ASTROFLAME
PASSIVE FIRE STOP SYSTEMS

Technical Data Sheet

Astro PFP FR Pipe Wrap
installed in the Astro PFP FR Board

Revision 8 - 3rd February 2025



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CE CE-ETA - 21/0029
CE-2531-CPR-CXO10146

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> Technical Data	**General Guide**	> Page 1
> Technical Data	**Solutions in Drywalls and rigid walls**	> Page 2-34
> Technical Data	**Solutions in Timber walls**	> Page 34-45
> Technical Data	**Solutions in Rigid walls, additional items**	> Page 46-54
> Technical Data	**Solutions in Rigid floors**	> Page 54-60
> Technical Data	**Solutions in Timber & rigid floors**	> Page 60-61
> Technical Data	**Full index of detailed drawings**	> Page 10-12

General Guide

Minimum separations and limitations: Services can be sealed as specified in the detailed drawings. An aperture can include several services, and they may also be different. The minimum permitted separation between adjacent seals/apertures is 200 mm. Services should be a minimum of 25 mm from seal edges.

Services within the system Astro PFP FR Board seal do not require a minimum separation, except where Astro PFP FR Pipe Wraps are used, which should be a minimum of 30 mm from other services in the aperture. The total amount of cross sections of services (including insulation) should not exceed 60 % of the penetration area.

Astro PFP FR Board seals which involve services penetrating both sides of a flexible wall may also be used in the situation where the services penetrates one side of the wall only and the remaining side of the wall is not penetrated at the same point (i.e. the services continues on the inside of the wall).

Supporting constructions: Flexible walls must have a minimum thickness of 75 mm and comprise steel studs or timber studs*) lined on both faces with minimum 1 layer of 12.5 mm thick boards. Timber walls must have a minimum thickness of 100 mm and comprise solid wood or crosslaminated timber. Rigid walls must have a minimum thickness of 75 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m3. Rigid floors must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m3. Timber floors must have a minimum thickness of 150 mm and comprise solid wood or cross-laminated timber.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period. Services in floors should be supported at maximum 450 mm from the top face. Services in walls should be supported at maximum 270 mm from both faces of the wall. *) Timber studs: no part of the penetration seal may be closer than 100 mm to a stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.

Test Standards

This Installation Instructions and the Technical Data Sheet are based on the product's European Technical Assessment issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350454-00-1104, September 2017, tested to EN 1366-3, -4 & -12 in conjunction with EN 1363-1. The product hold the following approval marks: CE-Mark, UL-EU Certificate and UKCA for the United Kingdom.

Installation

1. For fire sealing service penetrations and linear seals, installation must be in accordance to the detailed drawings on pages 2 to 61. Where PVC pipes are mentioned, this includes PVC-C and PVC-U. Where PE pipes are mentioned, this includes PE-LD, PE-MD, PE-HD, PE-X and similar according to EN 1519-1, EN 12201-2 or EN 12666-1. Where PP pipes are mentioned, this includes PP-MV, PP-H, PP-R and similar if the pipe is according to EN 1451-1 or DIN 8077/8078.

2. Before installing Astro PFP FR Board ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.

3. Astro PFP FR Coating and Astro PFP FR Acrylic are water based, so in cases where corrosion protection is a problem, some metals may require a barrier between the seal and the surface prior to this installation.

4. Select the type and number of boards to meet the required fire classification using the detailed drawings. Boards of a greater thickness than stated can be used, and where a single sided coated board is stated, a double sided coated board of the same thickness or greater may be used.

5. When fitting double layer boards into drywalls, the coated side of the board should normally be flush with the surface of the wall on both sides. In seals wider than 2,400 mm, uninterrupted separating studs will be required at 2,400 mm centres or less.

6. When fitting double layer 60 mm thick boards into masonry or concrete constructions, the boards should normally be flush with the surface of the construction on both sides to maximize the fire resistance. If this is not possible, there should be an air gap of at least 30 mm between the boards.

7. When fitting single layer boards into constructions, the board can be positioned to either side of the construction or anywhere in between.

8. When installing Astro PFP FR Board in hollow floor slabs, fire seals specified as single layer boards should be installed from the soffit side of the floor assuming there is sufficient thickness of concrete below the void to follow the installation guide. Where this is not the case, tubular voids should be filled with stone wool normally the same thickness as the depth of the floor slab. Alternatively, simply fire seal flush on both sides.

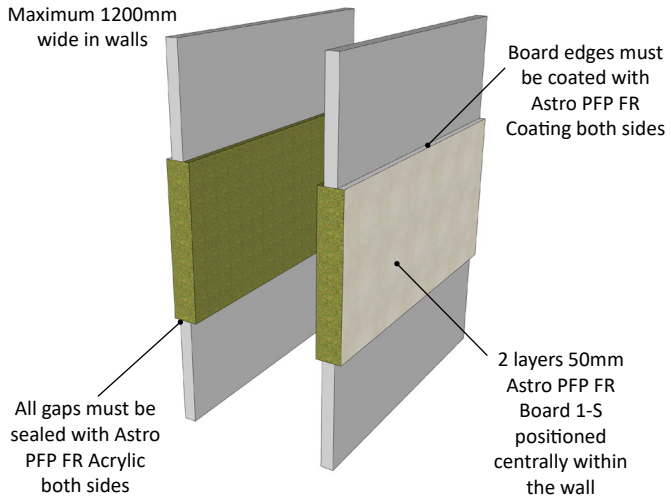
9. Cut the required board(s) to suit the aperture dimensions and type and size of service penetration(s). All exposed and cut edges of the board can be sealed with Astro PFP FR Coating or Astro PFP FR Acrylic prior to fitting which will act as an adhesive and ensure a smoke tight seal.

10. All joints, gaps or imperfections in the installed seal must be filled with Astro PFP FR Acrylic on both sides, and any visible mineral fibres must be coated with Astro PFP FR Coating.

11. Astro PFP FR Board can be over-painted with most emulsion or alkyd (gloss) paints. For a moisture proof seal protect the cured Astro PFP FR Acrylic seals by painting over with Astro PFP FR Coating.

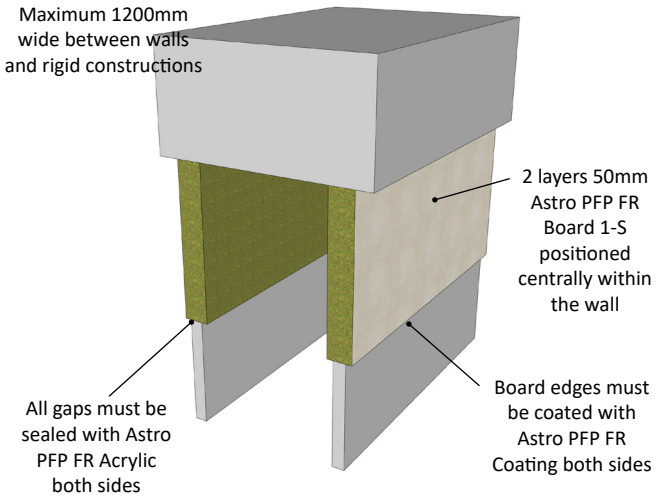
LINEAR SEALS FIRE RESISTANCE EI 60 (E 60)

≥ 75MM DRYWALLS



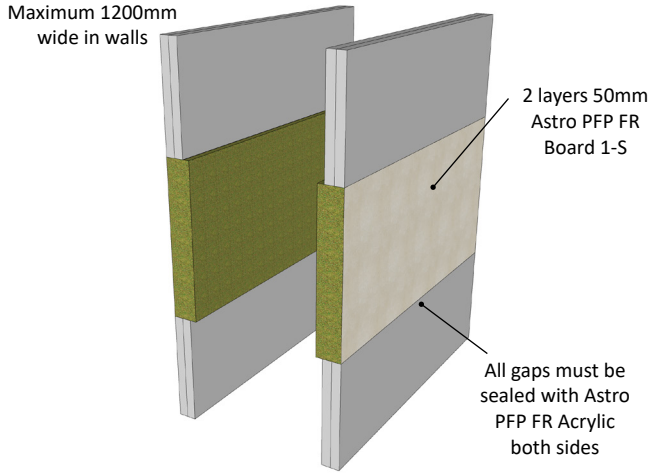
LINEAR SEALS FIRE RESISTANCE EI 60 (E 60)

≥ 75MM DRYWALLS



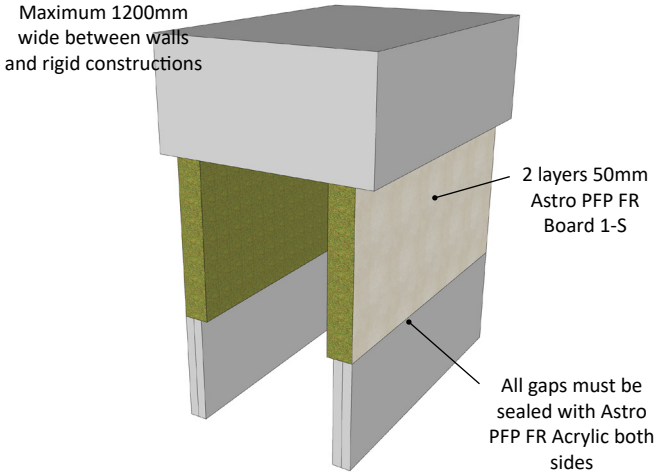
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≥ 100MM DRYWALLS



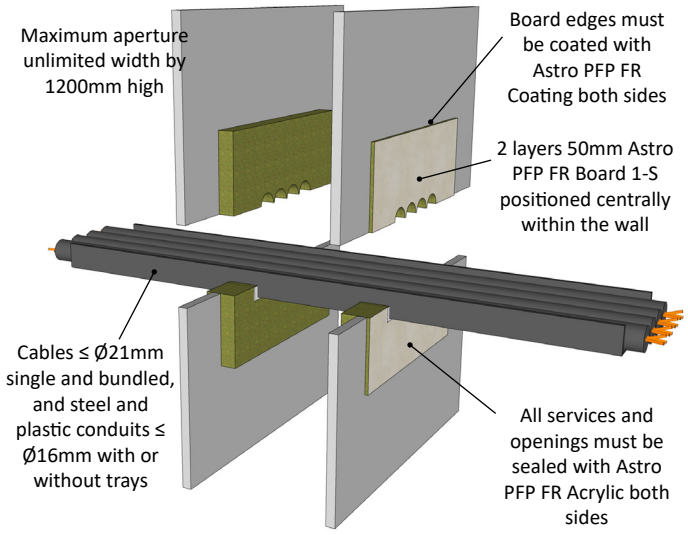
LINEAR SEALS FIRE RESISTANCE EI 120 (E 120)

≥ 100MM DRYWALLS



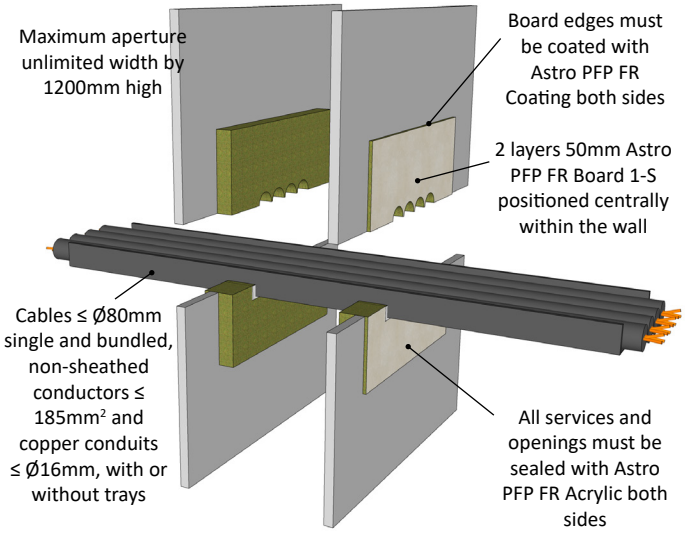
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



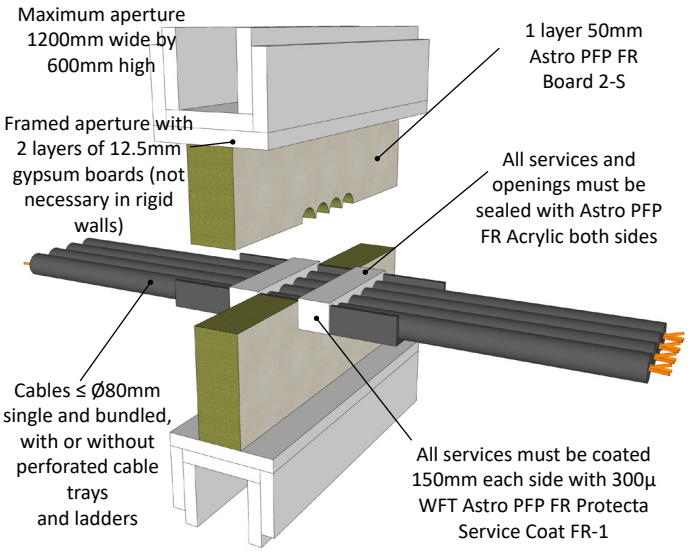
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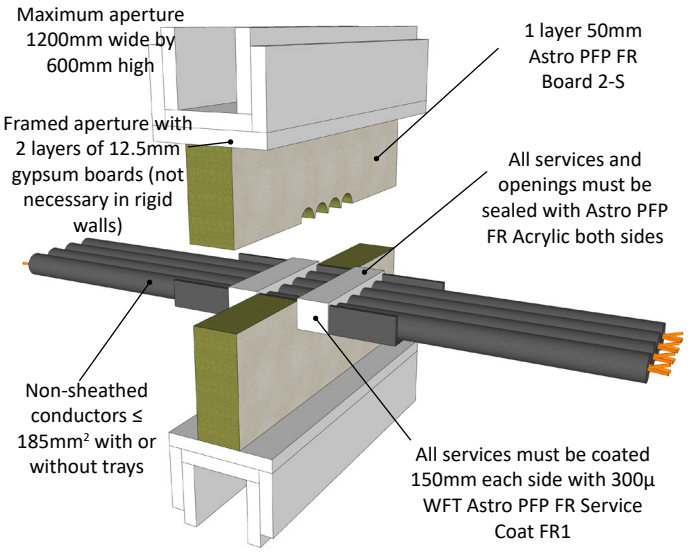
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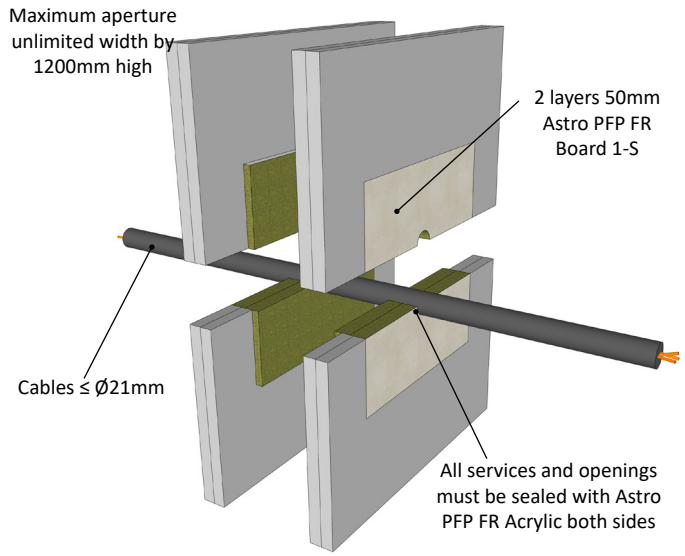
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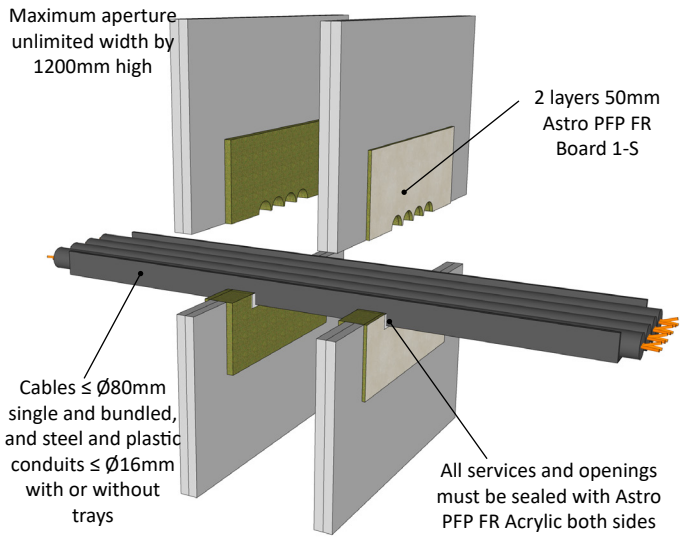
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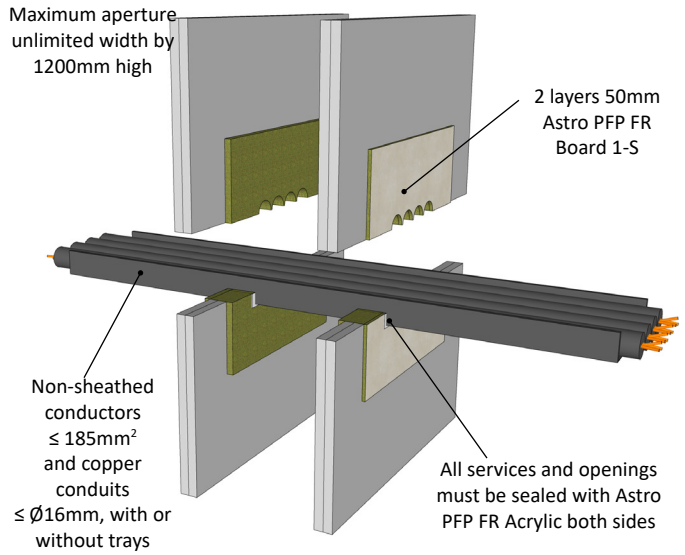
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



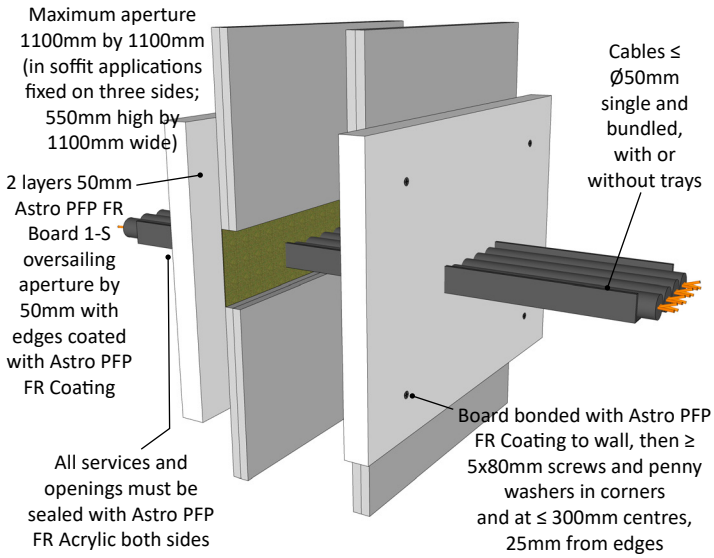
CONDUCTORS AND CONDUITS FIRE RESISTANCE EI 30 (E 60)

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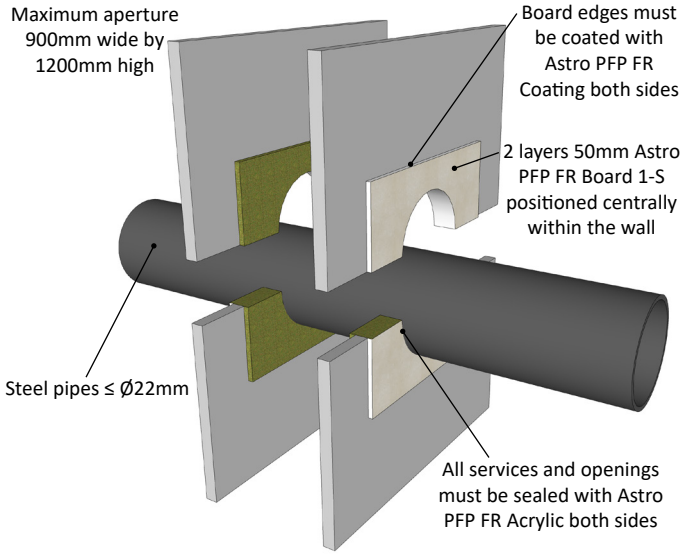
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≥ 75MM DRYWALLS OR RIGID WALLS



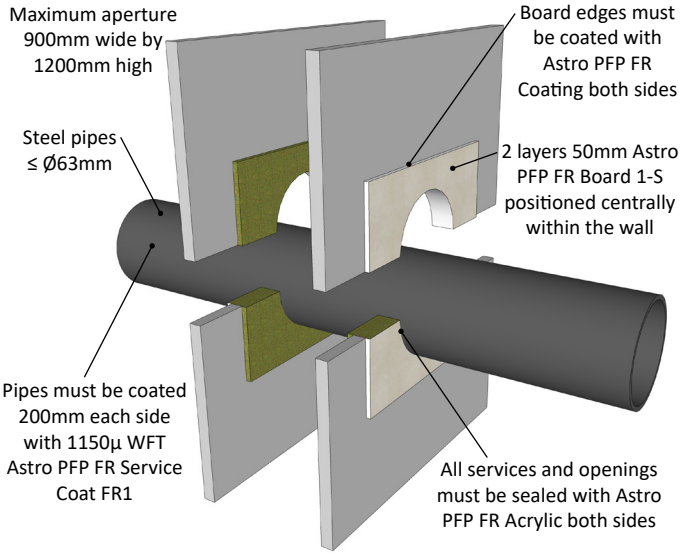
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≥ 75MM DRYWALLS OR RIGID WALLS



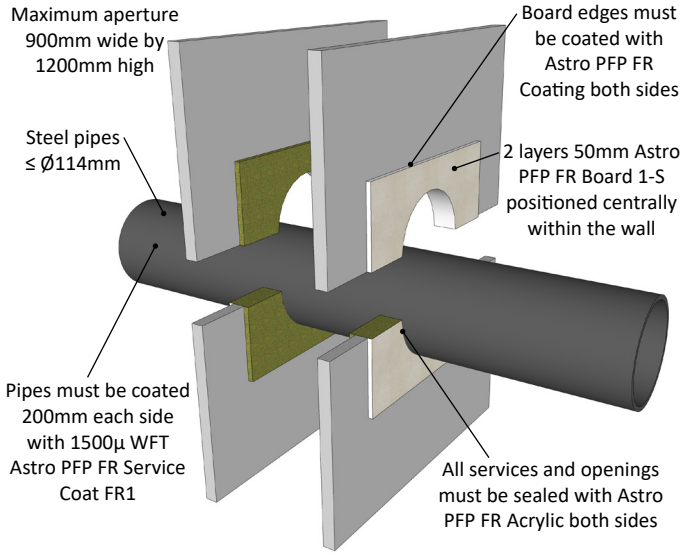
STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



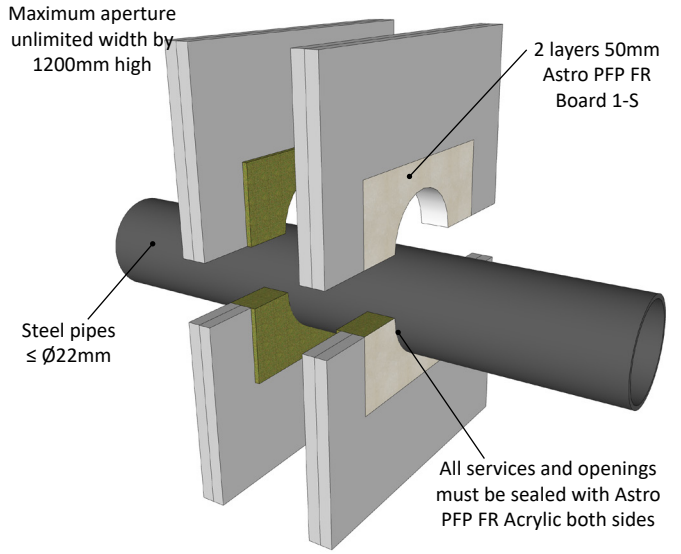
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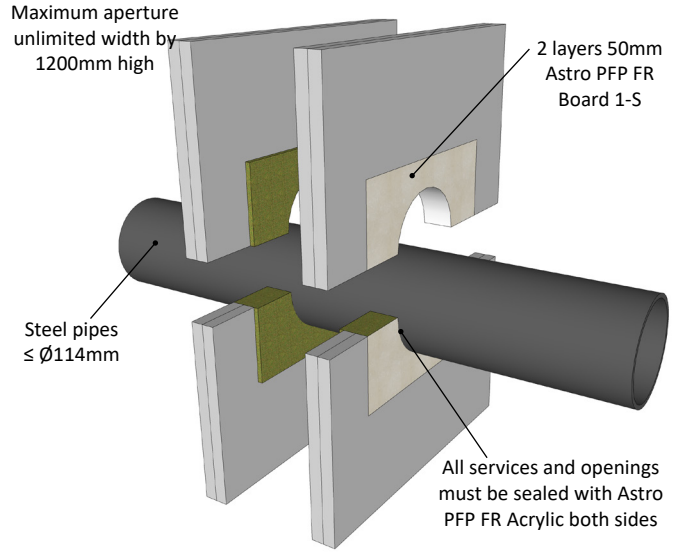
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≥ 100MM DRYWALLS OR RIGID WALLS



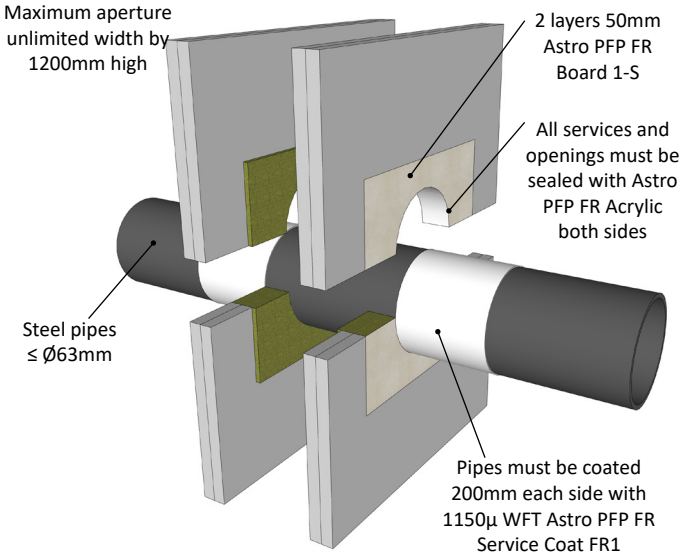
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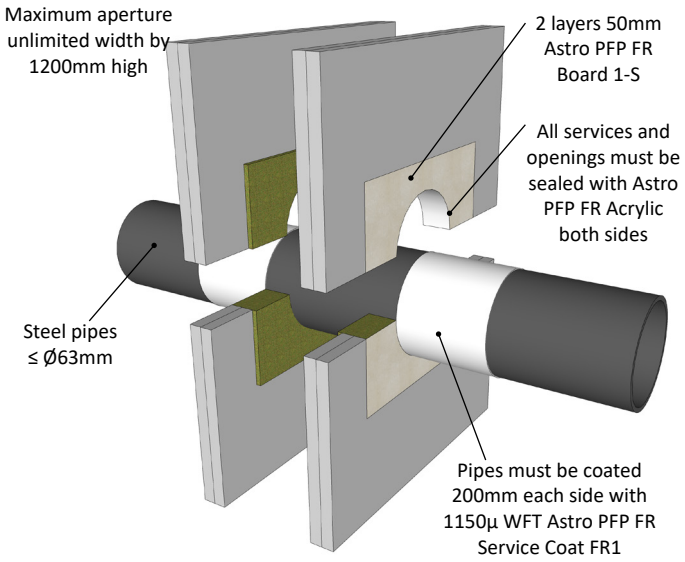
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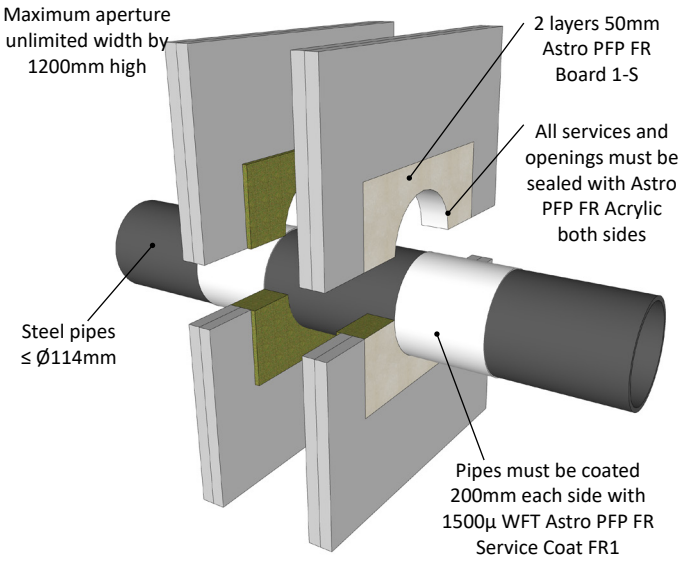
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

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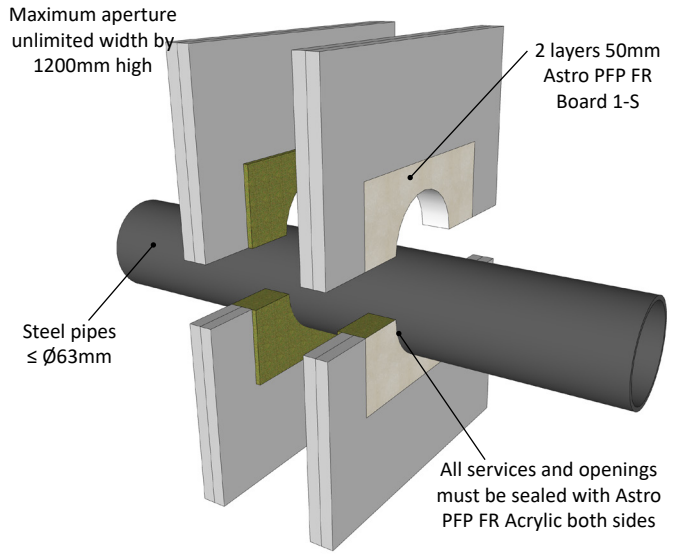
STEEL PIPES FIRE RESISTANCE EI 45 C/U (E 120)

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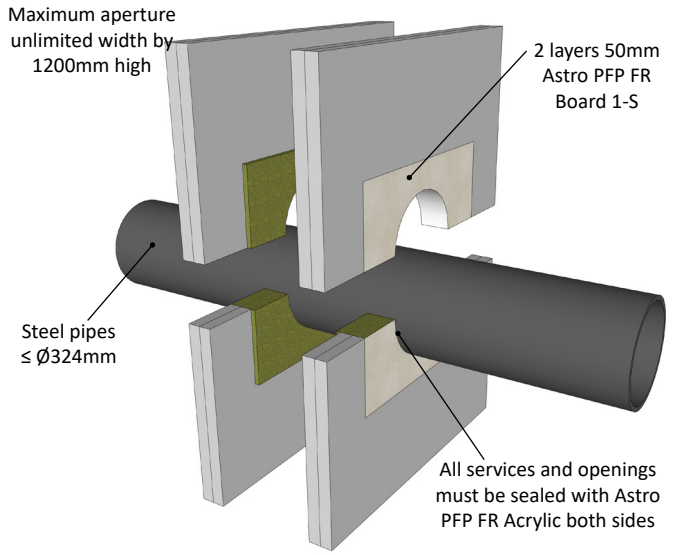
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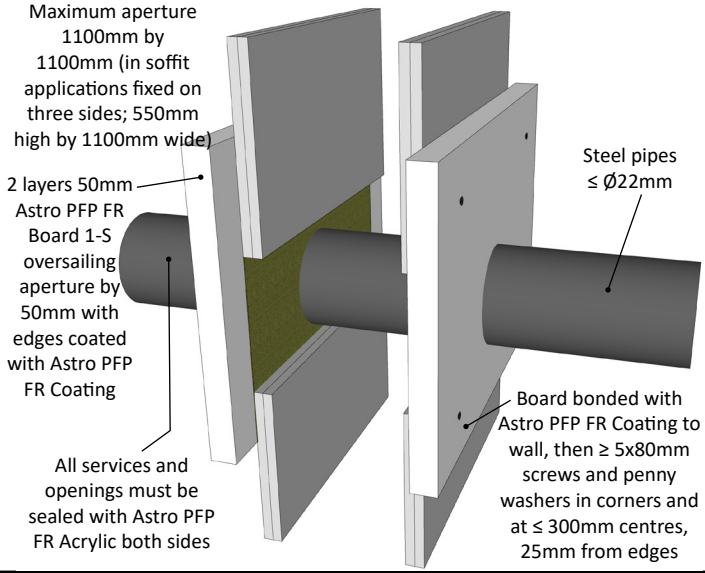
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≥ 120MM DRYWALLS OR RIGID WALLS



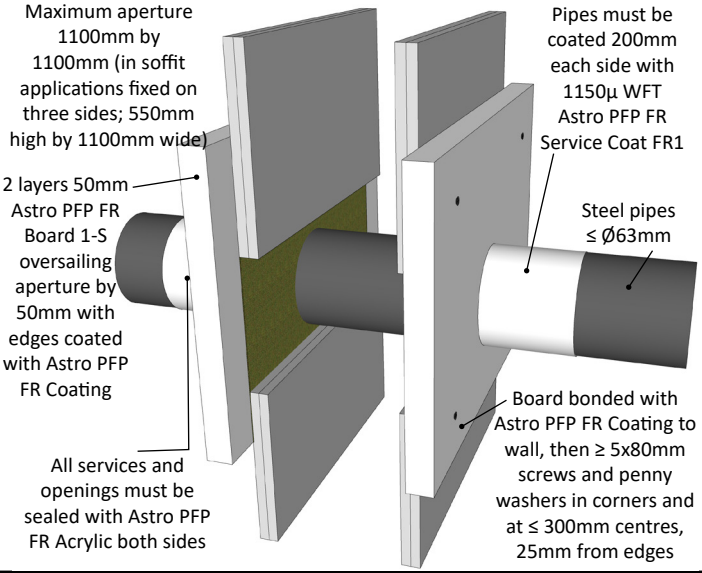
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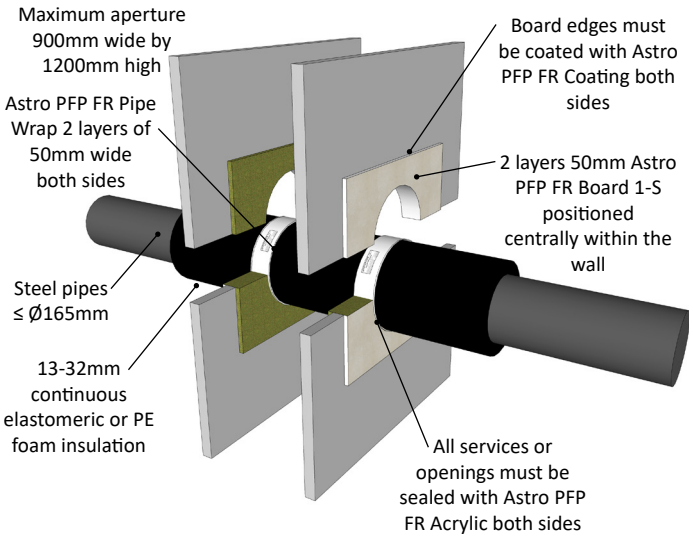
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



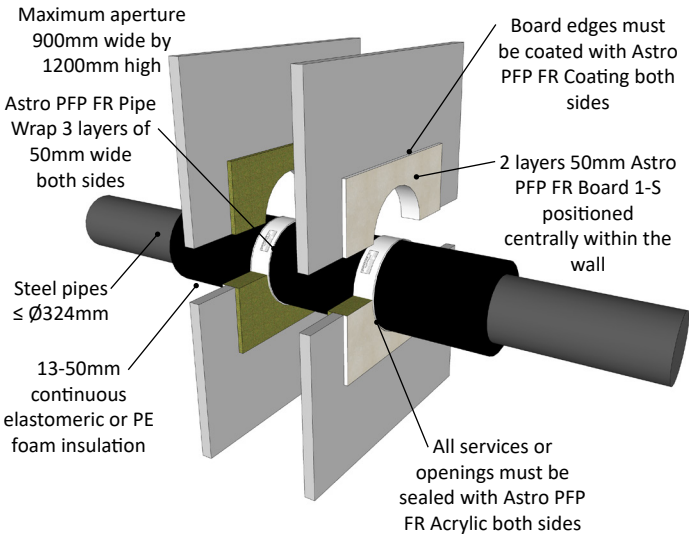
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 U/U (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



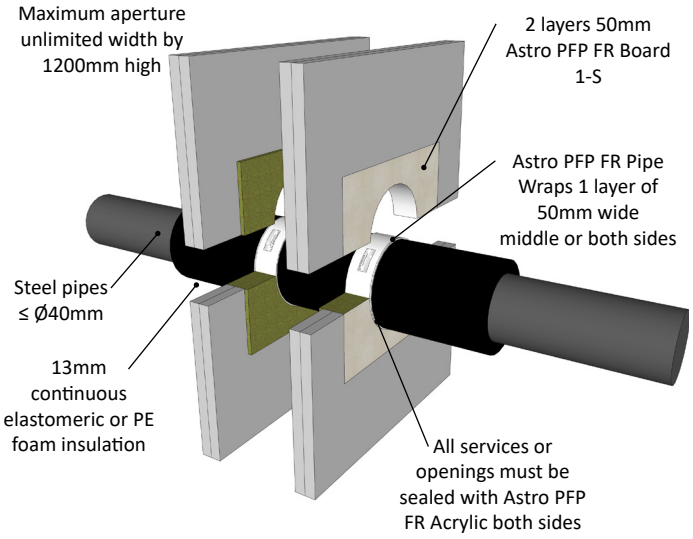
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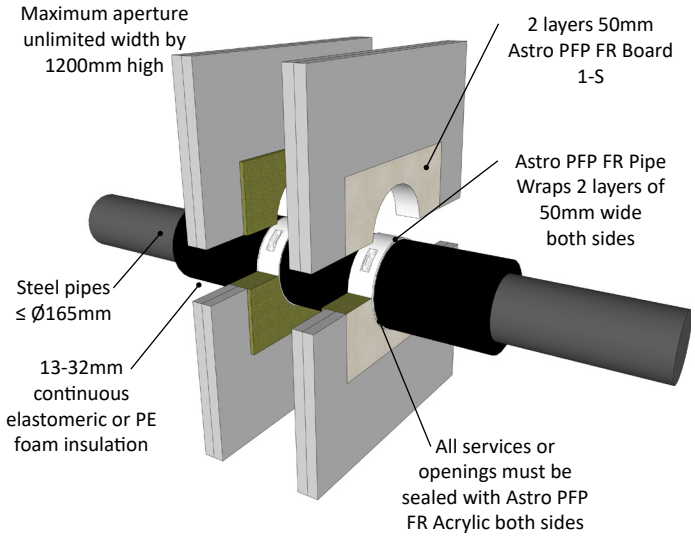
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≥ 100MM DRYWALLS OR RIGID WALLS



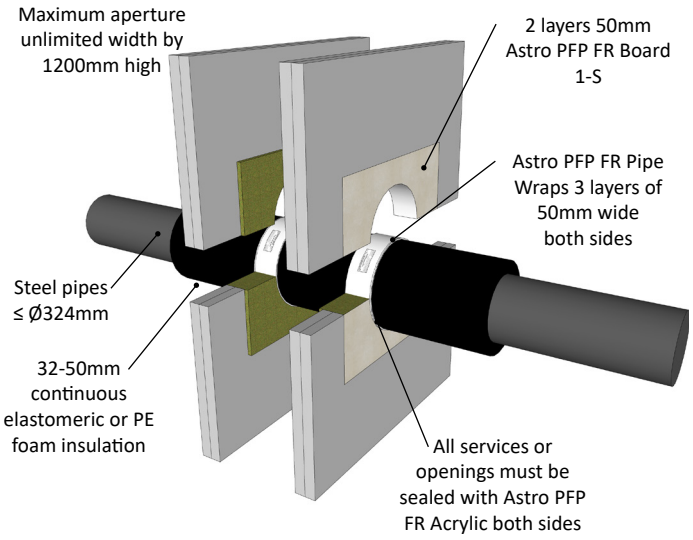
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 U/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



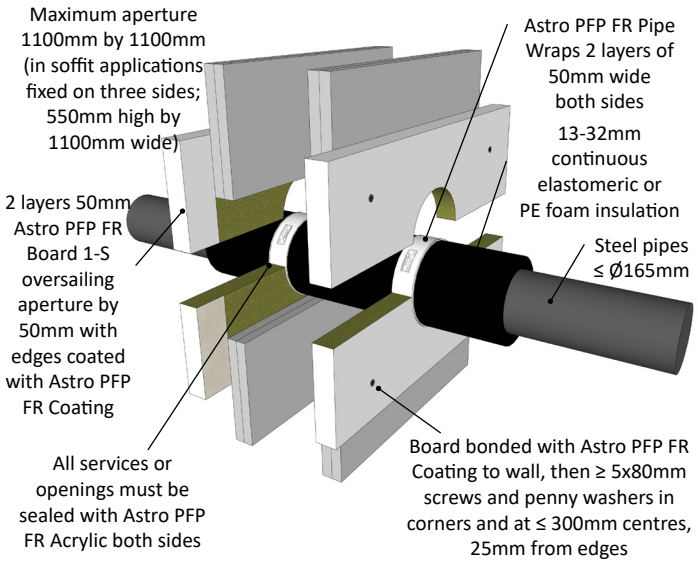
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≥ 100MM DRYWALLS OR RIGID WALLS



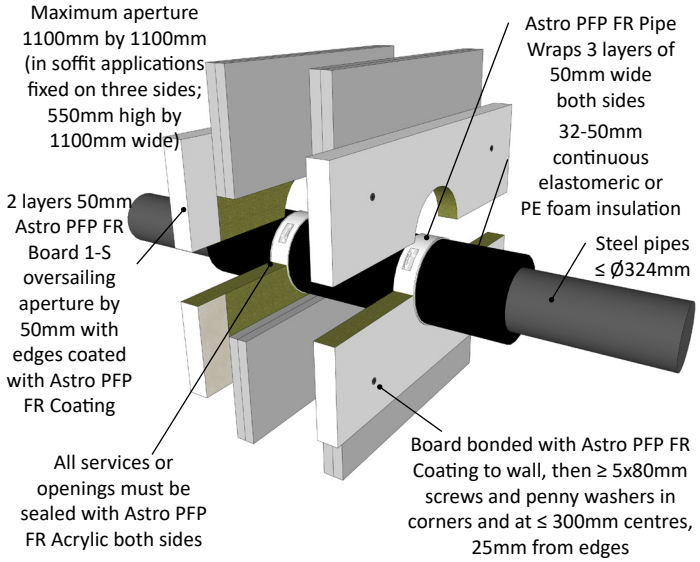
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 U/U (E 120)

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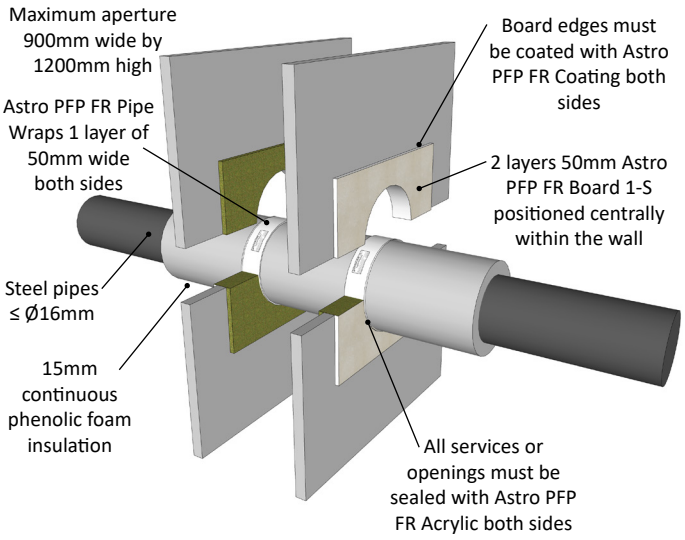
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



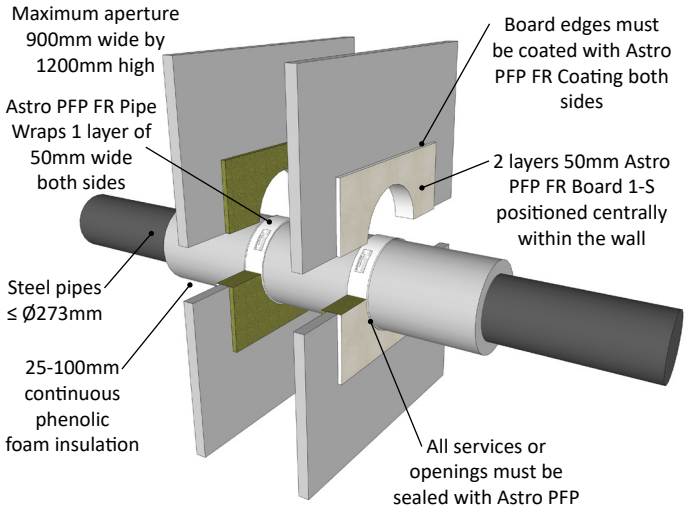
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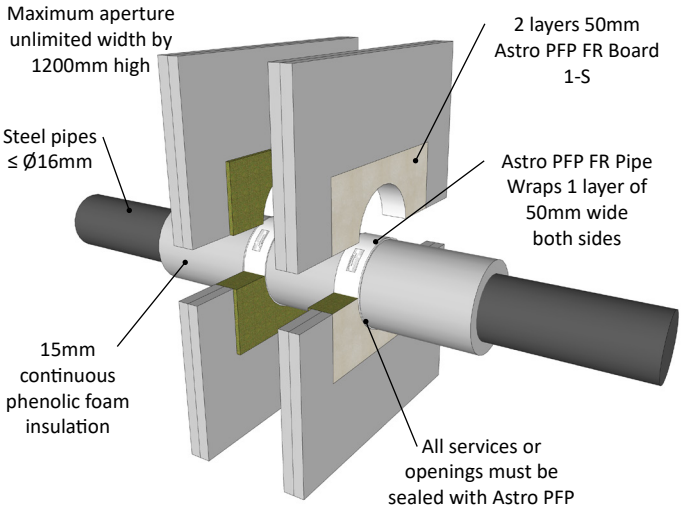
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 60)

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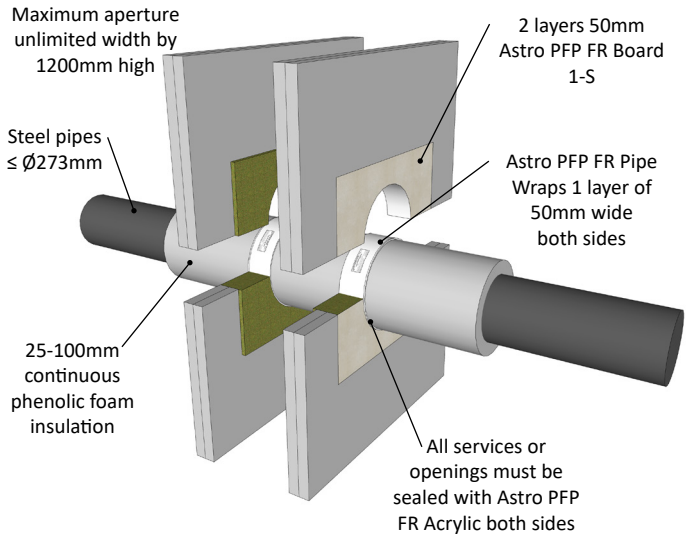
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



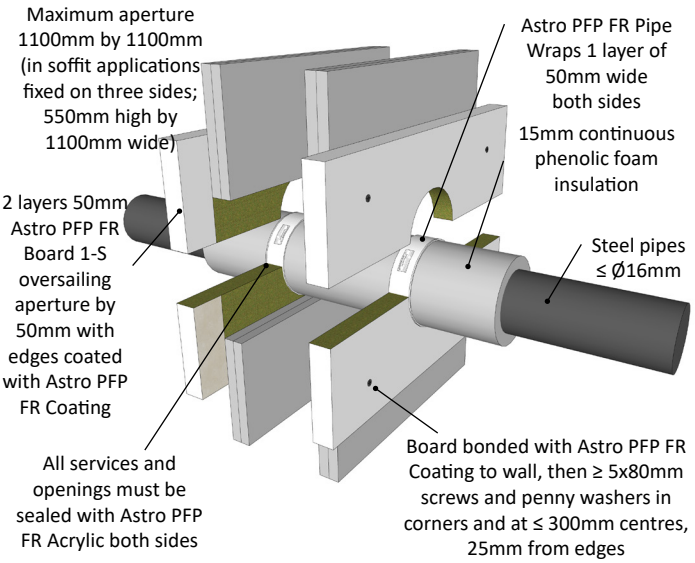
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

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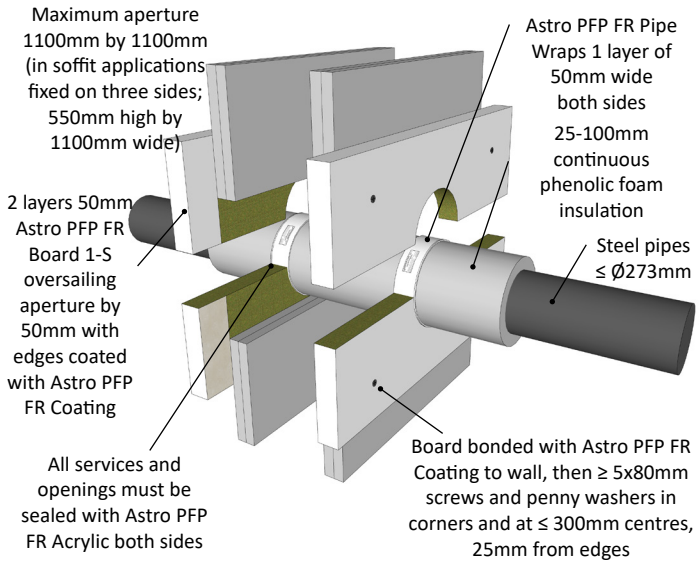
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

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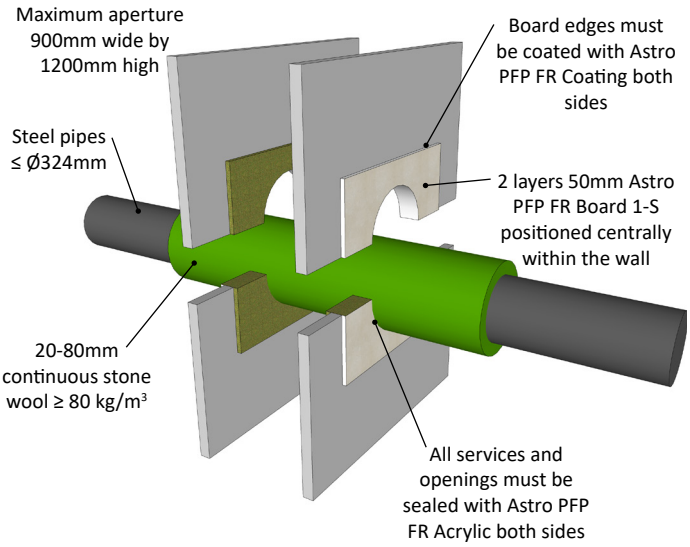
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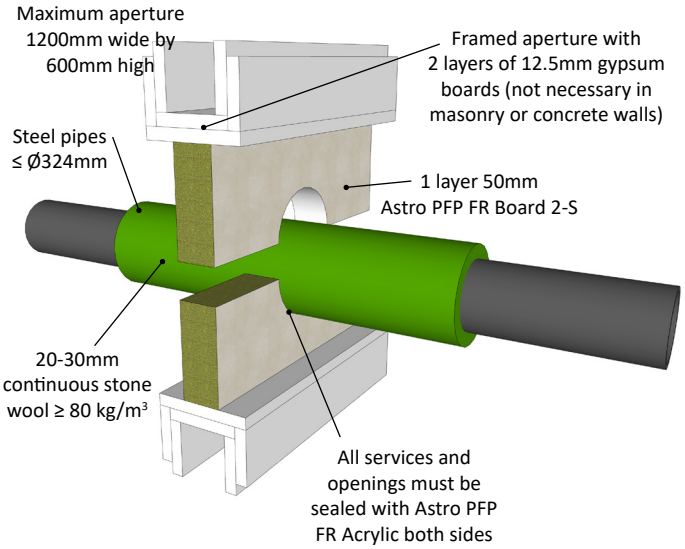
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



