seal separation
- a3 Pipe / pipe separation



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| Services | Sealant | Backing | Aperture | Classification |
|--------------------------------------|--------------|---------------------|--------------------------|------------------|
| Mild or stainless steel pipe | depth (min.) | (min.) | (max.) | |
| 4-16 mm diameter/1.0-8.0 mm wall | 25 mm | 48 mm stone wool | Annular ring width 30 mm | EI 120 C/U |
| Copper or steel pipe | | | | |
| Up to 10 mm diameter/0.7-5.0 mm wall | 25 mm | 48 mm stone wool | Annular ring width 30 mm | EI 120 C/C |
| 11-15 mm diameter/0.7 -7.5 mm wall | 25 mm | 48 mm stone wool | Annular ring width 30 mm | E 120, EI 45 C/C |
| Alupex composite pipe | | | | |
| 16-20 mm diameter/2.0 mm wall | 25 mm | 48 mm stone wool | Annular ring width 30 mm | EI 120 C/C |

| Services | Sealant depth | Backing | Classification |
|--|-------------------|---------------------|-----------------------|
| PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1, PVC-C according to EN 1566-1 | (min.) | (min.) | |
| 6-32 mm diameter/1.0-2.4 mm wall* | 25 mm | 48 mm stone wool | EI 120 U/C |
| PP pipe according to EN 1451-1 | | | |
| 12-32 mm diameter/1.8-4.4 mm wall* | 25 mm | 48 mm stone wool | EI 120 U/C |
| PE pipe according to EN 1519-1, EN 12201-2 and EN 1 SAN+PVC according to EN 1565-1 | 2666-1, ABS accor | rding to EN 1455- | 1 and pipes made from |
| 20-32 mm diameter/2.0-3.0 mm wall* | 25 mm | 48 mm stone wool | EI 120 U/C |

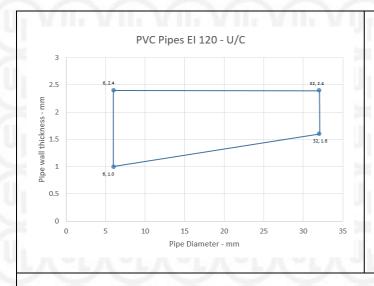
^{*}See below graphs for interpolated pipe sizes and permitted pipe wall thicknesses

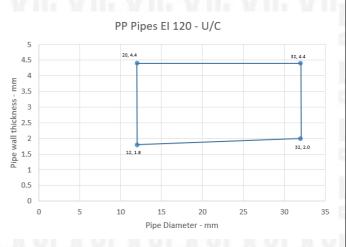


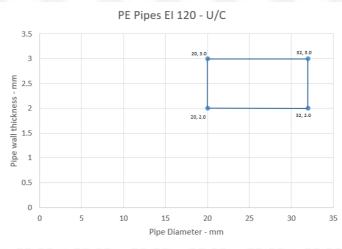
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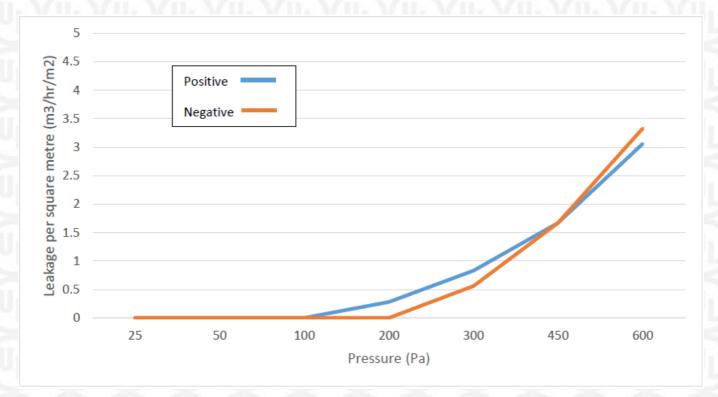
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ANNEX B - Air Permeability - Protecta FR IPT (Applicable to linear joint and gap seals only)

| Product tested | 10mm deep x 30mm wide Protecta FR IPT | | | |
|---|---------------------------------------|---------------------------|-------------------|--|
| Su | immary of testing procedure | mary of testing procedure | | |
| \times | Pressure (Pa) | Leakage (m³/h) | Leakage (m³/m²/h) | |
| Results under negative chamber pressure | 25 | 0.00 | 0.00 | |
| | 50 | 0.00 | 0.00 | |
| | 100 | 0.00 | 0.00 | |
| | 200 | 0.00 | 0.00 | |
| | 300 | 0.02 | 0.56 | |
| | 450 | 0.03 | 0.83 | |
| | 600 | 0.1 | 2.78 | |
| Results under positive chamber pressure | 25 | 0.00 | 0.00 | |
| | 50 | 0.00 | 0.00 | |
| | 100 | 0.00 | 0.00 | |
| | 200 | 0.01 | 0.28 | |
| | 300 | 0.03 | 0.83 | |
| | 450 | 0.06 | 1.67 | |
| | 600 | 0.11 | 3.06 | |





Appendix UL-EU Certificate

Certification Mark UL-EU mark

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



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

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

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PROCUREMENT

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