

### DWG

Falcon Acoustics & Passive Fire Solutions Pvt. Ltd. Plot No 60/A, Kandivali Industrial Area, Charkop, Kandivali (W), Mumbai -400067. Tel: +91 22 28699520 +91 22 28672800, Web Site: www.falcontechno.in PROJECT NAME: ETERNIA LOCATION: Tower A,B,C,D **Document Title: Drawings for Fire Sealant Application** Date of Issue: 09-02-2022 Document No./Submittal:ET-FAL-MEP-DWG-0001 Revision Number: R0 Consultants: Contractor: Falcon Acoustics & Passive Fire Protection Pvt. Ltd. Pre-Qlfctn Method Work Program PQP Test Results Surveys Statemnt Calcultns Certificate Warranty O & M HSE Others Manuals Submittal Originator: Falcon Acoustics & Passive Fire Protection Pvt. Ltd. Date: 09-02-2022 Co-ordination Sign off: Prashant Ravindran Date: 09-02-2022 Planned Submission: Actual Submission: 09-02-2022 Approval Reqd By: Submittal Received: <Consultant /Employer> Date: The Contractor hereby certifies that the documents/data submitted are in accordance with the contract conditions, scope of works and local regulations and building standards **Engineers Review and Comments** Approvals Code A - NO OBJECTION Code B - NO OBJECTION WITH COMMENTS Code C - OBJECTION Code D - FOR INFO & RECORDS ONLY **Consultant Review Comments** Employer's (ORL HO) Comments NOTE: The concerned contractor's action is required within 3 days. Approval of the Documents/Data does not relieve the Contractor of his obligation in completing the works in accordance with contract documents, drawings and any applicable local regulations and standards Released by: < Name > CDate & Signature > Falcon Acoustics & Passive Fire Solutions Pvt Ltd Prashant Ravindran 09-02-2022 Released by: < Name > < Date & Signature > Oberoi Construction Limited Kaustubh Burange

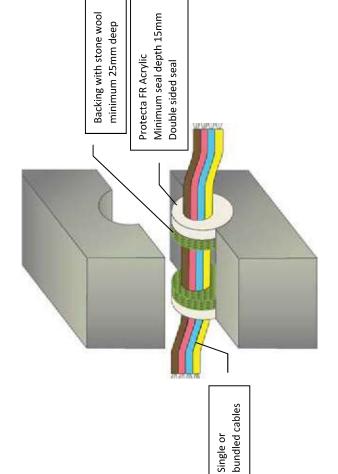
R03: Sep-16 ORL-HO-DCM-FM-0007

## Installation Instructions

- 1. Before installing Protecta® FR Acrylic ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.
- appropriate surface preparation should be made Where Protecta® FR Acrylic is to be installed against (contact Polyseam for guidance in these cases). For paints sensitive to sealing compounds, priming with surfaces that cannot tolerate direct contact; a PVA primer is recommended. ۲,
- When installing any backing material, cut this slightly oversize and insert into the gap ensuring a tight friction fit. Ensure correct depth is achieved.
- Fill the gap or joint with Protecta® FR Acrylic to the required depth. 4.
- Finish the bead with a moist spatula, pallet knife or Apply the sealant generously to prevent air bubbles.

Single or

Protecta® FR Acrylic can be over-painted with most emulsion or alkyd (gloss) paints. 9.



Minimum wall thickness of 150

Construction

aerated concrete or masonry, with a density of  $\geq 650 \text{ kg/m}^3$ 

mm and comprise concrete,

Fire stopping of cables in rigid

Application

walls

Protecta FR Acrylic

Products

Job Title:

Client:

Stone wool

EI 120 & E 240

≤ Ø100mm in maximum aperture 300x300mm

Cables ≤ Ø21mm single or in a bundle

Fire & Sound classification

EI 60 & E 120

≤ Ø100mm in maximum aperture 300x300mm

Cables ≤ Ø80mm single or in a bundle

Rw 62 dB

Sound reduction (seal only)



Huddersfield, West Yorkshire, HD1 6SB Polyseam Ltd, 15 St Andrews Road, Tel: +44 (0) 148 4421036 For all technical details on the products specified

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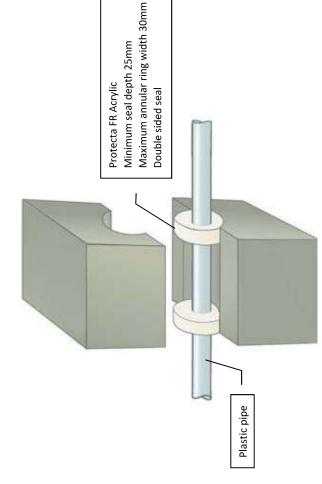
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## Installation Instructions