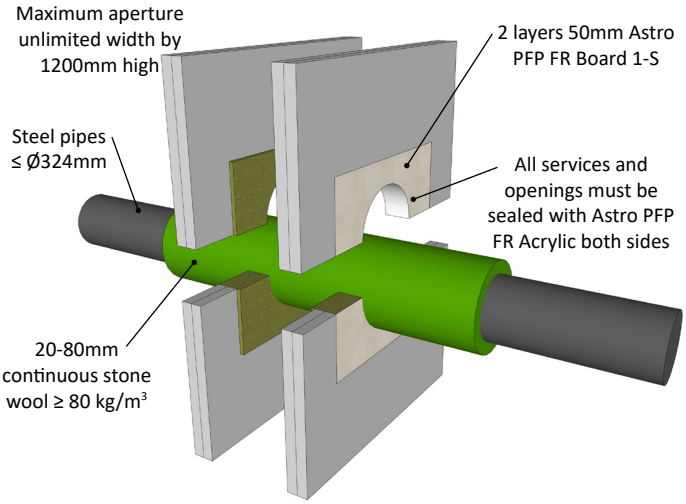
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



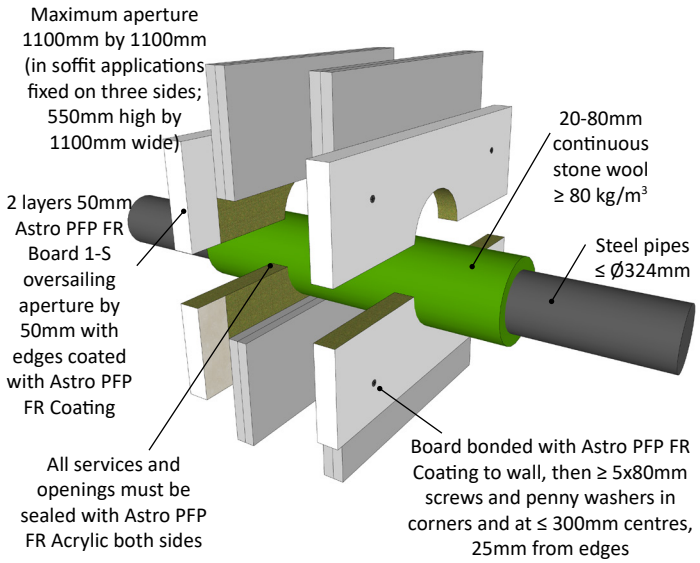
INSULATED STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



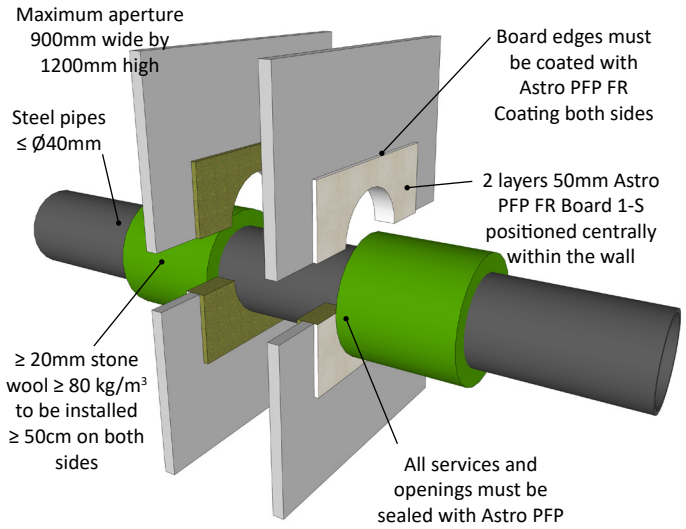
INSULATED STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



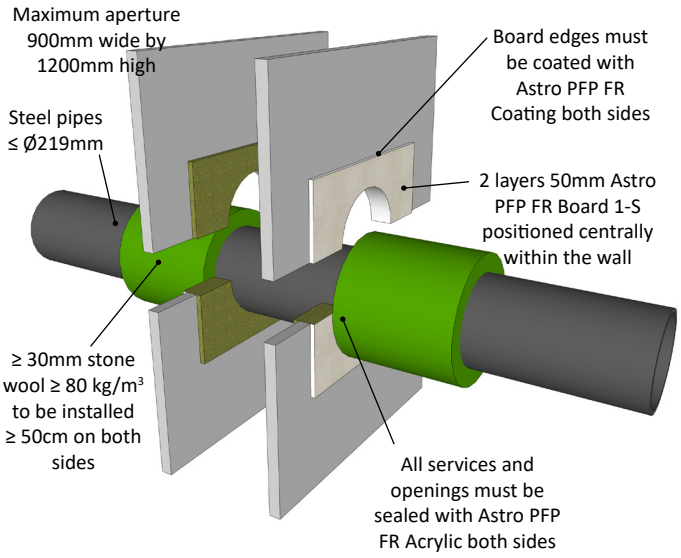
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



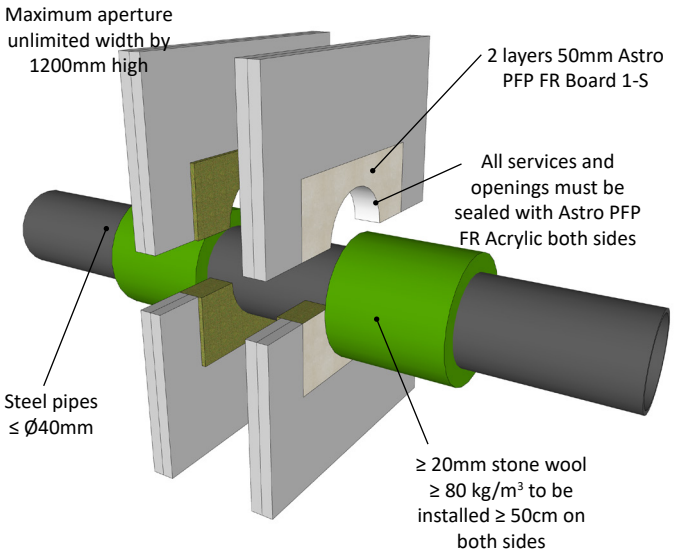
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



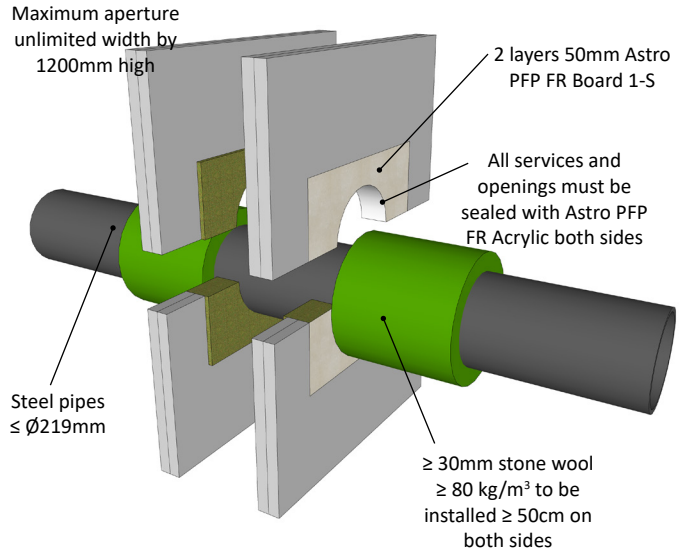
STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



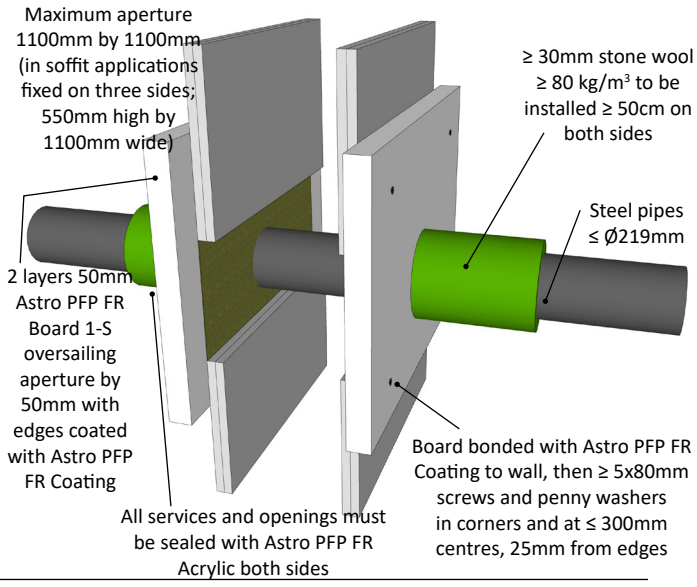
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



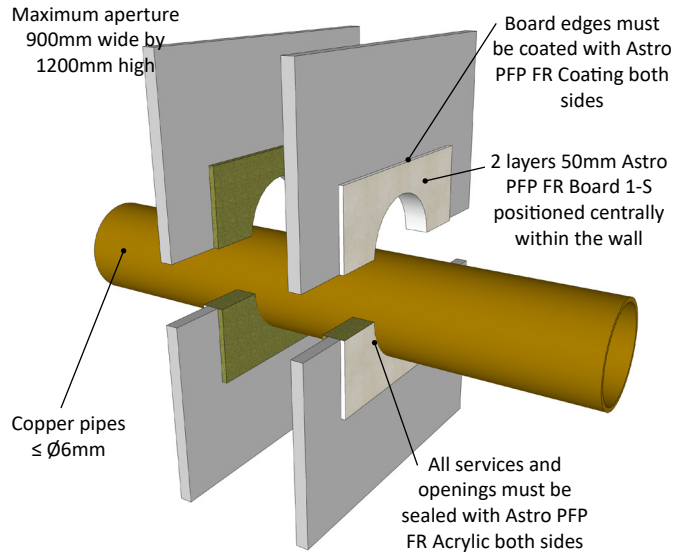
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



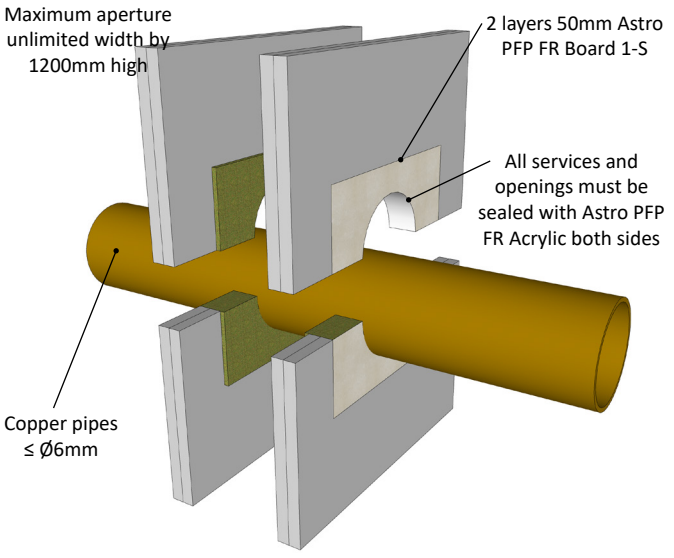
COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



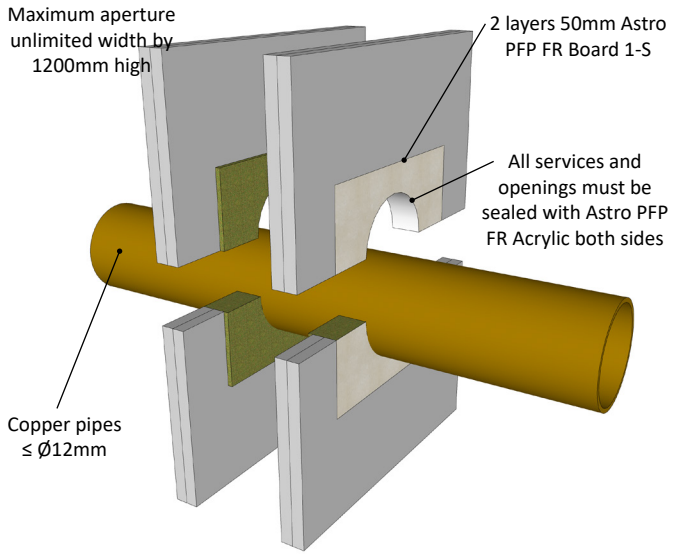
COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



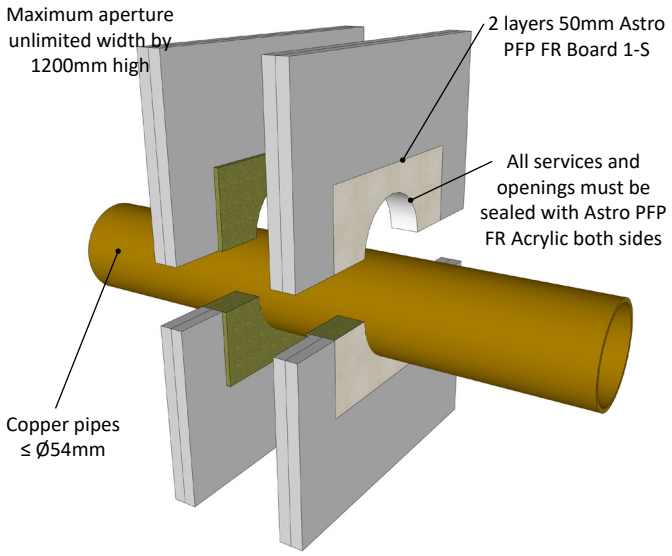
COPPER PIPES FIRE RESISTANCE EI 30 C/C (E 120)

≥ 120MM DRYWALLS OR RIGID WALLS



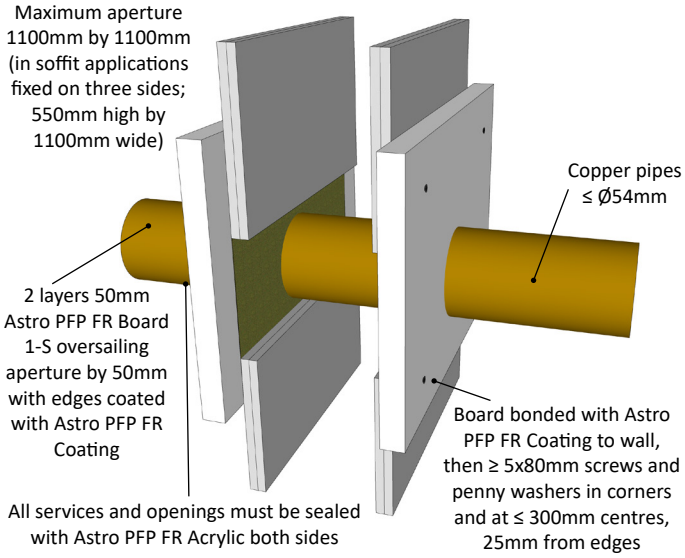
COPPER PIPES FIRE RESISTANCE EI 15 C/C (E 120)

≥ 120MM DRYWALLS OR RIGID WALLS



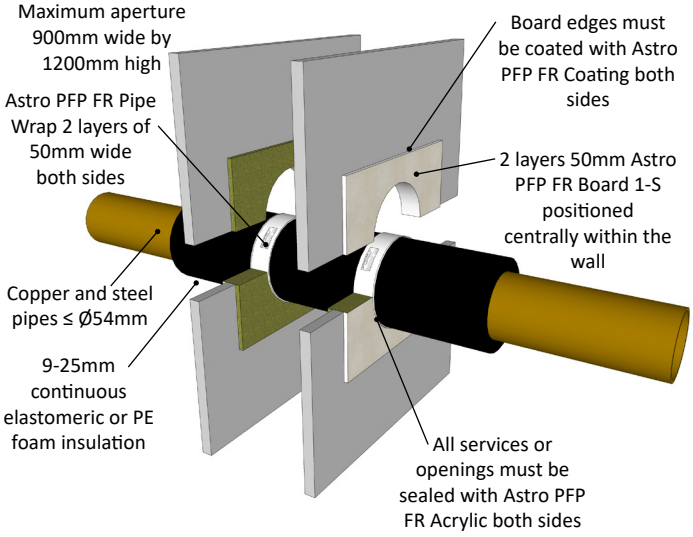
COPPER PIPES FIRE RESISTANCE EI 15 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



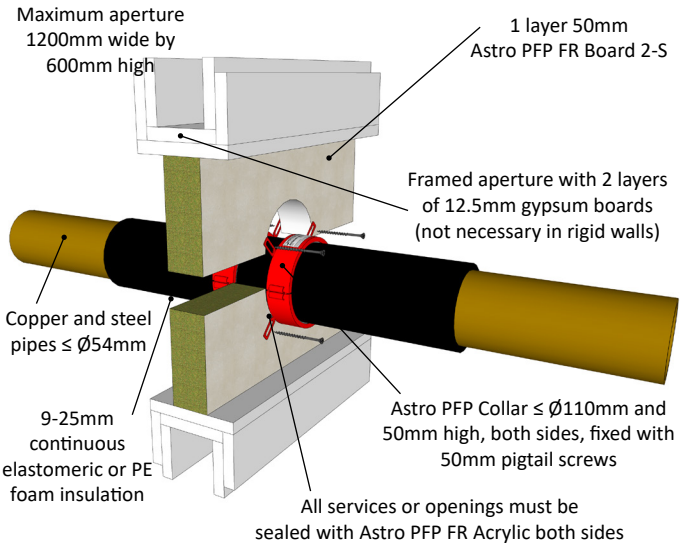
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



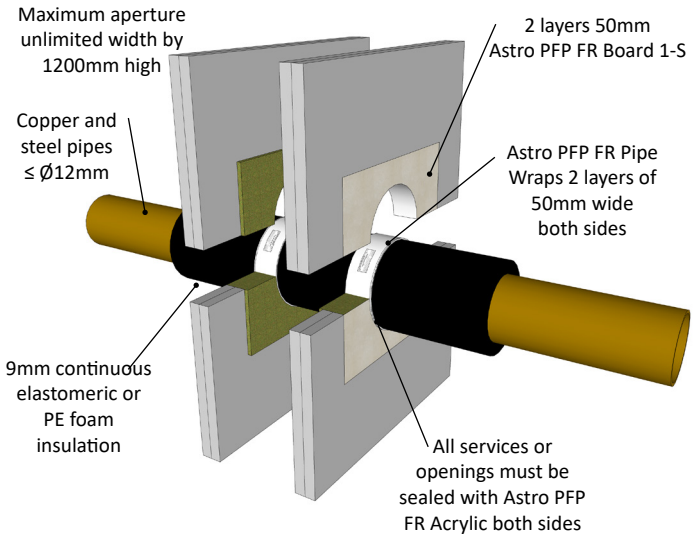
COPPER & STEEL PIPES FIRE RESISTANCE EI 30 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



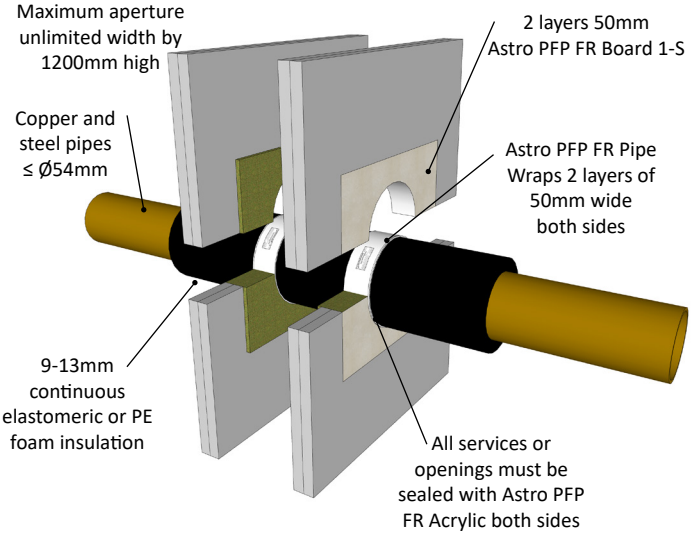
COPPER & STEEL PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



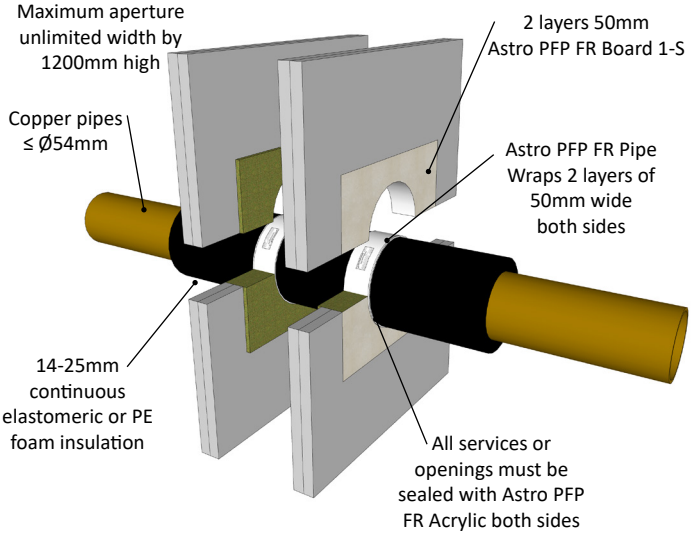
COPPER & STEEL PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



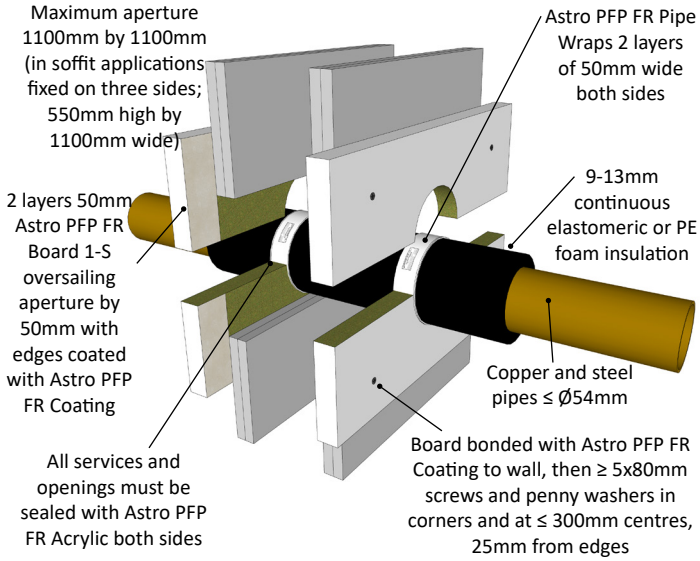
INSULATED COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



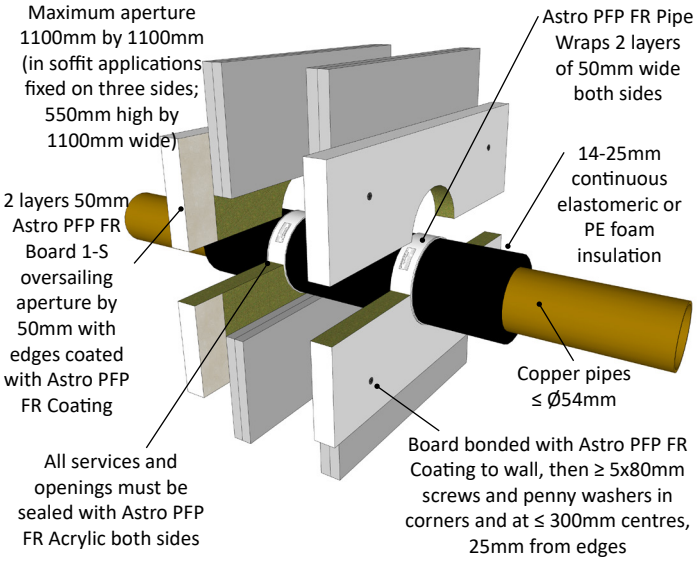
COPPER & STEEL PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



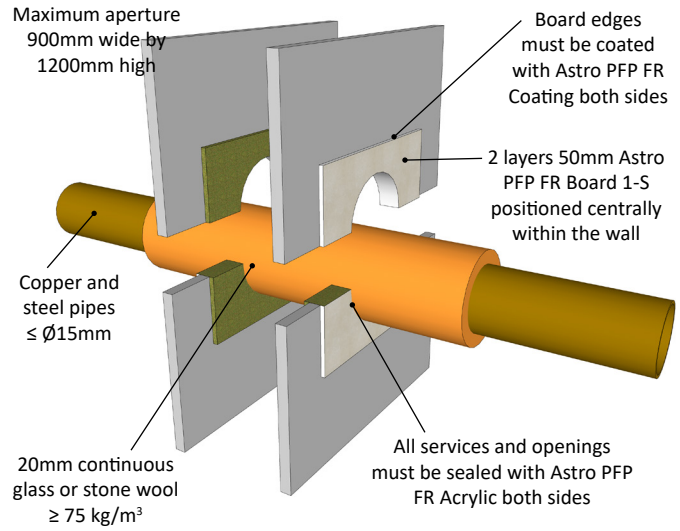
INSULATED COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



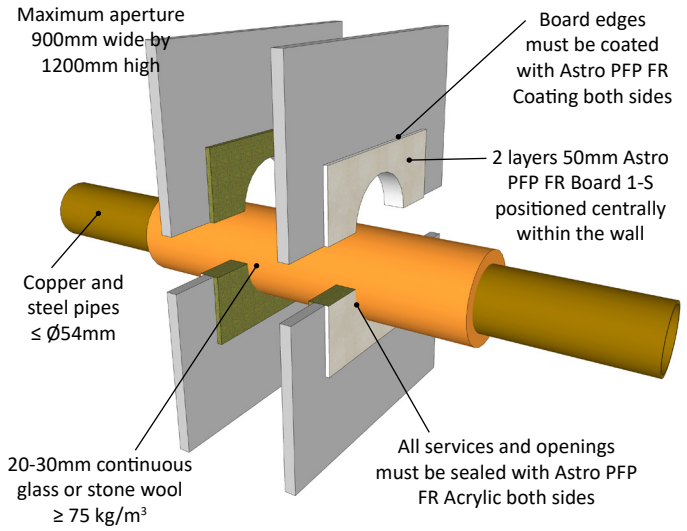
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



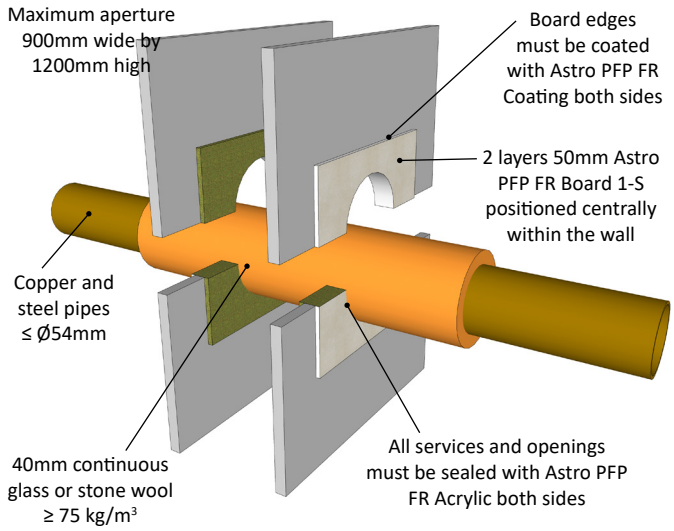
COPPER & STEEL PIPES FIRE RESISTANCE EI 45 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



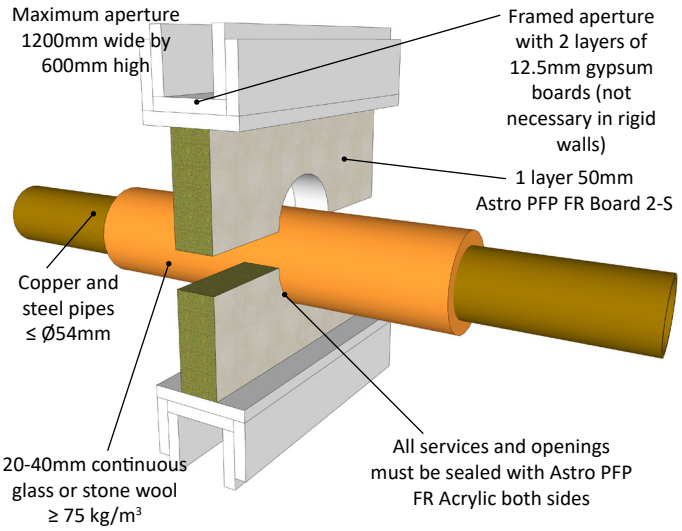
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



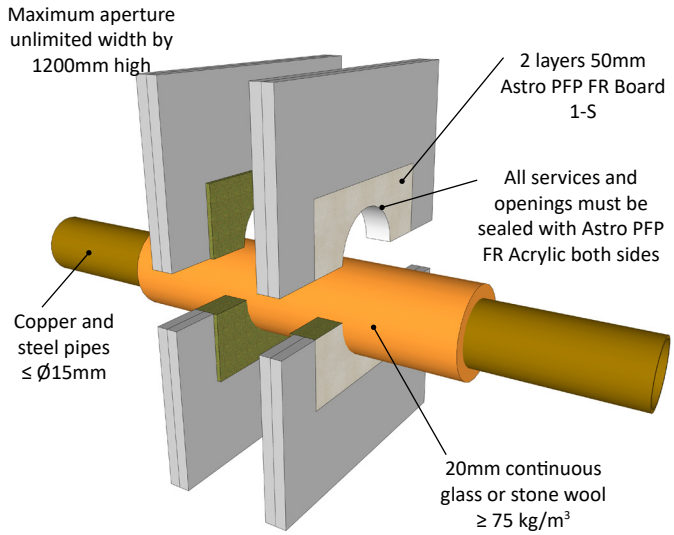
COPPER & STEEL PIPES FIRE RESISTANCE EI 30 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



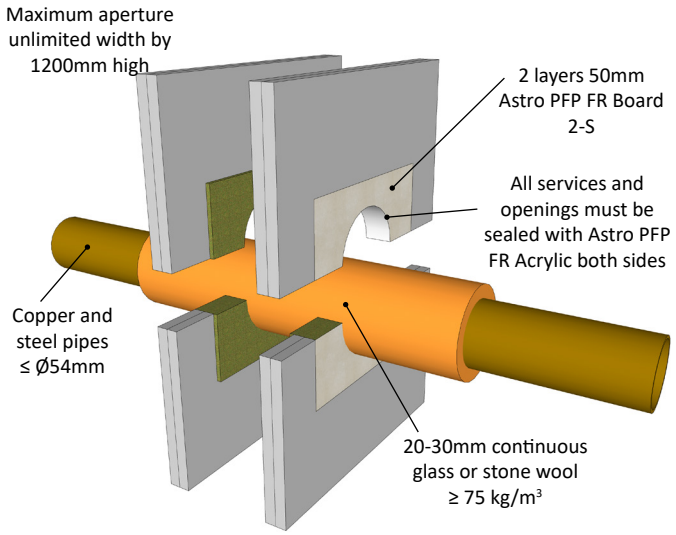
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



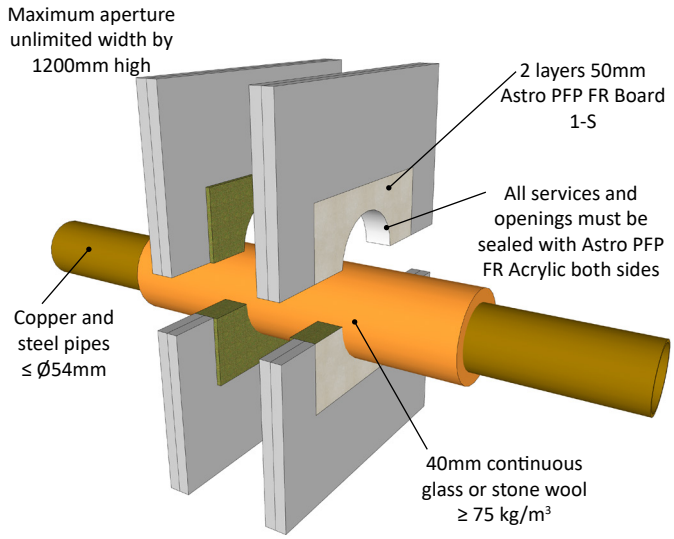
COPPER & STEEL PIPES FIRE RESISTANCE EI 45 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



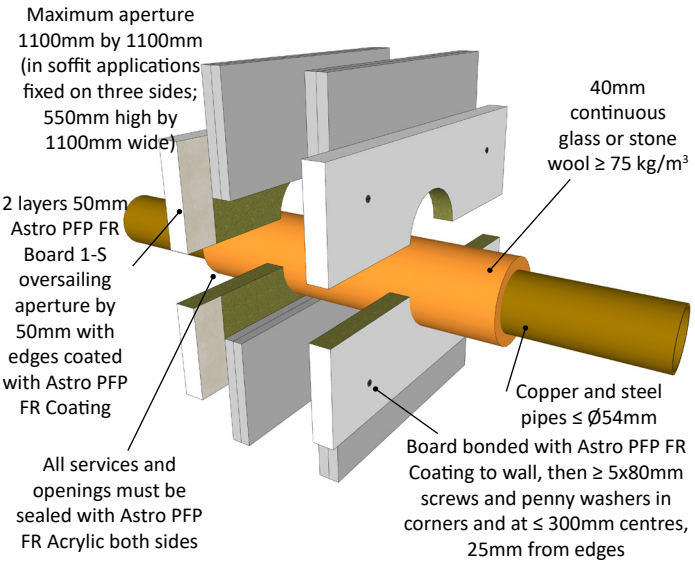
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



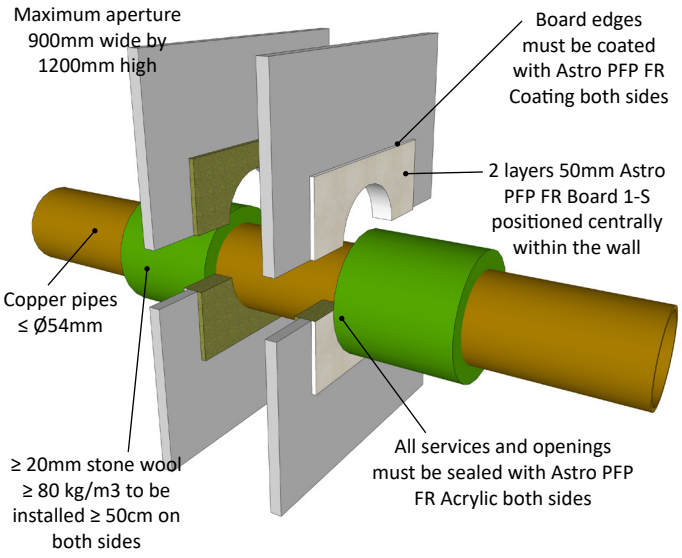
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



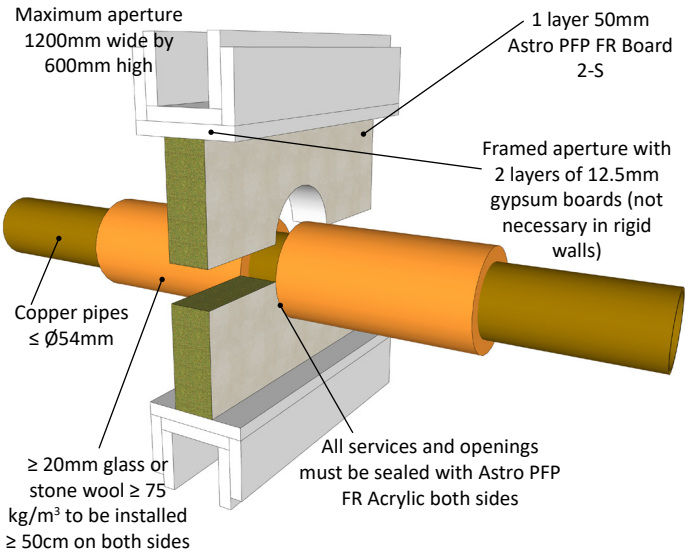
COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



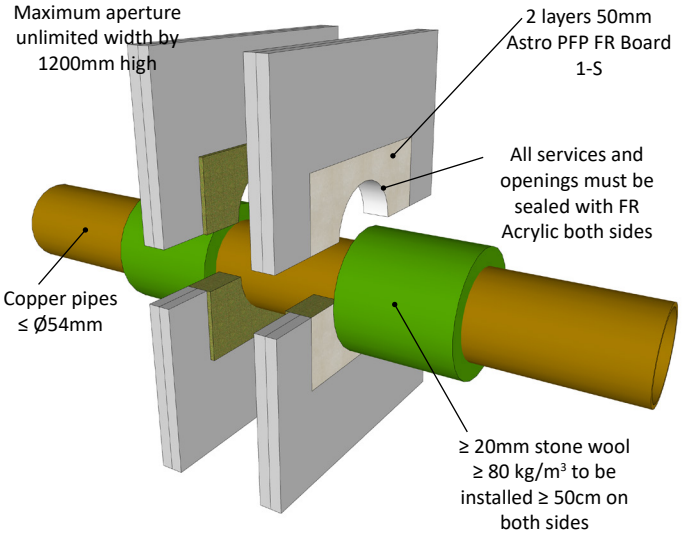
COPPER PIPES FIRE RESISTANCE EI 45 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



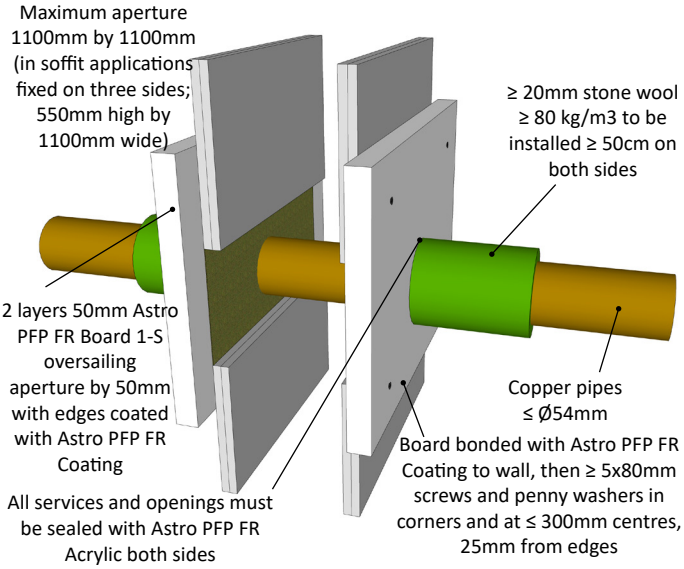
COPPER PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



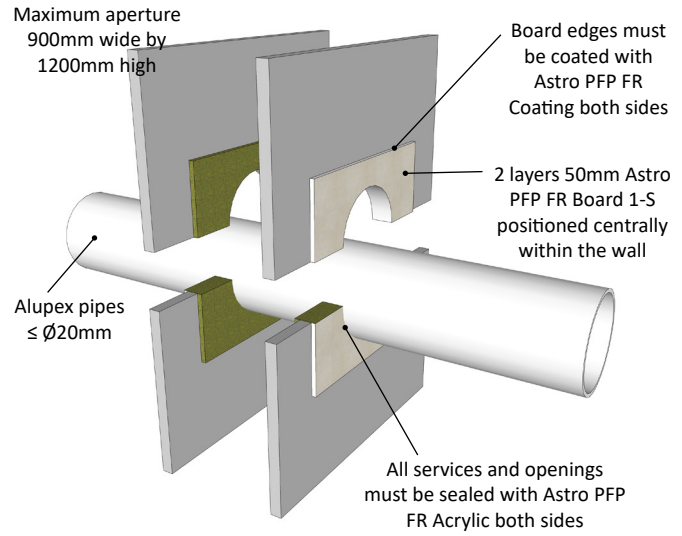
COPPER PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



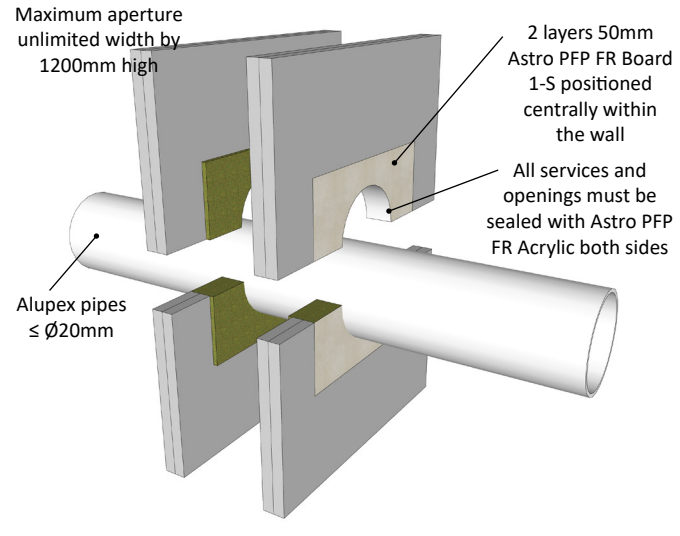
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



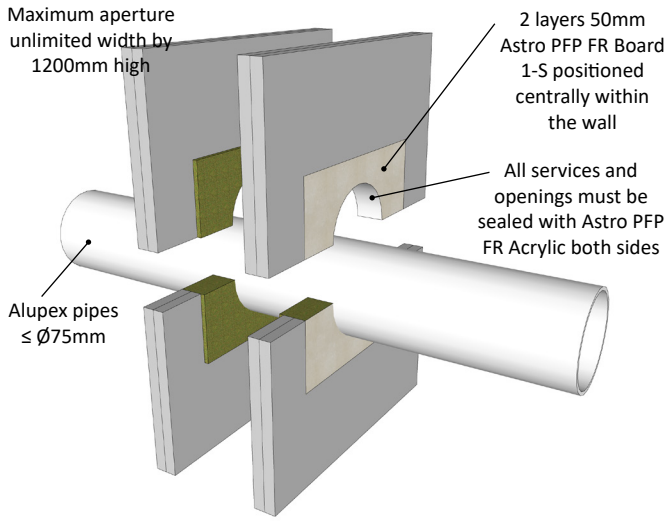
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



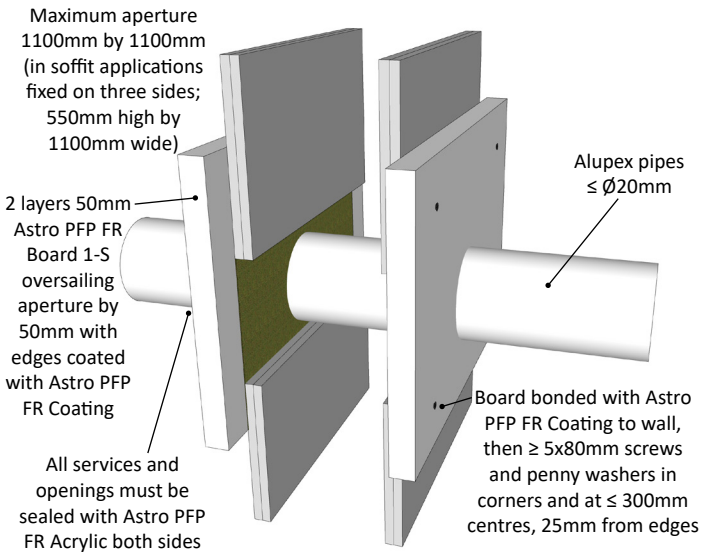
ALUPEX PIPES FIRE RESISTANCE EI 20 C/C (E 120)

≥ 120MM DRYWALLS OR RIGID WALLS



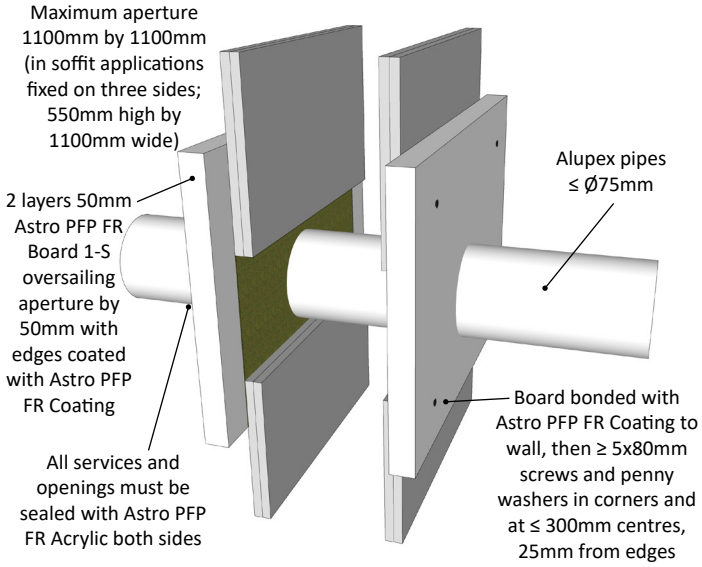
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



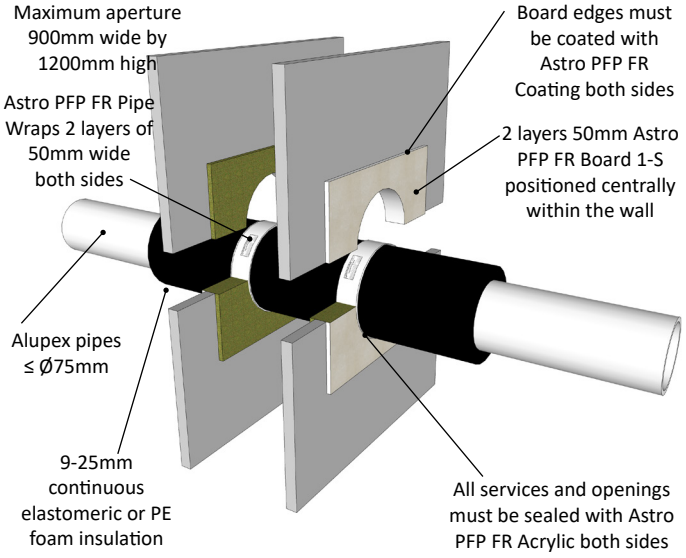
ALUPEX PIPES FIRE RESISTANCE EI 20 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



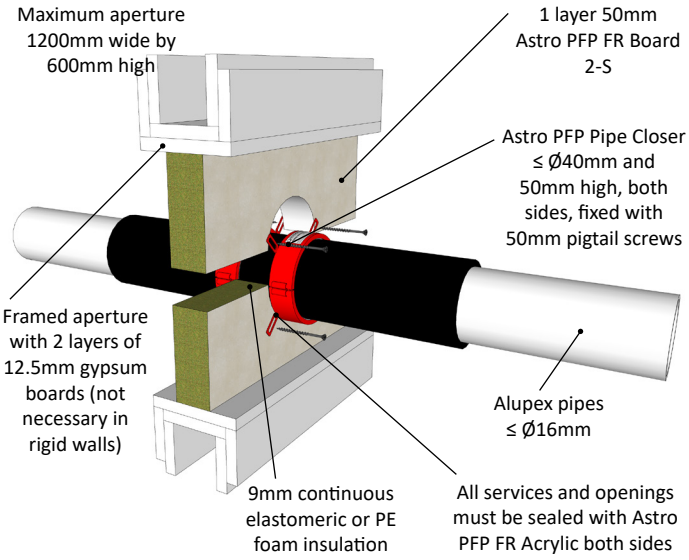
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



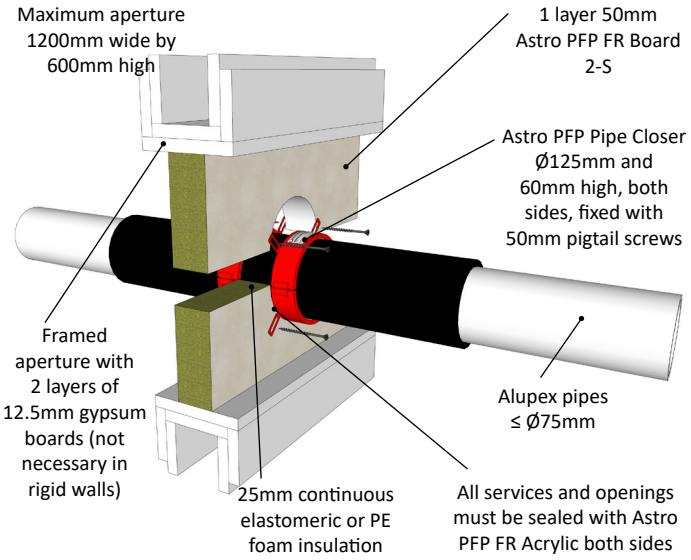
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



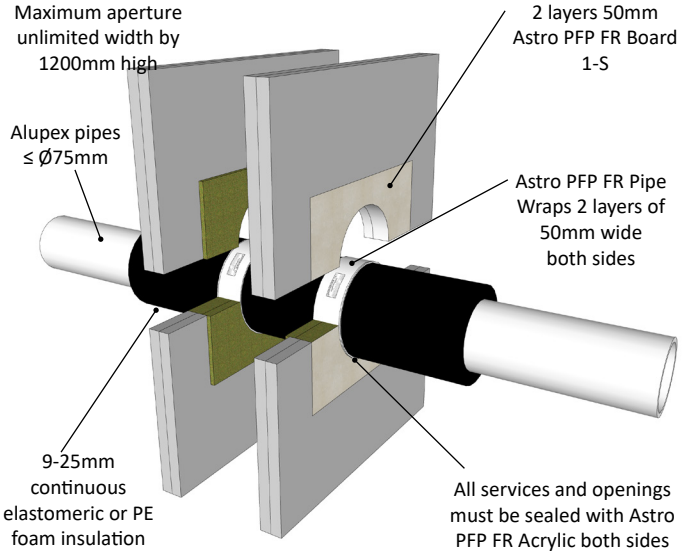
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



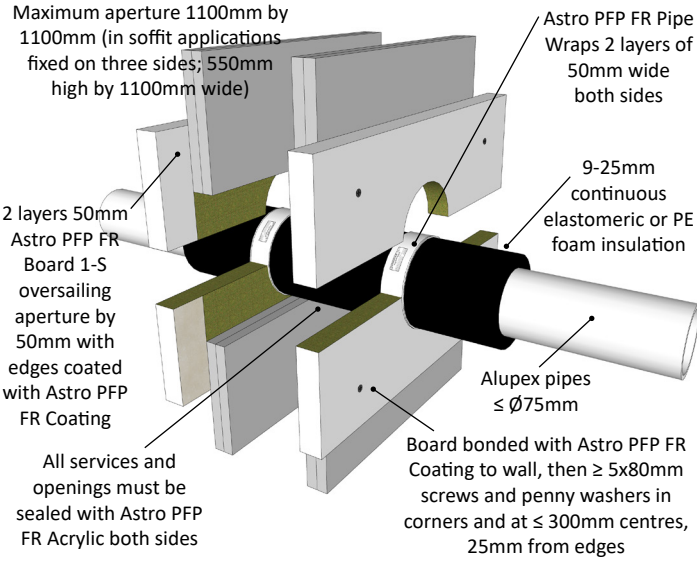
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



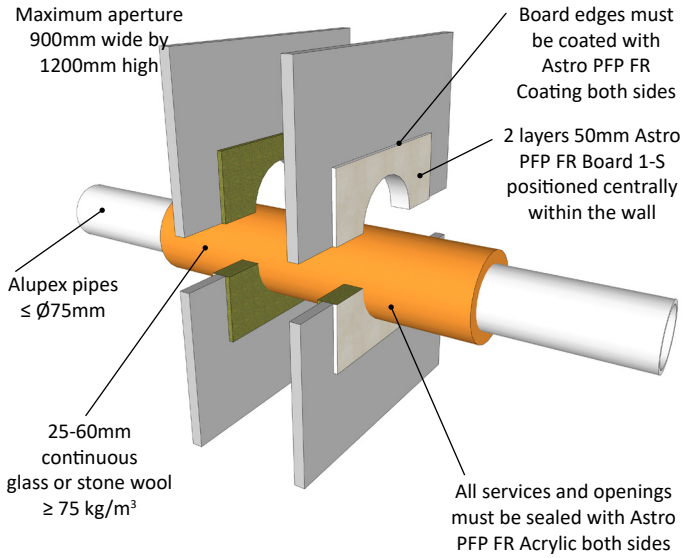
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



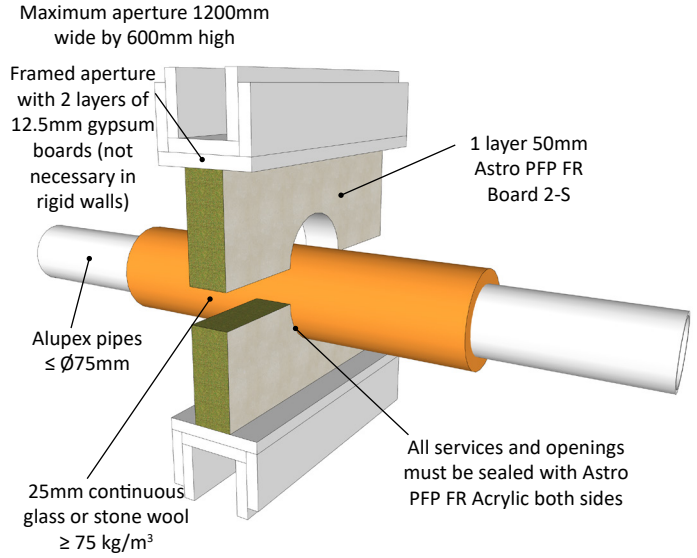
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



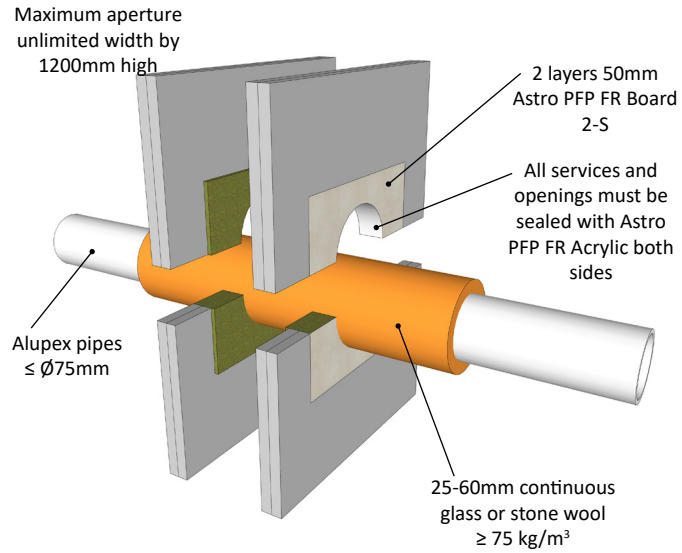
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



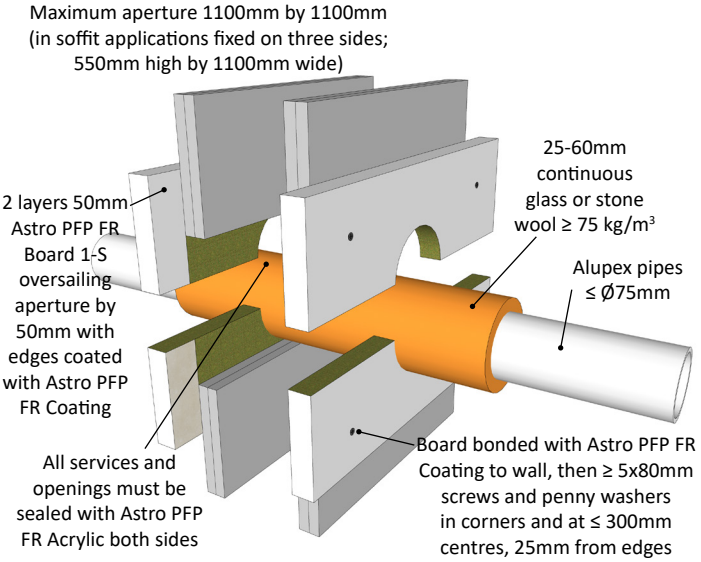
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



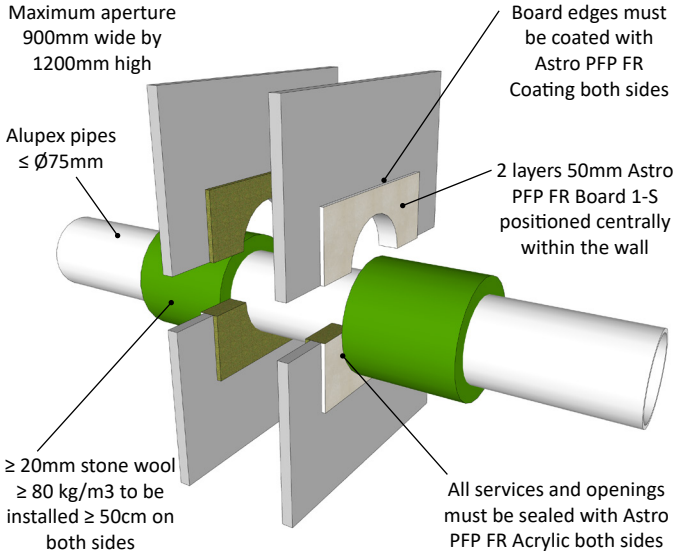
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



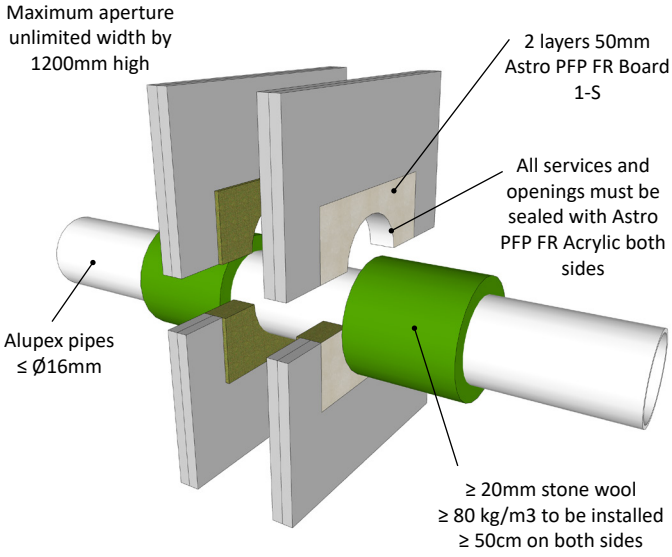
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



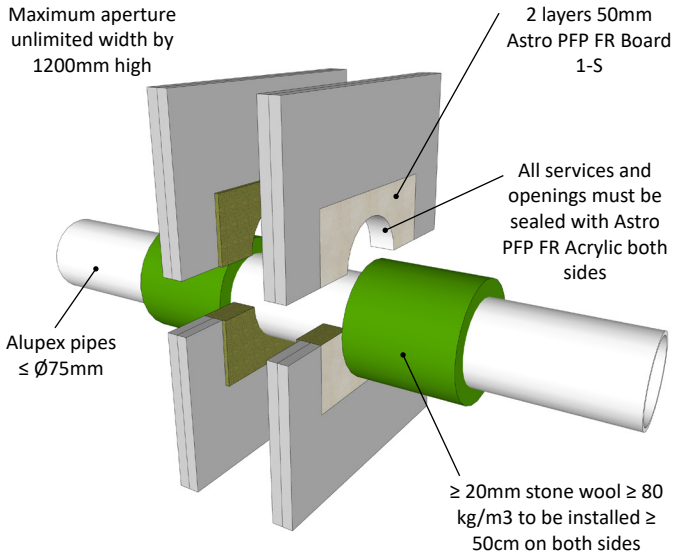
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



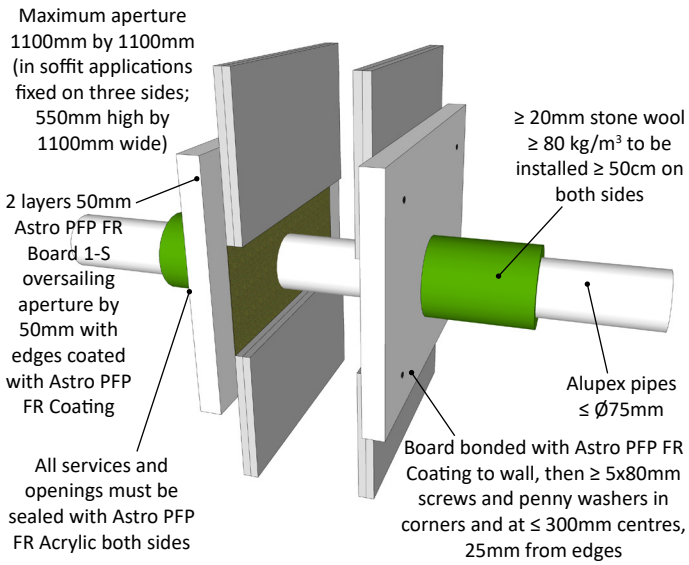
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



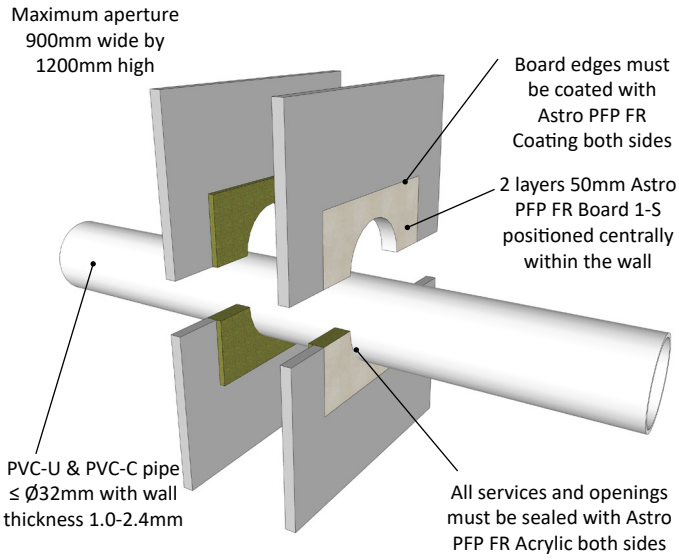
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



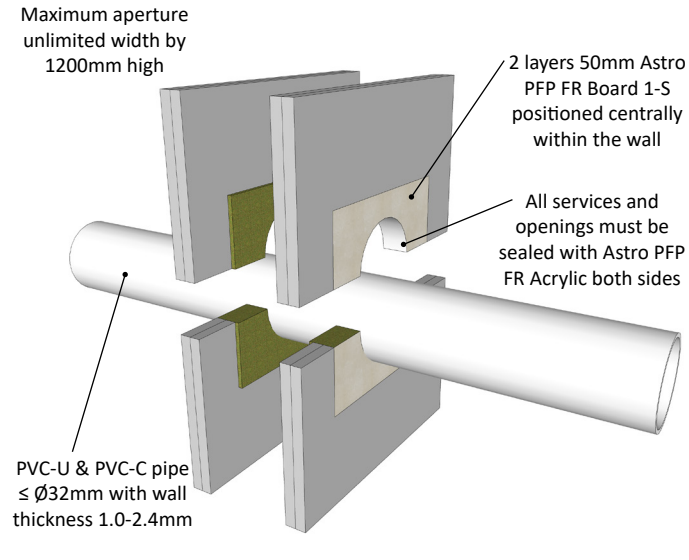
PVC PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



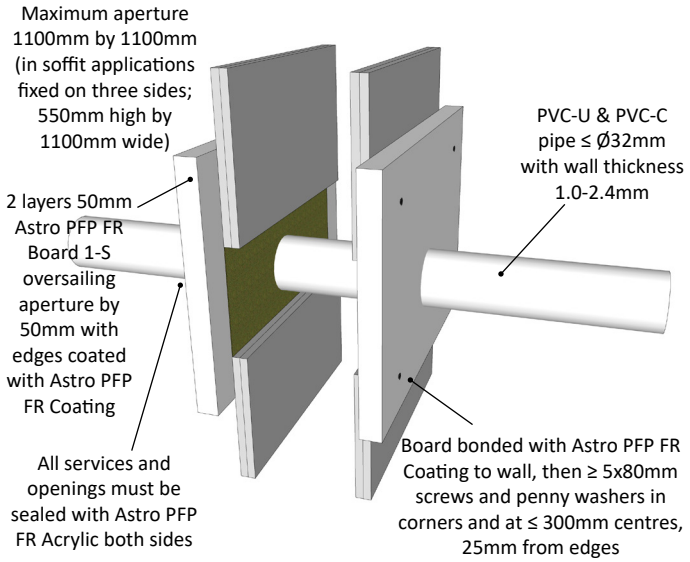
PVC PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



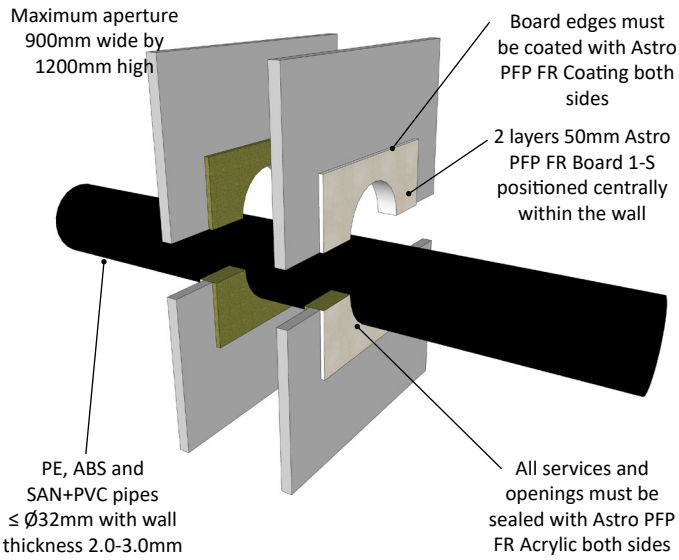
PVC PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



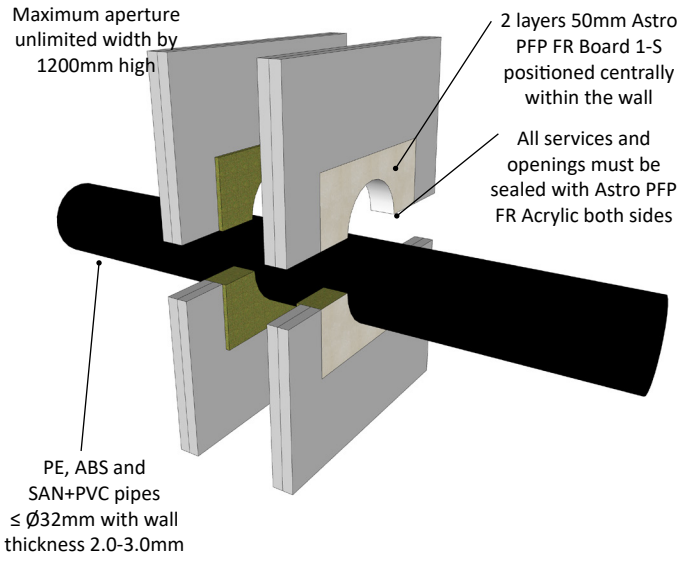
PE PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



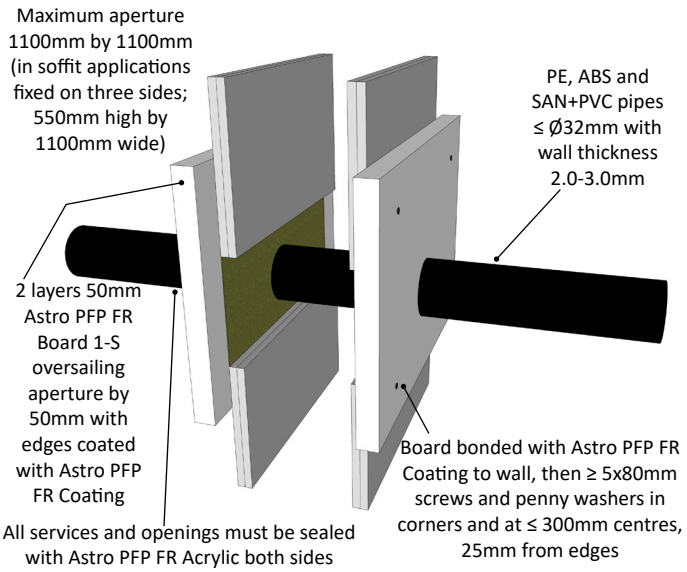
PE PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



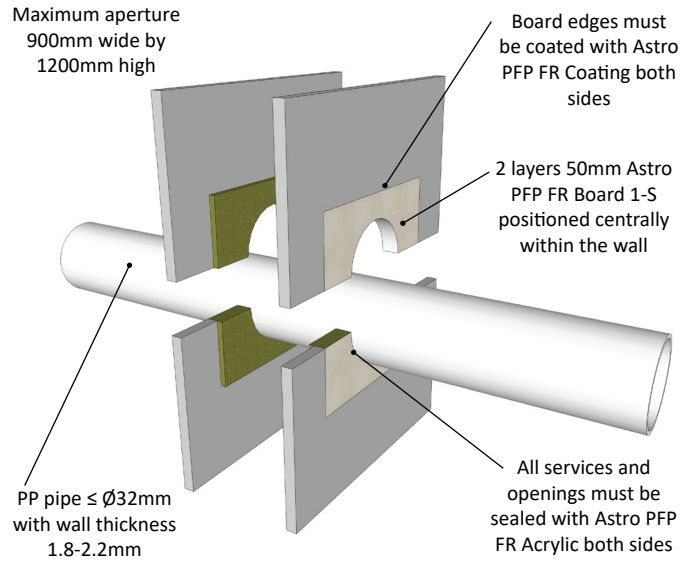
PE PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



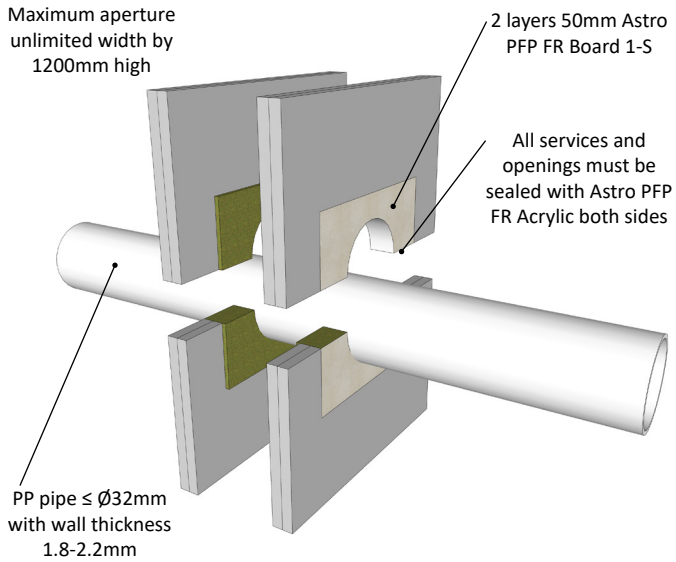
PP PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



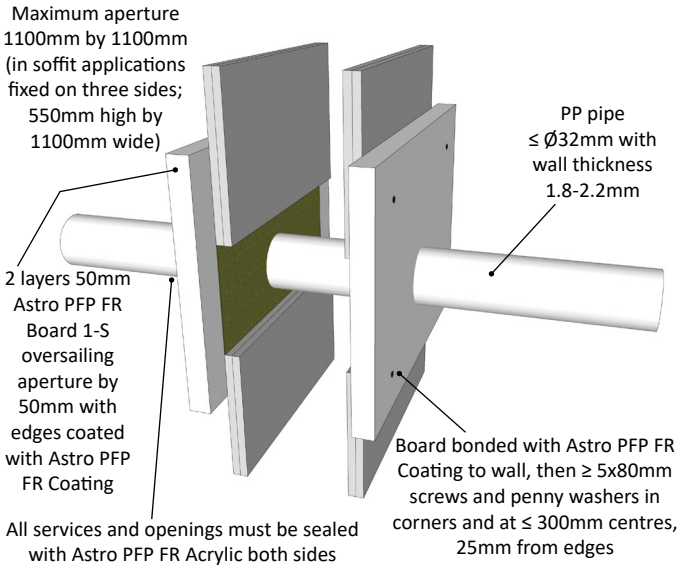
PP PIPES FIRE RESISTANCE EI 60 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



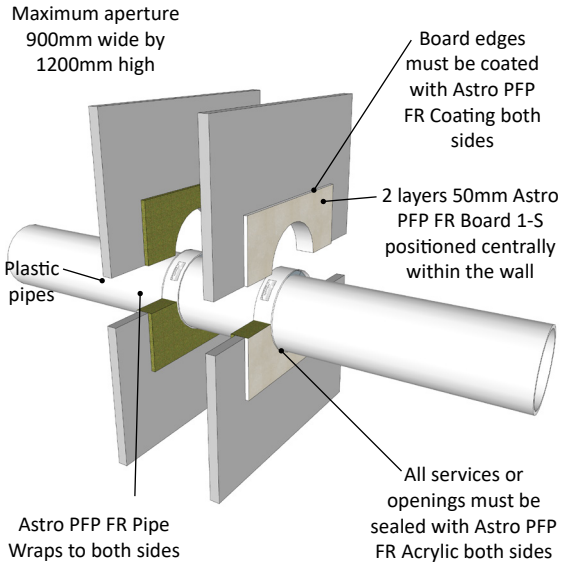
PP PIPES FIRE RESISTANCE EI 60 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



PLASTIC PIPES FIRE RESISTANCE EI 90-120

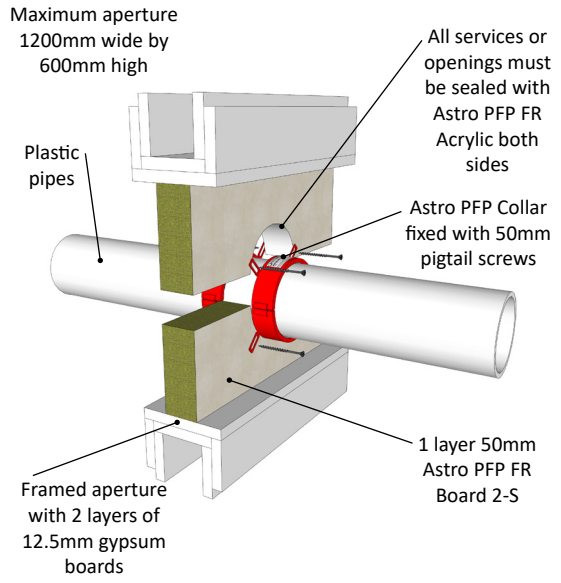
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 60 U/U (E 60 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 60 U/U (E 60 U/U)
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 60 U/U (E 60 U/U)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	4.2 – 10.0mm	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 110mm PP	2.7 – 15.1mm	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
≤ Ø 125mm PVC-U & PVC-C	3.7 – 7.4mm	50 x 5.4mm (3 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 125mm PE, ABS & SAN+PVC	4.8 – 12.0mm	50 x 5.4mm (3 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 125mm PP	3.1 – 17.1mm	50 x 5.4mm (3 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 160mm PP	4.9 – 21.9mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 200mm PVC-U & PVC-C	4.9 – 11.9mm	50 x 10.8mm (6 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 200mm PE, ABS & SAN+PVC	6.2 – 18.2mm	50 x 10.8mm (6 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 200mm PP	4.9 – 18.2mm	50 x 10.8mm (6 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 315mm PVC-U & PVC-C	7.7 – 12.1mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 315mm PE, ABS & SAN+PVC	18.7mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 315mm PP	28.6mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 400mm PVC-U & PVC-C	9.8 – 15.3mm	50 x 28.8mm (16 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 400mm PE, ABS & SAN+PVC	23.7mm	50 x 28.8mm (16 layers)	EI 60 C/C (E 60 C/C)

PLASTIC PIPES FIRE RESISTANCE EI 30-60

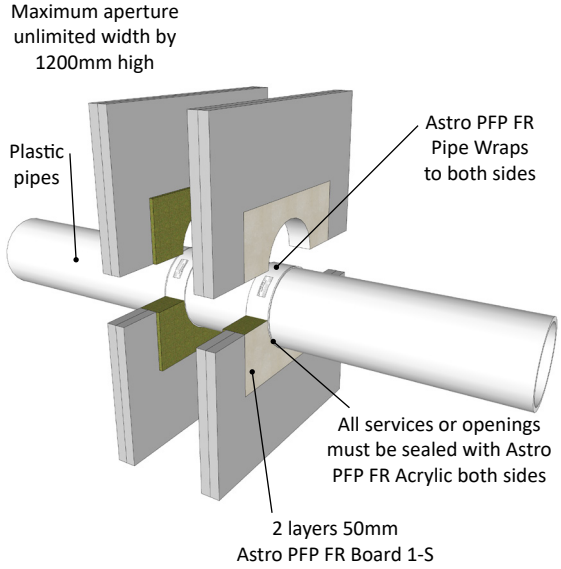
≥ 100MM DRYWALLS OR RIGID WALLS



Pipe & Collar Descriptions	Pipe Wall Thickness	Min. Collar Height	Classification
≤ Ø 110mm PVC-U & PVC-C	1.9 – 6.6mm	30mm	EI 30 U/C (E 90 U/C)
≤ Ø 50mm PVC-U & PVC-C	1.9 – 3.7mm	50mm	EI 60 U/C (E 120 U/C)
≤ Ø 110mm PVC-U & PVC-C	2.1 – 6.6mm	50mm	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PVC-U & PVC-C	3.1 – 9.5mm	60mm	EI 60 C/C (E 60 C/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.4 – 10.0mm	30mm	EI 45 U/C (E 60 U/C)
≤ Ø 50mm PE, ABS & SAN+PVC	3.0 – 4.6mm	50mm	EI 60 U/C (E 120 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.0 – 10.0mm	50mm	EI 60 C/C (E 90 C/C)
≤ Ø 160mm PE, ABS & SAN+PVC	3.9 – 9.5mm	60mm	EI 60 C/C (E 60 C/C)
≤ Ø 90mm PP	1.8 – 4.6mm	50mm	EI 60 C/C (E 60 C/C)
≤ Ø 110mm PP	2.7mm	50mm	EI 60 C/C (E 60 C/C)
≤ Ø 160mm PP	3.4 – 9.1mm	60mm	EI 60 C/C (E 60 C/C)

PLASTIC PIPES FIRE RESISTANCE EI 60-120

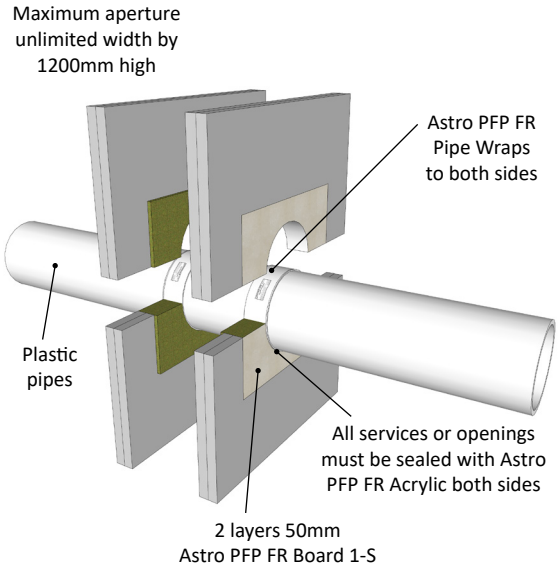
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	4.2 – 10.0mm	50 x 3.6mm (2 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 110mm PP	2.7 – 15.1mm	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
≤ Ø 125mm PVC-U & PVC-C	3.7 – 7.4mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 125mm PE, ABS & SAN+PVC	4.8 – 12.0mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 125mm PP	3.1 – 17.1mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PP	4.9 – 21.9mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 200mm PVC-U & PVC-C	4.9 – 11.9mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 200mm PE, ABS & SAN+PVC	6.2 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 200mm PP	4.9 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PVC-U & PVC-C	7.7 – 12.1mm	50 x 18.0mm (10 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PE, ABS & SAN+PVC	18.7mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 315mm PP	28.6mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 400mm PVC-U & PVC-C	9.8 – 15.3mm	50 x 28.8mm (16 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 400mm PE, ABS & SAN+PVC	23.7mm	50 x 28.8mm (16 layers)	EI 60 C/C (E 60 C/C)

PLASTIC PIPES FIRE RESISTANCE EI 120

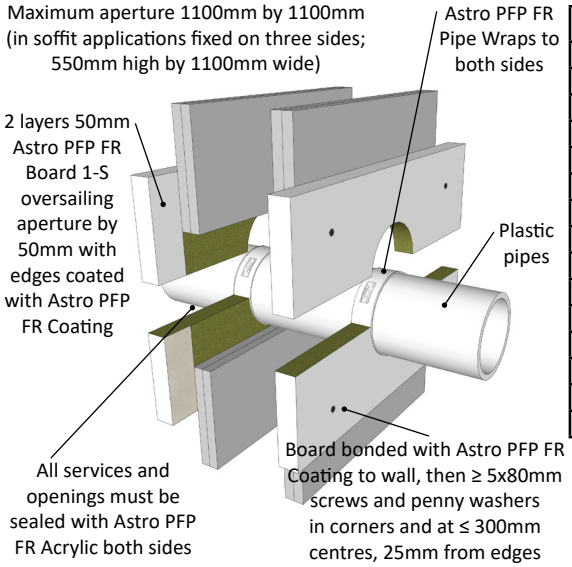
≥ 120MM DRYWALLS OR RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	3.8 – 4.6mm	50 x 1.8mm (1 layer)	EI 120 C/C (E 120 C/C)
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.4 – 10.0mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 110mm PP	2.7 – 10.0mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 160mm PP	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)

PVC & PE PIPES FIRE RESISTANCE EI 90-120

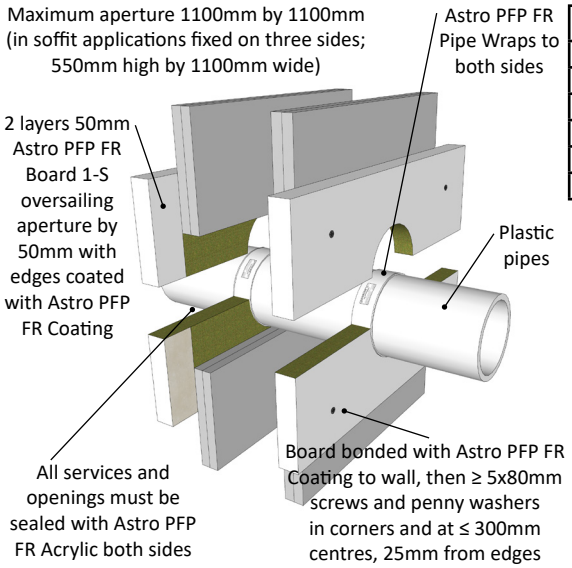
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	3.8 – 4.6mm	50 x 1.8mm (1 layer)	EI 120 C/C (E 120 C/C)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.4 – 10.0mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 125mm PVC-U & PVC-C	3.7 – 7.4mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 125mm PE, ABS & SAN+PVC	4.8 – 12.0mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 200mm PVC-U & PVC-C	4.9 – 11.9mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 200mm PE, ABS & SAN+PVC	6.2 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PVC-U & PVC-C	7.7 – 12.1mm	50 x 18.0mm (10 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PE, ABS & SAN+PVC	18.7mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 400mm PVC-U & PVC-C	9.8 – 15.3mm	50 x 28.8mm (16 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 400mm PE, ABS & SAN+PVC	23.7mm	50 x 28.8mm (16 layers)	EI 60 C/C (E 60 C/C)

PP PIPES FIRE RESISTANCE EI 90-120

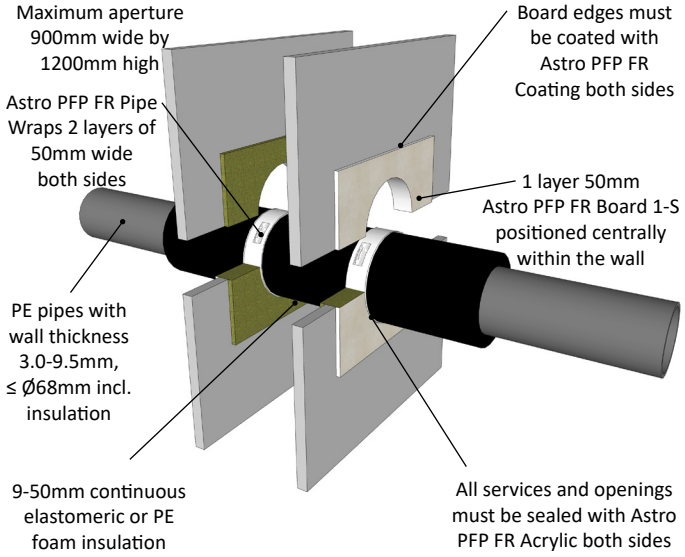
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 110mm PP	2.7 – 10.0mm	50 x 3.6mm (2 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 125mm PP	3.1 – 17.1mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 160mm PP	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 200mm PP	4.9 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PP	28.6mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)

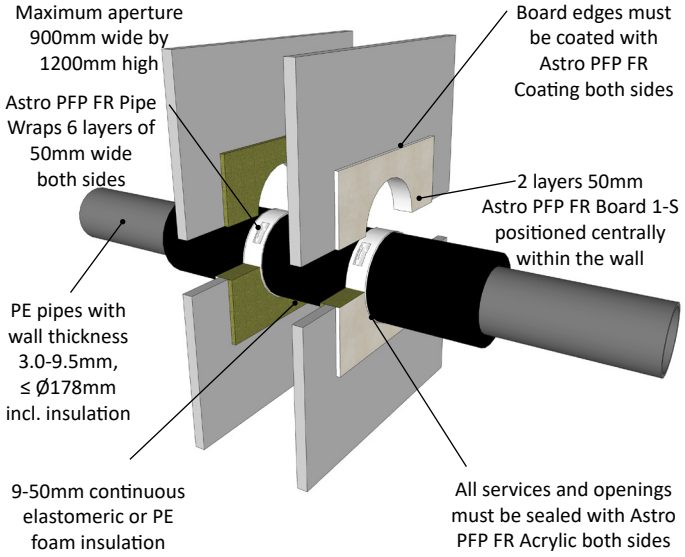
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



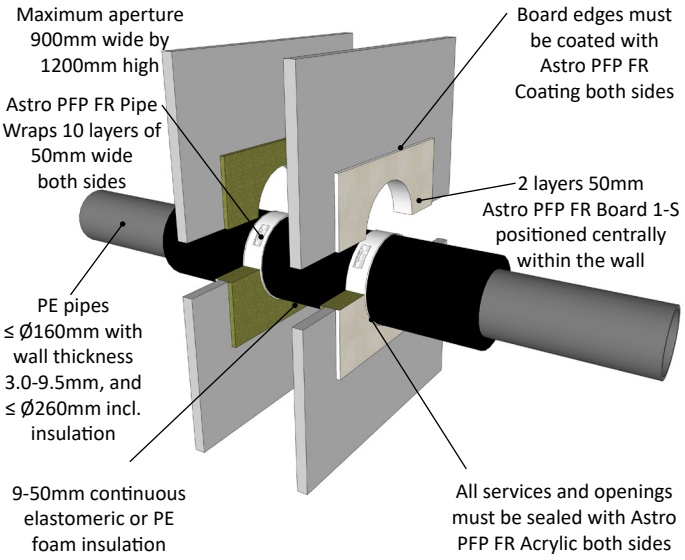
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



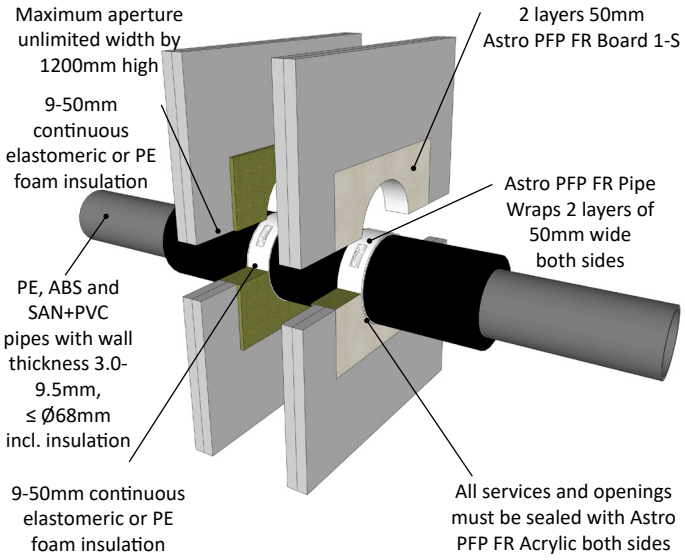
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



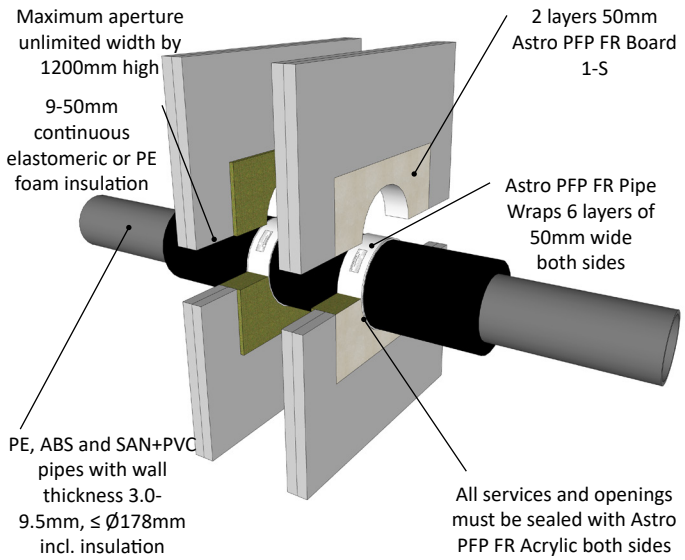
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



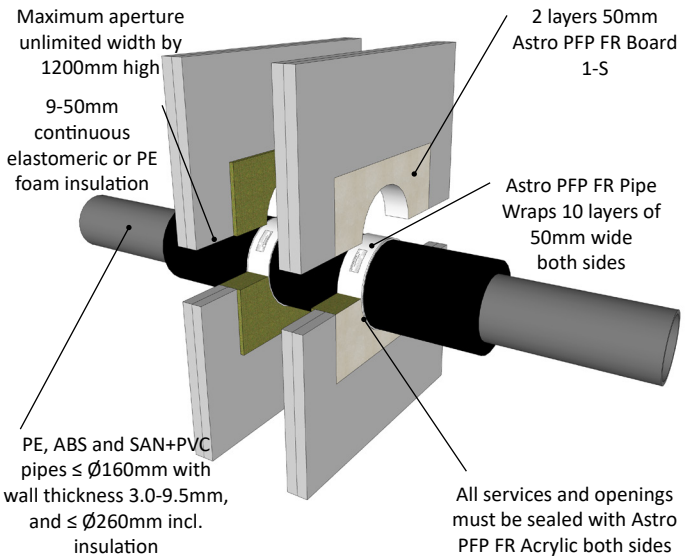
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



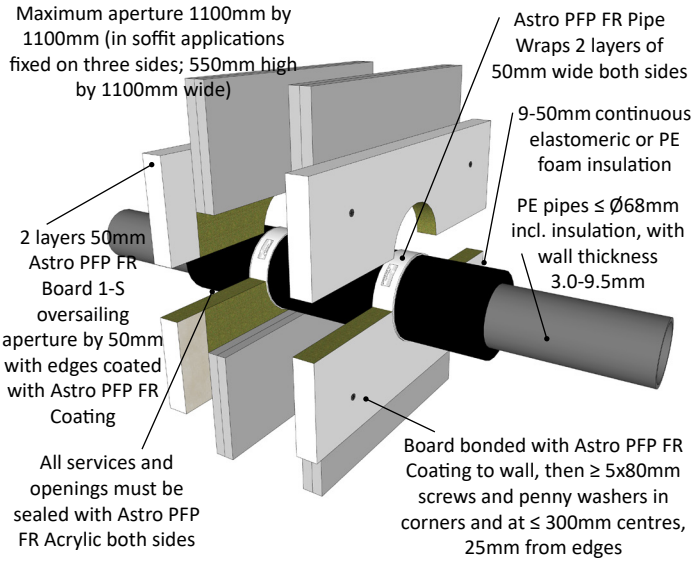
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



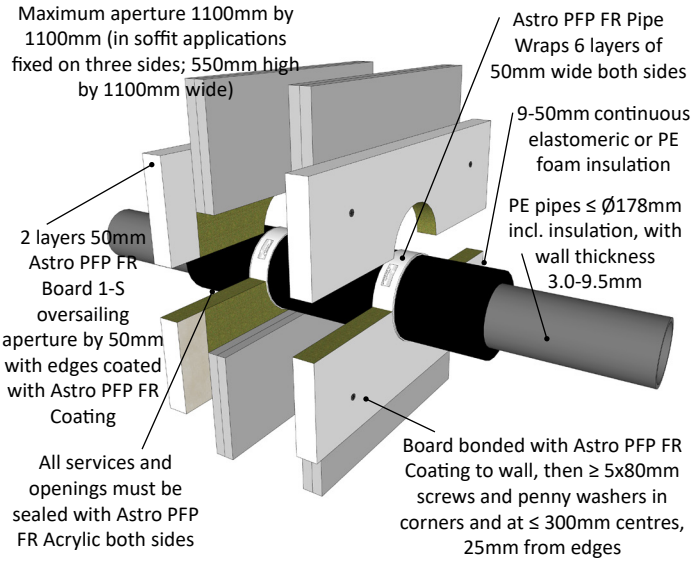
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



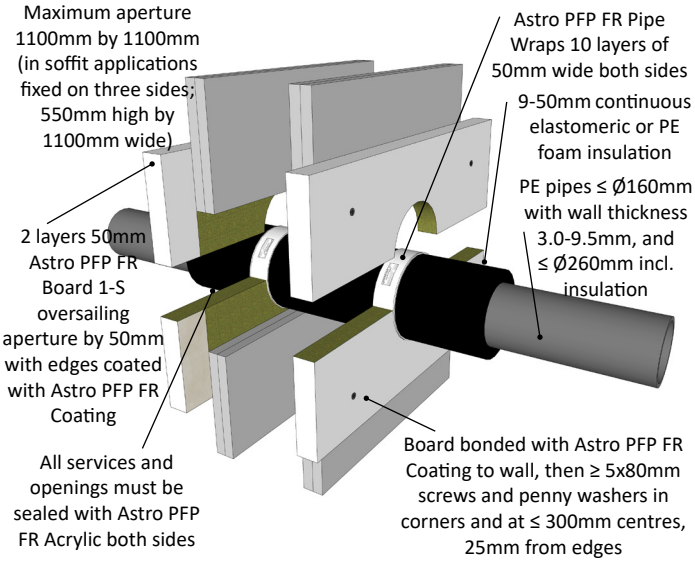
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



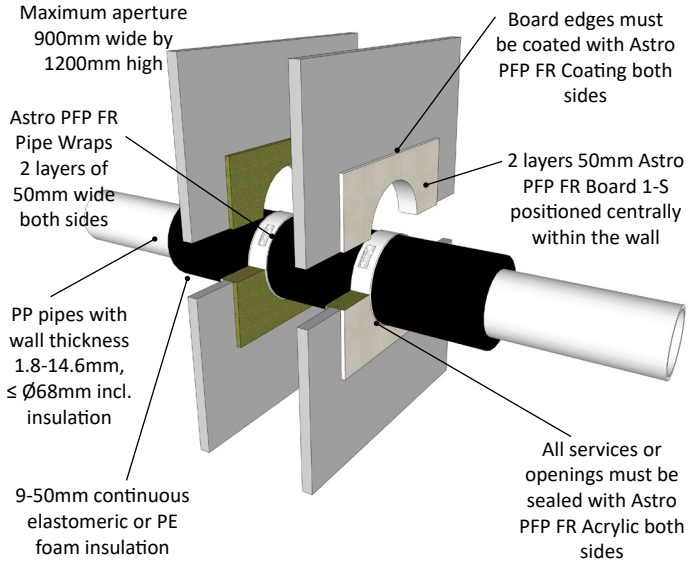
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



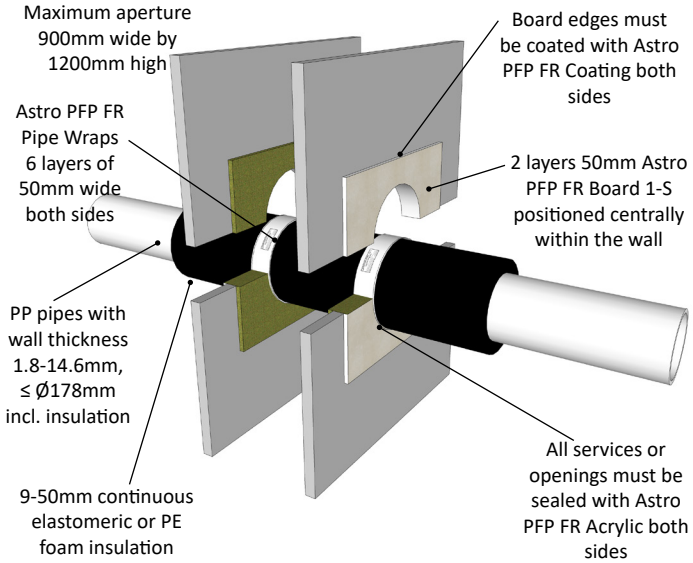
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



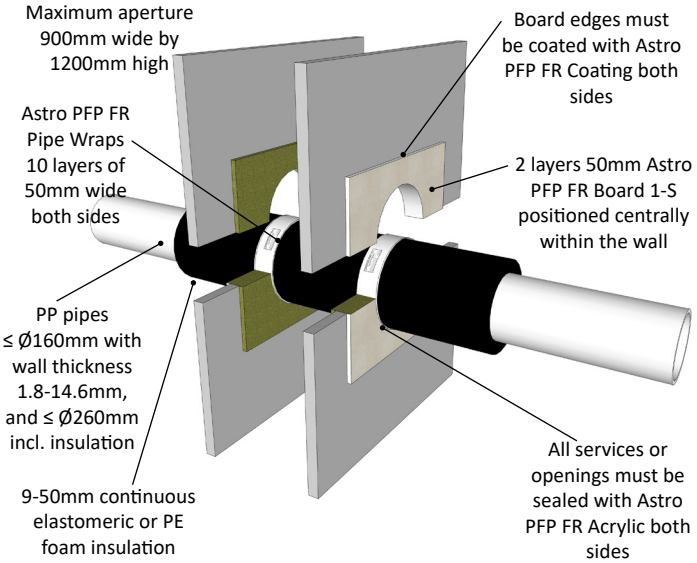
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



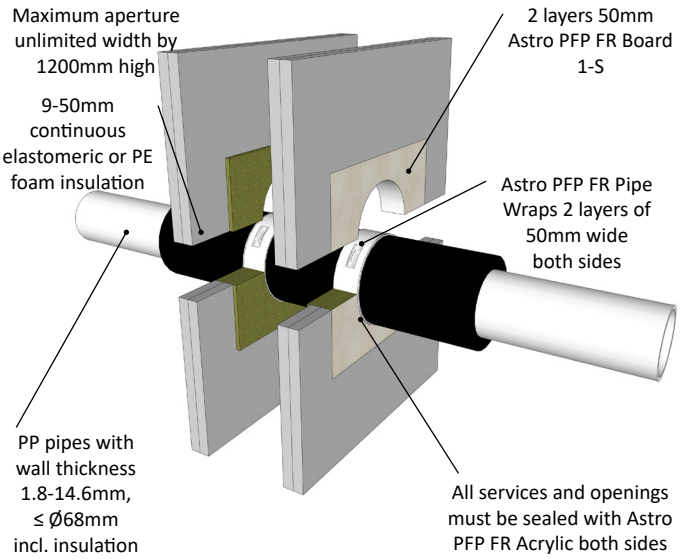
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



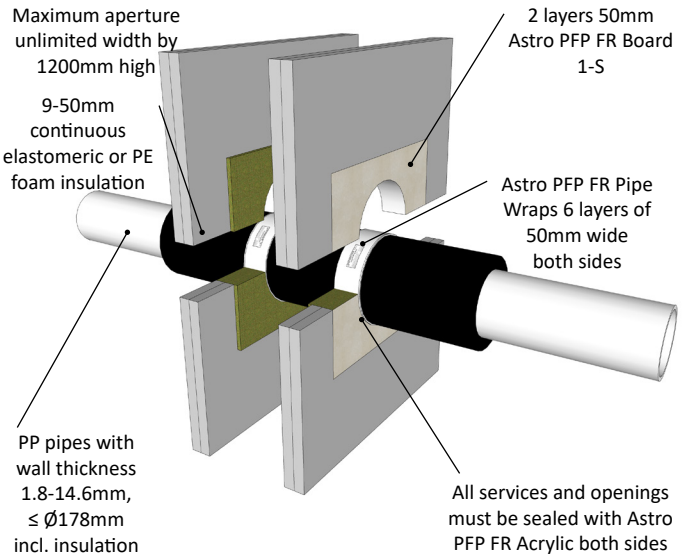
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



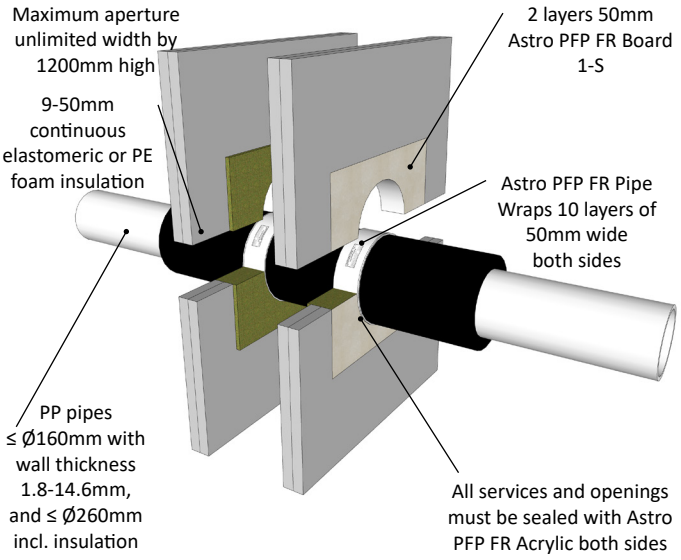
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



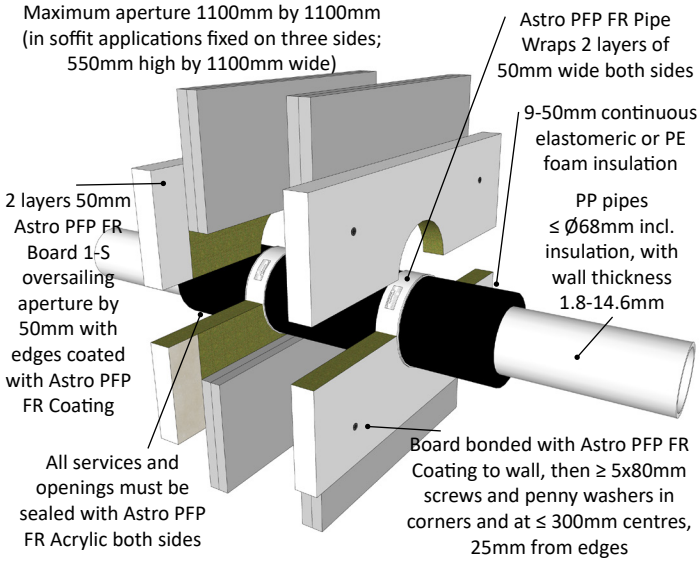
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



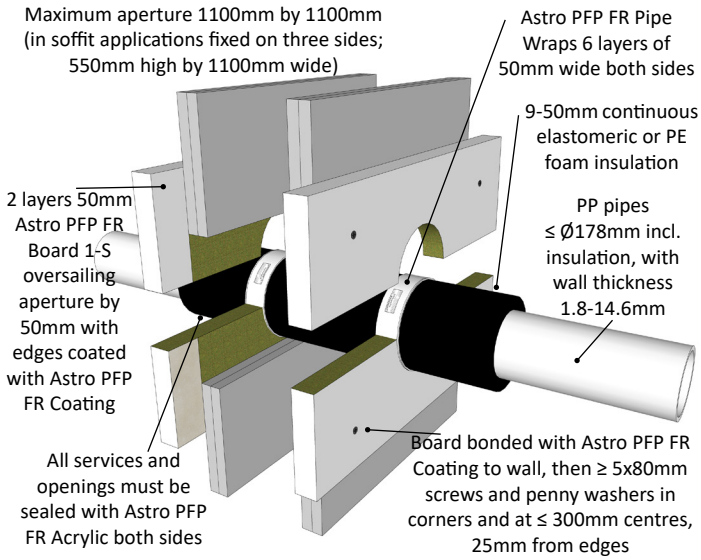
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



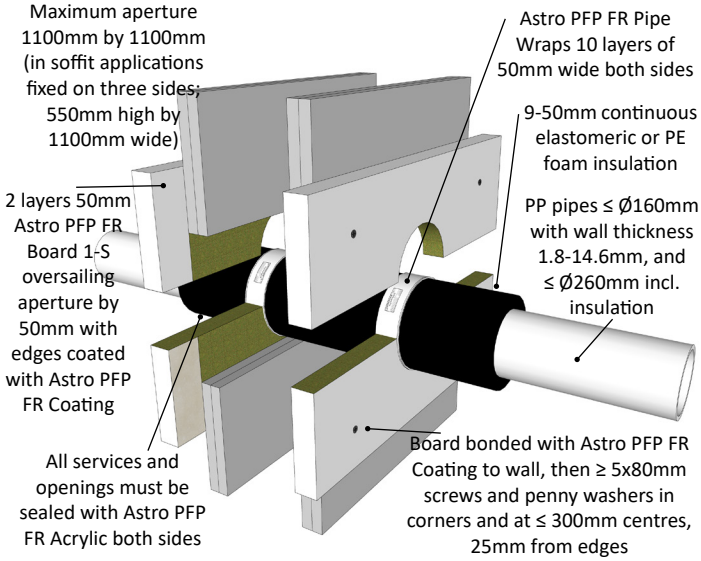
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



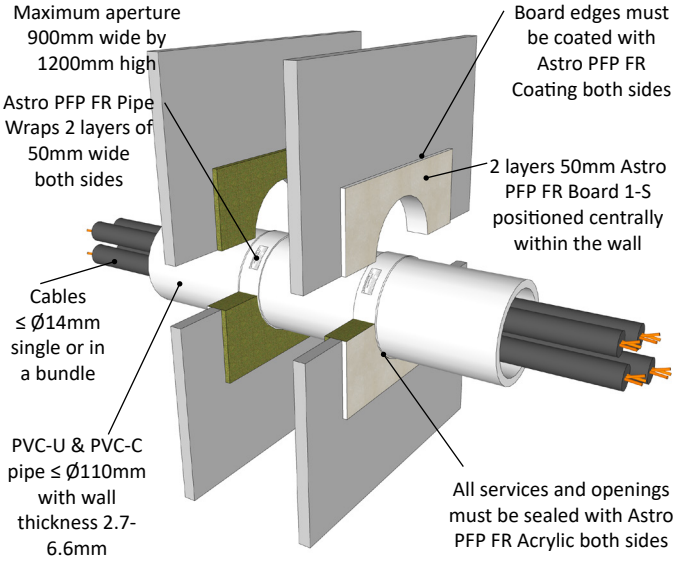
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM DRYWALLS OR RIGID WALLS