- 1. Before installing Protecta® FR Acrylic ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.
- appropriate surface preparation should be made Where Protecta® FR Acrylic is to be installed against paints sensitive to sealing compounds, priming with (contact Polyseam for guidance in these cases). For surfaces that cannot tolerate direct contact; a PVA primer is recommended.
- When installing any backing material, cut this slightly oversize and insert into the gap ensuring a tight friction fit. Ensure correct depth is achieved.
- Fill the gap or joint with Protecta® FR Acrylic to the required depth. 4.
- Finish the bead with a moist spatula, pallet knife or Apply the sealant generously to prevent air bubbles.
- Protecta® FR Acrylic can be over-painted with most emulsion or alkyd (gloss) paints 9



EI 90 U/C & E 120 U/C

PVC-U or PVC-C pipe ≤ Ø32mm with wall

thickness 1.0-2.4mm

EI 120 U/C & E 120 U/C

thickness 2.0mm

PE, ABS or SAN+PVC pipe Ø20mm with wall

EI 120 C/C & E 120 C/C

PVC-U or PVC-C pipe ≤ Ø32mm with wall

thickness 1.0-1.6mm

Fire & Sound classification

Fire stopping of plastic pipes in

Application

**Products** 

Job Title:

Client:

Protecta FR Acrylic

Minimum wall thickness of 100

Construction

rigid walls

aerated concrete or masonry, with a density of ≥ 650 kg/m³

mm and comprise concrete,

EI 120 U/C & E 120 U/C

PP pipe Ø20mm with wall thickness 2.2mm

EI 60 C/C & E 60 C/C

PP pipe ≤ Ø32mm with wall thickness

1.8-4.4mm

Rw 62dB

Sound reduction (seal only)

EI 90 C/C & E 90 C/C

thickness 2.0-3.0mm

PE, ABS or SAN+PVC pipe ≤ Ø32mm with wall

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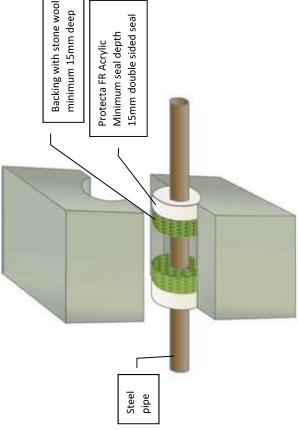
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## Installation Instructions

- 1. Before installing Protecta® FR Acrylic ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.
- appropriate surface preparation should be made Where Protecta® FR Acrylic is to be installed against (contact Polyseam for guidance in these cases). For paints sensitive to sealing compounds, priming with surfaces that cannot tolerate direct contact; a PVA primer is recommended. ۲,
- As Protecta® FR Acrylic is water based, in cases where corrosion protection is a problem; some metals may require a barrier between the sealant and the metal surface prior to this installation.
- oversize and insert into the gap ensuring a tight When installing any backing material, cut this slightly friction fit. Ensure correct depth is achieved. 4.
- Fill the gap or joint with Protecta® FR Acrylic to the required depth.
- Apply the sealant generously to prevent air bubbles. Finish the bead with a moist spatula, pallet knife or 9
- Protecta® FR Acrylic can be over-painted with most emulsion or alkyd (gloss) paints.



Minimum wall thickness of 120

Construction

aerated concrete or masonry, with a density of  $\geq 650 \text{ kg/m}^3$ 

Fire & Sound classification

mm and comprise concrete,

Fire stopping of steel pipes in rigid walls

Application

Protecta FR Acrylic

Products

Job Title:

Client:

Stone wool

Steel pipe ≤ Ø324mm without pipe insulation in maximum aperture 300x300mm or Ø344mm Sound reduction (seal only)

E 120 C/U

Rw 62dB



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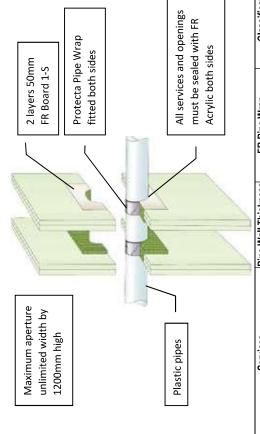
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# Installation Instructions

- 1. Before installing Protecta® FR Board ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.
- The coated side of the board should be flush with the surface of the drywall on both sides. ۲,
- dimensions and type and size of service penetration(s). All exposed and cut edges of the board can be sealed with Protecta® FR Coating or Cut the required board(s) to suit the aperture Protecta® FR Acrylic prior to fitting which will act as an adhesive and ensure a smoke tight seal. m.
  - All joints, gaps or imperfections in the installed seal must be filled with Protecta® FR Acrylic on both 4
- Protecta® FR Board can be over-painted with most emulsion or alkyd (gloss) paints. 5



Fire stopping of plastic pipes in

Application

flexible walls

Protecta FR Pipe Wrap 25m

Protecta FR Acrylic Protecta FR Board

Products

Job Title:

Client:

Minimum wall thickness of 100

Construction

faces with minimum 2 layers of or timber studs\* lined on both mm and comprise steel studs

12.5 mm thick boards

Fire & Sound classification

Services	Pipe Wall Thickness	FR Pipe Wrap	Classification
≤Ø40mm PVC-U & PVC-C	1.9 – 3.0mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤Ø40mm PE, ABS & SAN+PVC	2.4 – 3.7mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤Ø40mm PP	1.8 – 5.5mm	50 x 1.8mm (1 layer)	EI 120 U/U (E 120 U/U)
≤Ø110mm PVC-U & PVC-C	2.7 – 6.6mm	50 x 3.6mm (2 layers)	EI 90 U/C (E 120 U/C)
≤Ø110mm 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	9.5mm	50 x 7.2mm (4 layers)	EI 90 U/C (E 120 U/C)
≤Ø 160mm PE, ABS & SAN+PVC	14.6mm	50 x 7.2mm (4 layers)	EI 90 U/C (E 120 U/C)
≤ Ø 160mm PP	21.9mm	50 x 7.2mm (4 layers)	EI 90 U/C (E 120 U/C)
≤Ø200mm PVC-U & PVC-C	9.0 – 10.2mm	50 x 18.0mm (10 layers)	EI 90 C/C (E 90 C/C)
≤ Ø 250mm PVC-U & PVC-C	8.5 – 11.0mm	50 x 18.0mm (10 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 400mm PVC-U & PVC-C	9.8 – 15.3mm	50 x 28.8mm (16 layers)	EI 90 C/C (E 90 C/C)

52 dB

Sound reduction (seal only)

For fire classifications please see the table on the left.

Minimum separations and limitations An aperture can include several services, and they may also be different. The minimum permitted separation between adjacent seals/apertures is 200mm. Services plastic pipe penetrations which should be a minimum of 30 mm from other services in the aperture. should be a minimum of 25mm from seal edges. Services within the system Protecta® FR Board seal do not require a minimum separation, except pipes where pipe insulation penetrates the seal and The total amount of cross sections of services should not exceed 60% of the penetration area.

ETA 13/0673 & 18/0855

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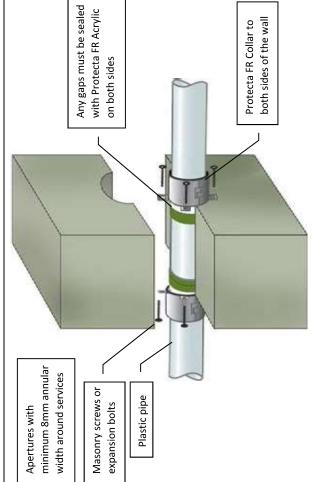
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## Installation Instructions

- Before fitting the collars ensure that the gaps between the pipe and the separating element are sealed with minimum 25mm deep Protecta FR Acrylic to cover the opening.
- 2. Place a suitable collar around the pipe and ensure that the collar shell and fixing lugs are positioned tightly to the surface of the wall, so that the fixings can be inserted fully.
- Where the surface is uneven, apply a sealing bead of Protecta® FR Acrylic between the wall and the collar shell.
- 4. Attach the collar with  $\geq \emptyset 4 \times 40$ mm long masonry screws or expansion bolts.



Fire stopping of plastic pipes in

Application

igid walls

Protecta FR Collar Protecta FR Acrylic

Products

Job Title:

Client:

Minimum wall thickness of 120

Construction

aerated concrete or masonry, with a density of ≥ 650 kg/m³

mm and comprise concrete,

Fire classifications in table on the left. For full specifications, please refer to the Installation

Instructions.

Fire & Sound classification

	Minimum Collar Height	Glassification
≤ Ø110mm PVC-U & PVC-C	50mm	EI 120 C/C
S 0160mm PVC-U & PVC-C	ww09	EI 120 C/C
≤ Ø50mm PE, ABS & SAN+PVC	20mm	EI 120 C/C
< Ø110mm PE, ABS & SAN+PVC	20mm	EI 90 C/C (E 120)
Ø110x3.4mm PE, ABS & SAN+PVC	20mm	EI 120 C/C
< Ø160mm PE, ABS & SAN+PVC	ww09	EI 90 C/C
Ø160x9.5mm PE, ABS & SAN+PVC	ww09	EI 120 C/C
	20mm	EI 120 C/C
≤ Ø110mm PP	20mm	EI 90 C/C (E 120)
≤ Ø140mm PP	ww09	EI 90 C/C (E 120)
Ø160mm PP	ww09	EI 120 C/C



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	Signed and approved:
	be found on www.protecta.eu
_	please refer to the technical data sheets that can
	For all technical details on the products specified

Sound reduction (seal only)	(seal only) Rw 58dB
Polymers	Protecta:
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