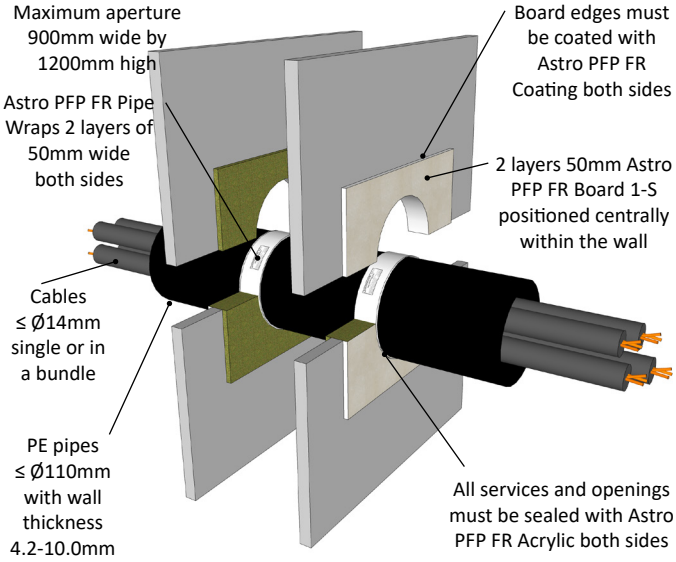
PVC CONDUITS FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



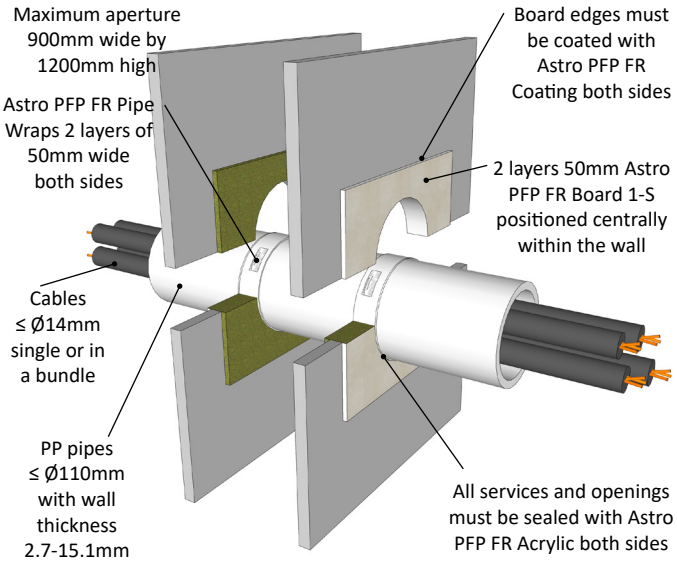
PE CONDUITS FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



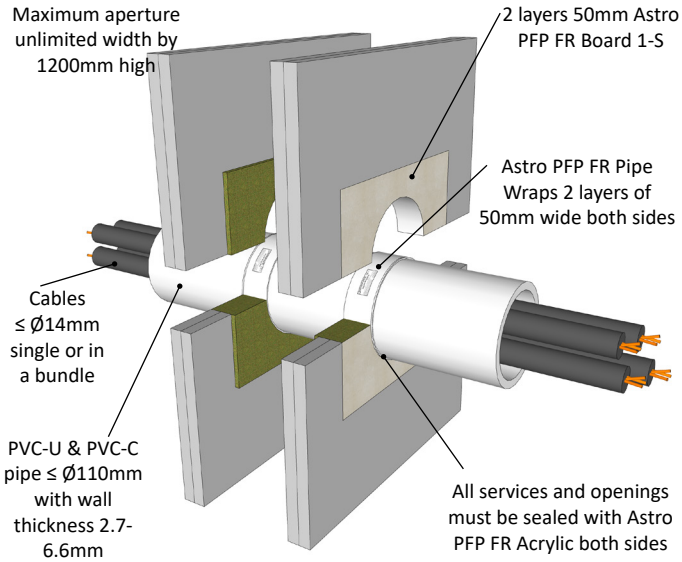
PP CONDUITS FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



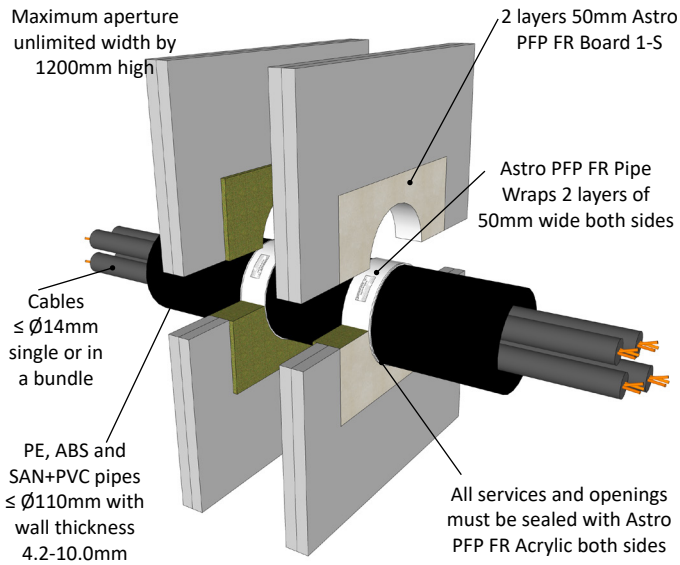
PVC CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



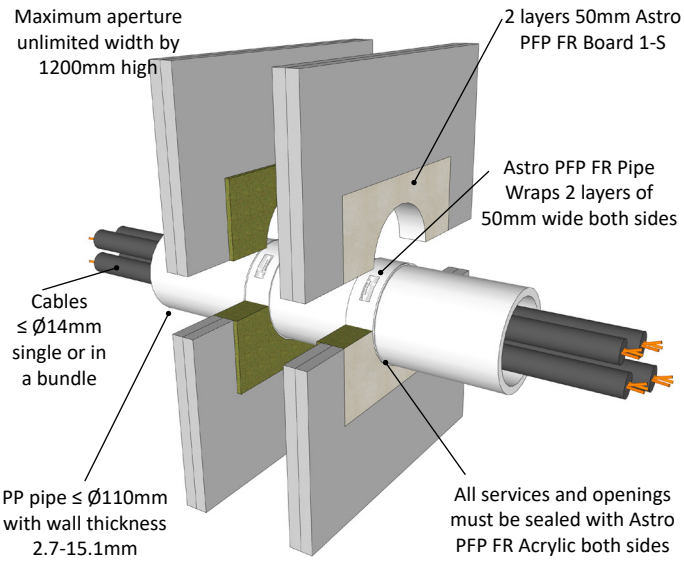
PE CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



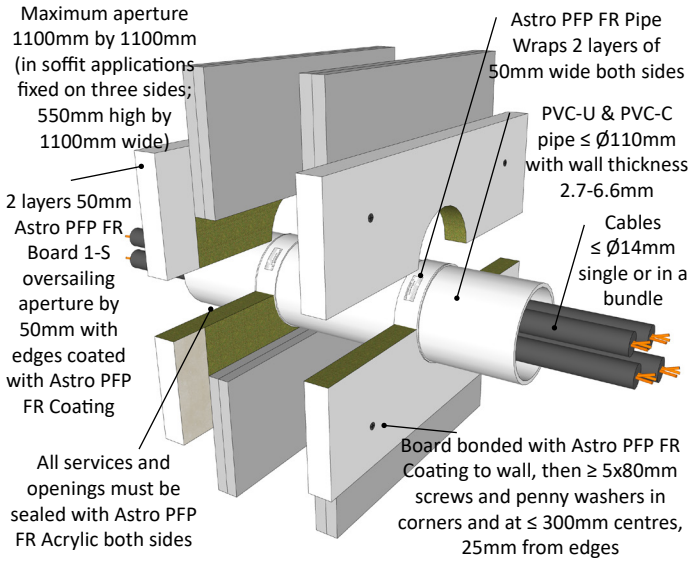
PP CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



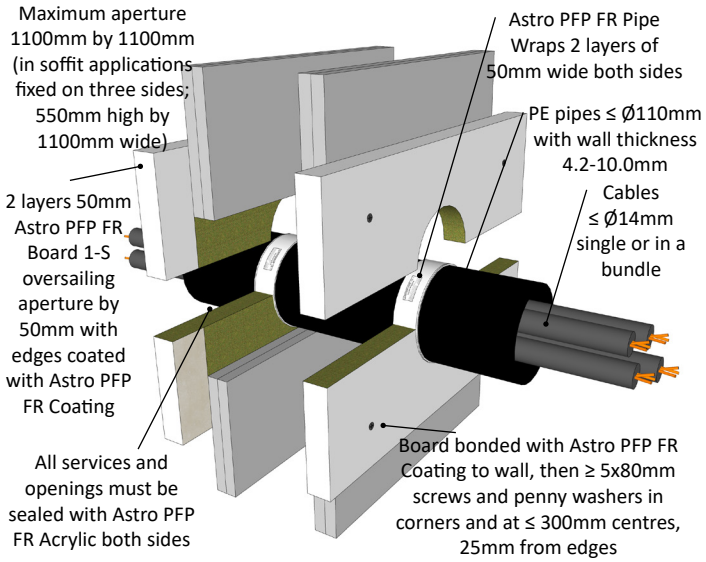
PVC CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



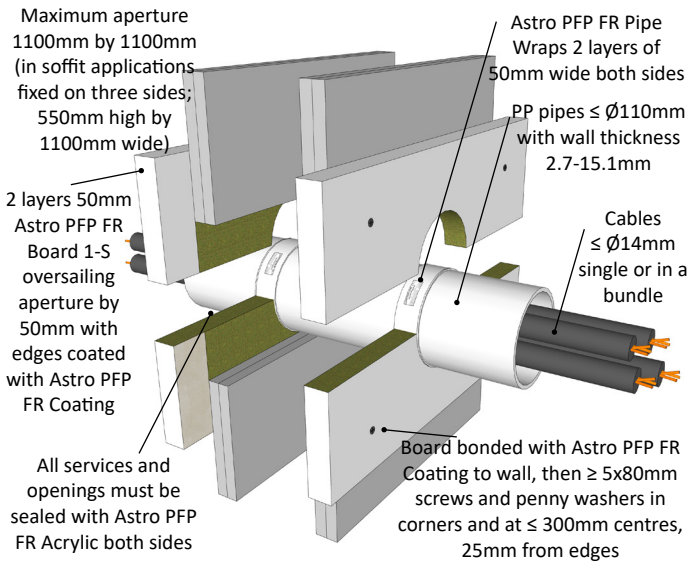
PE CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



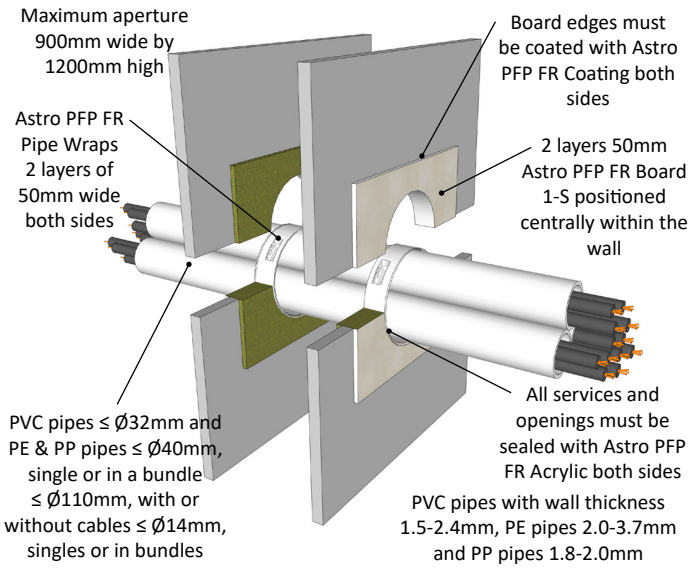
PP CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



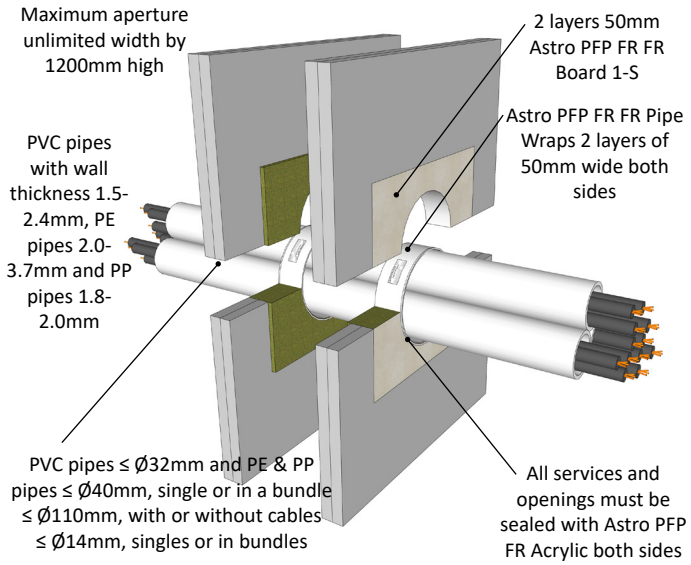
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



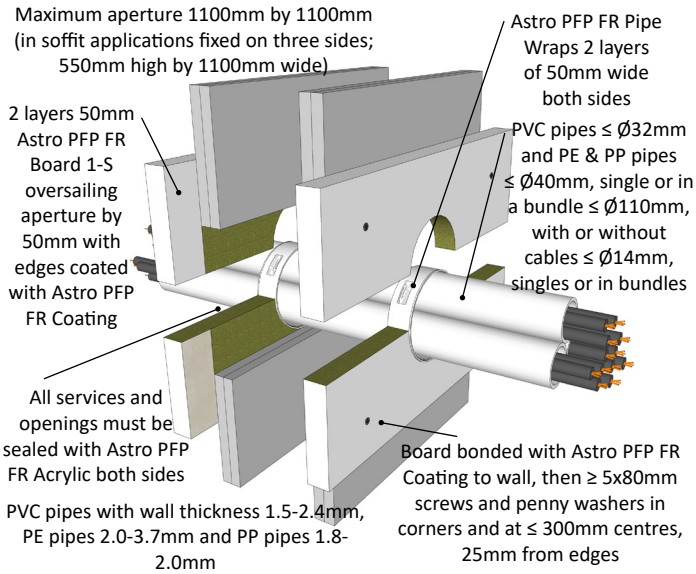
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



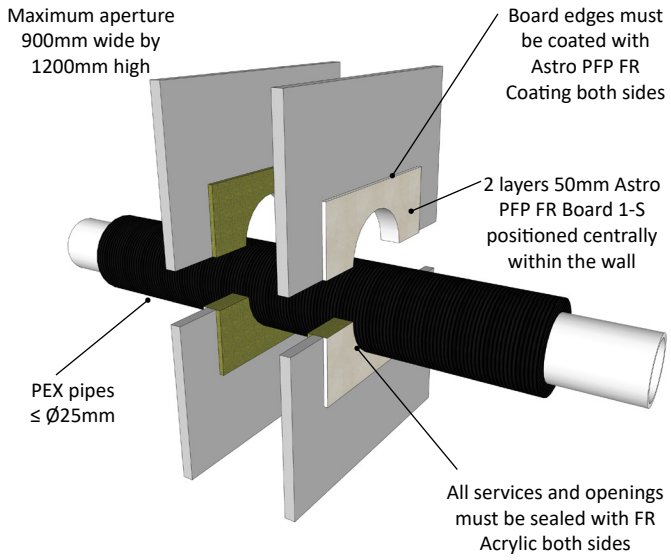
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



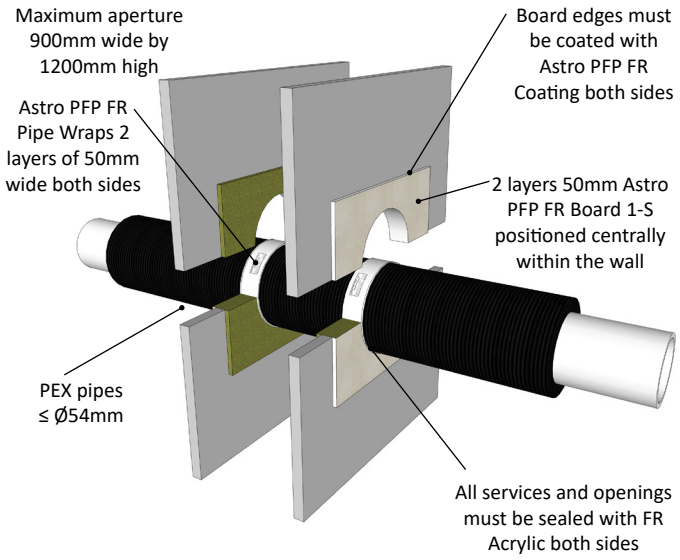
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



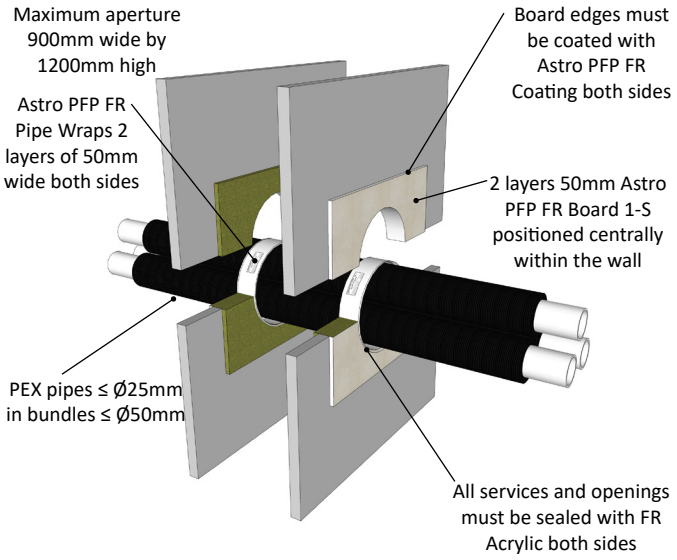
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



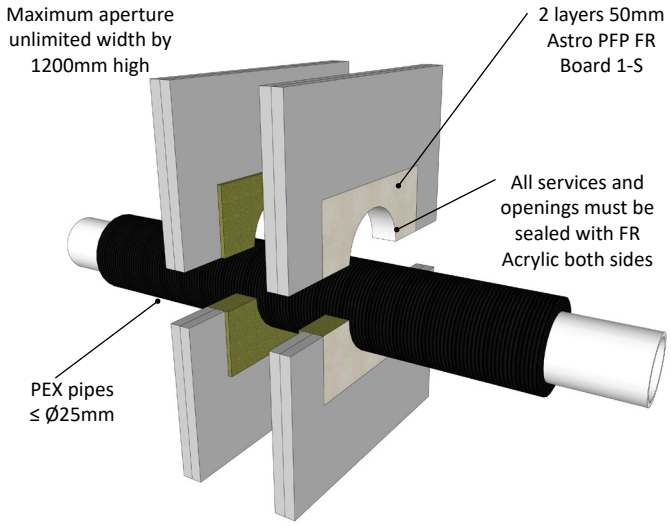
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM DRYWALLS OR RIGID WALLS



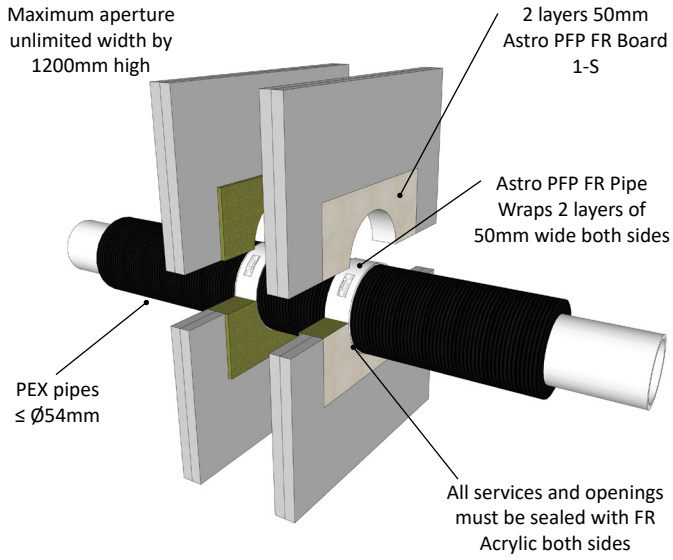
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



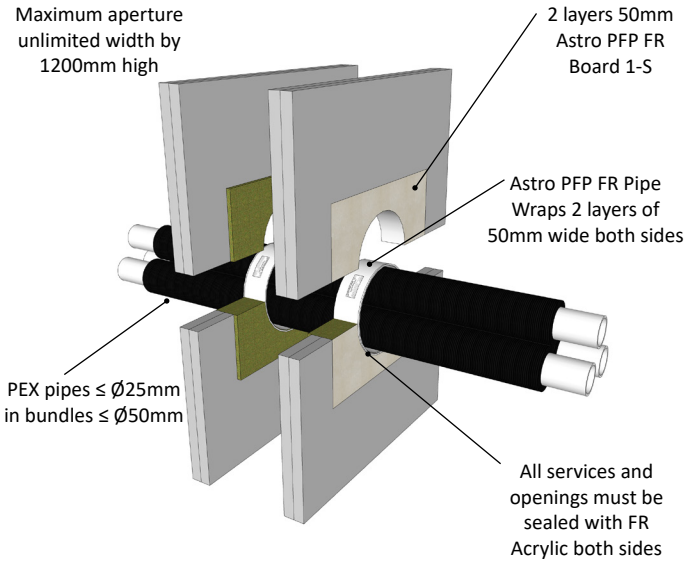
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM DRYWALLS OR RIGID WALLS



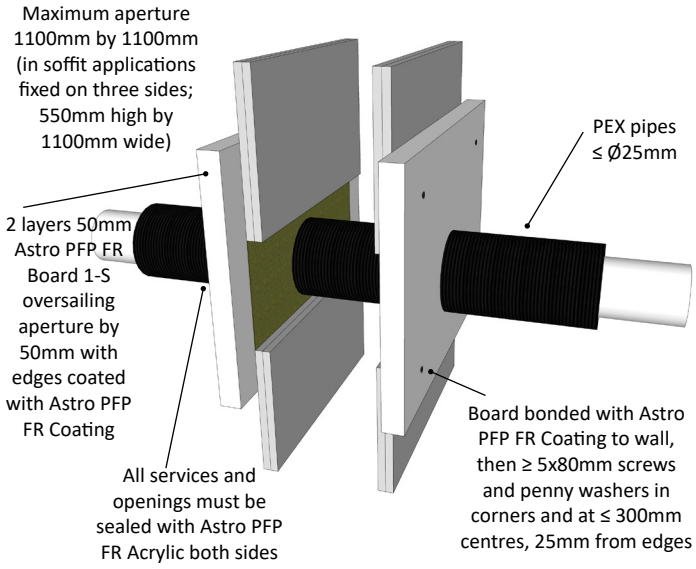
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



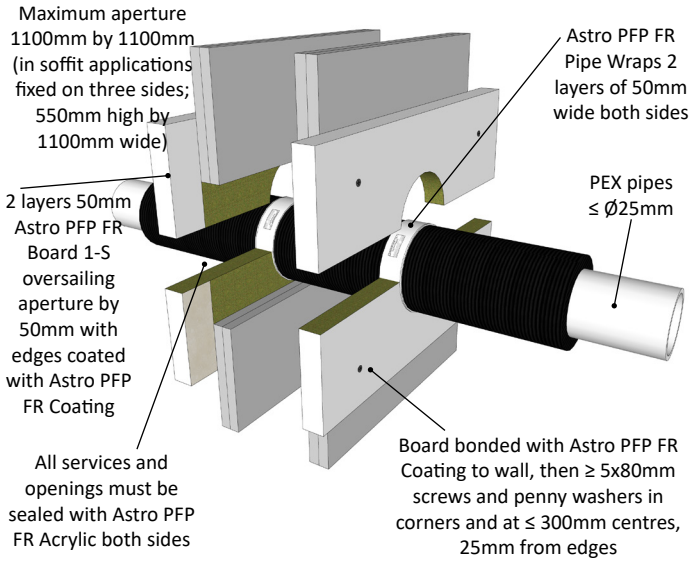
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



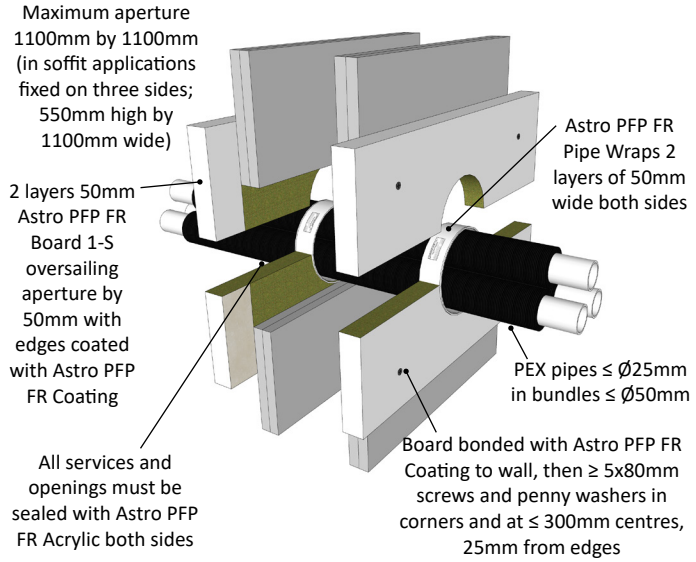
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



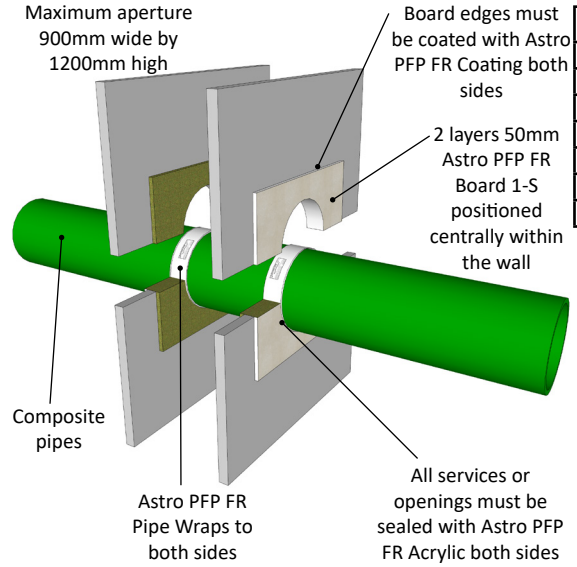
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM DRYWALLS OR RIGID WALLS



COMPOSITE AQUATHERM GREEN SDR9 PLASTIC PIPES FIRE RESISTANCE EI 60

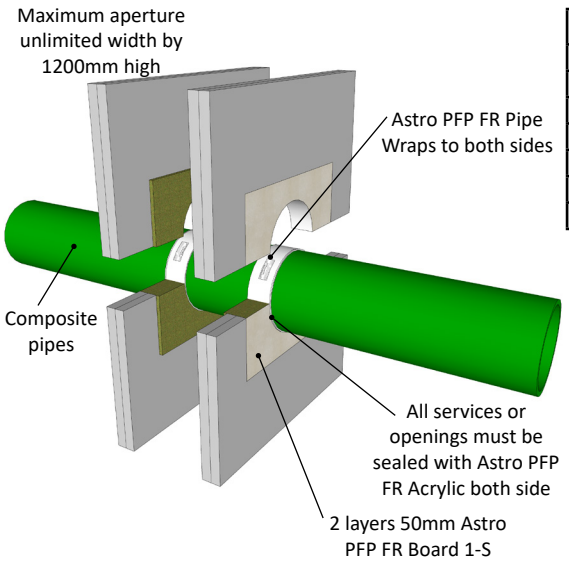
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Aquatherm Green SDR9 pipes	50 x 1.8mm (1 layer)	EI 60 C/C (E 60 C/C)
Ø 40mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)
Ø 50mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)
Ø 63mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)
Ø 75mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)
Ø 90mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)
Ø 110mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 60 C/C (E 60 C/C)

COMPOSITE AQUATHERM GREEN SDR9 PLASTIC PIPES FIRE RESISTANCE EI 90

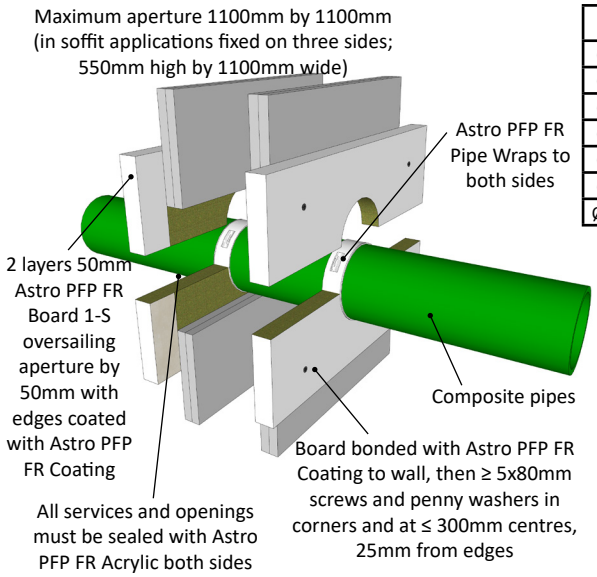
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Aquatherm Green SDR9 pipes	50 x 1.8mm (1 layer)	EI 90 C/C (E 120 C/C)
Ø 40mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 50mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 63mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 75mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 90mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 110mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)

COMPOSITE AQUATHERM GREEN SDR9 PLASTIC PIPES FIRE RESISTANCE EI 90

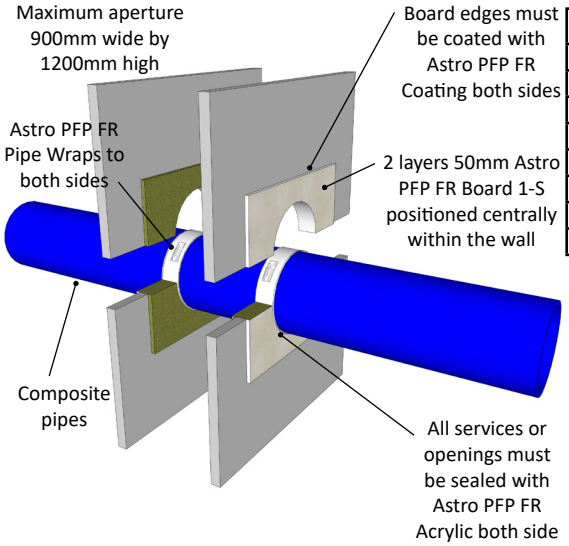
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Aquatherm Green SDR9 pipes	50 x 1.8mm (1 layer)	EI 90 C/C (E 120 C/C)
Ø 40mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 50mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 63mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 75mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 90mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 110mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)

COMPOSITE BLUEPOWER PLASTIC PIPES FIRE RESISTANCE EI 60

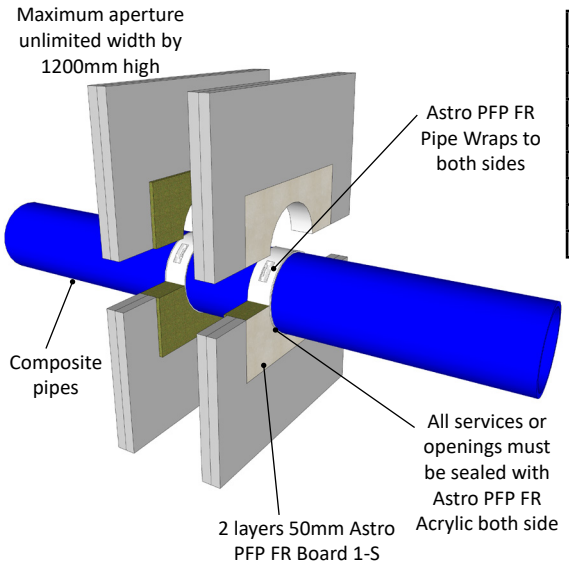
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 40mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 50mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 C/U (E 60 C/U)
Ø 90mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 C/U (E 60 C/U)
Ø 110mm BluePower pipes	50 x 3.6mm (2 layers)	EI 60 C/U (E 60 C/U)
Ø 125mm BluePower pipes	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
Ø 160mm BluePower pipes	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE BLUEPOWER PLASTIC PIPES FIRE RESISTANCE EI 90

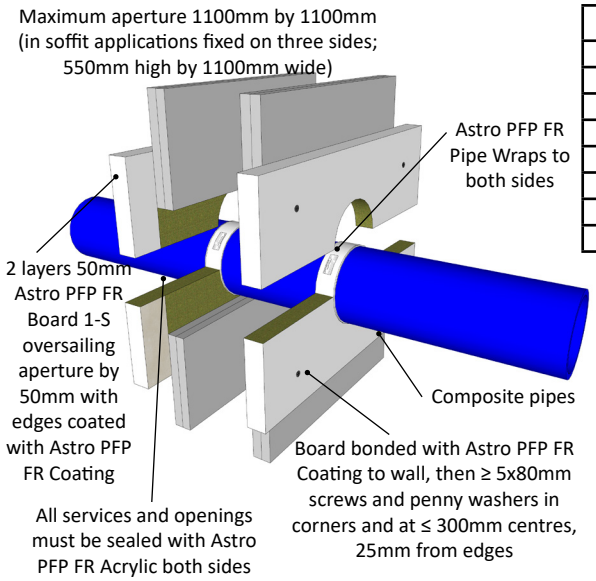
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 40mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 50mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 90mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 110mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 125mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)
Ø 160mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE BLUEPOWER PLASTIC PIPES FIRE RESISTANCE EI 90

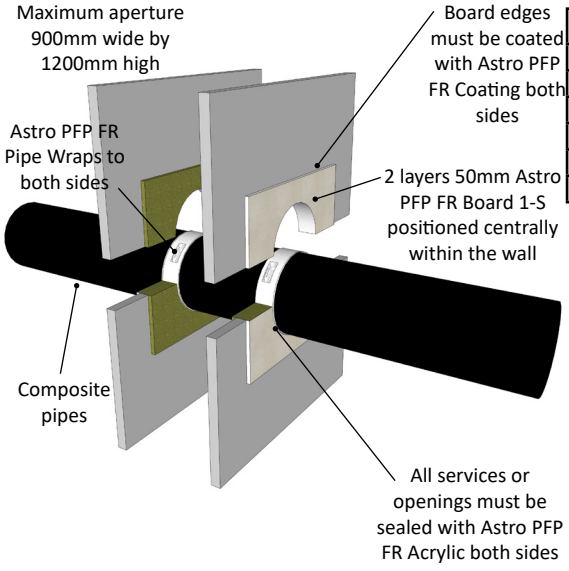
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 40mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 50mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 90mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 110mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 125mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)
Ø 160mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE GEBERIT SILENT-PP PIPES FIRE RESISTANCE EI 60

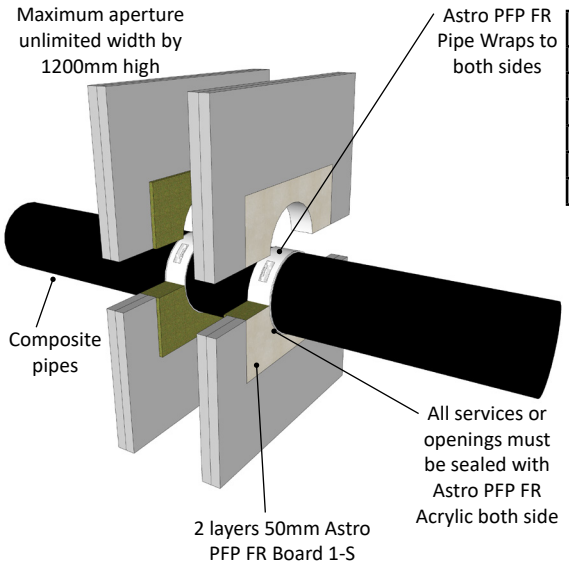
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 40mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 50mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 90mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 110mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE GEBERIT SILENT-PP PIPES FIRE RESISTANCE EI 120

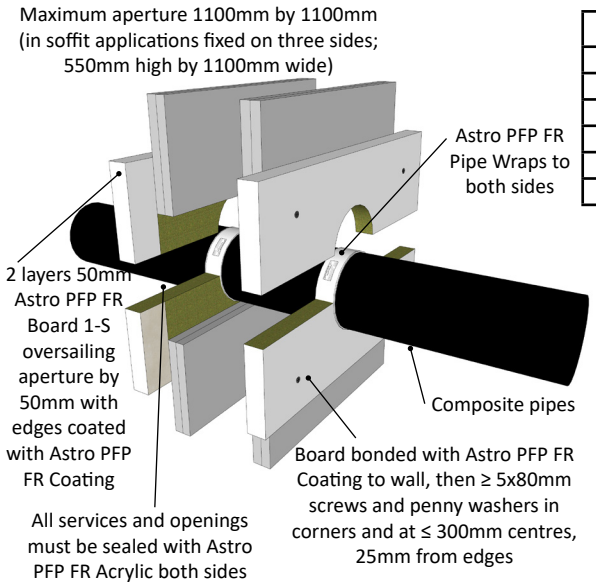
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE GEBERIT SILENT-PP PIPES FIRE RESISTANCE EI 120

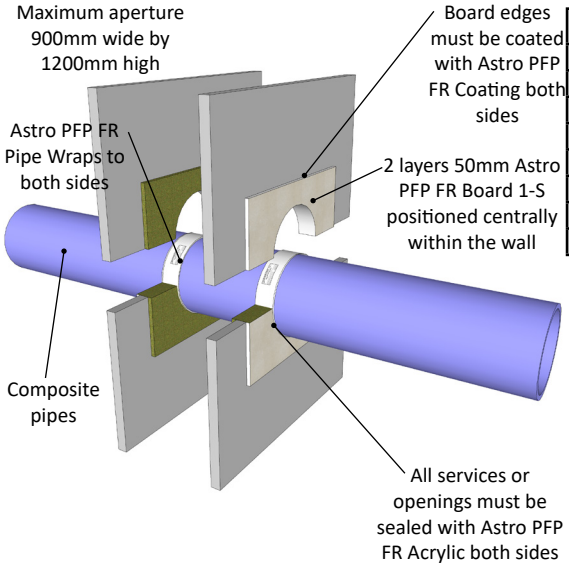
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE POLO-KAL NG PLASTIC PIPES FIRE RESISTANCE EI 60

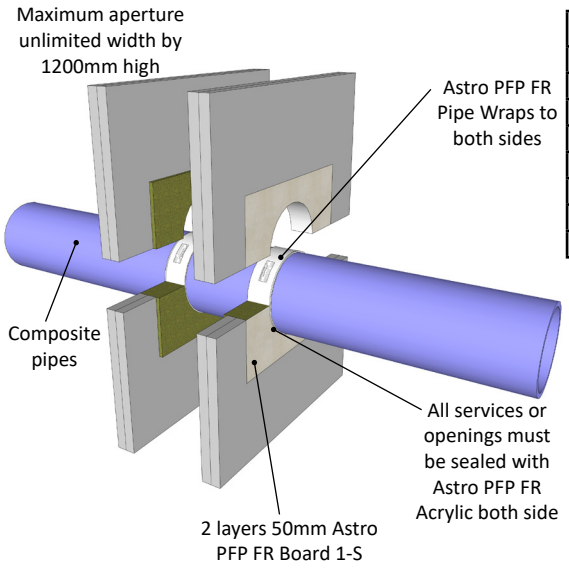
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 40mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 50mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 90mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 110mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 125mm Polo-Kal NG pipes	50 x 7.2mm (4 layers)	EI 60 U/C (E 60 U/C)
Ø 160mm Polo-Kal NG pipes	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE POLO-KAL NG PLASTIC PIPES FIRE RESISTANCE EI 120

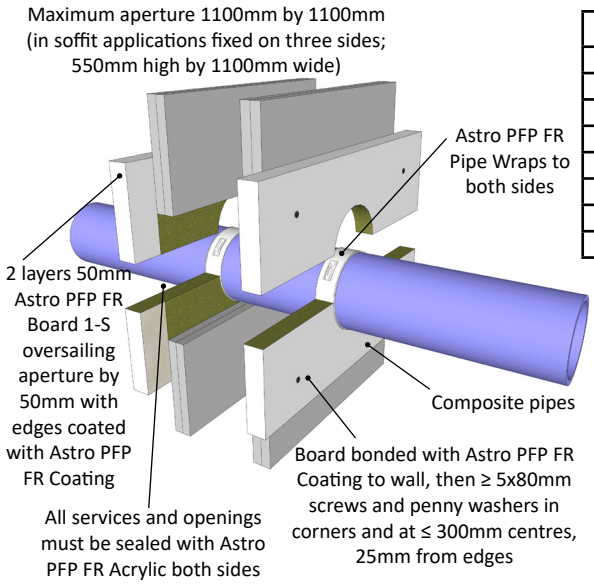
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Polo-Kal NG pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Polo-Kal NG pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE POLO-KAL NG PLASTIC PIPES FIRE RESISTANCE EI 120

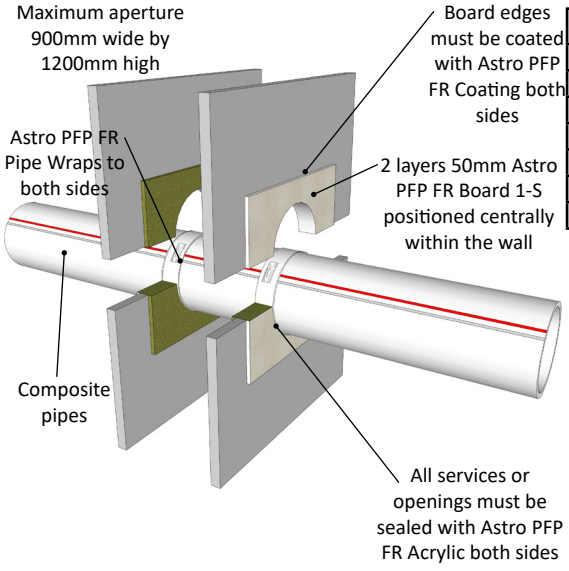
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Polo-Kal NG pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Polo-Kal NG pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE REHAU RAUPIANO PLUS PLASTIC PIPES FIRE RESISTANCE EI 60

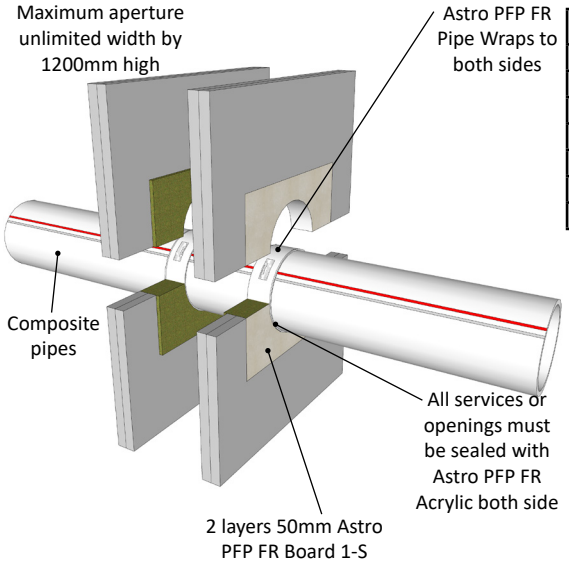
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 40mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 50mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 90mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 110mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 125mm Rehau Raupiano Plus pipes	50 x 7.2mm (4 layers)	EI 60 U/C (E 60 U/C)
Ø 160mm Rehau Raupiano Plus pipes	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE REHAU RAUPIANO PLUS PLASTIC PIPES FIRE RESISTANCE EI 120

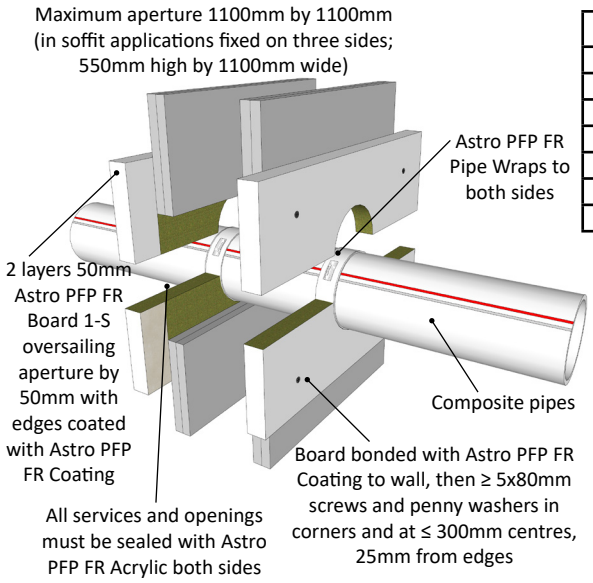
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 40mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Rehau Raupiano Plus pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Rehau Raupiano Plus pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE REHAU RAUPIANO PLUS PLASTIC PIPES FIRE RESISTANCE EI 120

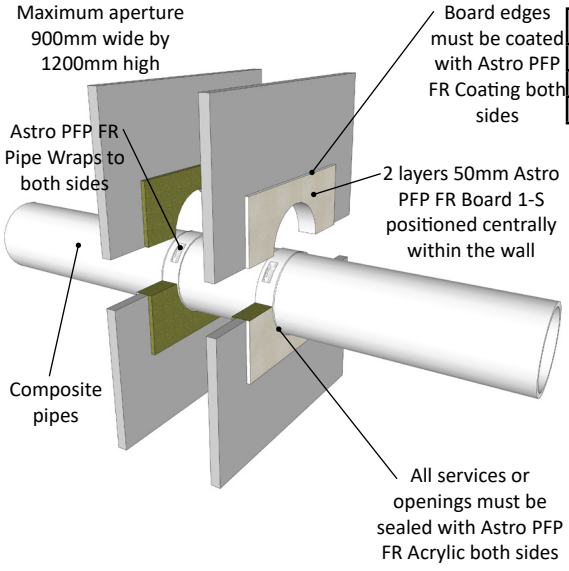
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 40mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Rehau Raupiano Plus pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Rehau Raupiano Plus pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE UPONOR DECIBEL PIPES FIRE RESISTANCE EI 60

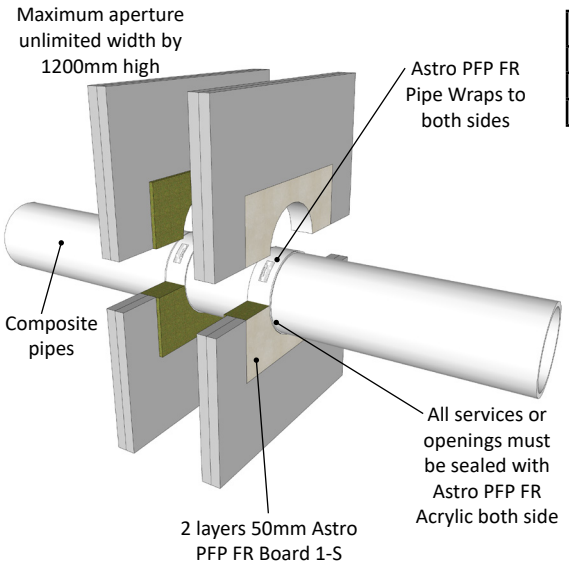
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 50mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 110mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE UPONOR DECIBEL PLASTIC PIPES FIRE RESISTANCE EI 90

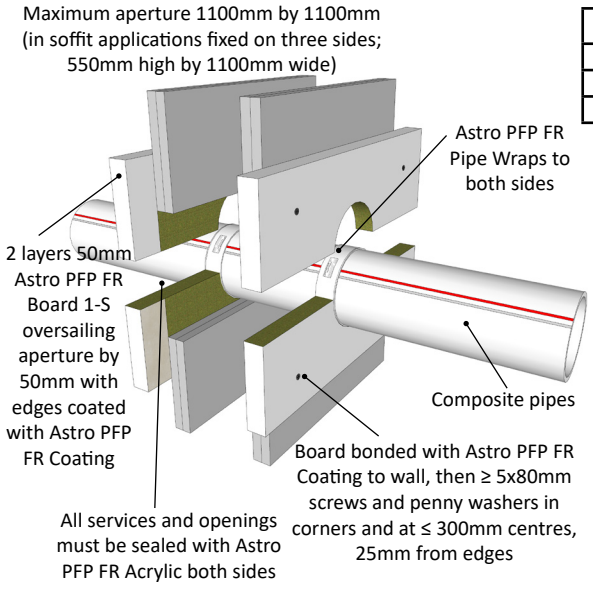
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 50mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)
Ø 110mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE UPONOR DECIBEL PLASTIC PIPES FIRE RESISTANCE EI 90

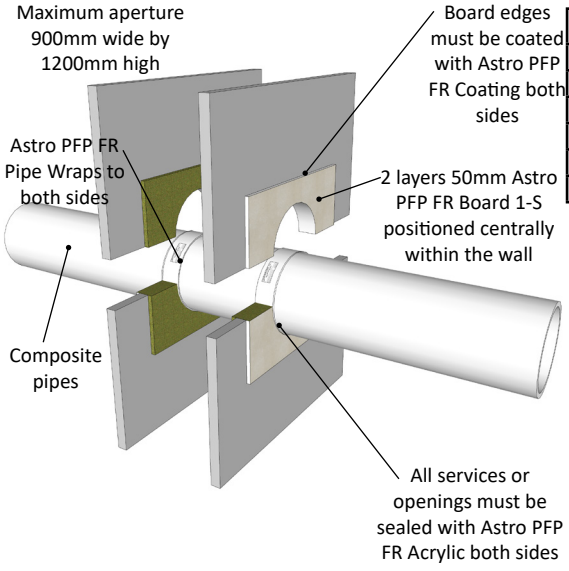
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 50mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)
Ø 110mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE WAVIN SITECH PIPES FIRE RESISTANCE EI 60

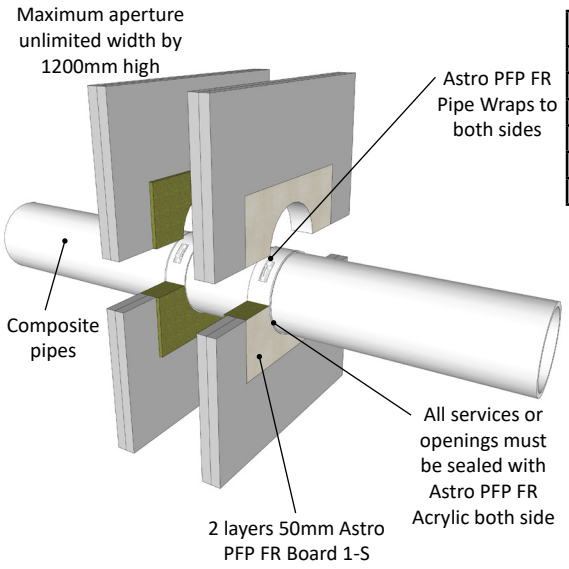
≥ 75MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 40mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 50mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/U (E 60 U/U)
Ø 75mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 90mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)
Ø 110mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 60 U/C)

COMPOSITE WAVIN SITECH PLASTIC PIPES FIRE RESISTANCE EI 60-90

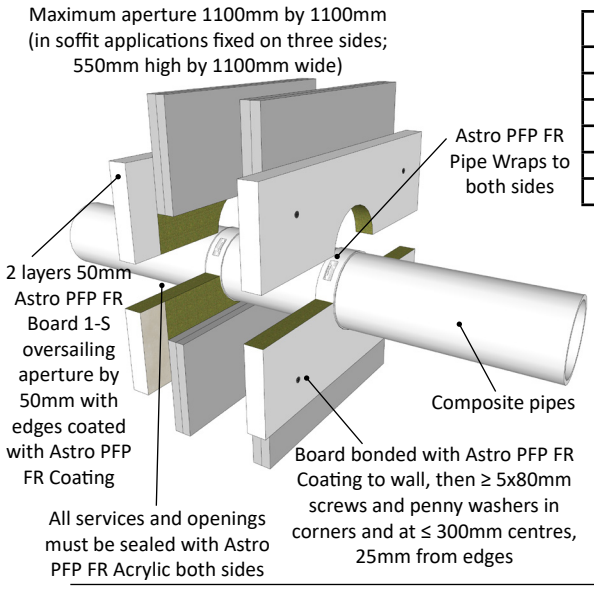
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 40mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 50mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 75mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 90mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 110mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)

COMPOSITE WAVIN SITECH PLASTIC PIPES FIRE RESISTANCE EI 60-90

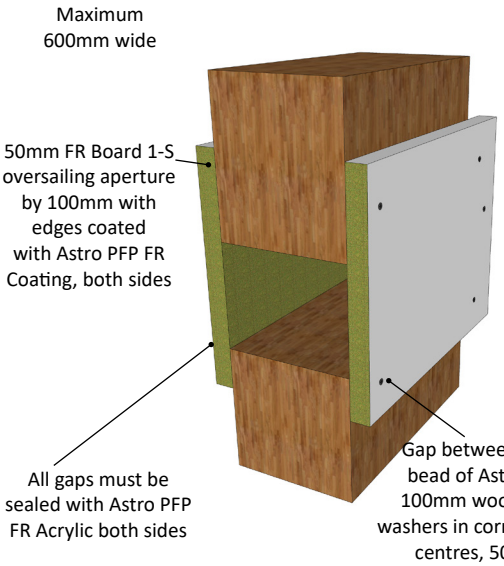
≥ 100MM DRYWALLS OR RIGID WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 40mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 50mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 75mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 90mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 110mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)

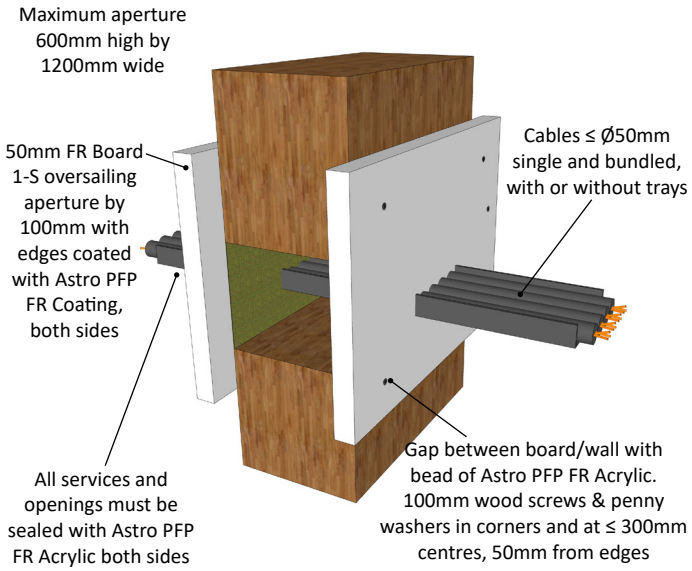
LINEAR SEALS FIRE RESISTANCE EI 60 (E 60)

≥ 100MM TIMBER WALLS



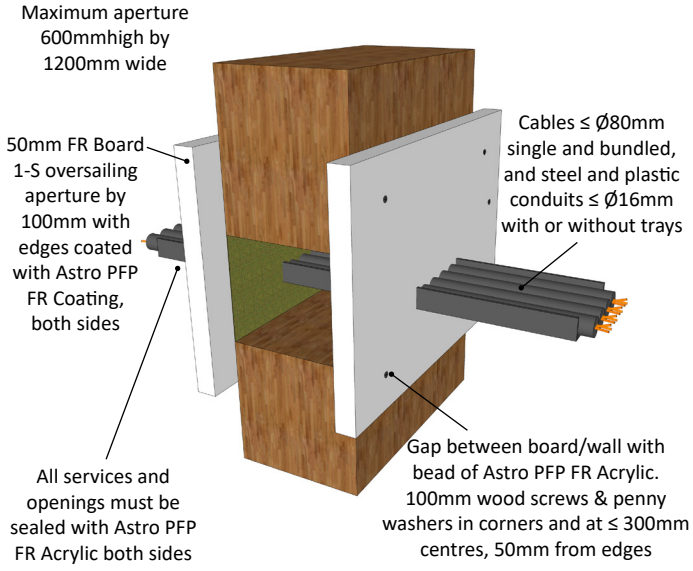
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 90 (E 120)

≥ 100MM TIMBER WALLS



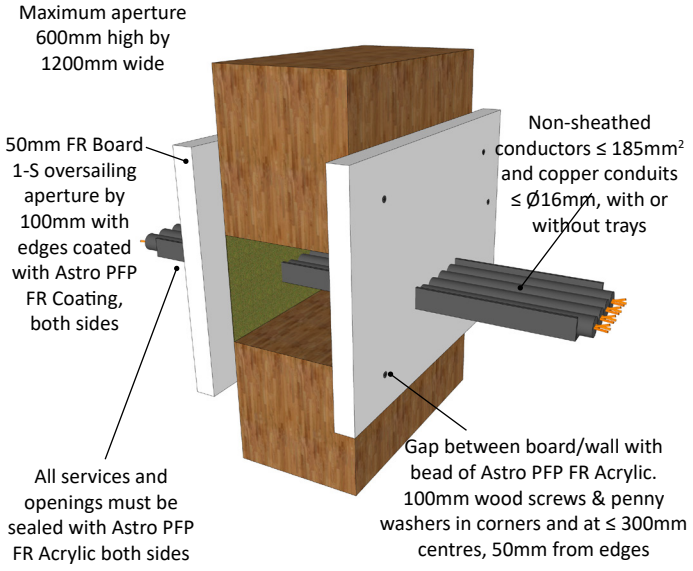
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 60)

≥ 100MM TIMBER WALLS



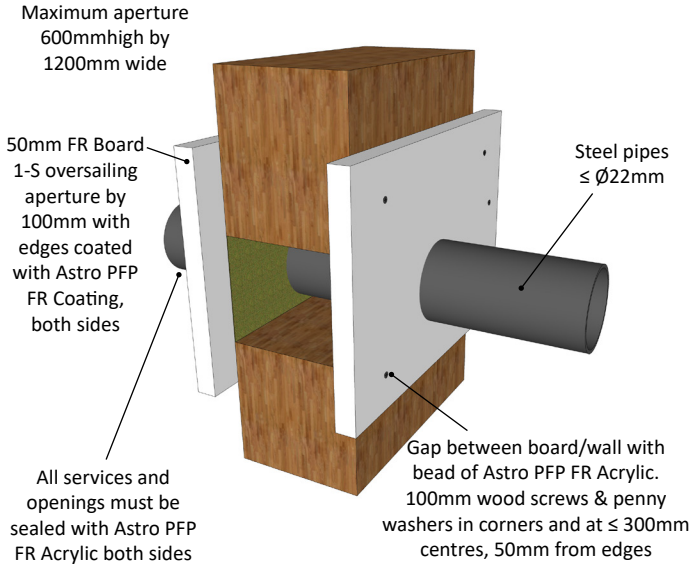
CONDUCTORS AND CONDUITS FIRE RESISTANCE EI 30 (E 60)

≥ 100MM TIMBER WALLS



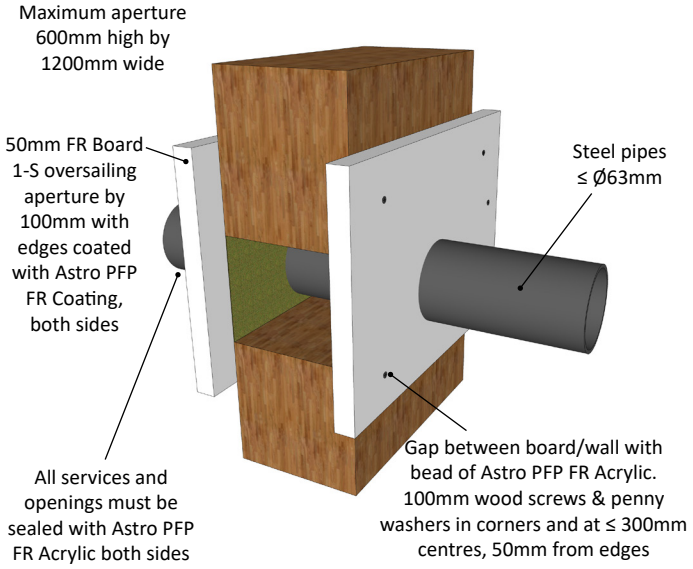
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 120)

≥ 100MM TIMBER WALLS



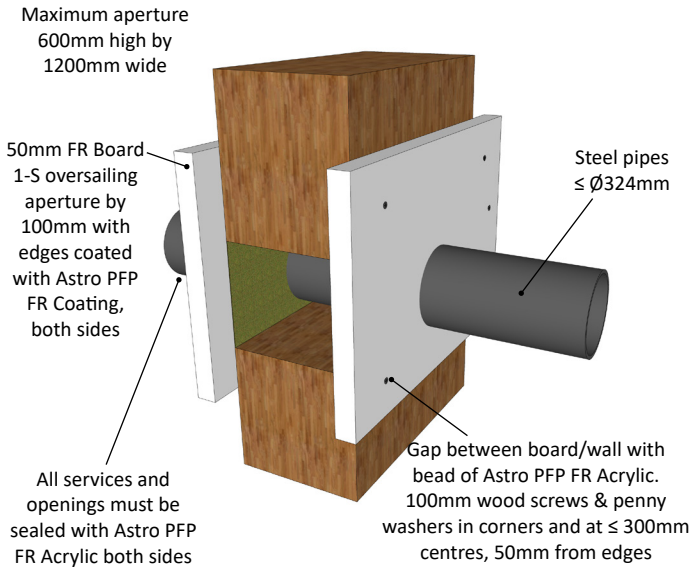
STEEL PIPES FIRE RESISTANCE EI 30 C/U (E 120)

≥ 100MM TIMBER WALLS



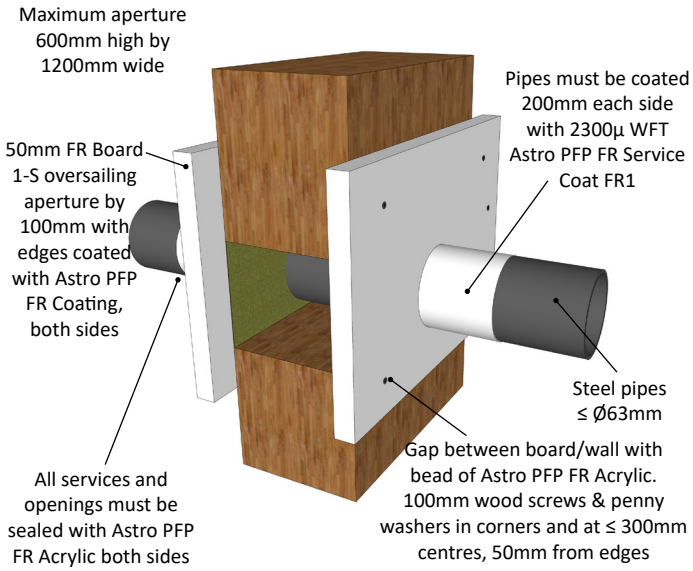
STEEL PIPES FIRE RESISTANCE EI 20 C/U (E 120)

≥ 100MM TIMBER WALLS



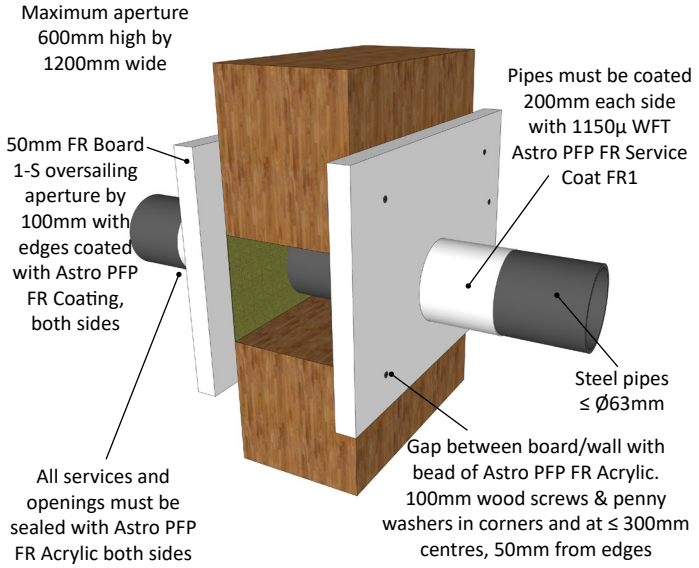
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

≥ 100MM TIMBER WALLS



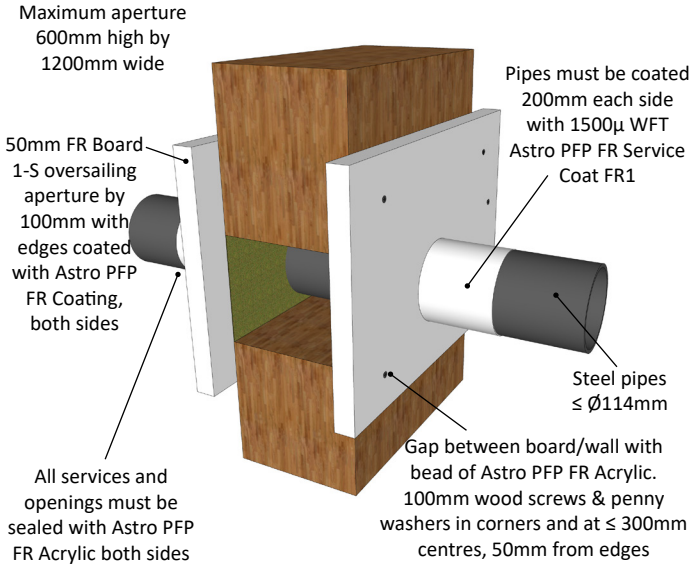
STEEL PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



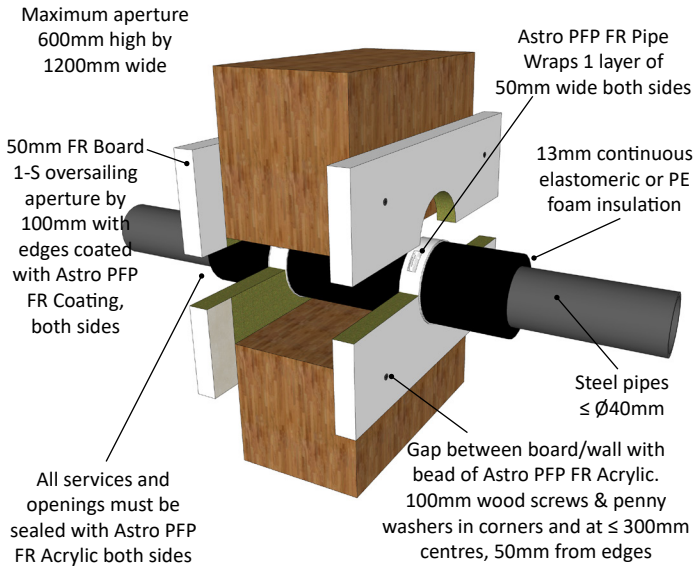
STEEL PIPES FIRE RESISTANCE EI 45 C/U (E 120)

≥ 100MM TIMBER WALLS



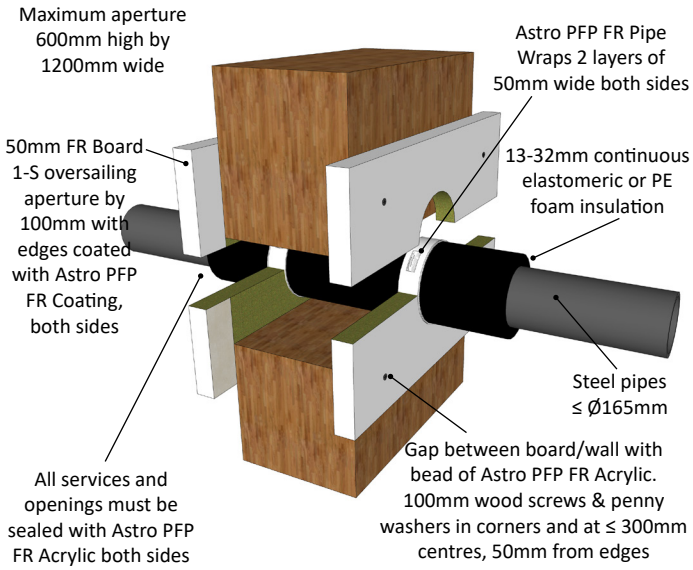
INSULATED STEEL PIPES FIRE RESISTANCE EI 120 U/U (E 120)

≥ 100MM TIMBER WALLS



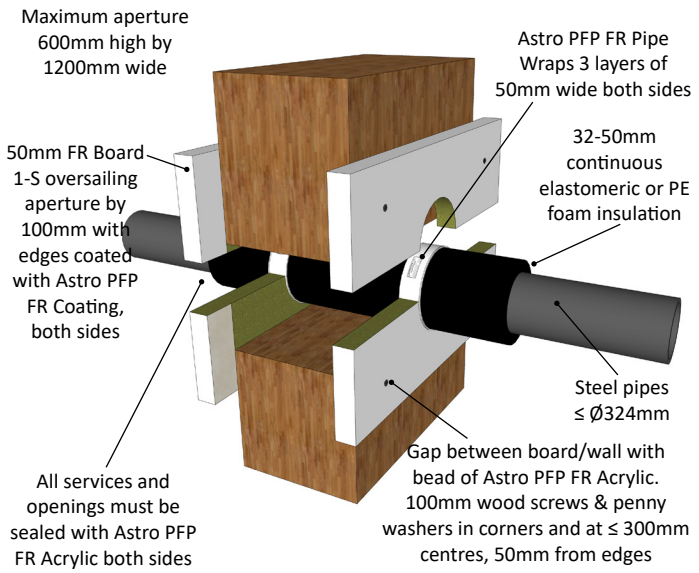
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 U/U (E 120)

≥ 100MM TIMBER WALLS



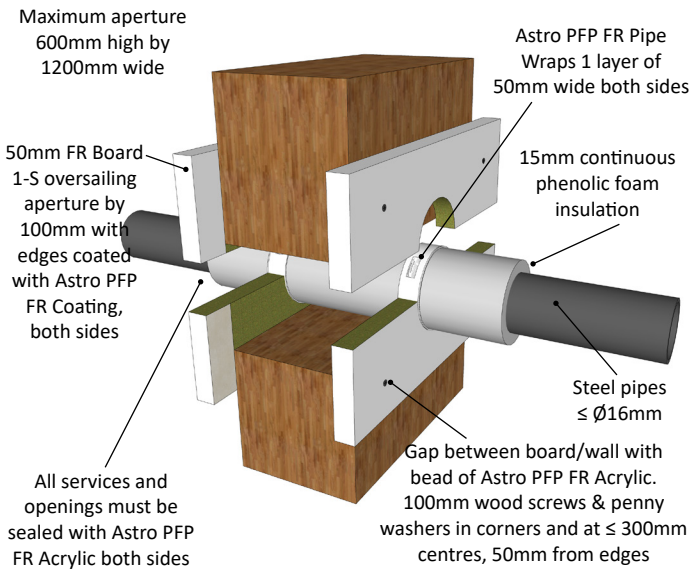
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

≥ 100MM TIMBER WALLS



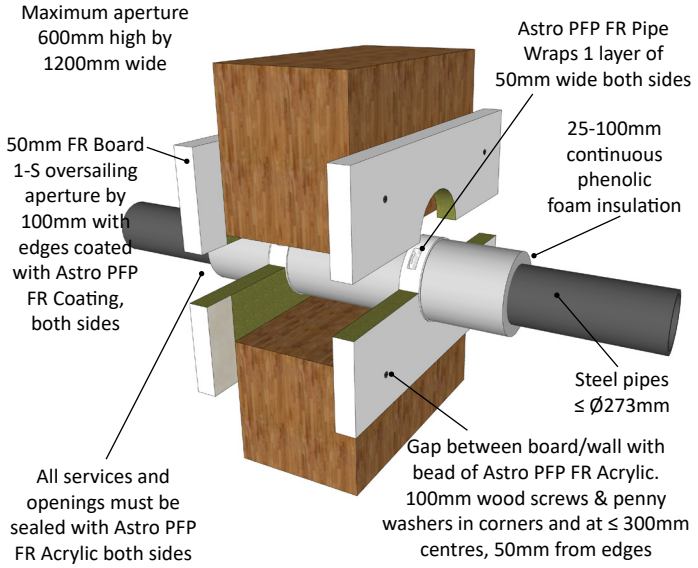
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

≥ 100MM TIMBER WALLS



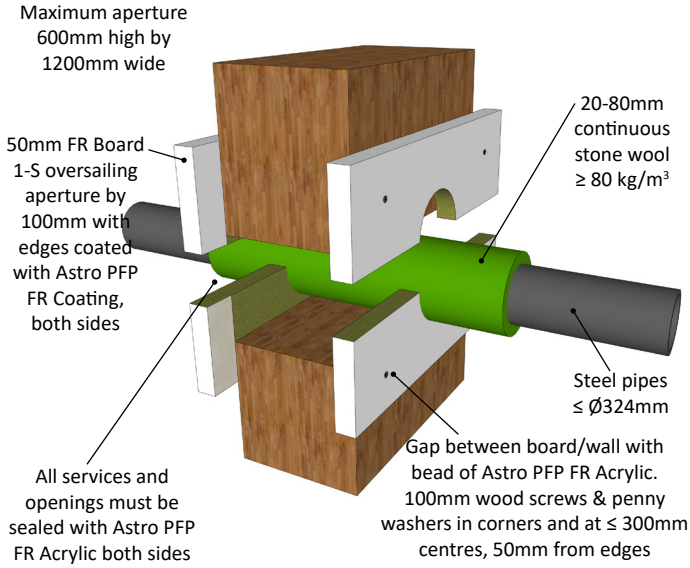
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

≥ 100MM TIMBER WALLS



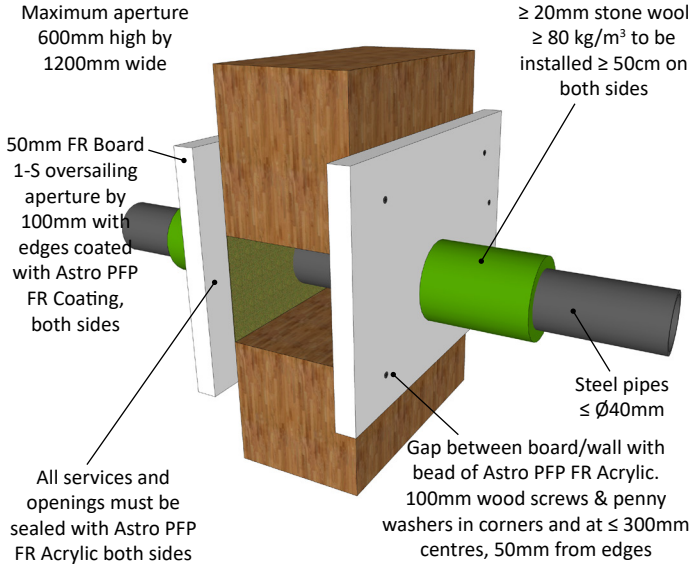
INSULATED STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 120)

≥ 100MM TIMBER WALLS



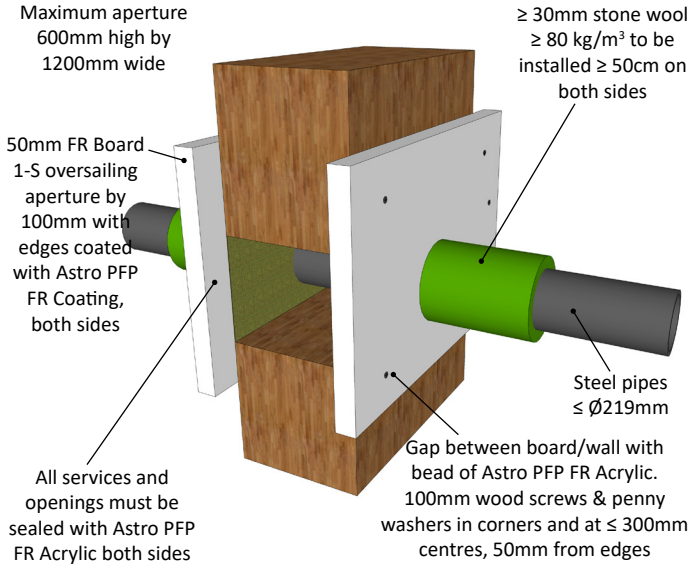
STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 120)

≥ 100MM TIMBER WALLS



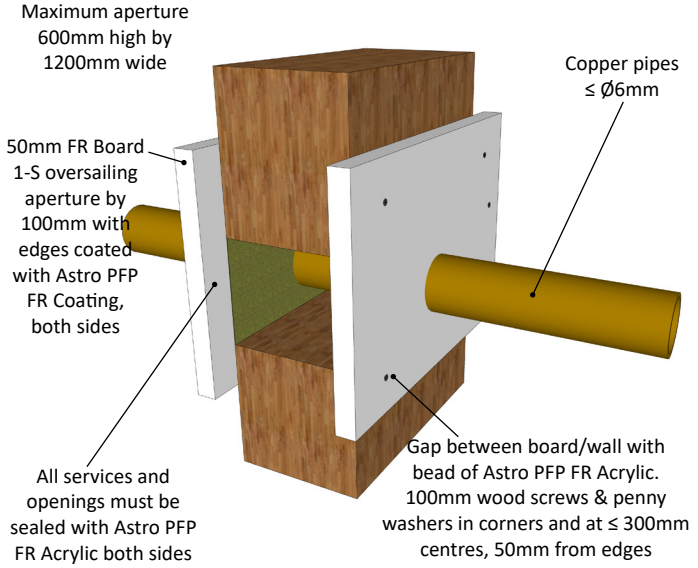
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 120)

≥ 100MM TIMBER WALLS



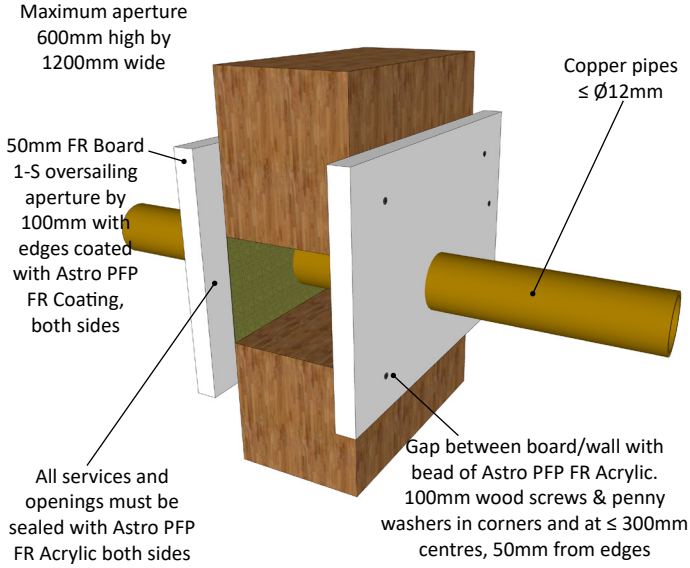
COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 120)

≥ 100MM TIMBER WALLS



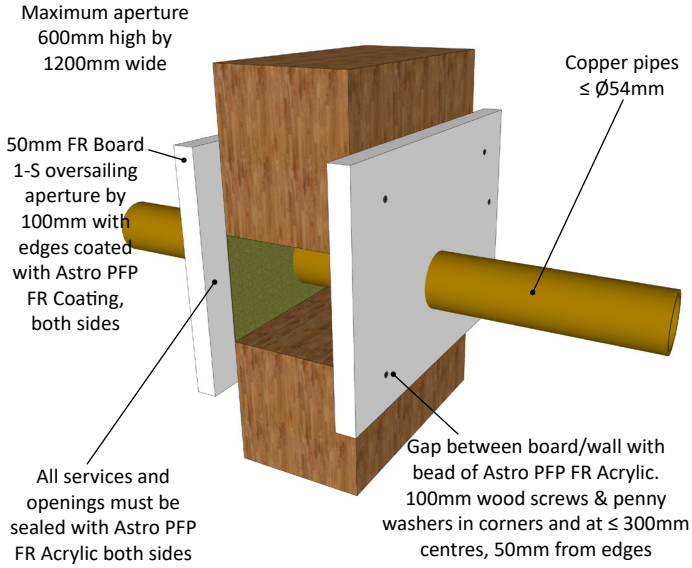
COPPER PIPES FIRE RESISTANCE EI 30 C/C (E 120)

≥ 100MM TIMBER WALLS



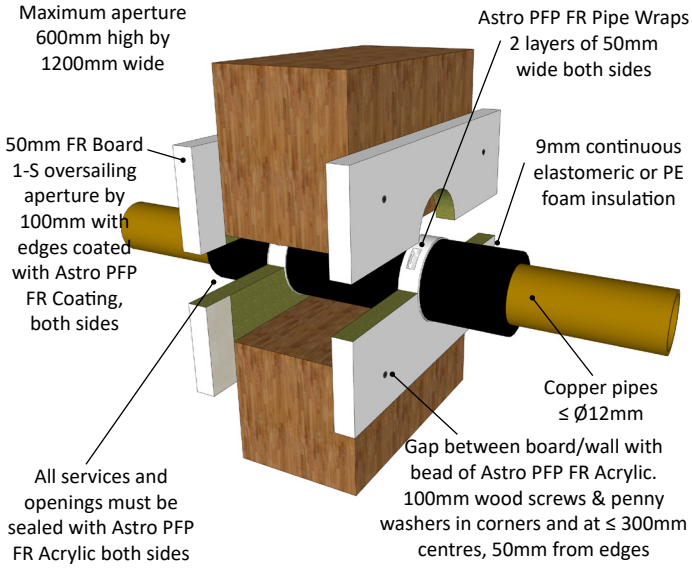
COPPER PIPES FIRE RESISTANCE EI 15 C/C (E 120)

≥ 100MM TIMBER WALLS



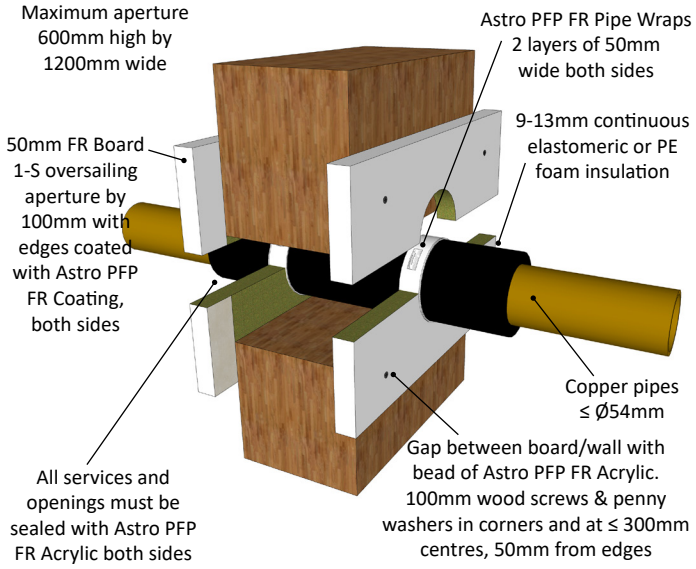
INSULATED COPPER PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



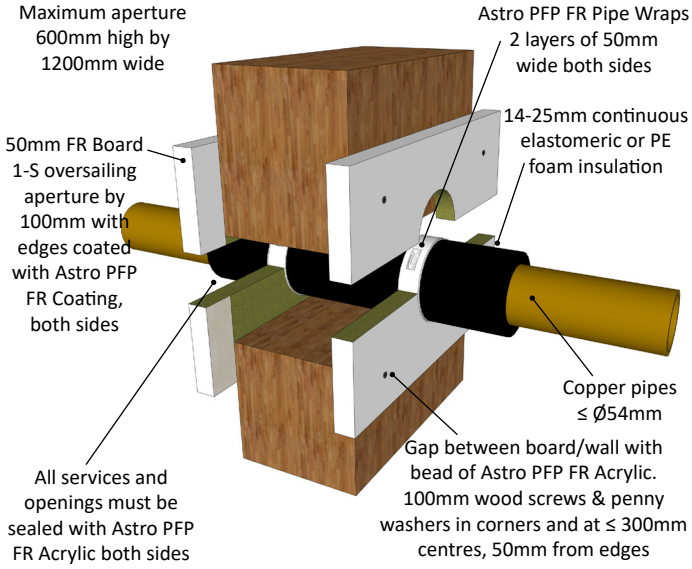
INSULATED COPPER PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 100MM TIMBER WALLS



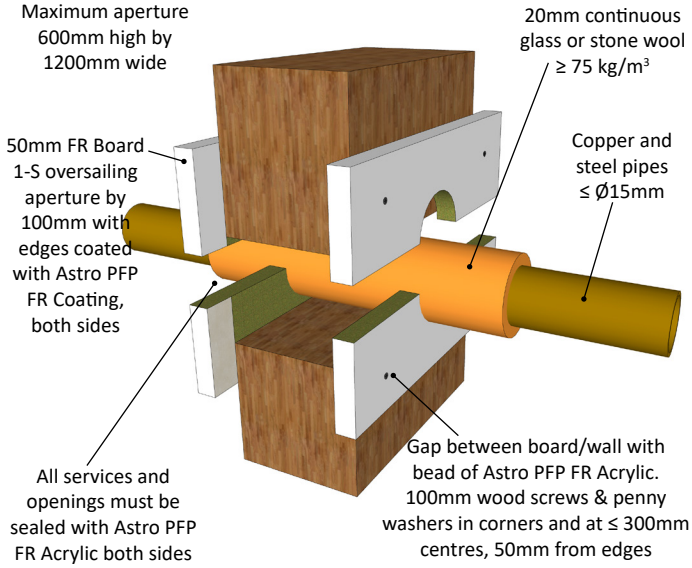
INSULATED COPPER PIPES FIRE RESISTANCE EI 60 C/C (E 120)

≥ 100MM TIMBER WALLS



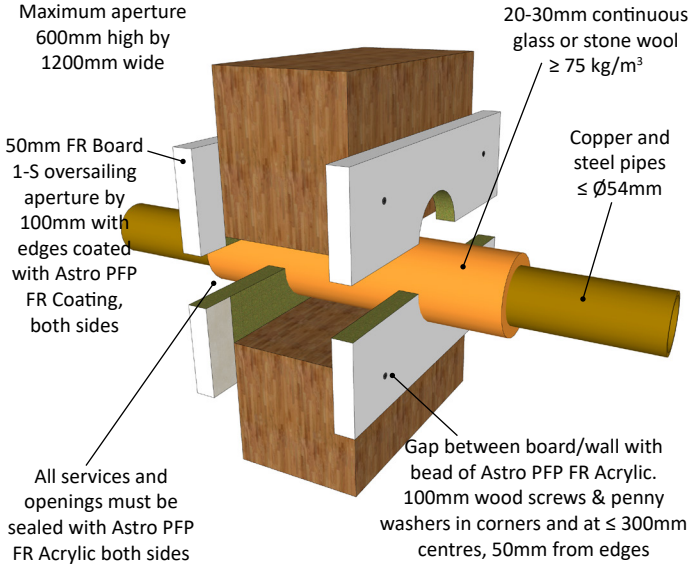
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



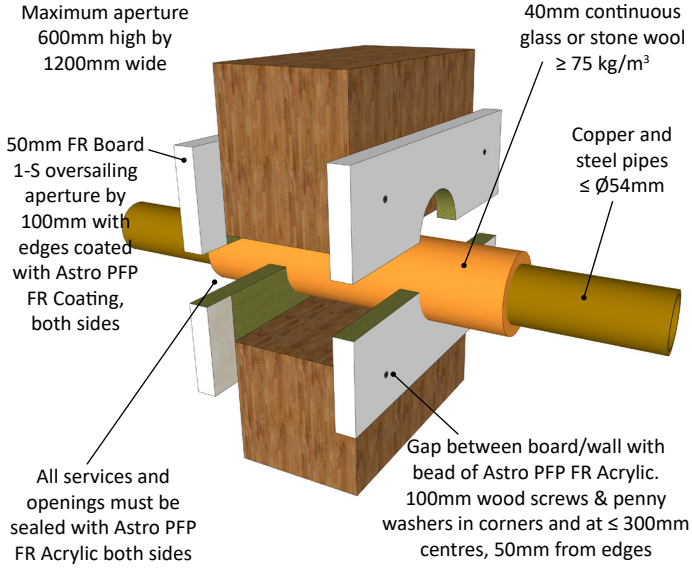
COPPER & STEEL PIPES FIRE RESISTANCE EI 45 C/C (E 60)

≥ 100MM TIMBER WALLS



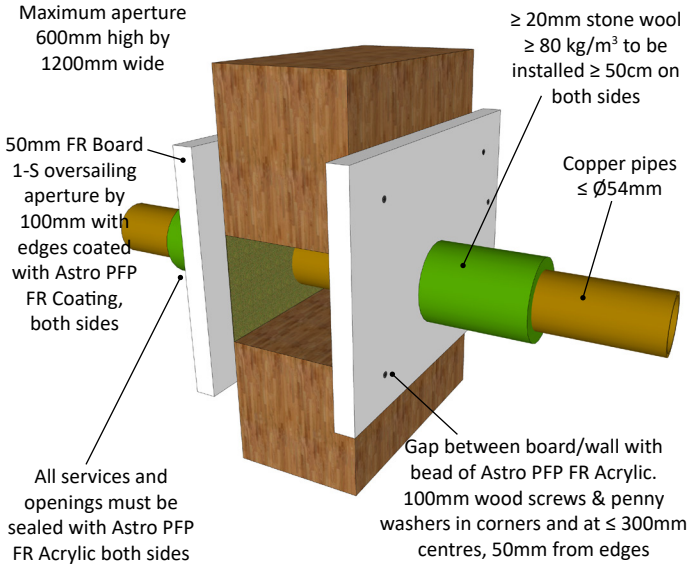
COPPER & STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



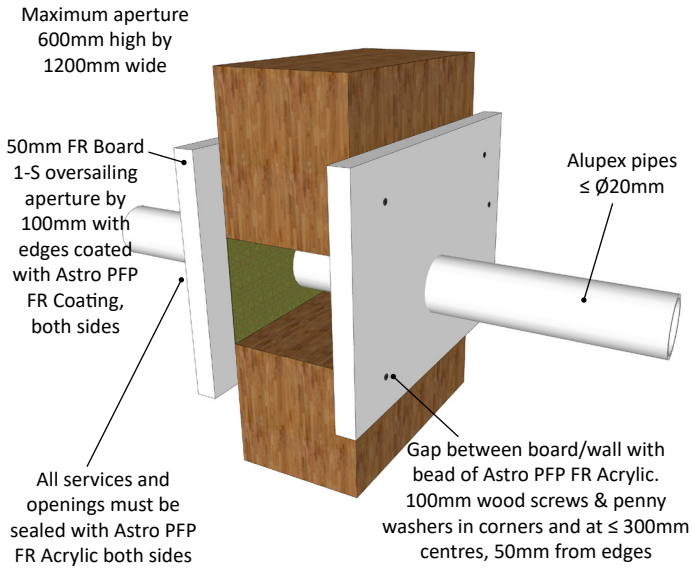
COPPER PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



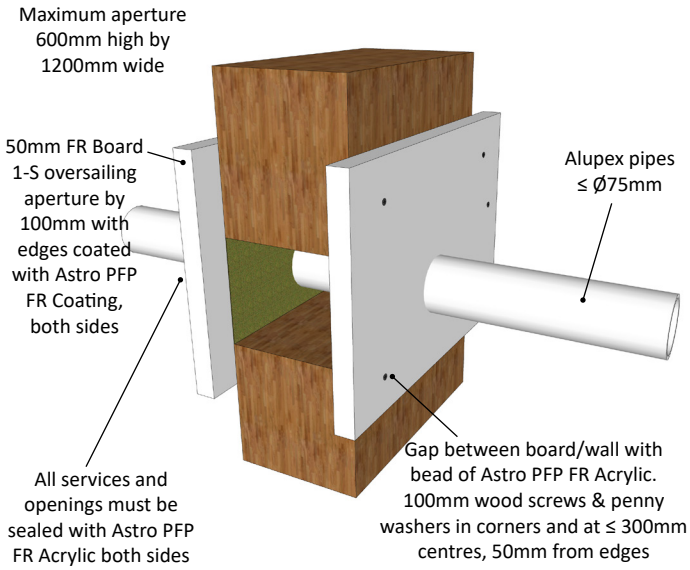
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



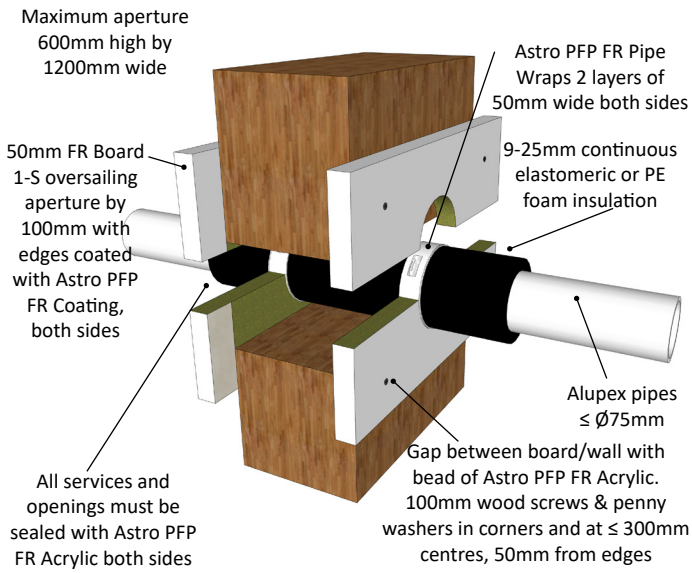
ALUPEX PIPES FIRE RESISTANCE EI 20 C/C (E 120)

≥ 100MM TIMBER WALLS



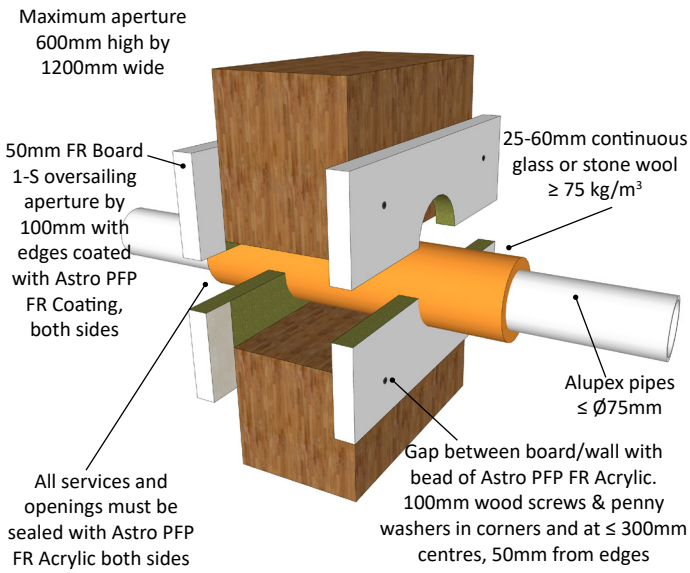
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



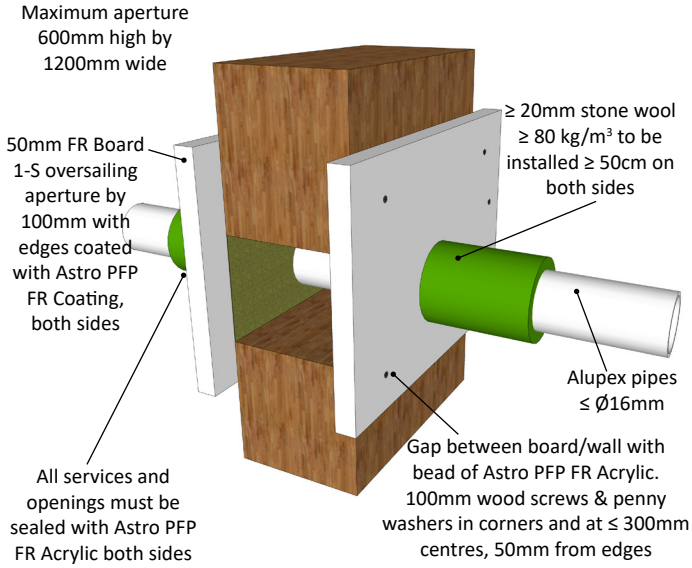
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 100MM TIMBER WALLS



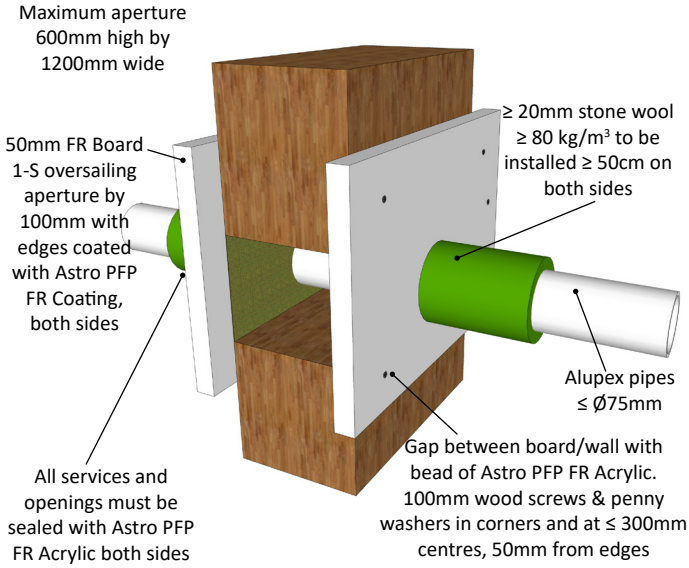
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



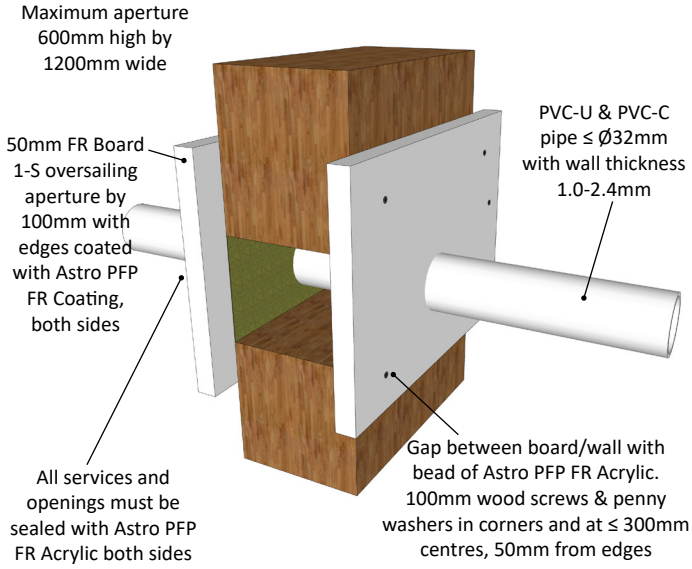
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



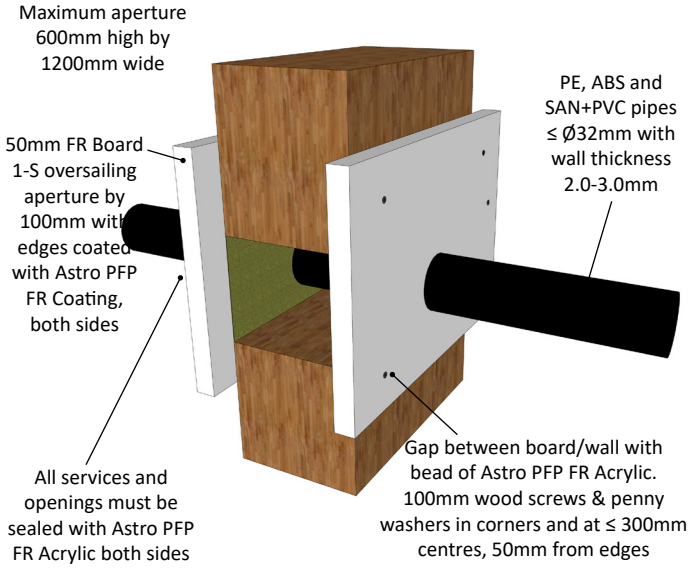
PVC PIPES FIRE RESISTANCE EI 60 U/C (E 60)

≥ 100MM TIMBER WALLS



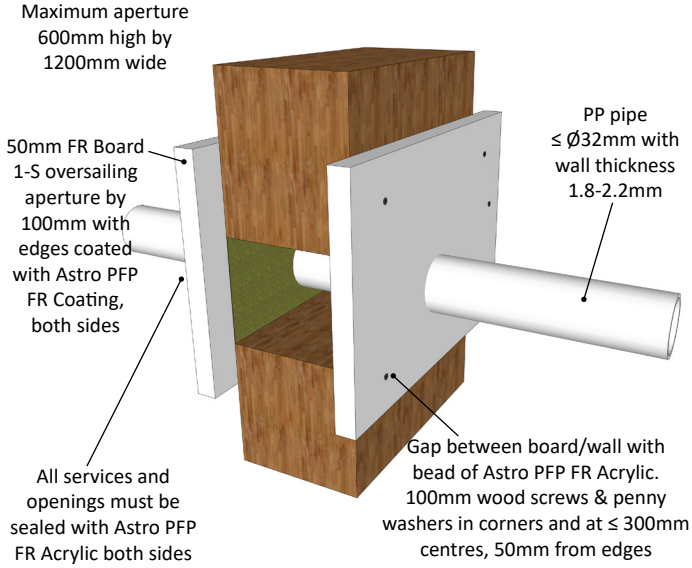
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



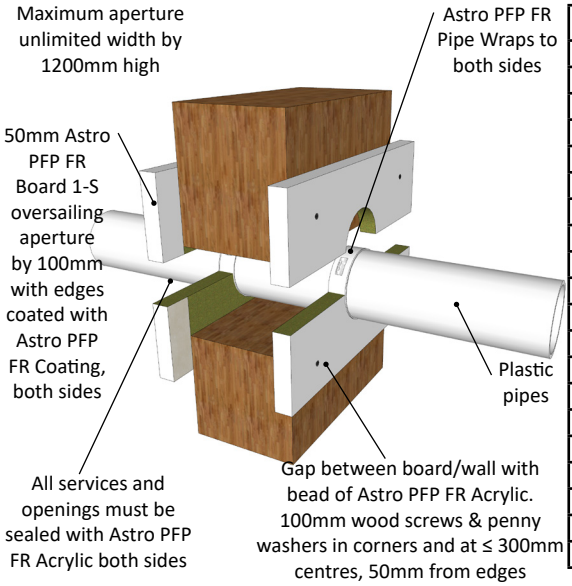
PP PIPES FIRE RESISTANCE EI 60 U/C (E 120)

≥ 100MM TIMBER WALLS



PLASTIC PIPES FIRE RESISTANCE EI 60-120

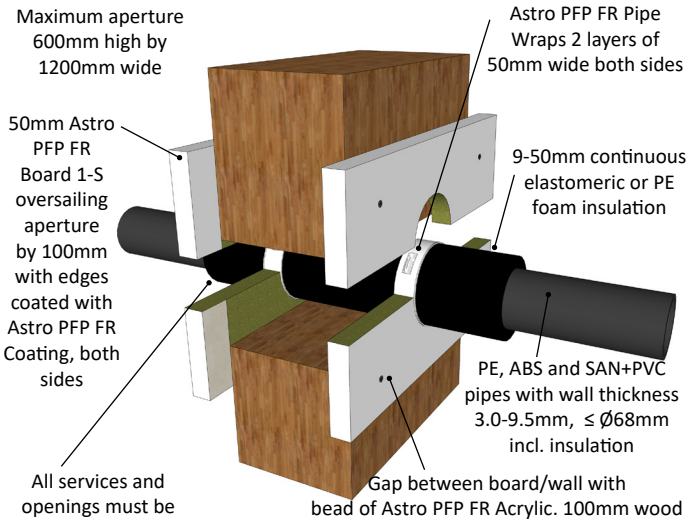
≥ 100MM TIMBER WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	4.2 – 10.0mm	50 x 3.6mm (2 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 110mm PP	2.7 – 15.1mm	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
≤ Ø 125mm PVC-U & PVC-C	3.7 – 7.4mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 125mm PE, ABS & SAN+PVC	4.8 – 12.0mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 125mm PP	3.1 – 17.1mm	50 x 5.4mm (3 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PP	4.9 – 21.9mm	50 x 10.8mm (6 layers)	EI 60 U/C (E 60 U/C)
≤ Ø 200mm PVC-U & PVC-C	4.9 – 11.9mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 200mm PE, ABS & SAN+PVC	6.2 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 200mm PP	4.9 – 18.2mm	50 x 10.8mm (6 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PVC-U & PVC-C	7.7 – 12.1mm	50 x 18.0mm (10 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 315mm PE, ABS & SAN+PVC	18.7mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 315mm PP	28.6mm	50 x 18.0mm (10 layers)	EI 60 C/C (E 60 C/C)
≤ Ø 400mm PVC-U & PVC-C	9.8 – 15.3mm	50 x 28.8mm (16 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 400mm PE, ABS & SAN+PVC	23.7mm	50 x 28.8mm (16 layers)	EI 60 C/C (E 60 C/C)

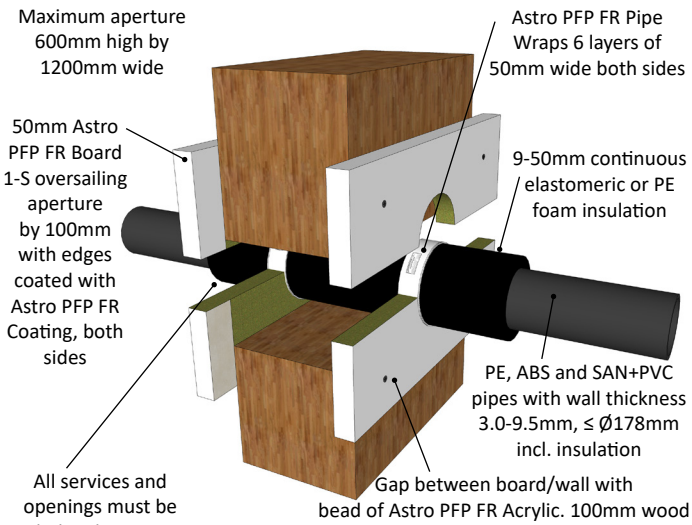
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



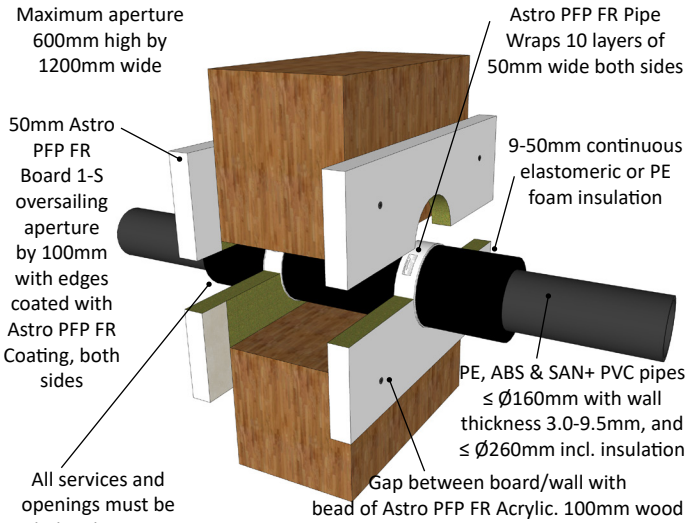
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



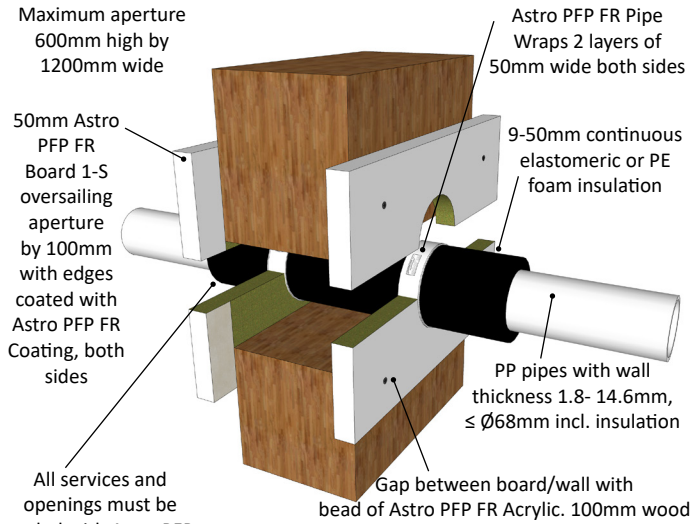
INSULATED PE PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



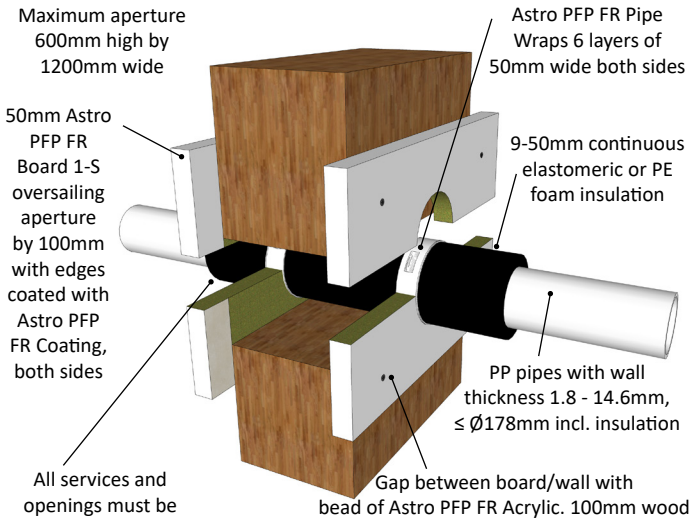
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



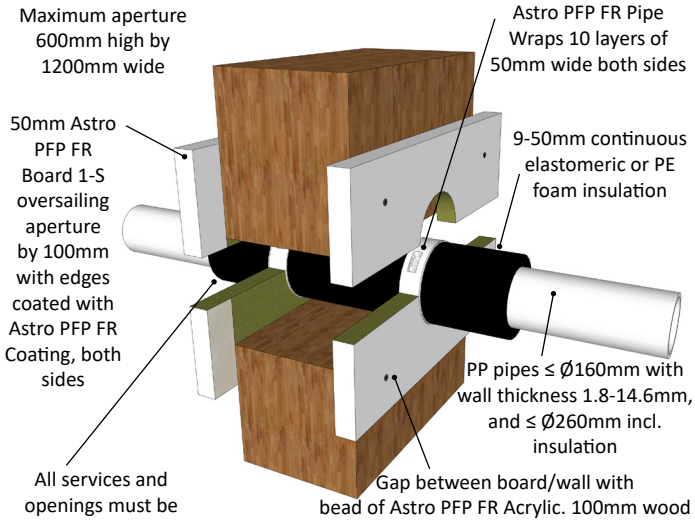
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



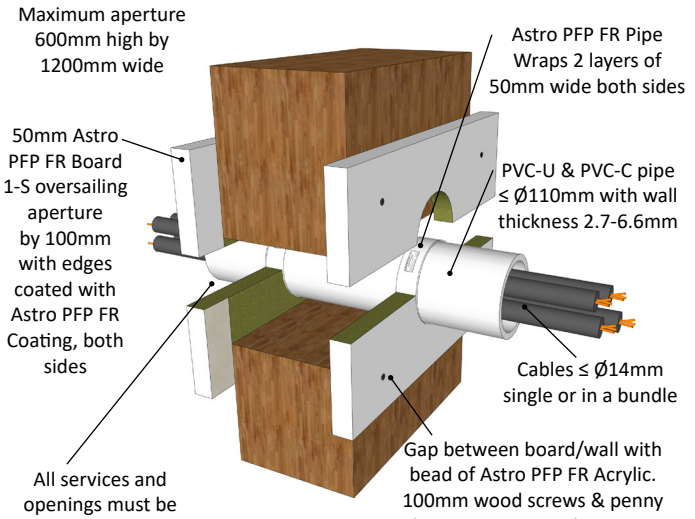
INSULATED PP PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 100MM TIMBER WALLS



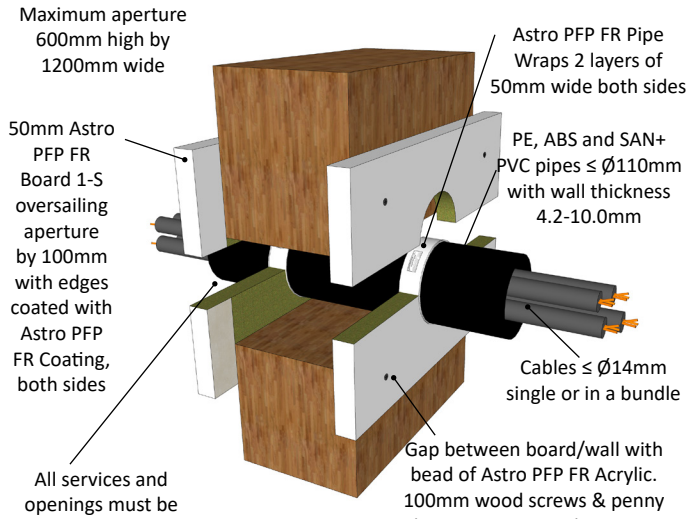
PVC CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM TIMBER WALLS



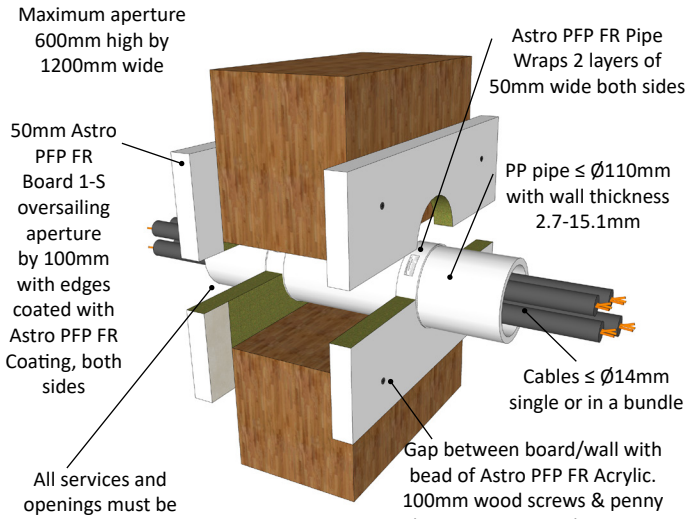
PE CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM TIMBER WALLS



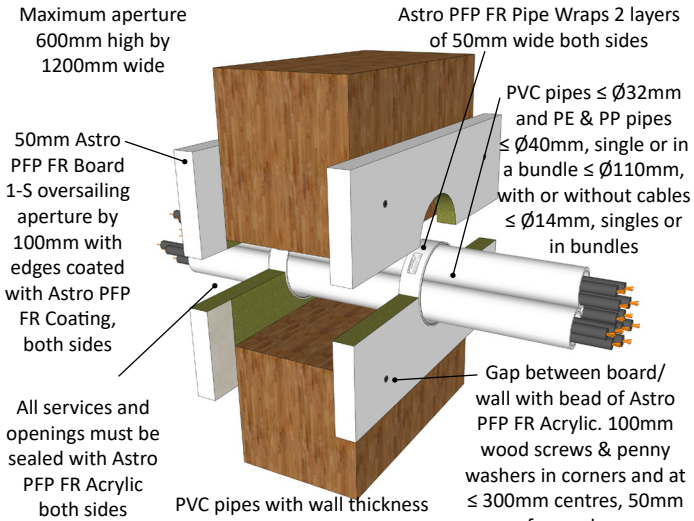
PP CONDUITS FIRE RESISTANCE EI 90 U/C (E 120)

≥ 100MM TIMBER WALLS



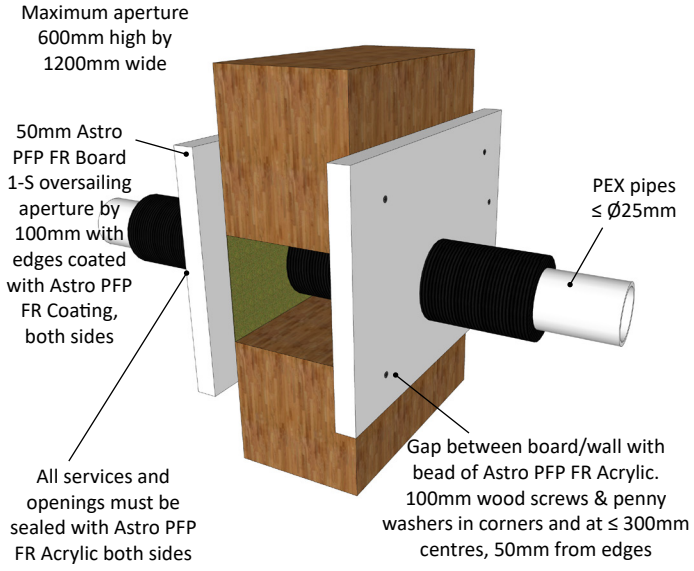
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM TIMBER WALLS



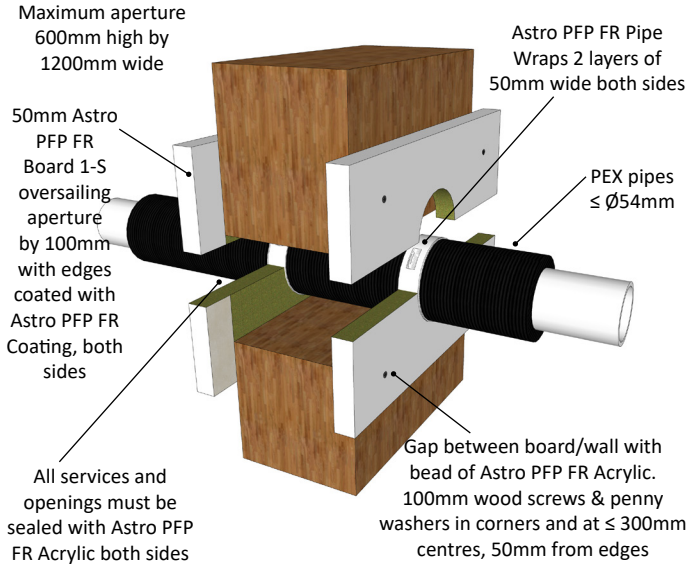
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM TIMBER WALLS



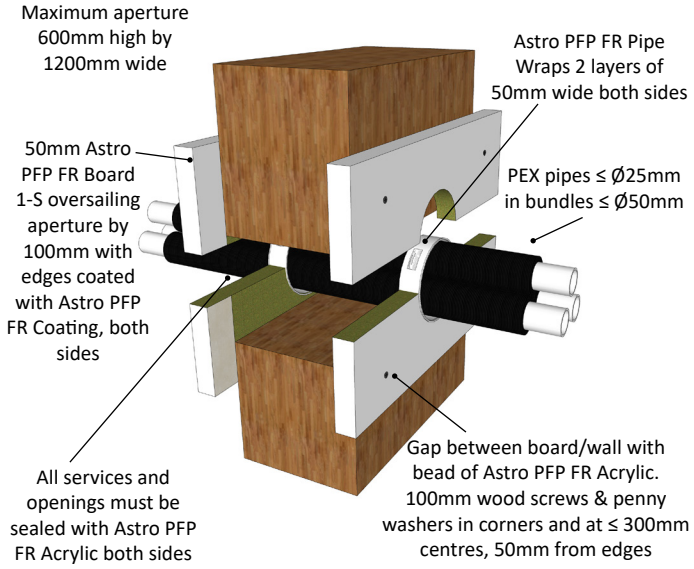
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 120 C/C (E 120)

≥ 100MM TIMBER WALLS



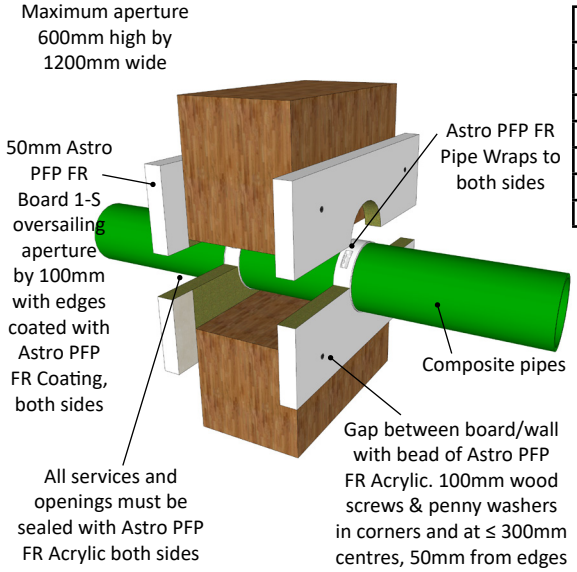
PEX PIPE IN PIPE SYSTEM FIRE RESISTANCE EI 90 C/C (E 90)

≥ 100MM TIMBER WALLS



COMPOSITE AQUATHERM GREEN SDR9 PLASTIC PIPES FIRE RESISTANCE EI 90

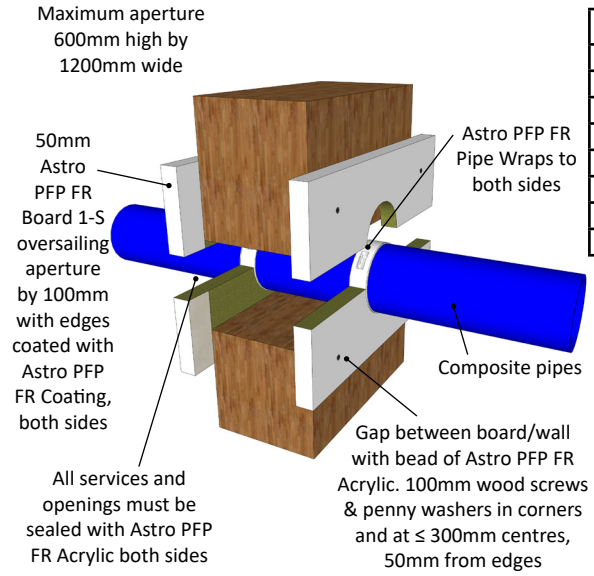
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Aquatherm Green SDR9 pipes	50 x 1.8mm (1 layer)	EI 90 C/C (E 120 C/C)
Ø 40mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 50mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 63mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 75mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 90mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)
Ø 110mm Aquatherm Green SDR9 pipes	50 x 3.6mm (2 layers)	EI 90 C/C (E 120 C/C)

COMPOSITE BLUEPOWER PLASTIC PIPES FIRE RESISTANCE EI 90

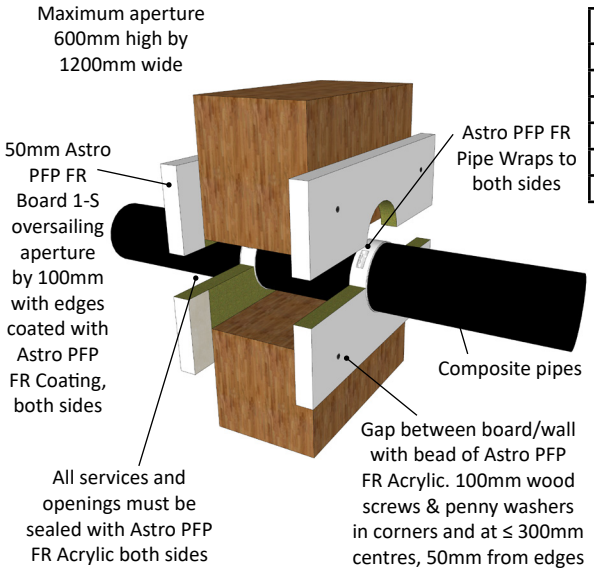
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 40mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 50mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 90mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 110mm BluePower pipes	50 x 3.6mm (2 layers)	EI 90 C/U (E 90 C/U)
Ø 125mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)
Ø 160mm BluePower pipes	50 x 10.8mm (6 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE GEBERIT SILENT-PP PIPES FIRE RESISTANCE EI 120

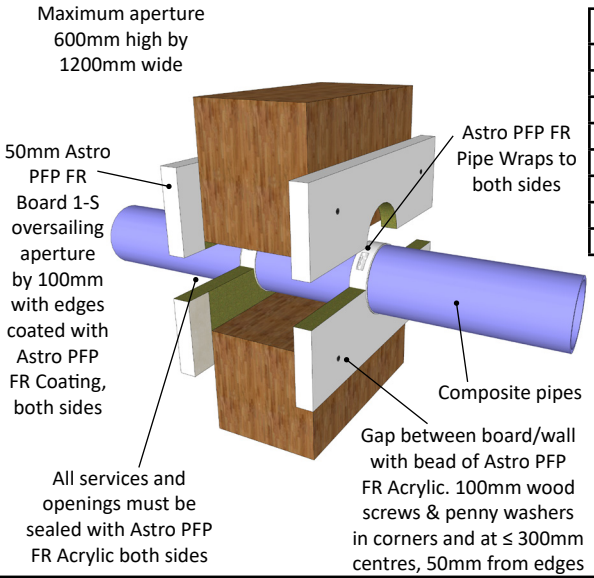
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Geberit Silent-PP pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE POLO-KAL NG PLASTIC PIPES FIRE RESISTANCE EI 120

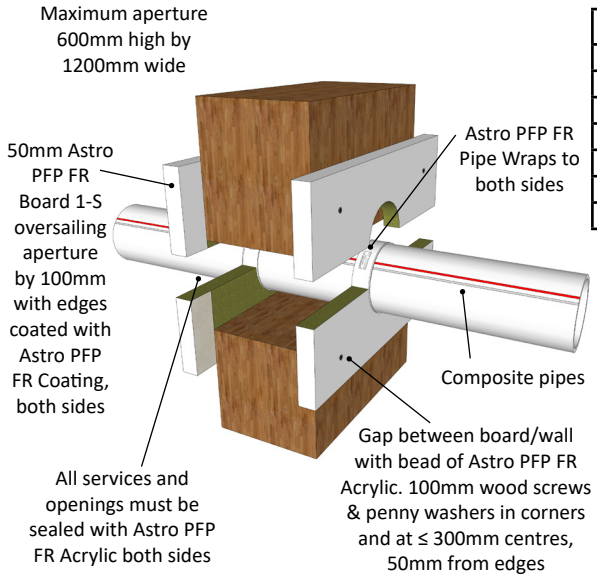
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 40mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Polo-Kal NG pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Polo-Kal NG pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Polo-Kal NG pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE REHAU RAUPIANO PLUS PLASTIC PIPES FIRE RESISTANCE EI 120

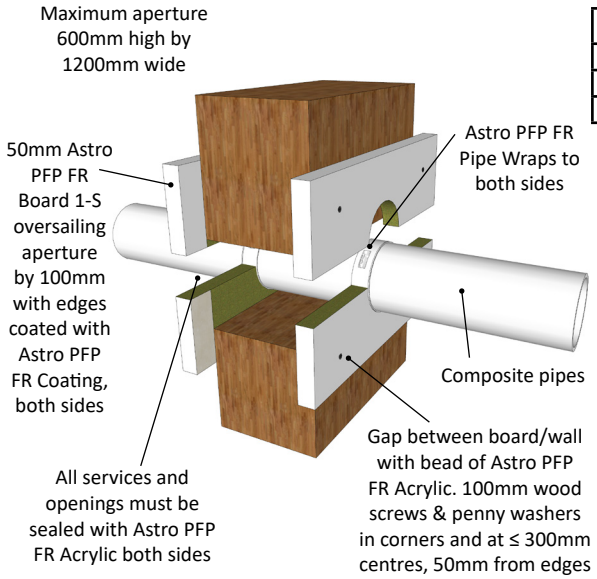
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 40mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 50mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/U (E 120 U/U)
Ø 75mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 90mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 110mm Rehau Raupiano Plus pipes	50 x 3.6mm (2 layers)	EI 120 U/C (E 120 U/C)
Ø 125mm Rehau Raupiano Plus pipes	50 x 7.2mm (4 layers)	EI 120 U/C (E 120 U/C)
Ø 160mm Rehau Raupiano Plus pipes	50 x 10.8mm (6 layers)	EI 120 U/C (E 120 U/C)

COMPOSITE UPONOR DECIBEL PIPES FIRE RESISTANCE EI 90

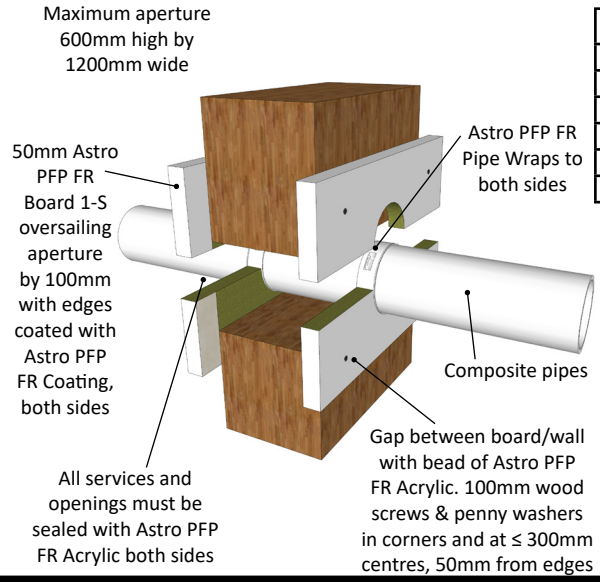
≥ 100MM TIMBER WALLS



Services	Astro PFP FR Pipe Wrap	Classification
Ø 50mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 90 U/U)
Ø 75mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)
Ø 110mm Uponor Decibel pipes	50 x 3.6mm (2 layers)	EI 90 U/C (E 90 U/C)

COMPOSITE WAVIN SITECH PLASTIC PIPES FIRE RESISTANCE EI 60-90

≥ 100MM TIMBER WALLS

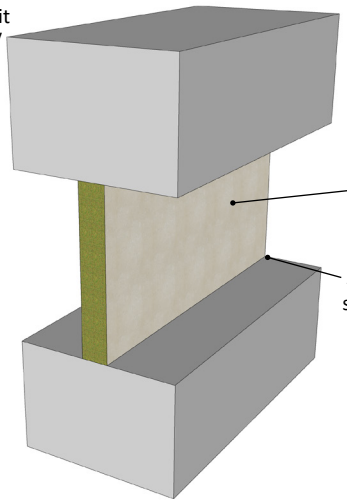


Services	Astro PFP FR Pipe Wrap	Classification
Ø 32mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 40mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 50mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 90 U/U (E 120 U/U)
Ø 75mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 90mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)
Ø 110mm Wavin SiTech pipes	50 x 3.6mm (2 layers)	EI 60 U/C (E 120 U/C)

LINEAR SEALS FIRE RESISTANCE EI 90 (E 120)

≥ 75MM RIGID WALLS

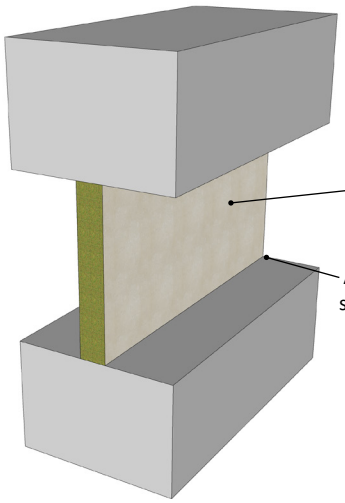
Maximum 1200mm wide between the head of walls and the soffit of floor slabs, or in/ between walls



LINEAR SEALS FIRE RESISTANCE EI 90 (E 240)

≥ 150MM TIMBER WALLS

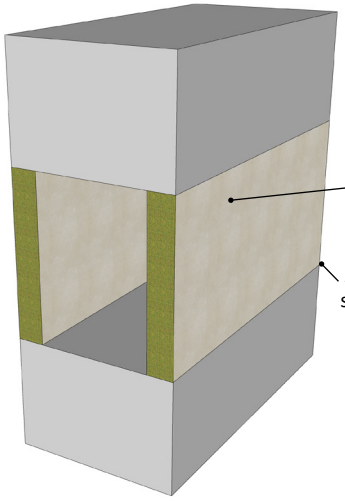
Maximum 1200mm wide between the head of walls and the soffit of floor slabs, or in/between walls



LINEAR SEALS FIRE RESISTANCE EI 180 (E 240)

≥ 150MM RIGID WALLS

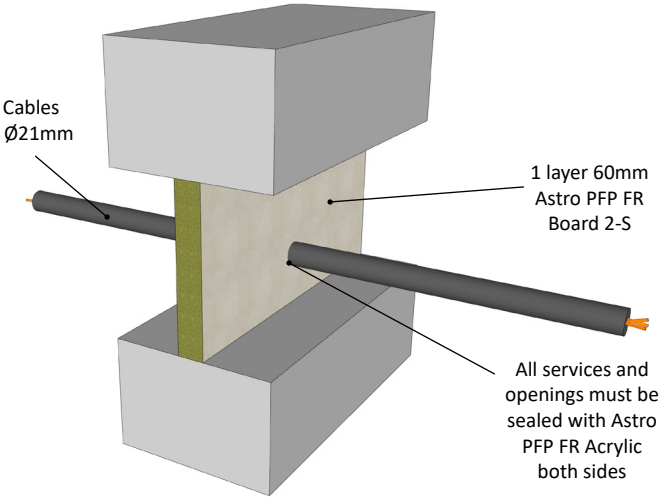
Maximum 1200mm wide between the head of walls and the soffit of floor slabs, or in/between walls



CABLES FIRE RESISTANCE EI 90 (E 120)

≥ 75MM RIGID WALLS

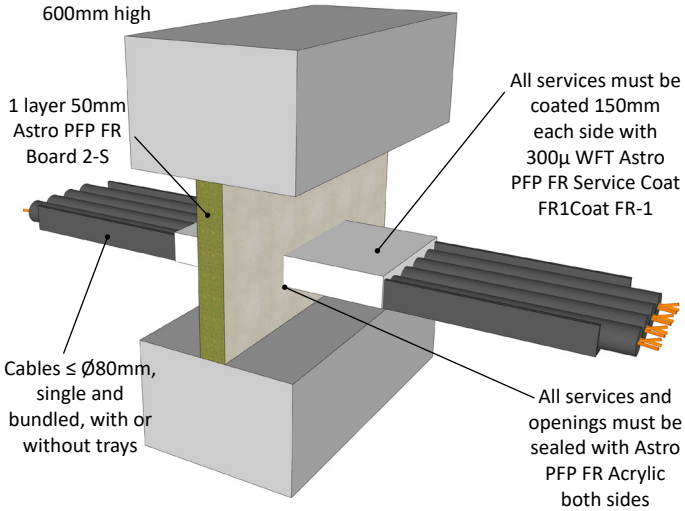
Maximum aperture unlimited width by 1200mm high



CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 60)

≥ 75MM RIGID WALLS

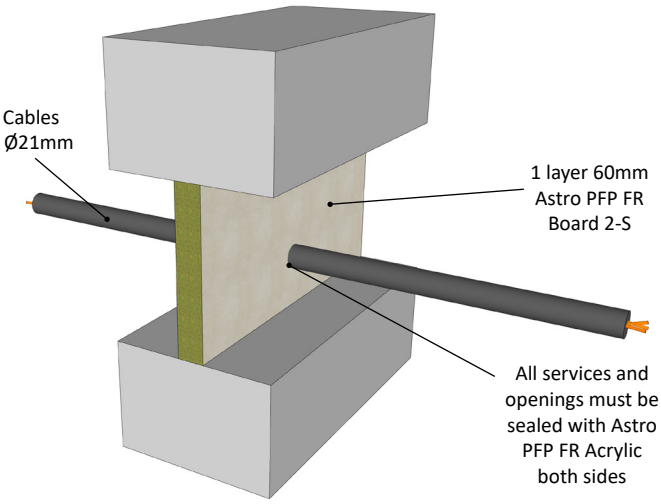
Maximum aperture 1200mm wide by 600mm high



CABLES FIRE RESISTANCE EI 90 (E 240)

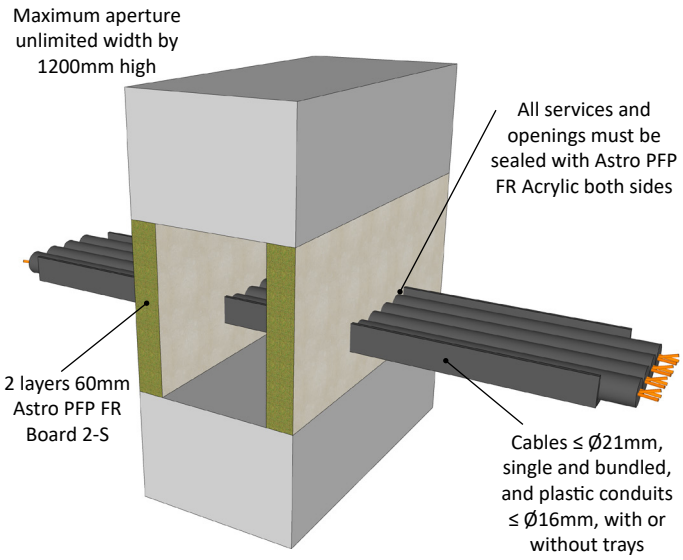
≥ 150MM RIGID WALLS

Maximum aperture unlimited width by 1200mm high



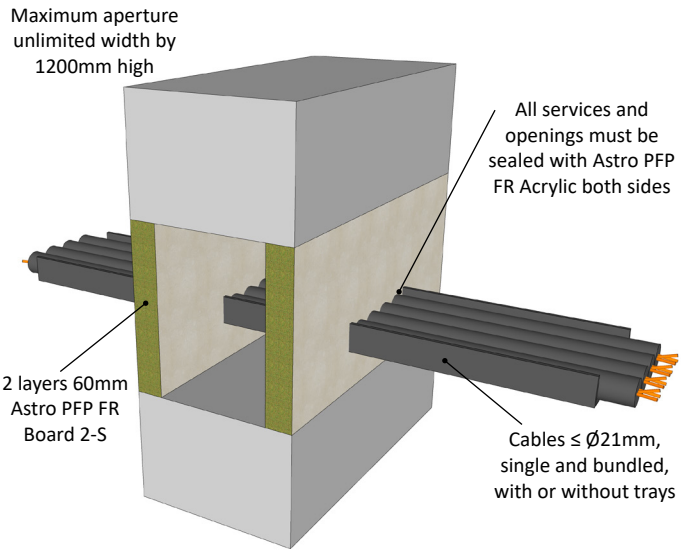
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 180 (E 180)

≥ 150MM RIGID WALLS



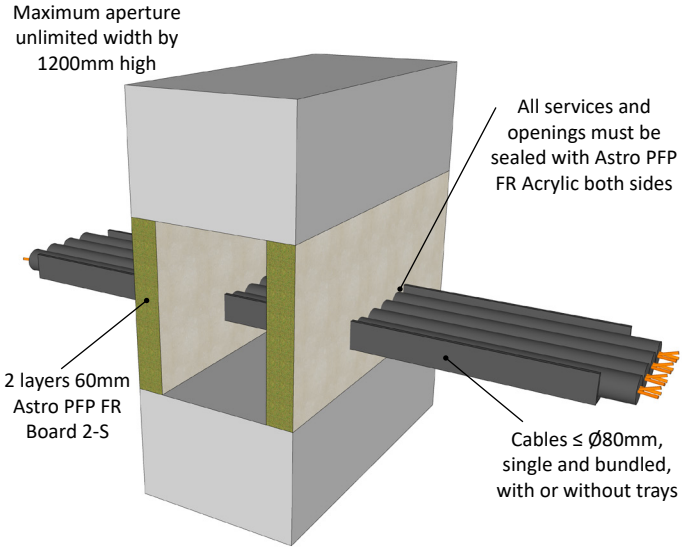
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 180 (E 240)

≥ 150MM RIGID WALLS



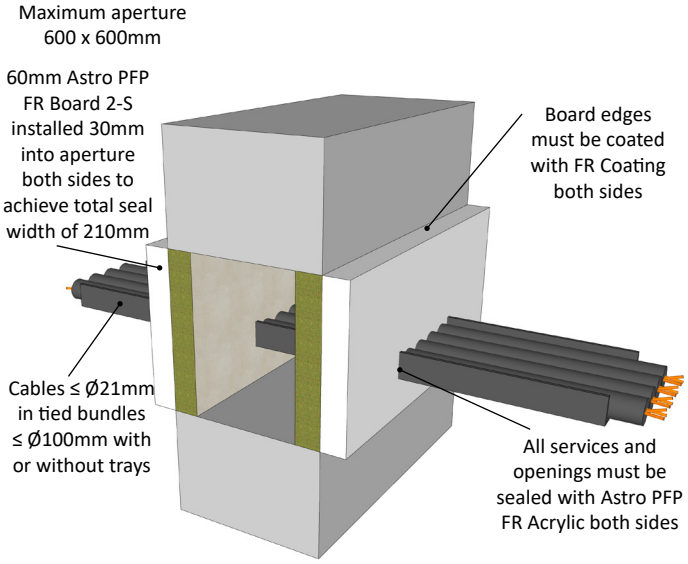
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 180)

≥ 150MM RIGID WALLS



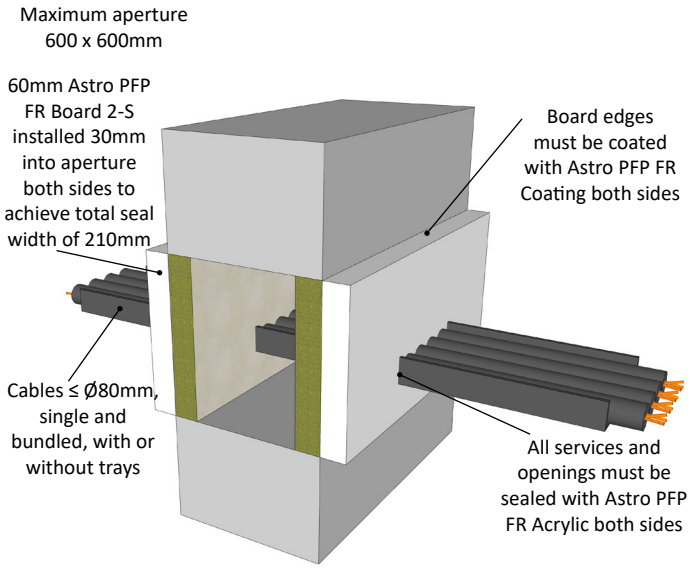
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 240 (E 240)

≥ 150MM RIGID WALLS



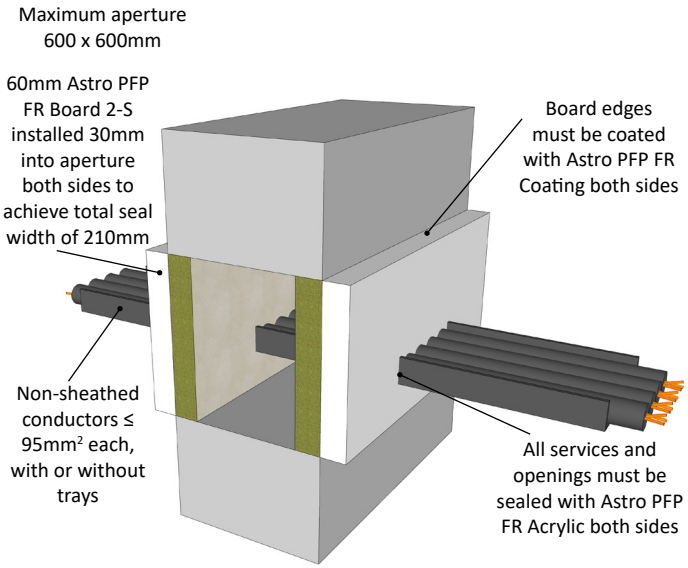
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 240)

≥ 150MM RIGID WALLS



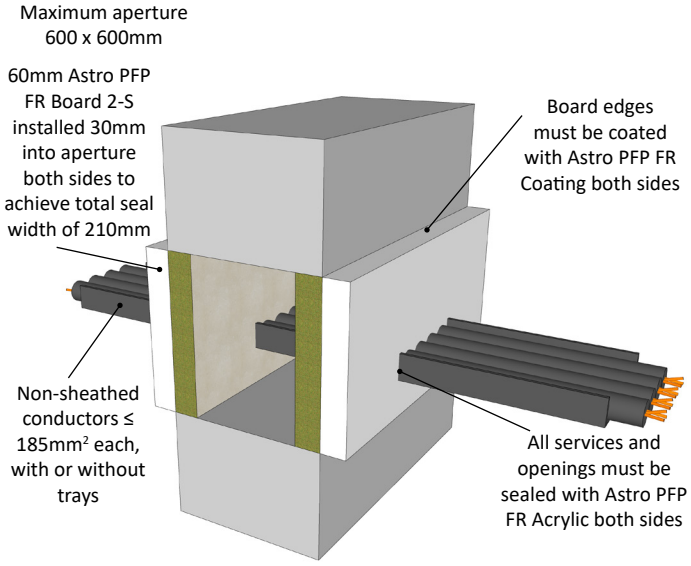
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 180 (E 240)

≥ 150MM RIGID WALLS



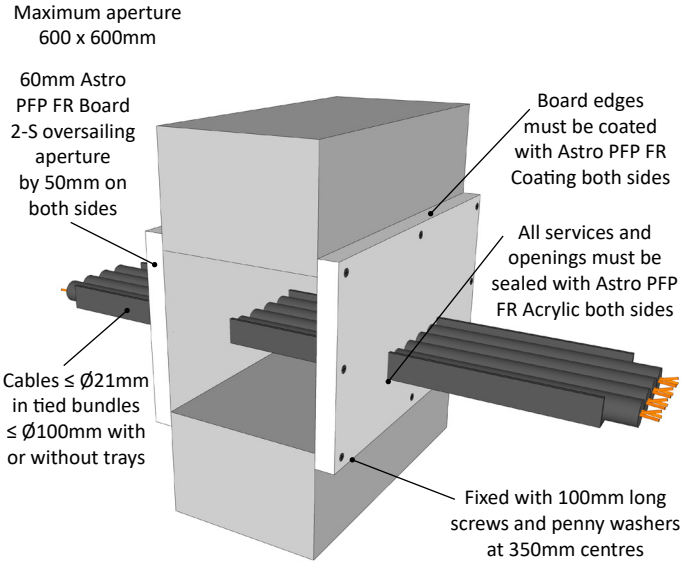
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 90 (E 240)

≥ 150MM RIGID WALLS



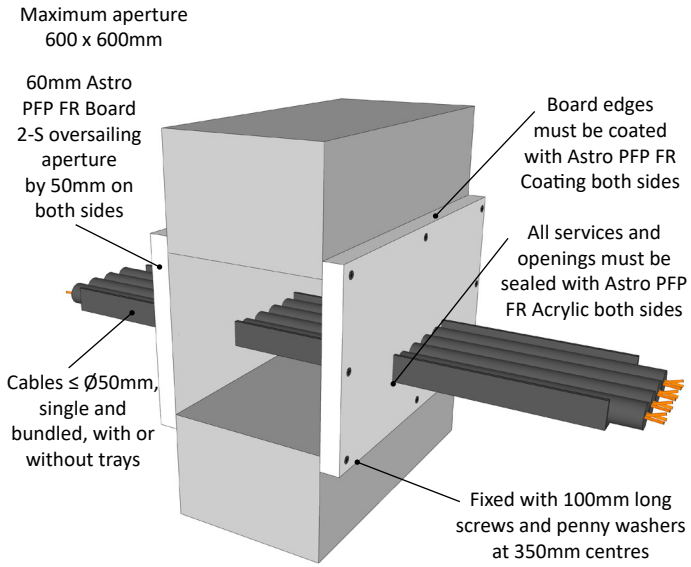
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 180 (E 240)

≥ 150MM RIGID WALLS



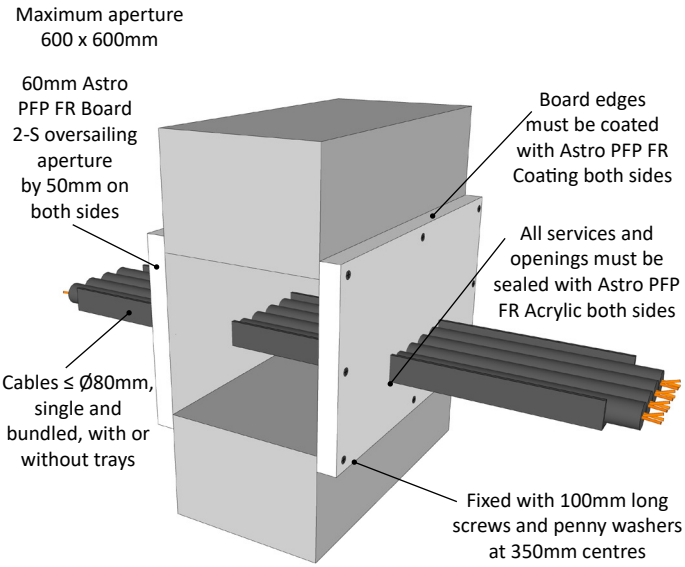
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 90 (E 240)

≥ 150MM RIGID WALLS



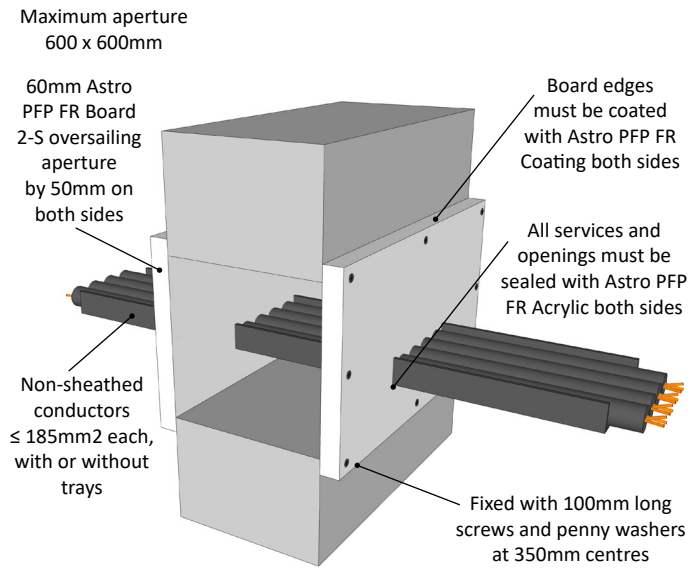
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 180 (E 240)

≥ 150MM RIGID WALLS



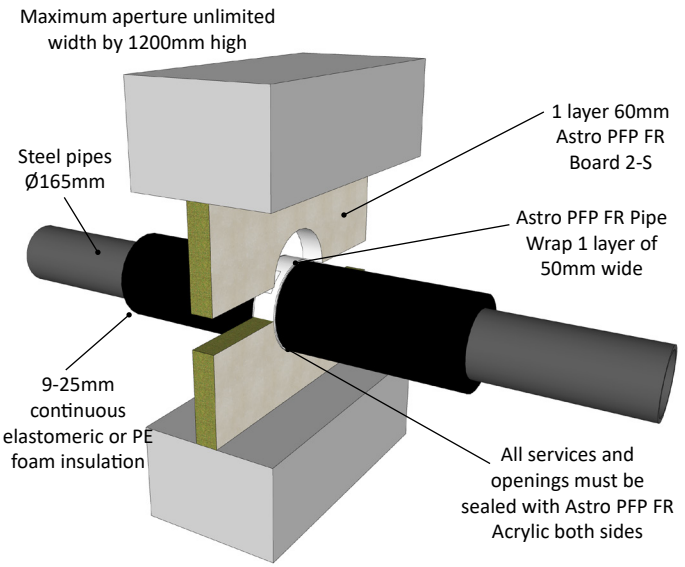
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 120 (E 240)

≥ 150MM RIGID WALLS



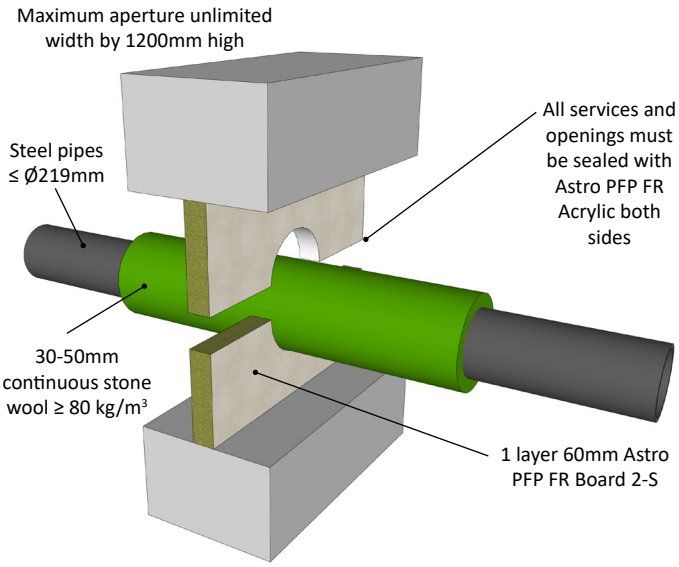
INSULATED STEEL PIPES FIRE RESISTANCE EI 45 C/U (E 120)

≥ 75MM RIGID WALLS



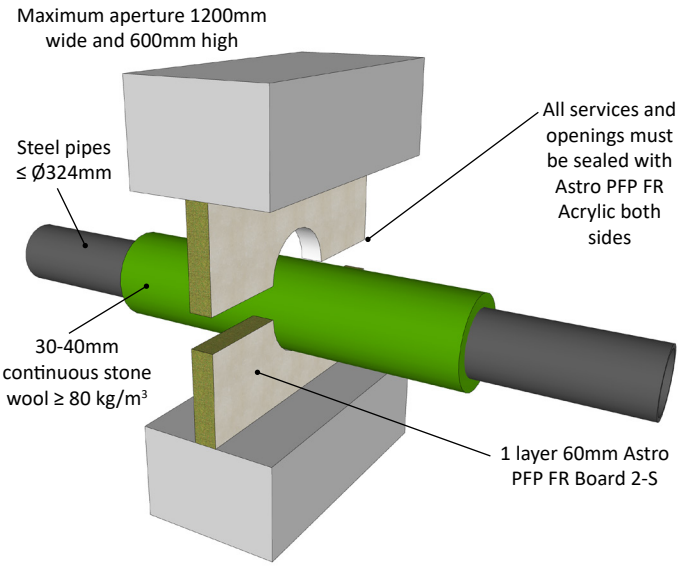
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 120)

≥ 75MM RIGID WALLS



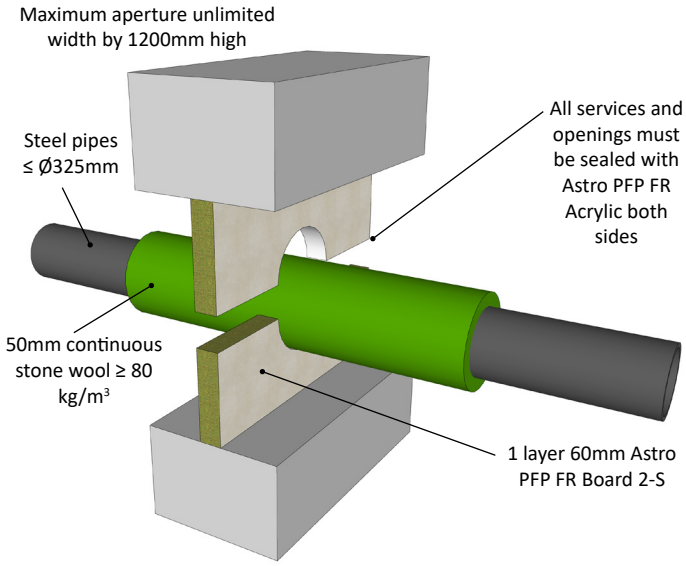
INSULATED STEEL PIPES FIRE RESISTANCE EI 45 C/U (E 120)

≥ 75MM RIGID WALLS



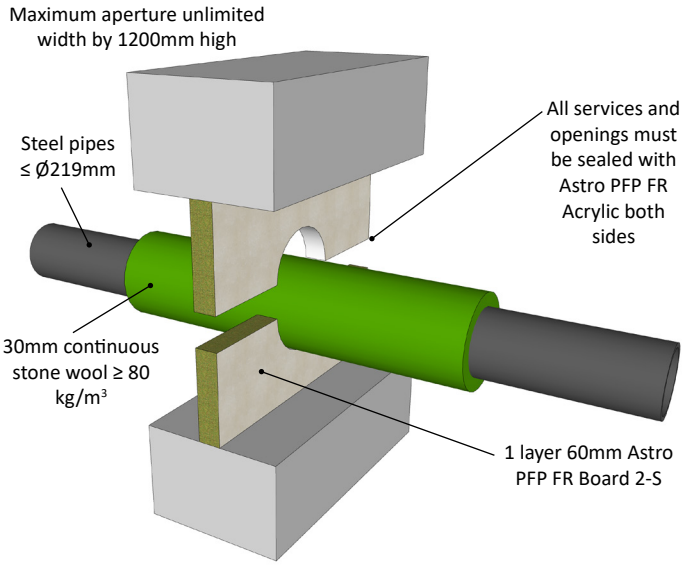
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 120)

≥ 75MM RIGID WALLS



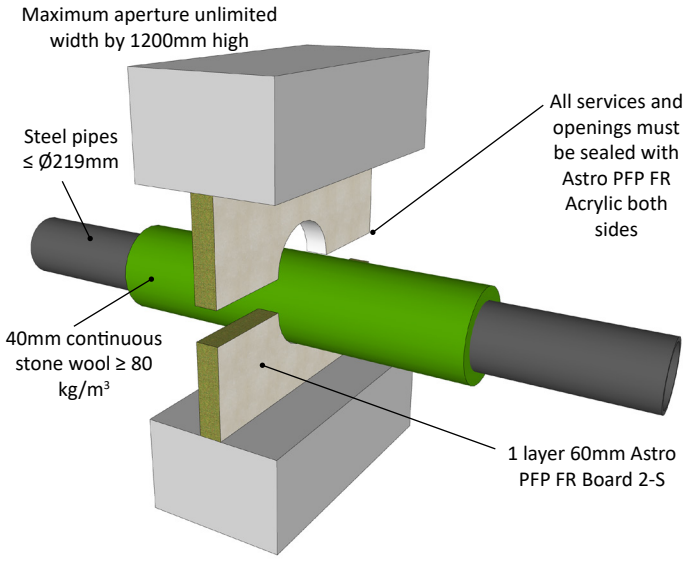
INSULATED STEEL PIPES FIRE RESISTANCE EI 45 C/U (E 120)

≥ 75MM RIGID WALLS



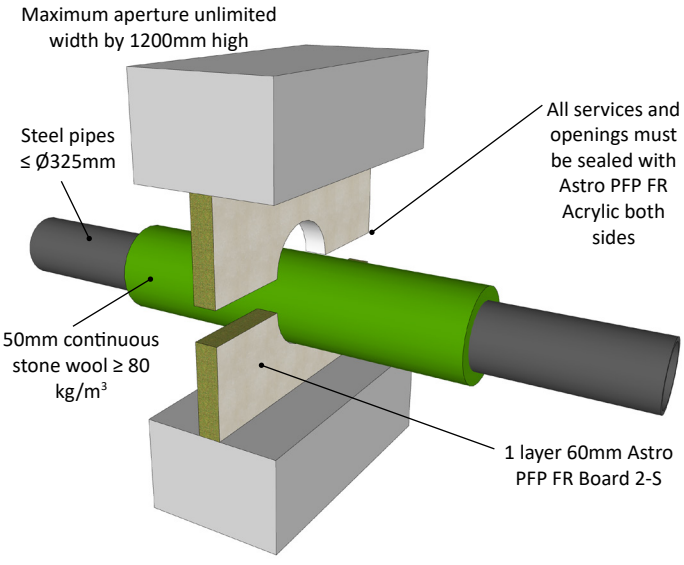
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 180)

≥ 75MM RIGID WALLS



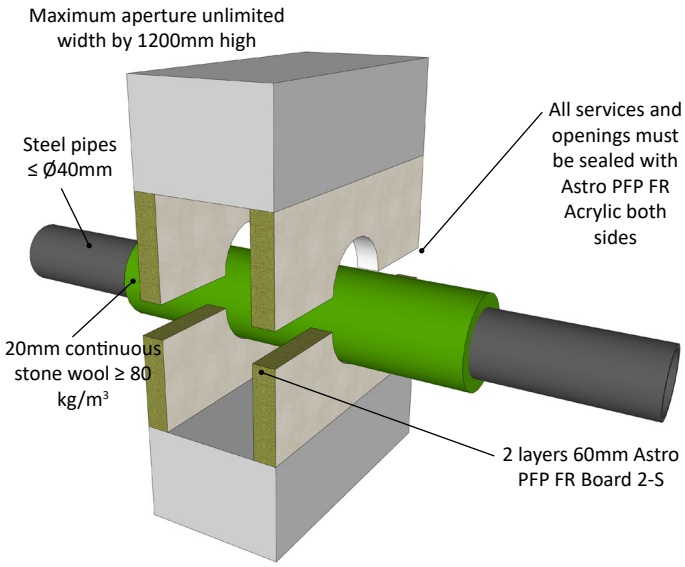
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 180)

≥ 150MM RIGID WALLS



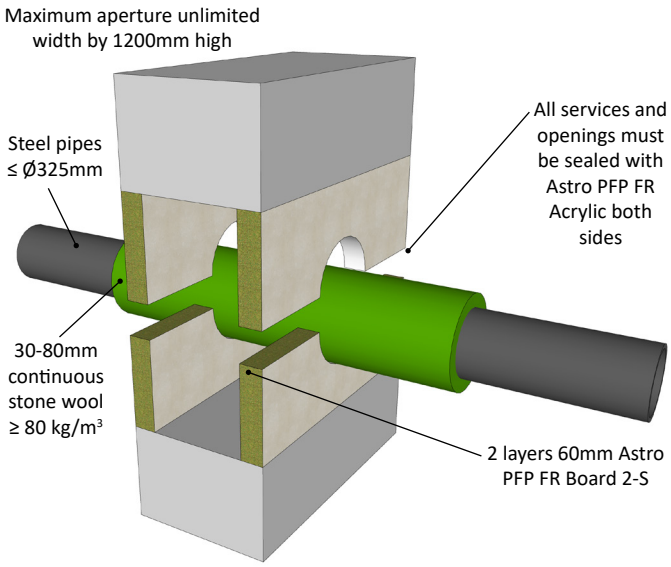
INSULATED STEEL PIPES FIRE RESISTANCE EI 180 C/U (E 240)

≥ 150MM RIGID WALLS



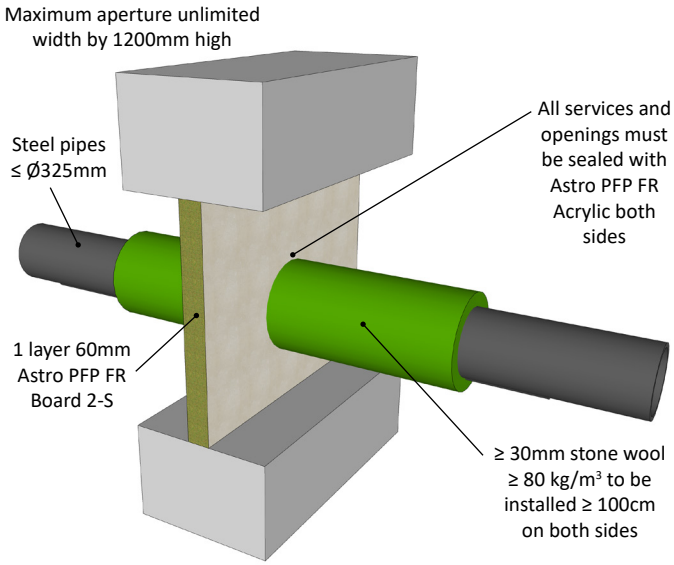
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 180)

≥ 150MM RIGID WALLS



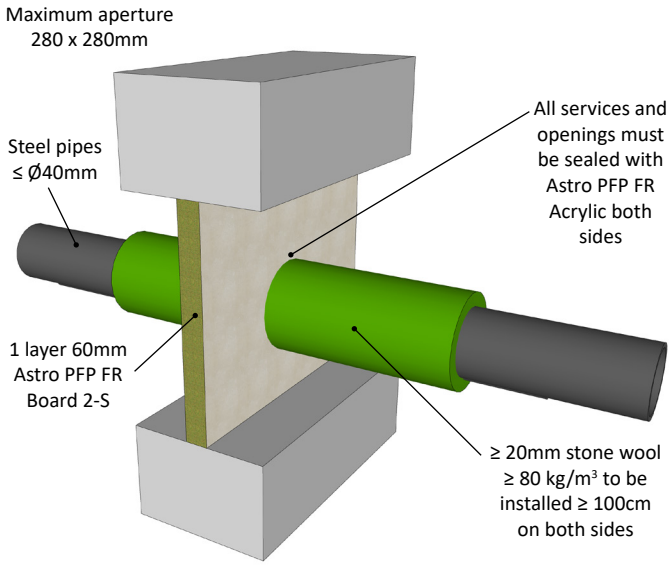
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 120)

≥ 75MM RIGID WALLS



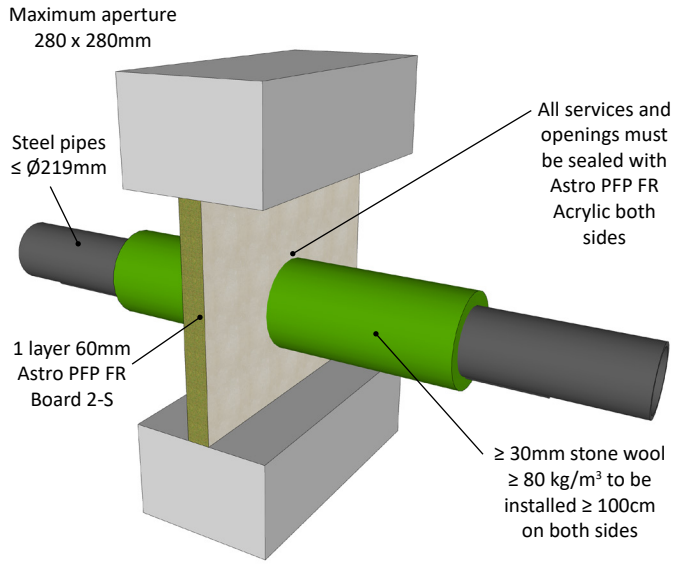
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



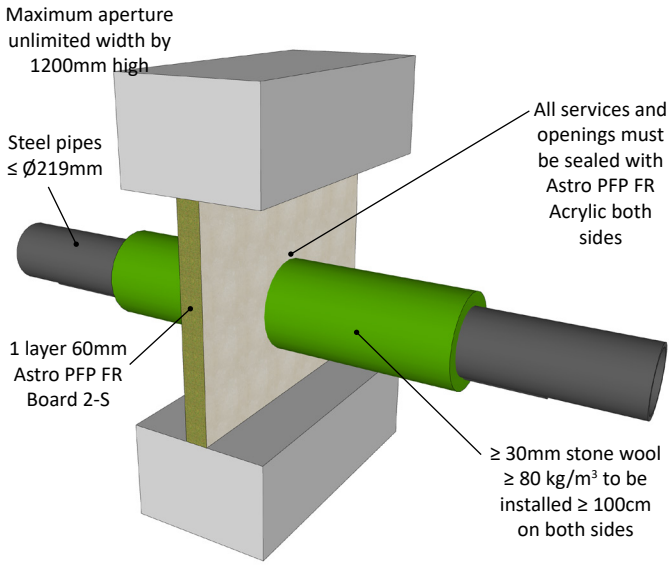
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



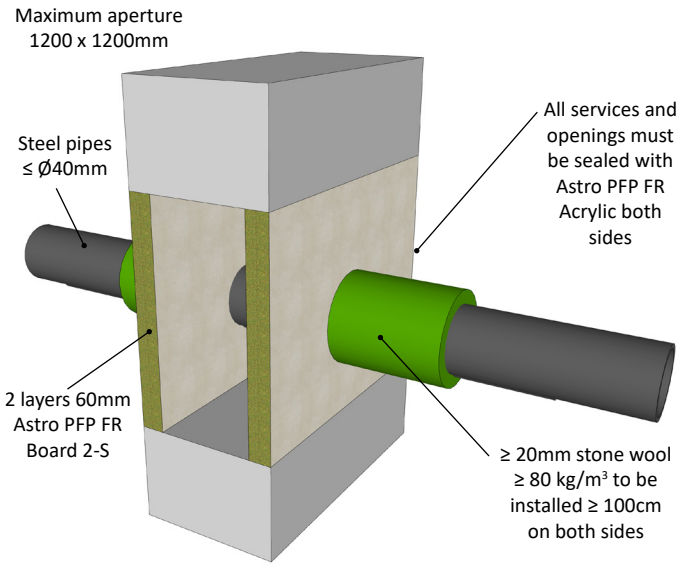
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



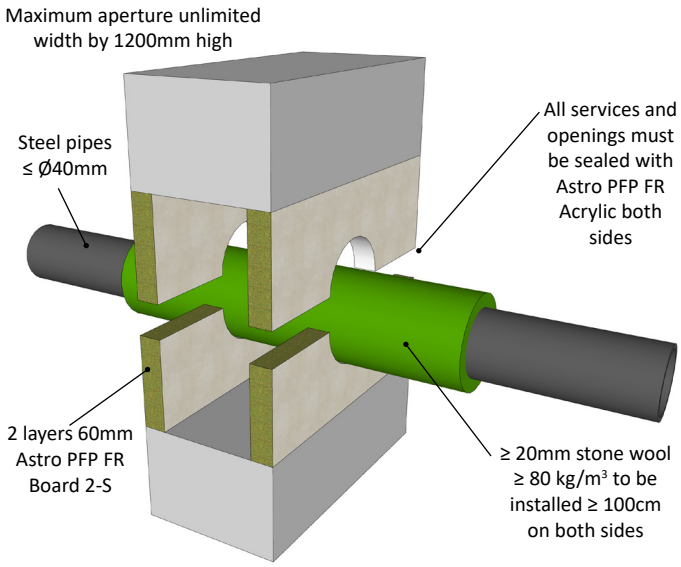
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



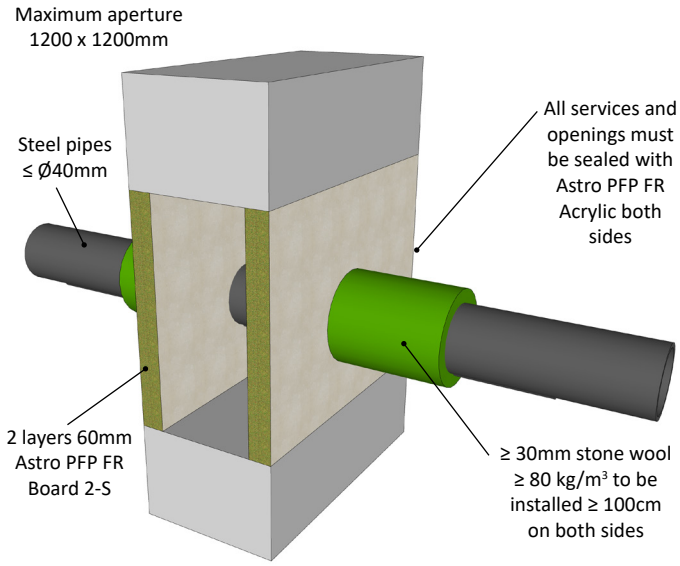
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



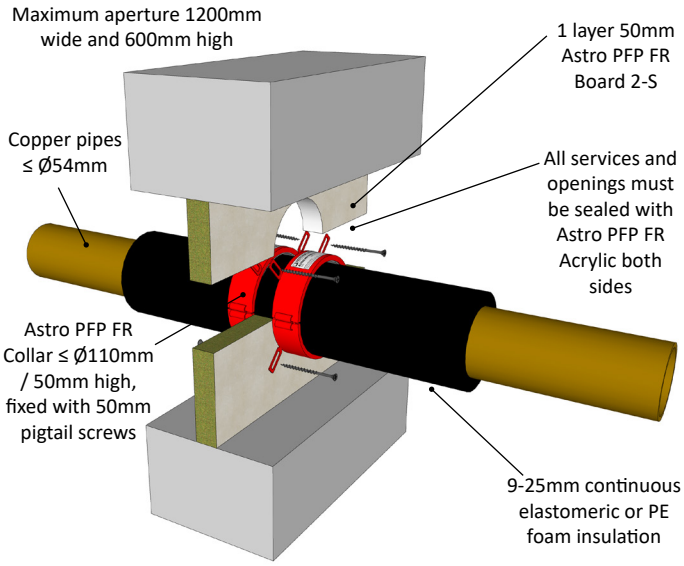
STEEL PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



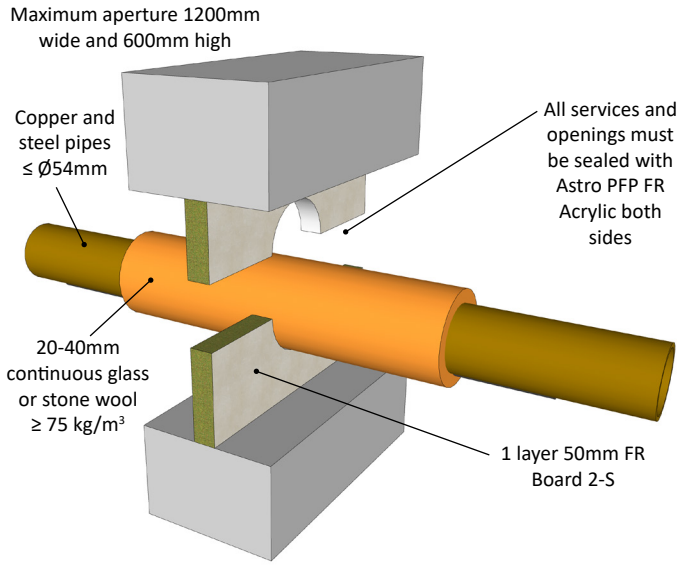
COPPER PIPES FIRE RESISTANCE EI 30 C/C (E 60)

≥ 75MM RIGID WALLS



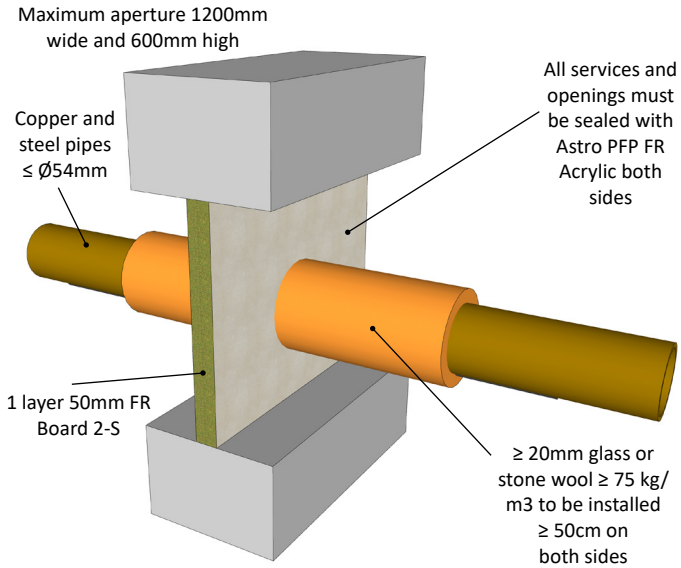
COPPER & STEEL PIPES FIRE RESISTANCE EI 30 C/C (E 60)

≥ 75MM RIGID WALLS



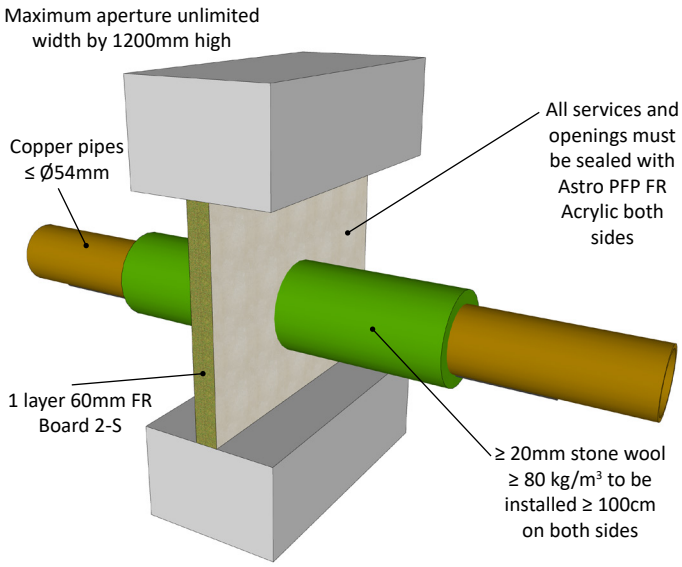
COPPER & STEEL PIPES FIRE RESISTANCE EI 45 C/C (E 60)

≥ 75MM RIGID WALLS



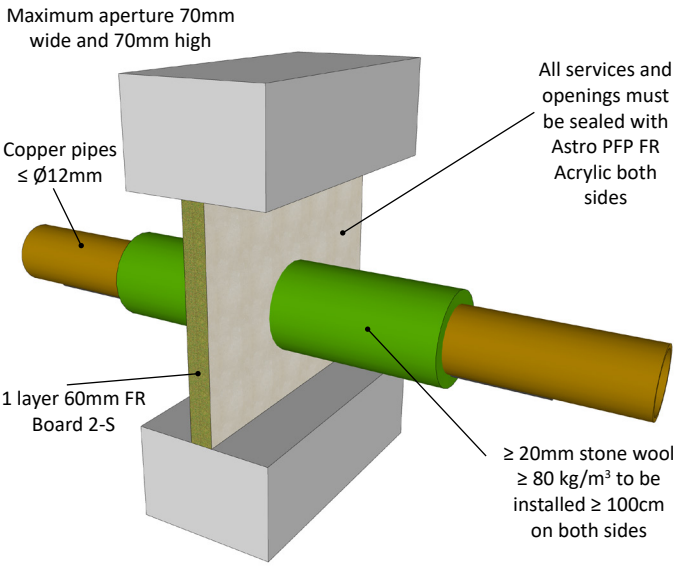
COPPER PIPES FIRE RESISTANCE EI 90 C/U (E 120)

≥ 75MM RIGID WALLS



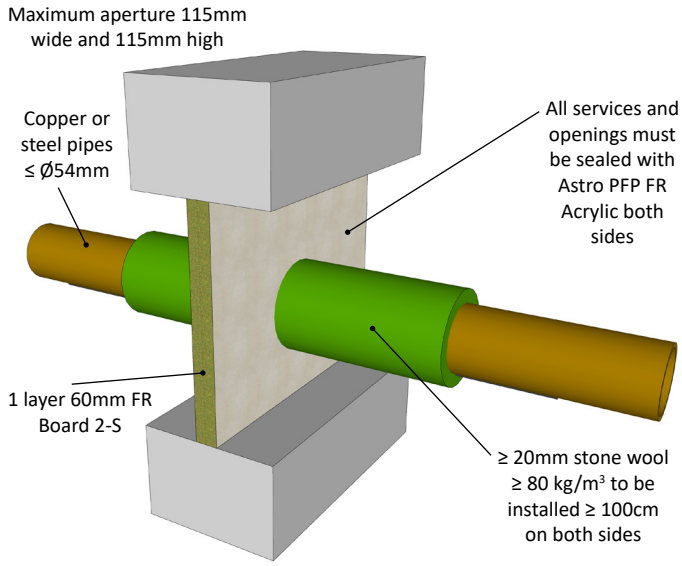
COPPER PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



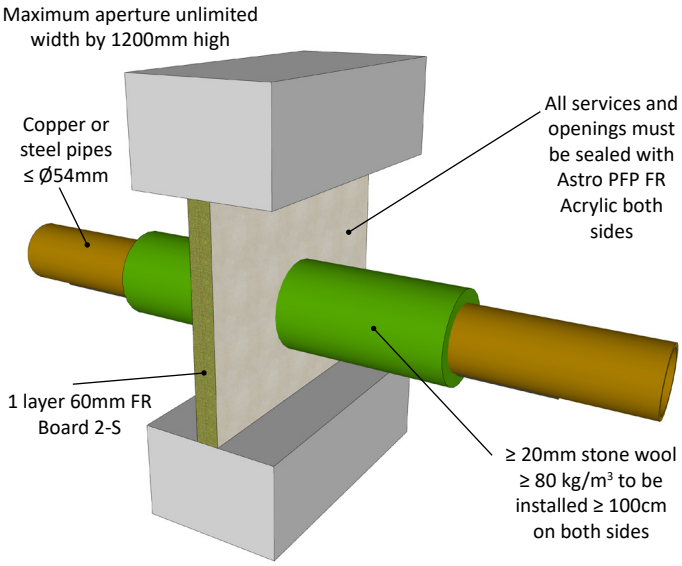
COPPER OR STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 240)

≥ 150MM RIGID WALLS



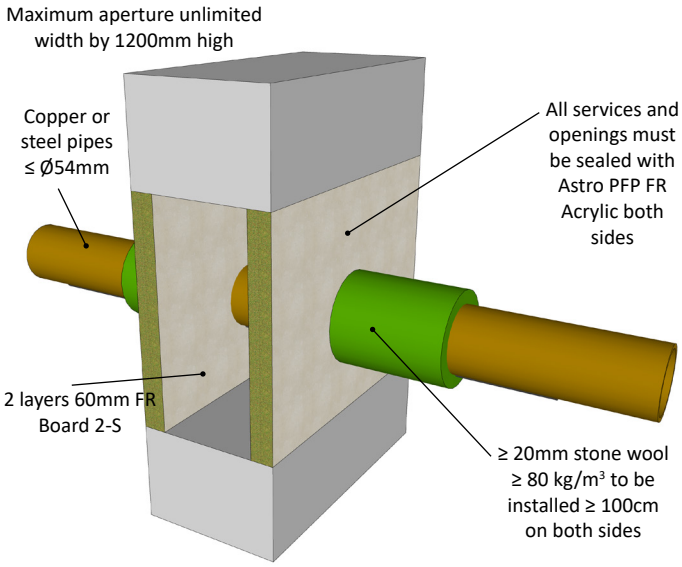
COPPER PIPES FIRE RESISTANCE EI 240 C/U (E 240)

≥ 150MM RIGID WALLS



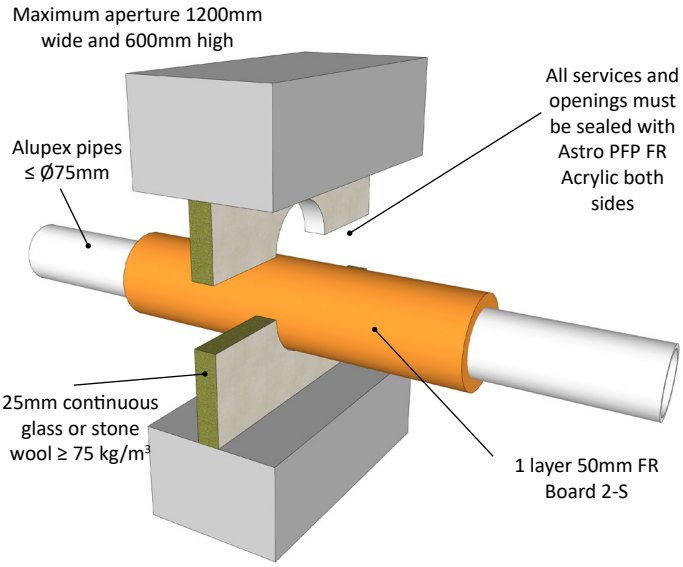
COPPER OR STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 240)

≥ 150MM RIGID WALLS



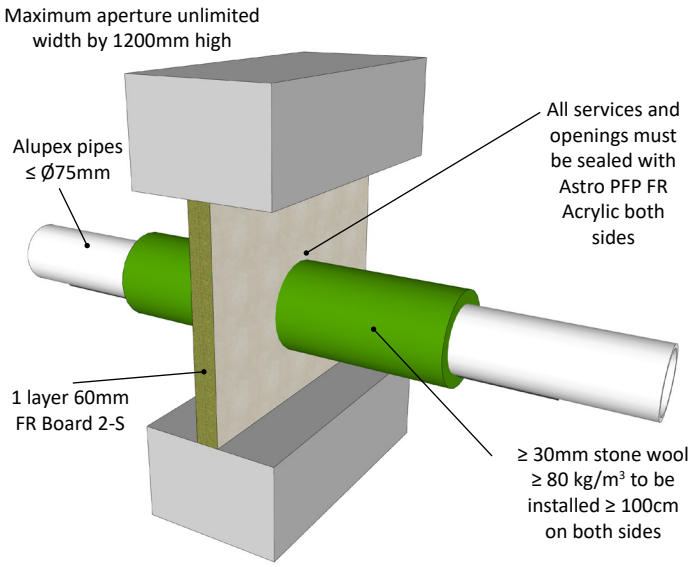
INSULATED ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 60)

≥ 75MM RIGID WALLS



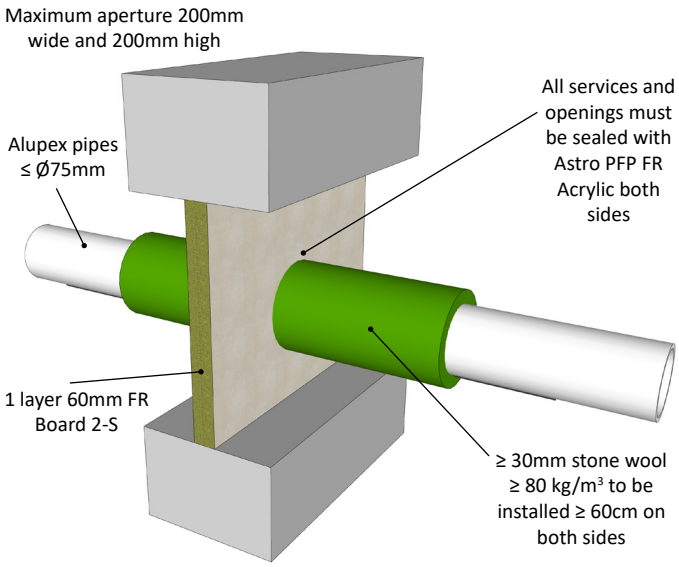
ALUPEX PIPES FIRE RESISTANCE EI 90 C/C (E 120)

≥ 75MM RIGID WALLS



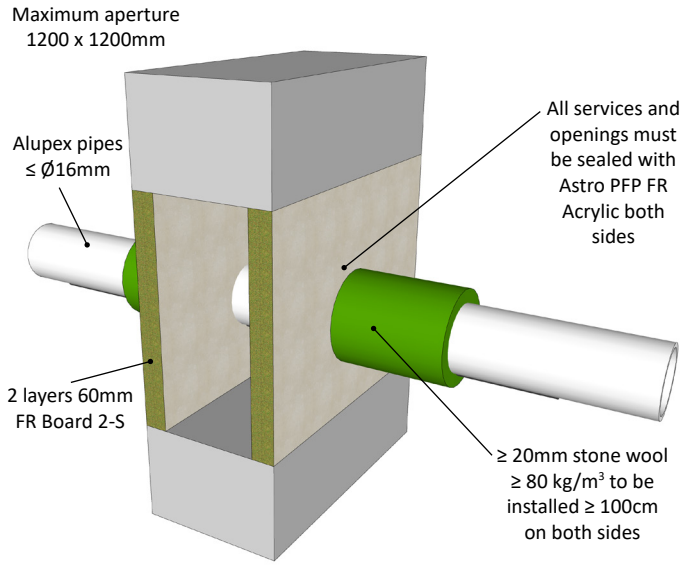
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

≥ 150MM RIGID WALLS



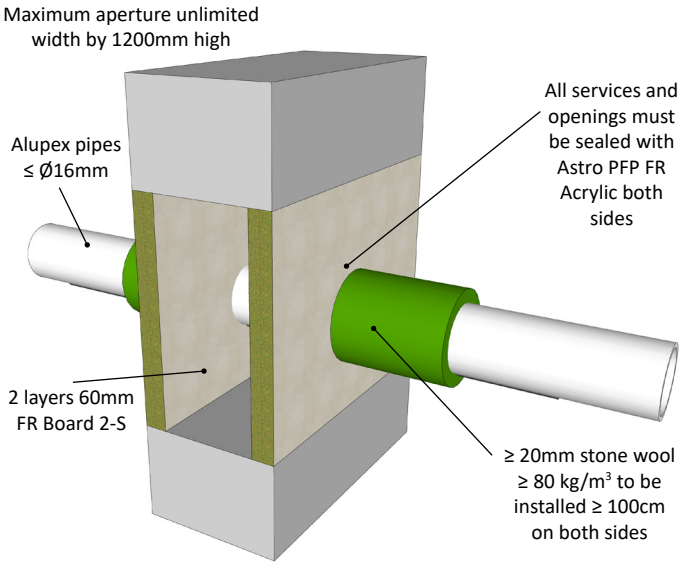
ALUPEX PIPES FIRE RESISTANCE EI 240 U/C (E 240)

≥ 150MM RIGID WALLS



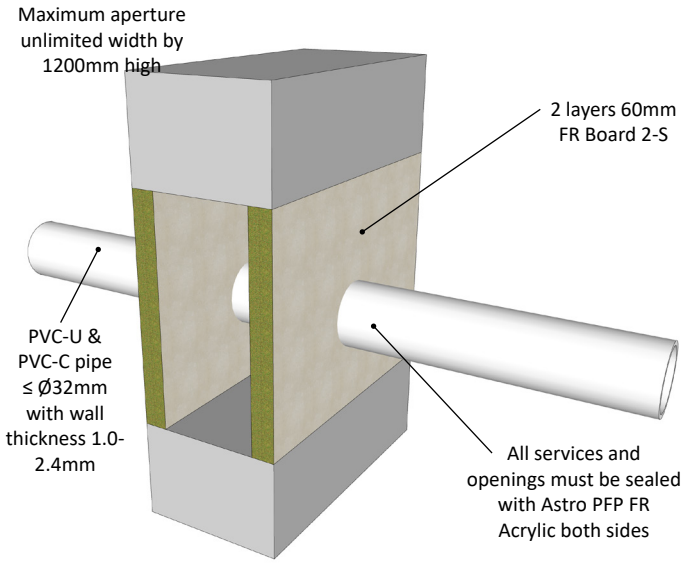
ALUPEX PIPES FIRE RESISTANCE EI 180 U/C (E 240)

≥ 150MM RIGID WALLS



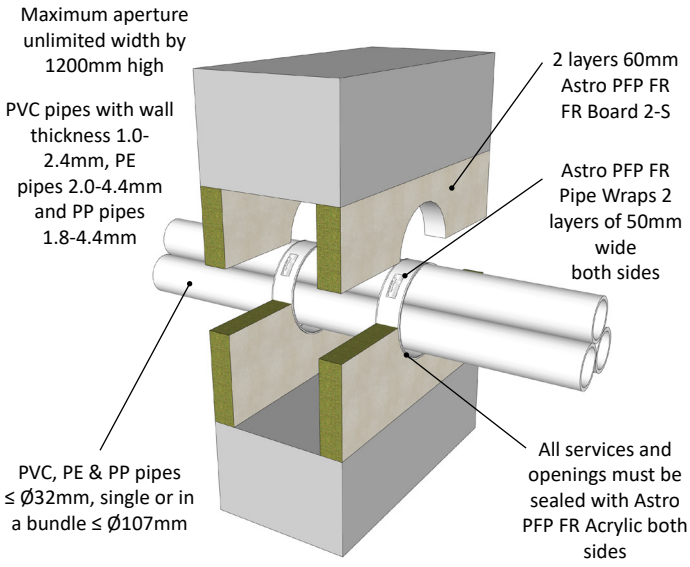
PVC PIPES FIRE RESISTANCE EI 240 U/C (E 240)

≥ 150MM RIGID WALLS



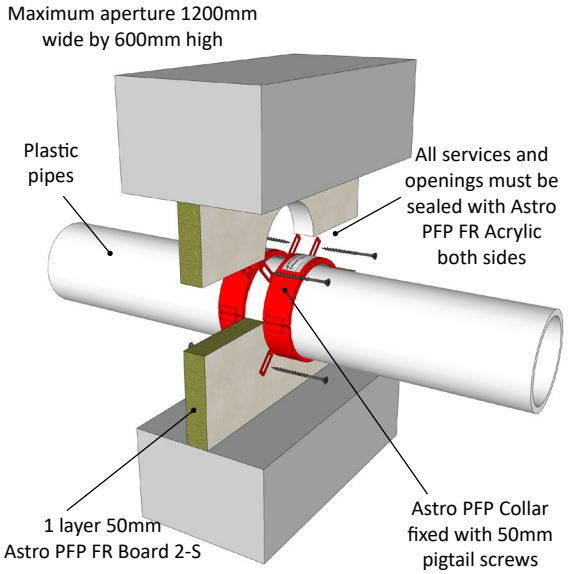
PLASTIC PIPE BUNDLES FIRE RESISTANCE EI 240 U/C (E 240)

≥ 150MM RIGID WALLS



PLASTIC PIPES FIRE RESISTANCE EI 30-60

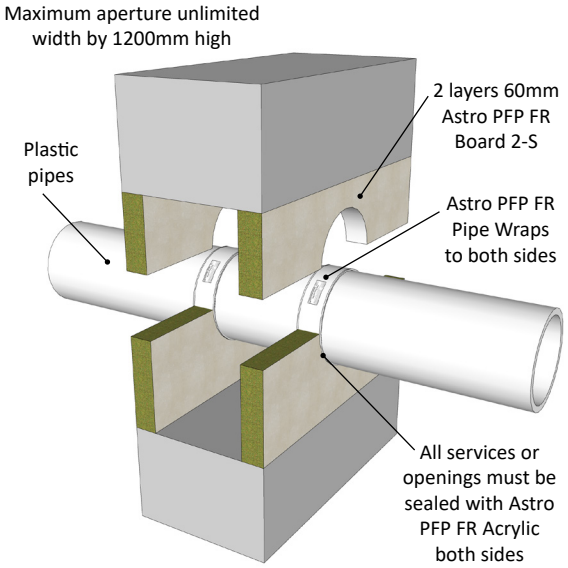
≥ 75MM RIGID WALLS



Pipe & Collar Descriptions	Pipe Wall Thickness	Min. Collar Height	Classification
≤ Ø 110mm PVC-U & PVC-C	1.9 – 6.6mm	30mm	EI 30 U/C (E 90 U/C)
≤ Ø 50mm PVC-U & PVC-C	1.9 – 3.7mm	50mm	EI 60 U/C (E 120 U/C)
≤ Ø 110mm PVC-U & PVC-C	2.1 – 6.6mm	50mm	EI 60 U/C (E 90 U/C)
≤ Ø 160mm PVC-U & PVC-C	3.1 – 9.5mm	60mm	EI 60 C/C (E 60 C/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.4 – 10.0mm	30mm	EI 45 U/C (E 60 U/C)
≤ Ø 50mm PE, ABS & SAN+PVC	3.0 – 4.6mm	50mm	EI 60 U/C (E 120 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.0 – 10.0mm	50mm	EI 60 C/C (E 90 C/C)
≤ Ø 160mm PE, ABS & SAN+PVC	3.9 – 9.5mm	60mm	EI 60 C/C (E 60 C/C)
≤ Ø 90mm PP	1.8 – 4.6mm	50mm	EI 60 C/C (E 60 C/C)
≤ Ø 110mm PP	2.7mm	50mm	EI 60 C/C (E 60 C/C)
≤ Ø 160mm PP	3.4 – 9.1mm	60mm	EI 60 C/C (E 60 C/C)

PLASTIC PIPES FIRE RESISTANCE EI 120-240

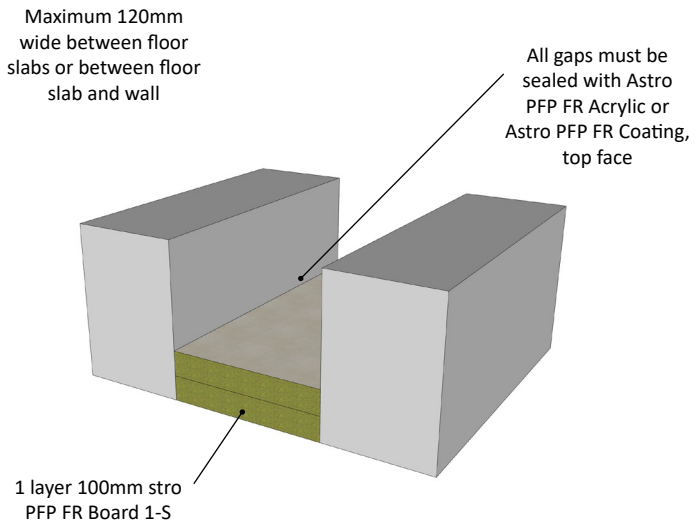
≥ 150MM RIGID WALLS



Services	Pipe Wall Thickness	Astro PFP FR Pipe Wrap	Classification
≤ Ø 40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 240 U/C (E 240 U/C)
≤ Ø 40mm PE, ABS & SAN+PVC	2.4 – 4.6mm	50 x 1.8mm (1 layer)	EI 240 U/C (E 240 U/C)
≤ Ø 40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 240 U/C (E 240 U/C)
≤ Ø 110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 110mm PE, ABS & SAN+PVC	3.4 – 10.0mm	50 x 3.6mm (2 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 110mm PP	2.7 – 10.0mm	50 x 3.6mm (2 layers)	EI 240 C/C (E 240 C/C)
≤ Ø 125mm PVC-U & PVC-C	4.7 – 7.4mm	50 x 7.2mm (4 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 125mm PE, ABS & SAN+PVC	3.9 – 7.4mm	50 x 7.2mm (4 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 125mm PP	3.1 – 11.4mm	50 x 7.2mm (4 layers)	EI 240 C/C (E 240 C/C)
≤ Ø 160mm PVC-U & PVC-C	4.0 – 9.5mm	50 x 10.8mm (6 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 160mm PE, ABS & SAN+PVC	4.9 – 9.5mm	50 x 10.8mm (6 layers)	EI 240 U/C (E 240 U/C)
≤ Ø 160mm PP	4.9 – 14.6mm	50 x 10.8mm (6 layers)	EI 240 C/C (E 240 C/C)
≤ Ø 200mm PVC-U & PVC-C	4.9 – 11.9mm	75 x 10.8mm (6 layers)	EI 180 C/C (E 180 C/C)
≤ Ø 200mm PE, ABS & SAN+PVC	4.9 – 18.2mm	75 x 10.8mm (6 layers)	EI 180 C/C (E 180 C/C)
≤ Ø 200mm PP	4.9 – 18.2mm	75 x 10.8mm (6 layers)	EI 180 C/C (E 180 C/C)
≤ Ø 315mm PVC-U & PVC-C	7.7 – 12.1mm	75 x 18.0mm (10 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 315mm PE, ABS & SAN+PVC	28.6mm	75 x 18.0mm (10 layers)	EI 120 C/C (E 180 C/C)
≤ Ø 400mm PVC-U & PVC-C	9.8 – 15.3mm	75 x 28.8mm (16 layers)	EI 120 C/C (E 120 C/C)
≤ Ø 400mm PE, ABS & SAN+PVC	36.3mm	75 x 28.8mm (16 layers)	EI 120 C/C (E 120 C/C)

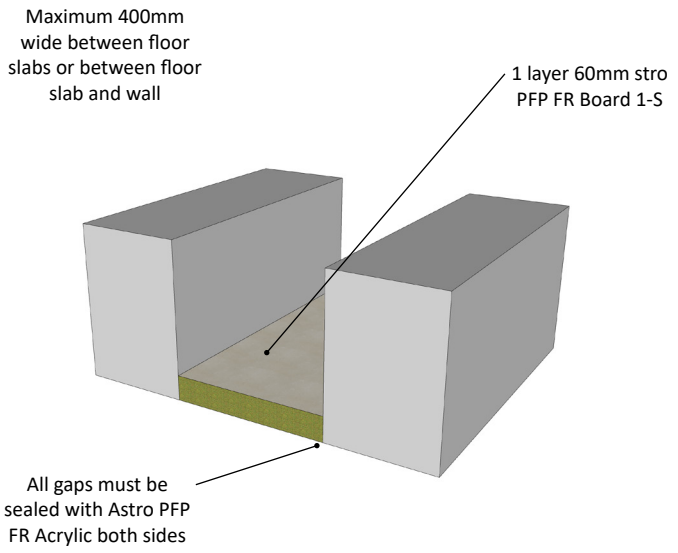
LINEAR SEALS FIRE RESISTANCE EI 180 (E 240)

RIGID FLOORS



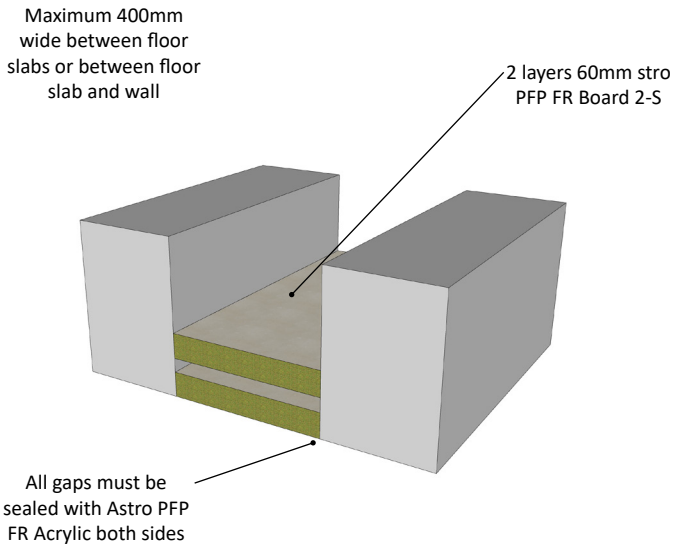
LINEAR SEALS FIRE RESISTANCE EI 120 (E 240)

RIGID FLOORS



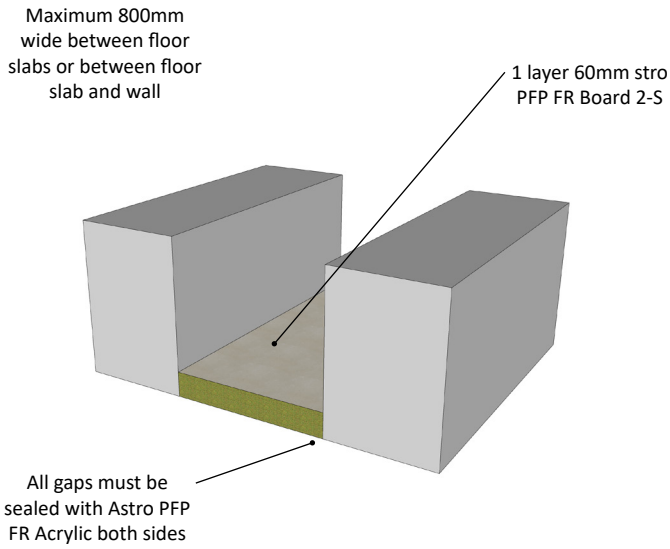
LINEAR SEALS FIRE RESISTANCE EI 180 (E 180)

RIGID FLOORS



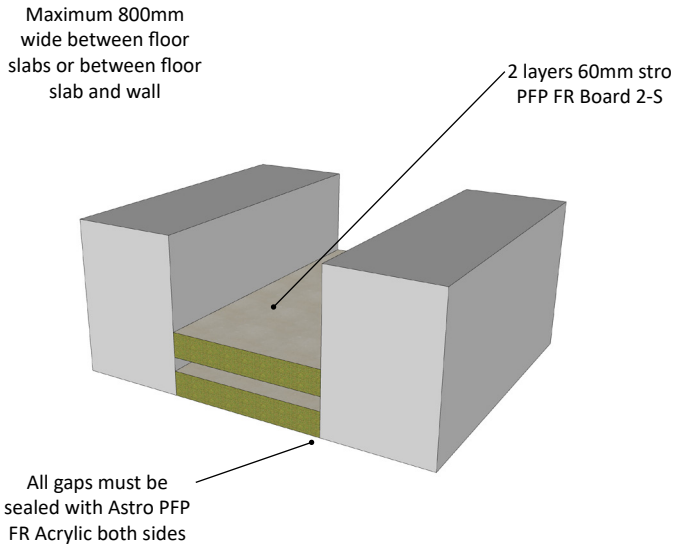
LINEAR SEALS FIRE RESISTANCE EI 90 (E 120)

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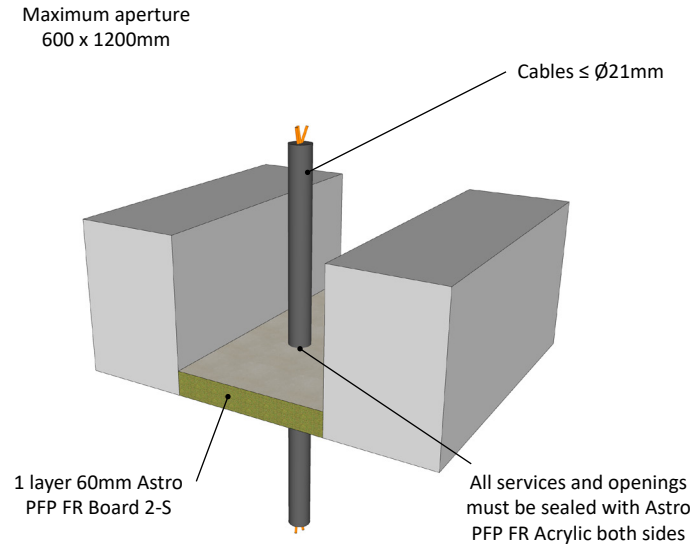
LINEAR SEALS FIRE RESISTANCE EI 120 (E 180)

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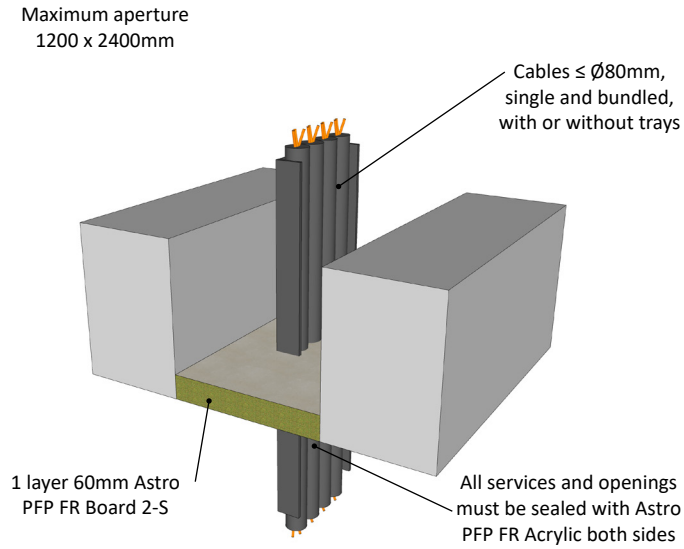
CABLES FIRE RESISTANCE EI 30 (E 240)

RIGID FLOORS



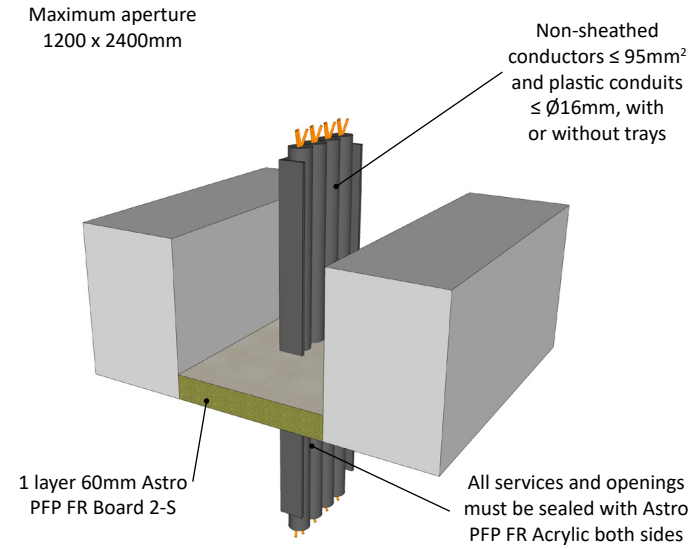
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 30 (E 90)

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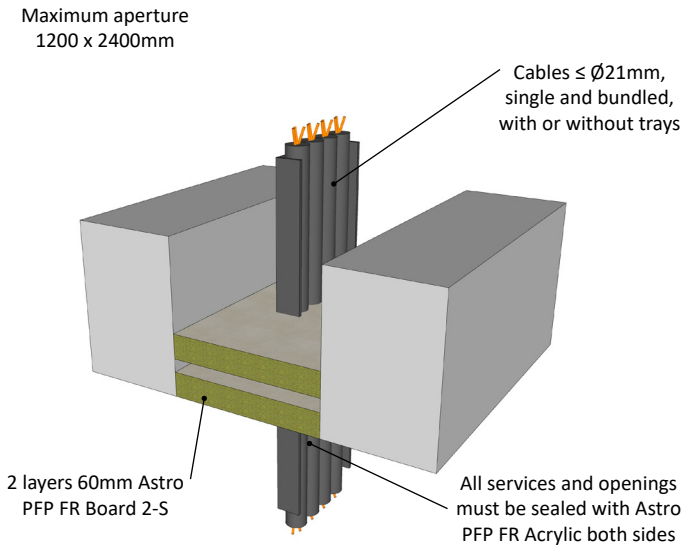
CONDUCTORS AND CONDUITS FIRE RESISTANCE EI 30 (E 45)

RIGID FLOORS



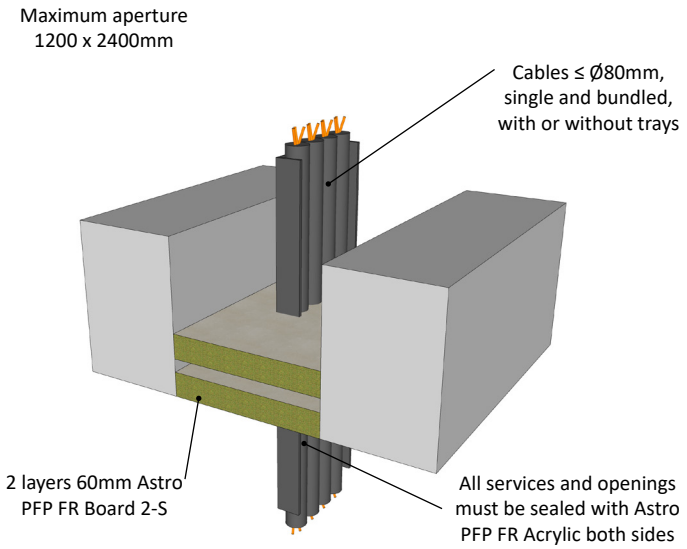
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 120 (E 120)

RIGID FLOORS



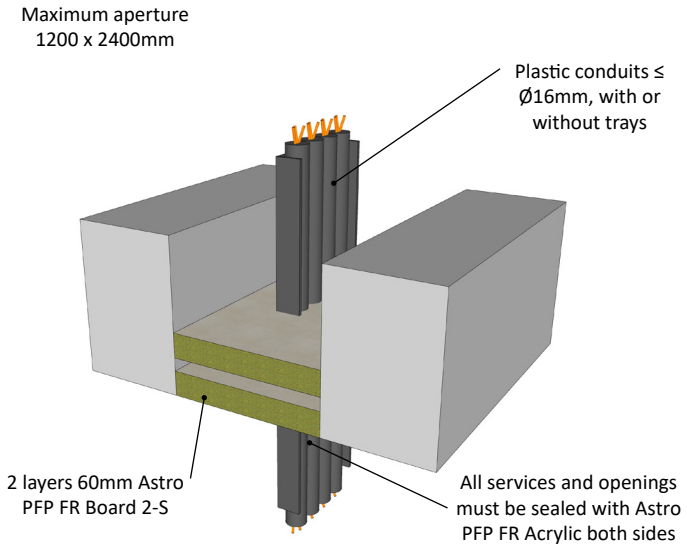
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 120)

RIGID FLOORS



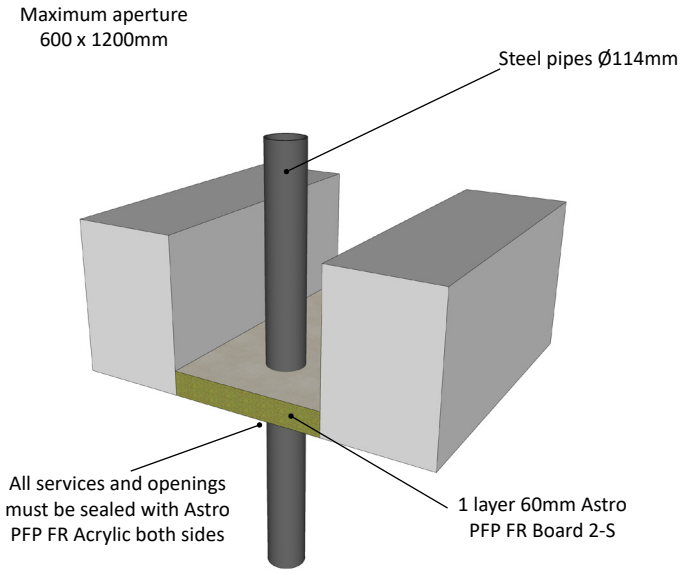
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 90 (E 120)

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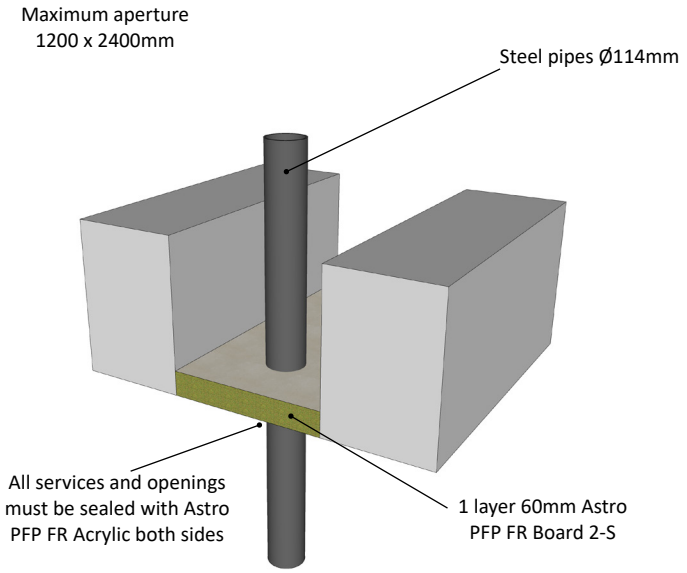
STEEL PIPES FIRE RESISTANCE EI 20 C/C (E 240)

RIGID FLOORS



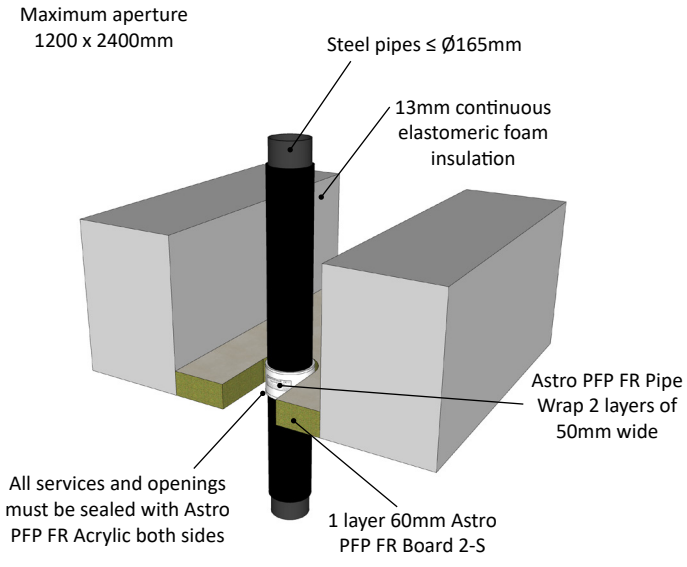
STEEL PIPES FIRE RESISTANCE EI 20 C/C (E 120)

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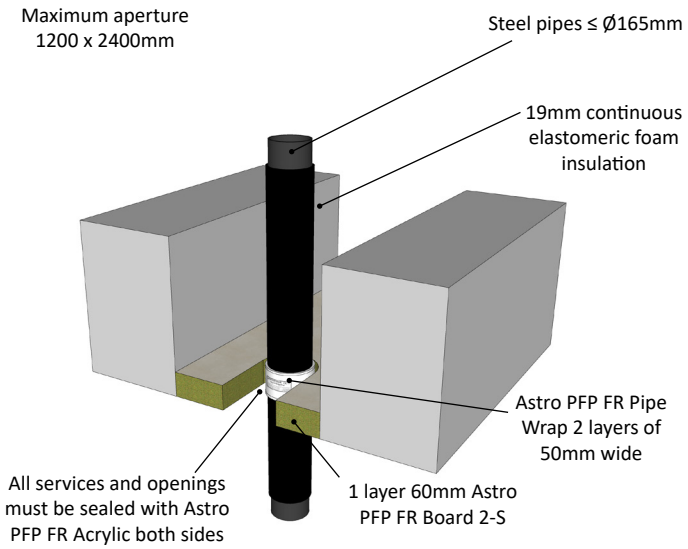
STEEL PIPES FIRE RESISTANCE EI 20 C/C (E 240)

RIGID FLOORS



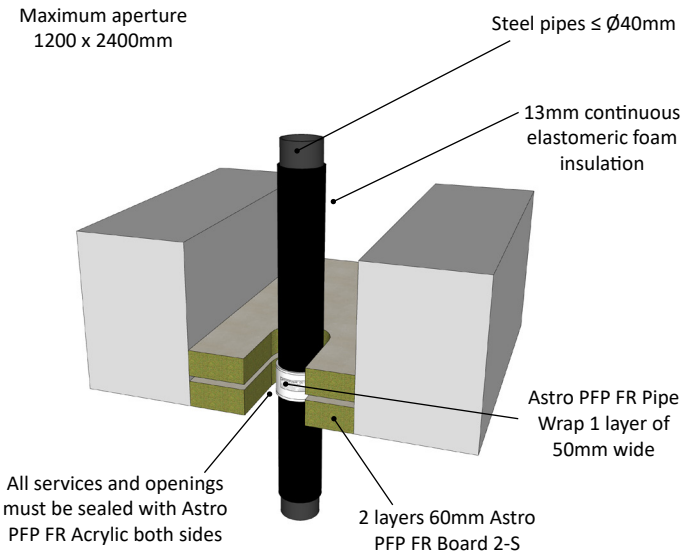
INSULATED STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 90)

RIGID FLOORS



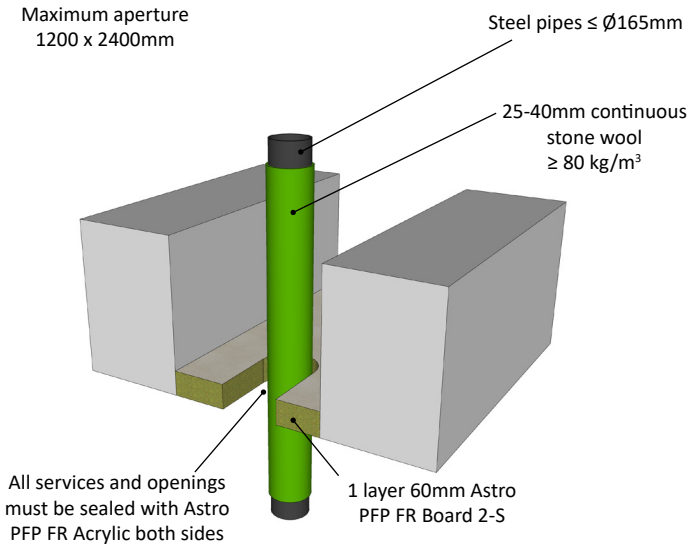
INSULATED STEEL PIPES FIRE RESISTANCE EI 120 C/U (E180)

RIGID FLOORS



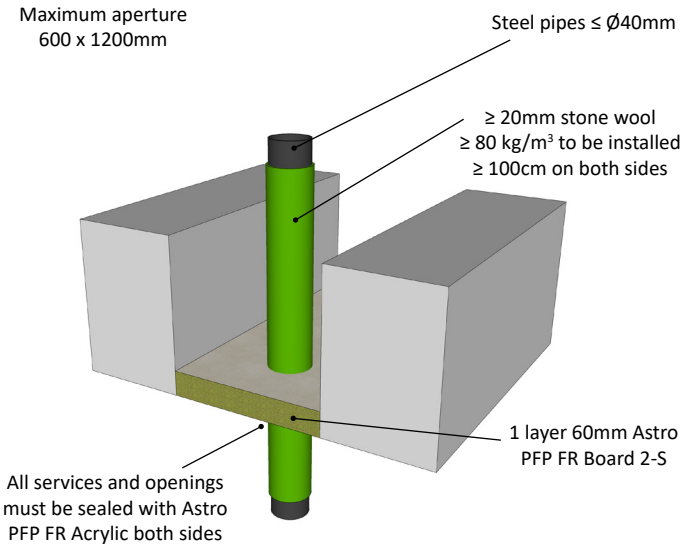
INSULATED STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

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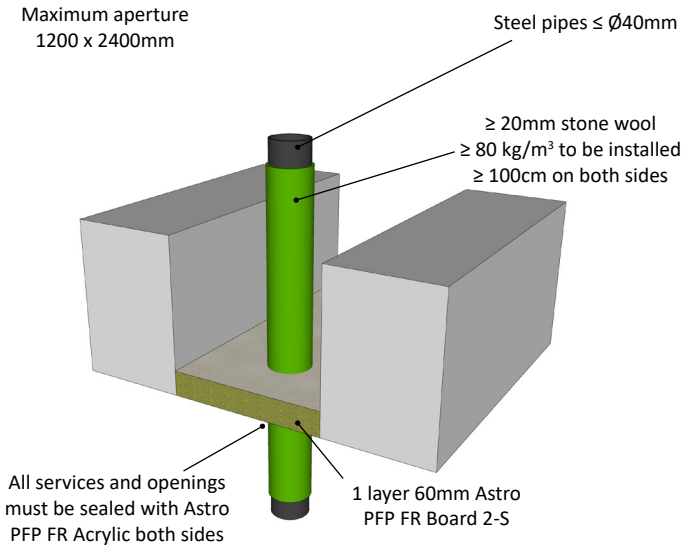
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 240)

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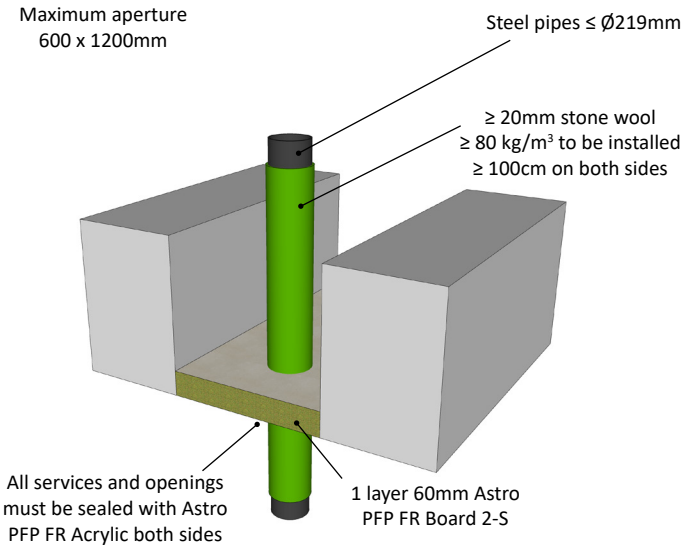
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 120)

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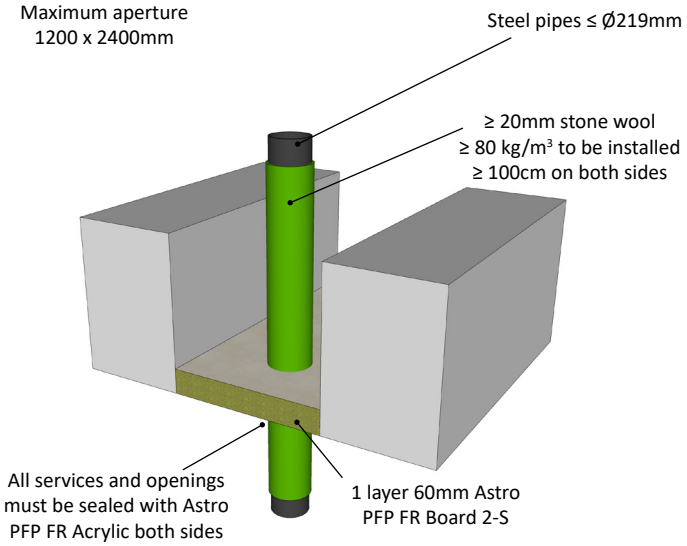
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 240)

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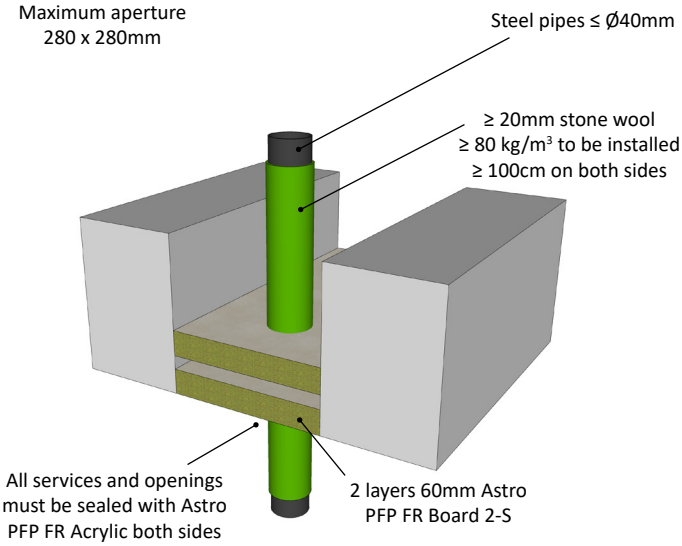
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 120)

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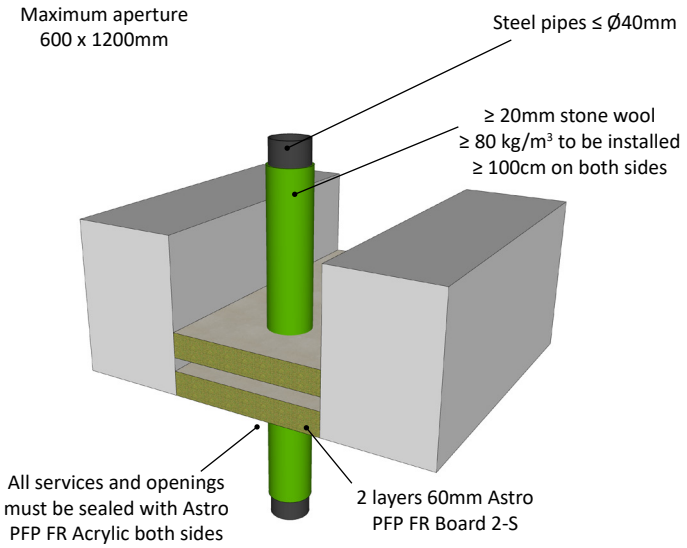
STEEL PIPES FIRE RESISTANCE EI 90 C/U (E 240)

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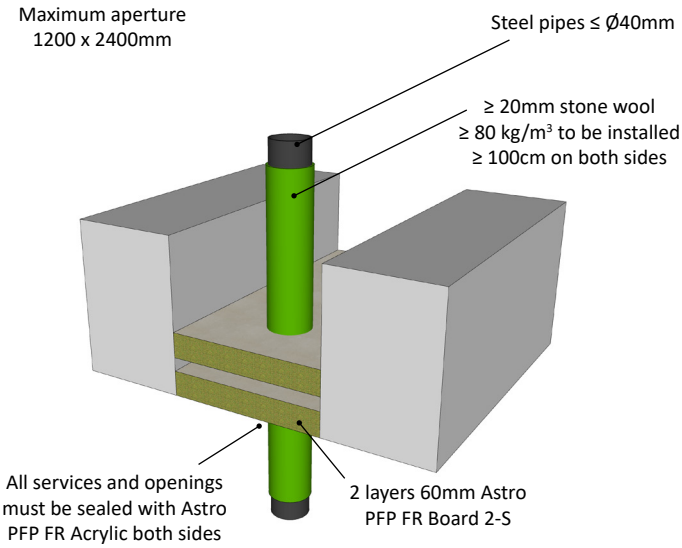
STEEL PIPES FIRE RESISTANCE EI 180 C/U (E 180)

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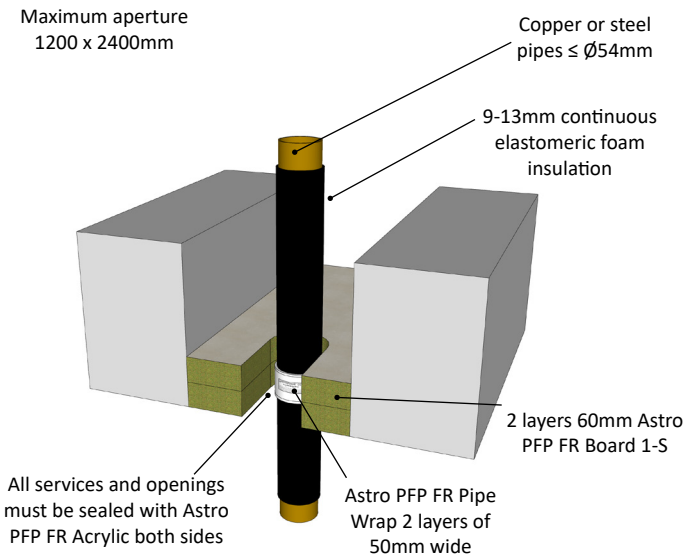
STEEL PIPES FIRE RESISTANCE EI 120 C/U (E 180)

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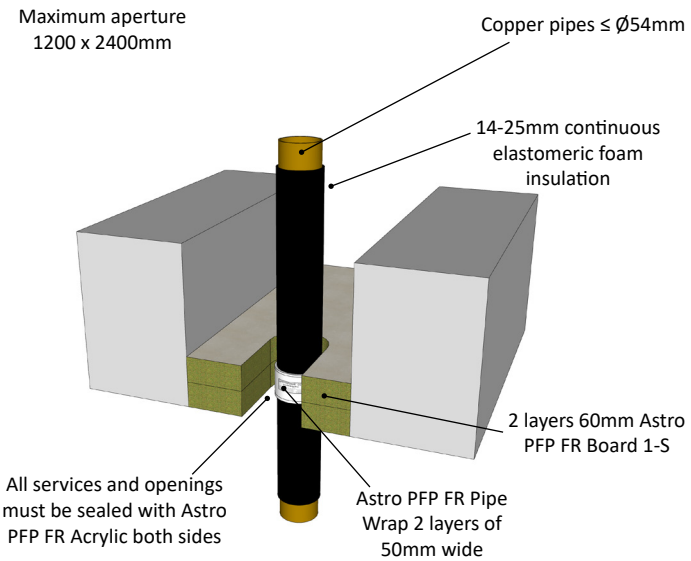
COPPER OR STEEL PIPES FIRE RESISTANCE EI 60 C/C (E 240)

RIGID FLOORS



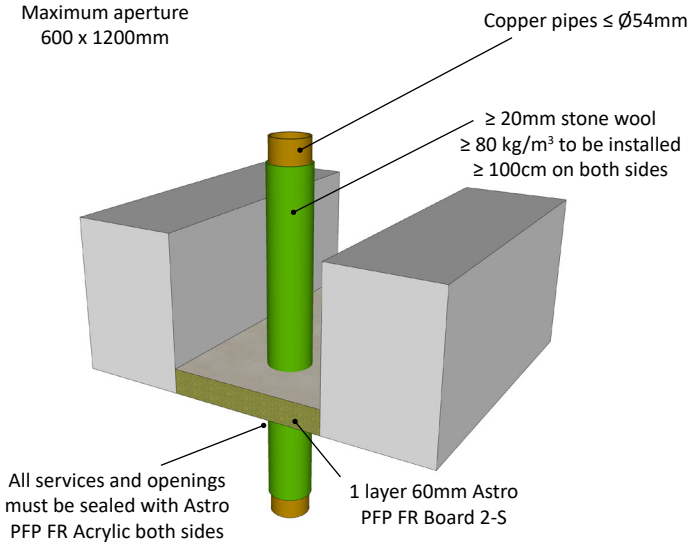
COPPER PIPES FIRE RESISTANCE EI 45 C/C (E 180)

RIGID FLOORS



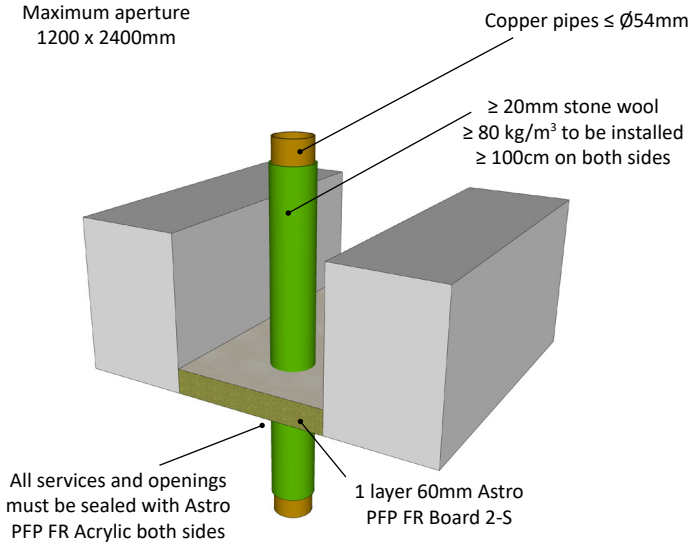
COPPER PIPES FIRE RESISTANCE E 240 C/U

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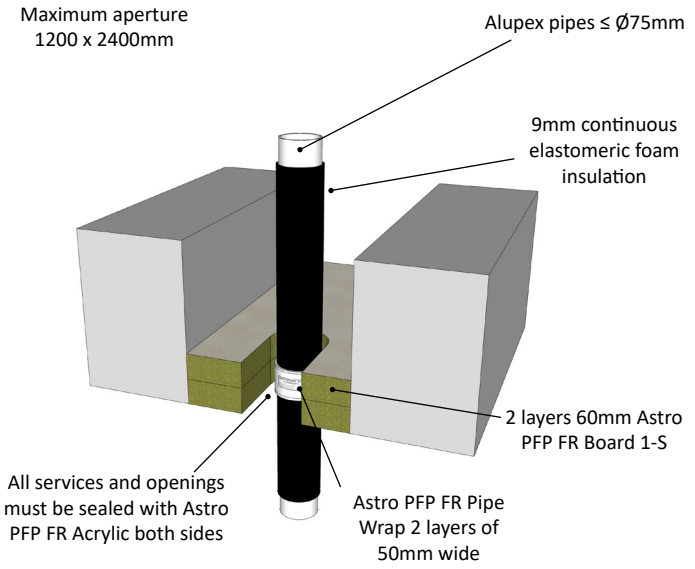
COPPER PIPES FIRE RESISTANCE E 120 C/U

RIGID FLOORS



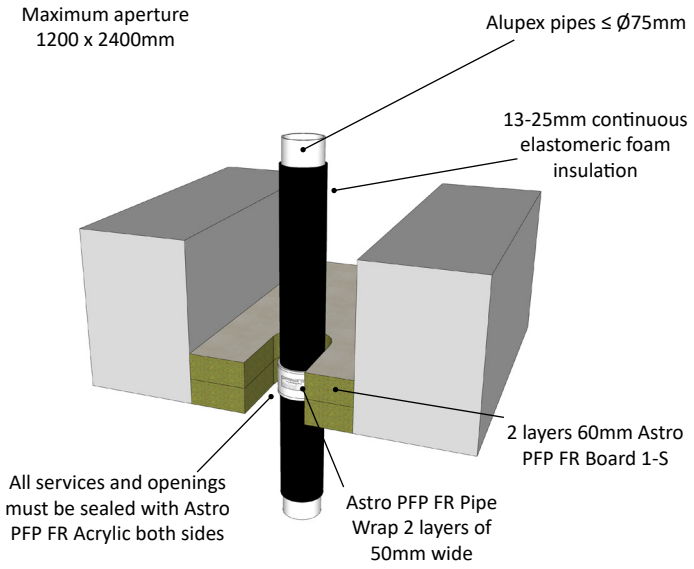
ALUPEX PIPES FIRE RESISTANCE EI 120 C/C (E 120)

RIGID FLOORS



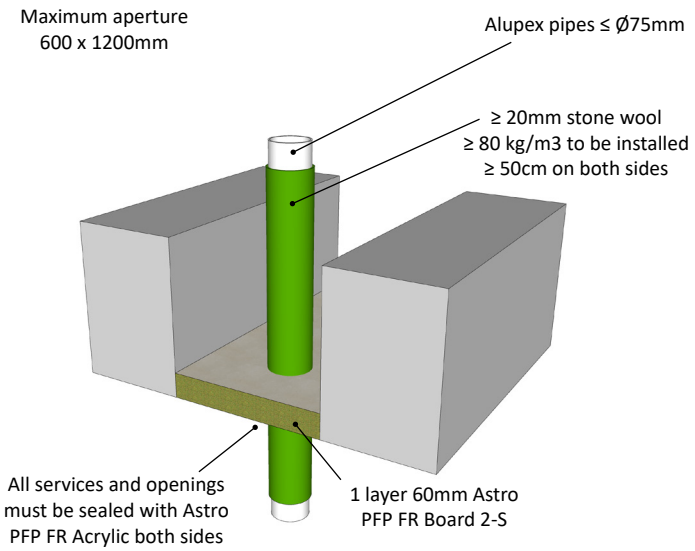
ALUPEX PIPES FIRE RESISTANCE EI 45 C/C (E 60)

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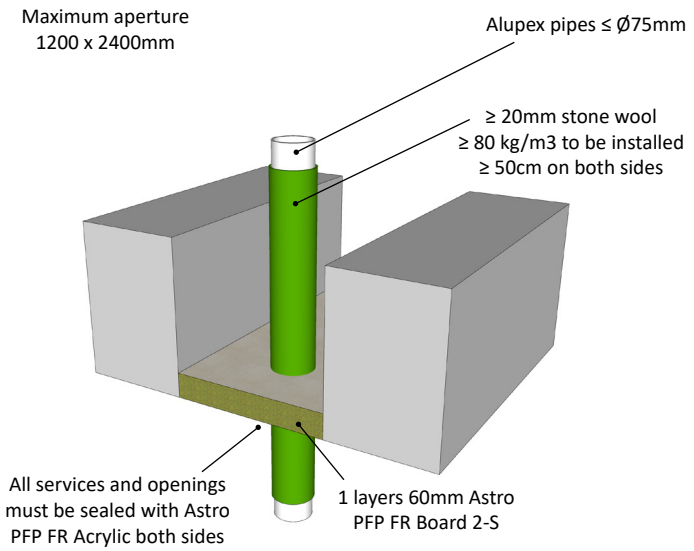
ALUPEX PIPES FIRE RESISTANCE EI 90 C/C (E 240)

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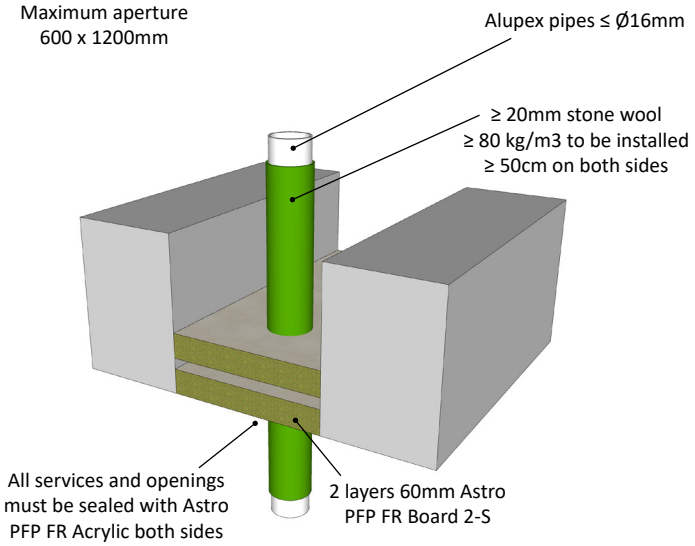
ALUPEX PIPES FIRE RESISTANCE EI 45 C/C (E 60)

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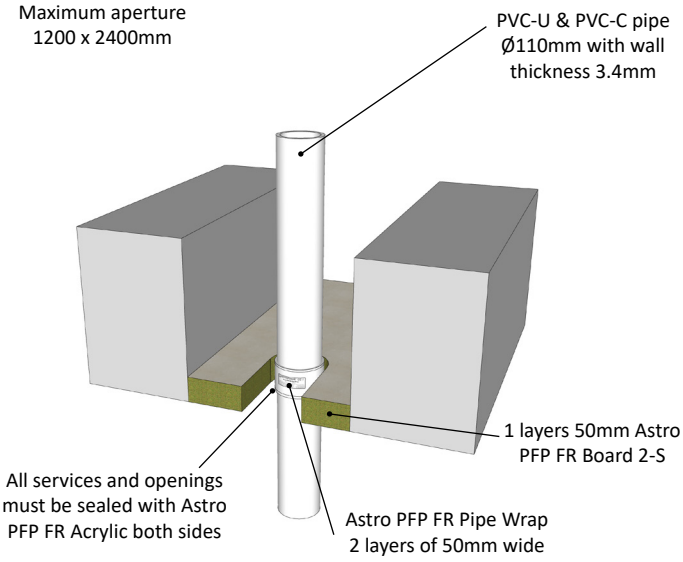
ALUPEX PIPES FIRE RESISTANCE EI 180 C/C (E 240)

RIGID FLOORS



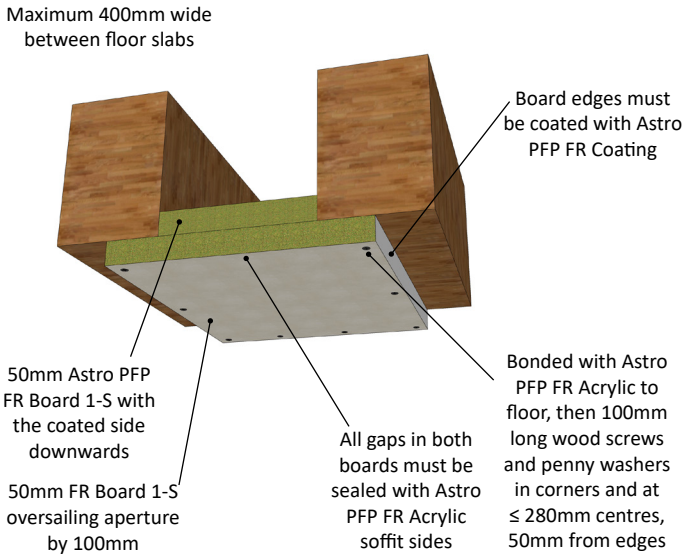
PVC PIPES FIRE RESISTANCE EI 90 U/C (E 90)

RIGID FLOORS



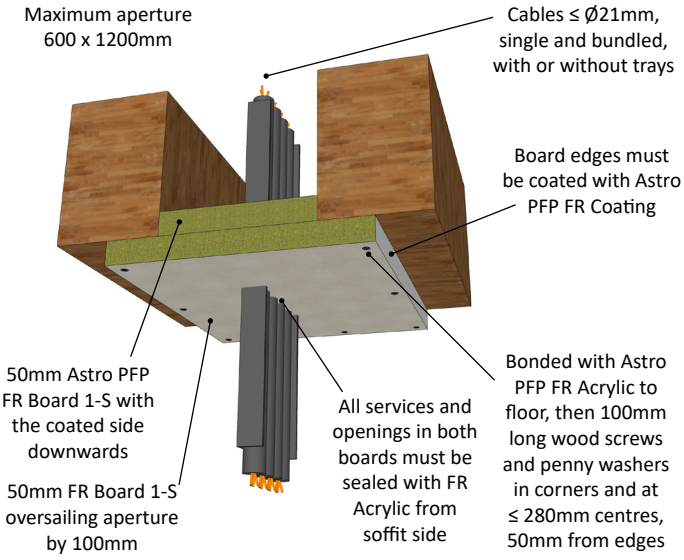
LINEAR SEALS FIRE RESISTANCE EI 90 (E 90)

TIMBER & RIGID FLOORS



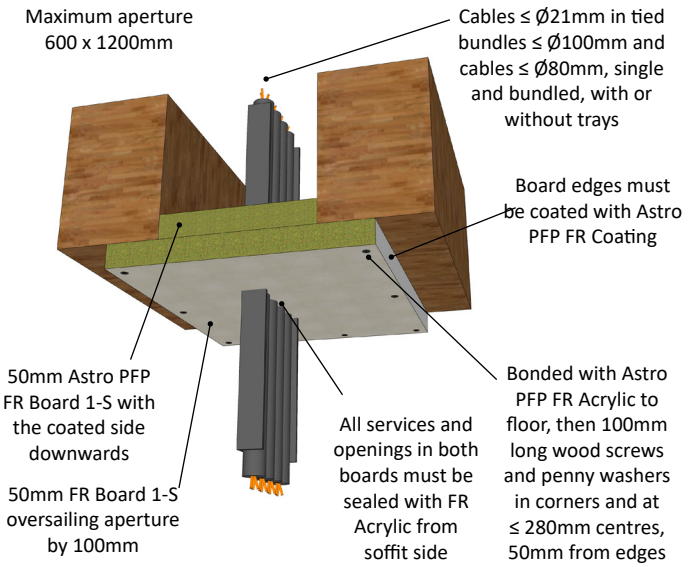
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 45 (E 90)

TIMBER & RIGID FLOORS



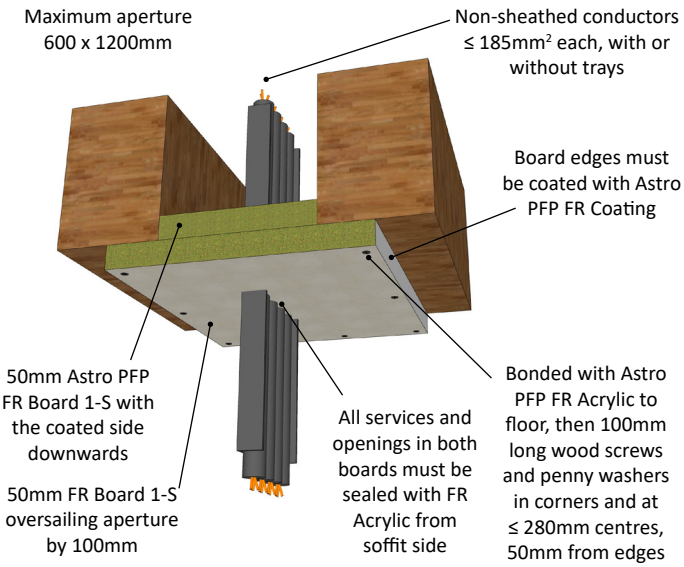
CABLES AND CABLE TRAYS FIRE RESISTANCE EI 60 (E 90)

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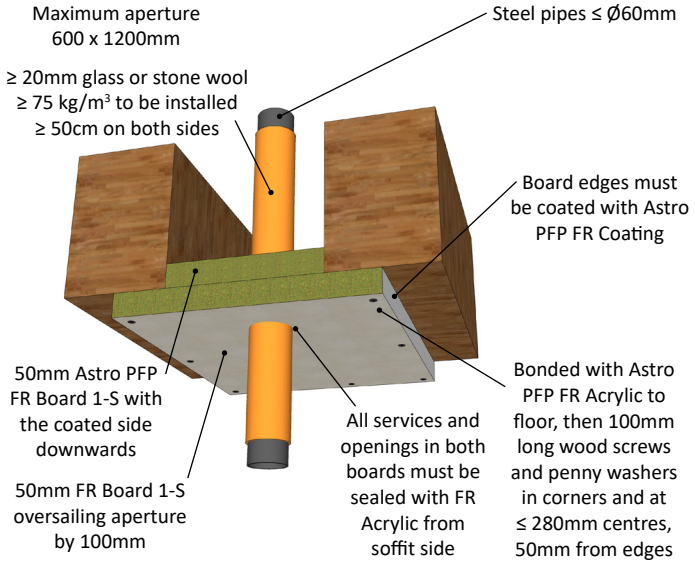
CONDUCTORS AND CABLE TRAYS FIRE RESISTANCE EI 30 (E 90)

TIMBER & RIGID FLOORS



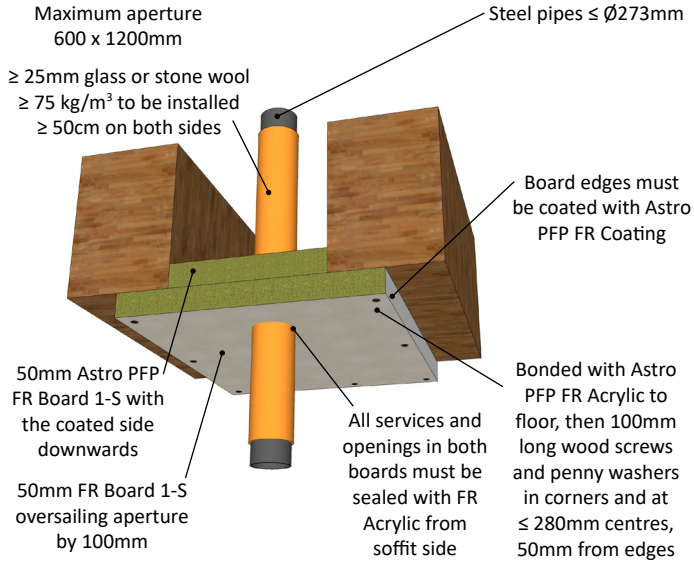
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

TIMBER & RIGID FLOORS



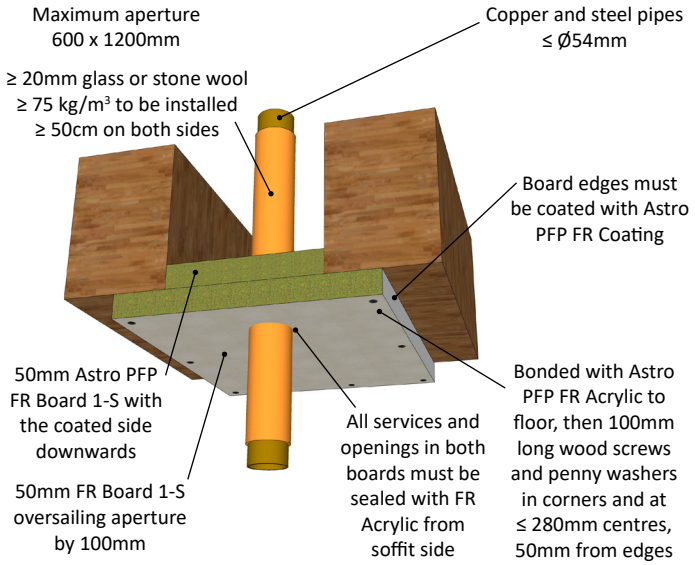
STEEL PIPES FIRE RESISTANCE EI 60 C/U (E 90)

TIMBER & RIGID FLOORS



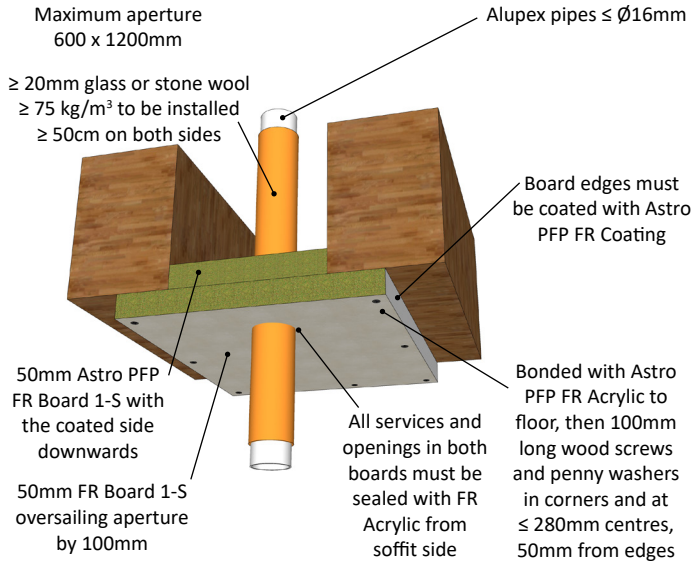
COPPER & STEEL PIPES FIRE RESISTANCE EI 90 C/C (E 90)

TIMBER & RIGID FLOORS



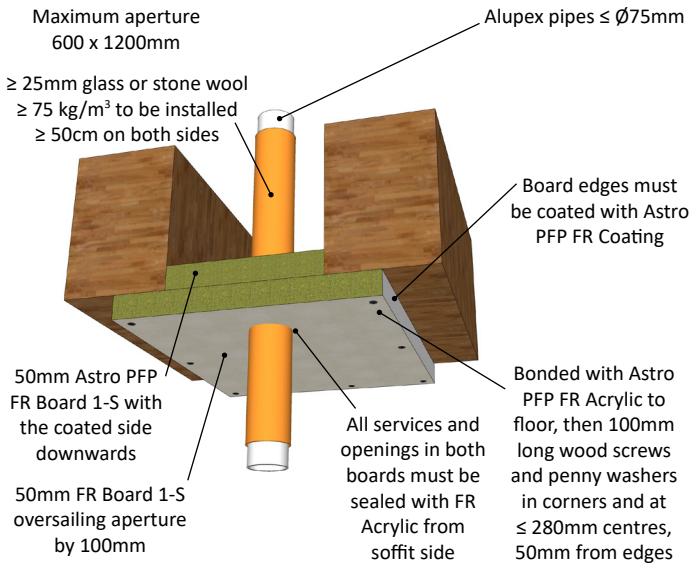
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 90)

TIMBER & RIGID FLOORS



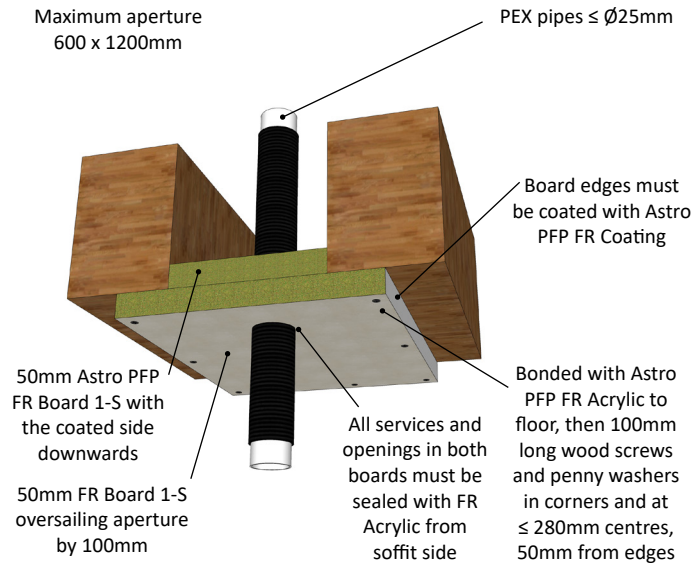
ALUPEX PIPES FIRE RESISTANCE EI 60 C/C (E 90)

TIMBER & RIGID FLOORS



PEX PIPE IN PIPES SYSTEM FIRE RESISTANCE EI 90 (E 90)

TIMBER & RIGID FLOORS



INDEX

Drywalls and rigid walls

> Services	> Wall thickness	> Seal type	> Service insulation	> Page
Linear seals	75mm	Normal	-	2
"	100mm	Normal	-	2
Cables and cable trays	75mm	Normal	-	2-3
"	100mm	Framed	-	3
"	100mm	Normal	-	3
"	100mm	Pattress	-	3
Steel pipes	75mm	Normal	-	4
"	75mm	Normal	Coat-back	4
"	100mm	Normal	-	4-5
"	100mm	Normal	Coat-back	5
"	120mm	Normal	-	5
"	100mm	Pattress	-	6
"	100mm	Pattress	Coat-back	6
"	75mm	Normal	Elastomeric & PE, continuous	6
"	100mm	Normal	Elastomeric & PE, continuous	6 - 7
"	100mm	Pattress	Elastomeric & PE, continuous	7
"	75mm	Normal	Phenolic, continuous	7
"	100mm	Normal	Phenolic, continuous	7 - 8
"	100mm	Pattress	Phenolic, continuous	8
"	75mm	Normal	Stonewool, continuous	8
"	100mm	Framed	Stonewool, continuous	8
"	100mm	Normal	Stonewool, continuous	8
"	100mm	Pattress	Stonewool, continuous	8
"	75mm	Normal	Stonewool, interrupted	8 - 9
"	100mm	Normal	Stonewool, interrupted	9
"	100mm	Pattress	Stonewool, interrupted	9
Copper pipes	75mm	Normal	-	9
"	100mm	Normal	-	9
"	120mm	Normal	-	10
"	100mm	Pattress	-	10
"	75mm	Normal	Elastomeric & PE, continuous	10
"	100mm	Framed	Elastomeric & PE, continuous	10
"	100mm	Normal	Elastomeric & PE, continuous	10
"	100mm	Pattress	Elastomeric & PE, continuous	11
"	75mm	Normal	Glass- & stonewool, continuous	11
"	100mm	Framed	Glass- & stonewool, continuous	12
"	100mm	Normal	Glass- & stonewool, continuous	12
"	100mm	Pattress	Glass- & stonewool, continuous	12
"	75mm	Normal	Stonewool, interrupted	13
"	100mm	Framed	Glass- & stonewool, interrupted	13
"	100mm	Normal	Stonewool, interrupted	13
"	100mm	Pattress	Stonewool, interrupted	13
Alupex pipes	75mm	Normal	-	13
"	100mm	Normal	-	13
"	120mm	Normal	-	14
"	100mm	Pattress	-	14
"	75mm	Normal	Elastomeric & PE, continuous	14
"	100mm	Framed	Elastomeric & PE, continuous	14
"	100mm	Normal	Elastomeric & PE, continuous	15
"	100mm	Pattress	Elastomeric & PE, continuous	15

Drywalls and rigid walls

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Alupex pipes	75mm	Normal	Glass- & stonewool, continuous	15
"	100mm	Framed	Glass- & stonewool, continuous	15
"	100mm	Normal	Glass- & stonewool, continuous	15
"	100mm	Pattress	Glass- & stonewool, continuous	15
"	75mm	Normal	Stonewool, interrupted	16
"	100mm	Normal	Stonewool, interrupted	16
"	100mm	Pattress	Stonewool, interrupted	16
PVC pipes, small, w/o pipe wraps	75mm	Normal	-	16
"	100mm	Normal	-	16
"	100mm	Pattress	-	17
PE & ABS pipes, small, w/o wraps	75mm	Normal	-	17
"	100mm	Normal	-	17
"	100mm	Pattress	-	17
PP pipes, small, w/o pipe wraps	75mm	Normal	-	17
"	100mm	Normal	-	17
"	100mm	Pattress	-	18
Plastic pipes, large	75mm	Normal	-	19
"	100mm	Framed	-	19
"	100mm	Normal	-	19
"	120mm	Normal	-	20
"	100mm	Pattress	-	20
PE & ABS pipes	75mm	Normal	Elastomeric & PE, continuous	21
"	100mm	Normal	Elastomeric & PE, continuous	21
"	100mm	Pattress	Elastomeric & PE, continuous	22
PP pipes	75mm	Normal	Elastomeric & PE, continuous	22
"	100mm	Normal	Elastomeric & PE, continuous	23
"	100mm	Pattress	Elastomeric & PE, continuous	23
Plastic conduits	75mm	Normal	-	24
"	100mm	Normal	-	24
"	100mm	Pattress	-	25
Bundled plastic pipes and conduits	75mm	Normal	-	25
"	100mm	Normal	-	25
"	100mm	Pattress	-	25
PEX pipe-in-pipes	75mm	Normal	-	26
"	100mm	Normal	-	26
"	100mm	Pattress	-	27
Aquatherm Green pipes	75mm	Normal	-	27
"	100mm	Normal	-	28
"	100mm	Pattress	-	28
Bluepower pipes	75mm	Normal	-	28
"	100mm	Normal	-	29
"	100mm	Pattress	-	29
Geberit Silent pipes	75mm	Normal	-	29
"	100mm	Normal	-	30
"	100mm	Pattress	-	30
POLO-KAL NG pipes	75mm	Normal	-	30
"	100mm	Normal	-	31
"	100mm	Pattress	-	31
Rehau Raupiano pipes	75mm	Normal	-	31
"	100mm	Normal	-	32
"	100mm	Pattress	-	32
Uponor Decibel pipes	75mm	Normal	-	32
"	100mm	Normal	-	33
"	100mm	Pattress	-	33

Drywalls and rigid walls

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Wavin SiTech pipes	75mm	Normal	-	33
"	100mm	Normal	-	34
"	100mm	Pattress	-	34

Timber walls

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Linear seals	100mm	Pattress	-	34
Cables and cable trays	100mm	Pattress	-	34 - 35
Steel pipes	100mm	Pattress	-	35
"	100mm	Pattress	Coat-back	35 - 36
"	100mm	Pattress	Elastomeric & PE, continuous	36
"	100mm	Pattress	Phenolic, continuous	36 - 37
"	100mm	Pattress	Stonewool, continuous	37
"	100mm	Pattress	Stonewool, interrupted	37
Copper pipes	100mm	Pattress	-	37 - 38
"	100mm	Pattress	Elastomeric & PE, continuous	38
"	100mm	Pattress	Glass- & stonewool, continuous	38 - 39
"	100mm	Pattress	Stonewool, interrupted	39
Alupex pipes	100mm	Pattress	-	39
"	100mm	Pattress	Elastomeric & PE, continuous	39
"	100mm	Pattress	Glass- & stonewool, continuous	39
"	100mm	Pattress	Stonewool, interrupted	40
Plastic pipes, small, w/o pipe wraps	100mm	Pattress	-	40
Plastic pipes, large	100mm	Pattress	-	41
PE & ABS pipes	100mm	Pattress	Elastomeric & PE, continuous	41
PP pipes	100mm	Pattress	Elastomeric & PE, continuous	41 - 42
Plastic conduits	100mm	Pattress	-	42
Bundled plastic pipes and conduits	100mm	Pattress	-	42
PEX pipe-in-pipes	100mm	Pattress	-	43
Aquatherm Green pipes	100mm	Pattress	-	43
Bluepower pipes	100mm	Pattress	-	44
Geberit Silent pipes	100mm	Pattress	-	44
POLO-KAL NG pipes	100mm	Pattress	-	44
Rehau Raupiano pipes	100mm	Pattress	-	45
Uponor Decibel pipes	100mm	Pattress	-	45
Wavin SiTech pipes	100mm	Pattress	-	45

Rigid walls, additional items

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Linear seals	75mm	Normal	-	46
"	150mm	Normal	-	46
Cables and cable trays	75mm	Normal	-	46
"	150mm	Normal	-	46 - 48
"	150mm	Pattress		48
Steel pipes	75mm	Normal	Elastomeric & PE, continuous	48
"	75mm	Normal	Stonewool, continuous	49
"	150mm	Normal	Stonewool, continuous	49 - 50
"	75mm	Normal	Stonewool, interrupted	50
"	150mm	Normal	Stonewool, interrupted	50 - 51
Copper pipes	75mm	Normal	Elastomeric & PE, continuous	51
"	75mm	Normal	Glass- & stonewool, continuous	51
"	75mm	Normal	Glass- & stonewool, interrupted	51
"	75mm	Normal	Stonewool, interrupted	52
"	150mm	Normal	Stonewool, interrupted	52
Alupex pipes	75mm	Normal	Glass- & stonewool, continuous	52
"	75mm	Normal	Stonewool, interrupted	53
"	150mm	Normal	Stonewool, interrupted	53
Plastic pipes, small, w/o pipe wraps	150mm	Normal	-	53
Bundled plastic pipes	150mm	Normal	-	53
Plastic pipes, large	75mm	Normal	-	54
"	150mm	Normal	-	54

Rigid floors

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Linear seals	150mm	Normal	-	54 - 55
Cables and cable trays	150mm	Normal	-	55 - 56
Steel pipes	150mm	Normal	-	56
"	150mm	Normal	Elastomeric, continuous	56 - 57
"	150mm	Normal	Stonewool, continuous	57
"	150mm	Normal	Stonewool, interrupted	57 - 58
Copper pipes	150mm	Normal	Elastomeric, continuous	58
"	150mm	Normal	Stonewool, interrupted	59
Alupex pipes	150mm	Normal	Elastomeric, continuous	59
"	150mm	Normal	Stonewool, interrupted	59 - 60
Plastic pipes	150mm	Normal	-	60

Timber & rigid floors

> Services	> Wall thickness	> Seal type	> Service insulation	> Page/drawing no.
Linear seals	150mm	Pattress	-	60
Cables and cable trays	150mm	Pattress	-	60
Steel pipes	150mm	Pattress	Glass & stonewool, interrupted	61
Copper pipes	150mm	Pattress	Glass & stonewool, interrupted	61
Alupex pipes	150mm	Pattress	Glass & stonewool, interrupted	61
PEX pipe-in-pipes	150mm	Pattress	-	61

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