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 Statemnt	Work Program	PQP	Test Results	Surveys	
Calcultns	Certificate	Warranty	O & M Manuals	HSE	Others	

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

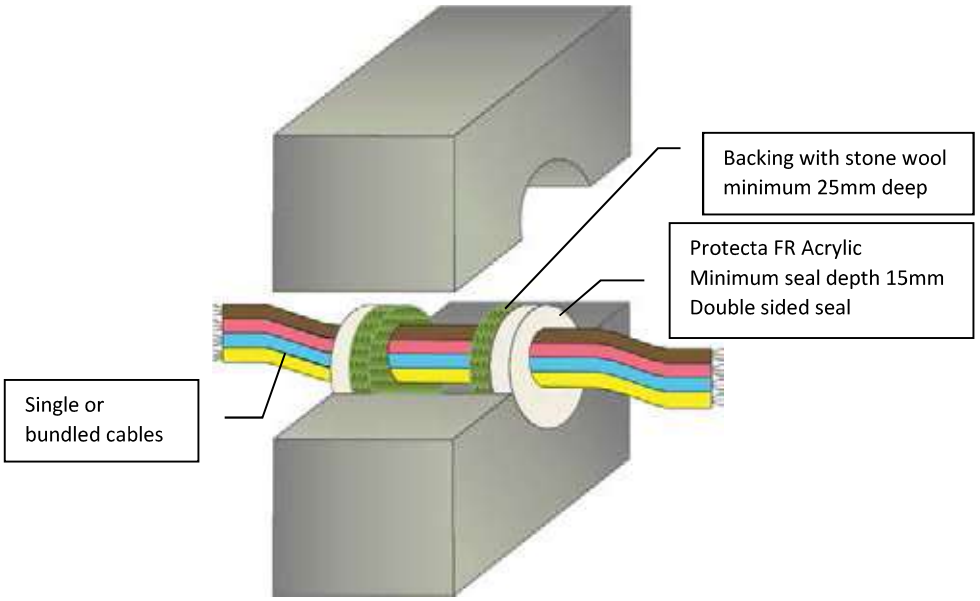
NOTE: The concerned contractor's action is required within 3 days.

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 >***	*< Date & Signature >*
Falcon Acoustics & Passive Fire Solutions Pvt Ltd	Prashant Ravindran	*09-02-2022*
Released by:	***< Name >***	*< Date & Signature >*
Oberoi Construction Limited	Kaustubh Burange	

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



ETA 18/0904

Client:

Job Title:

Products	Protecta FR Acrylic Stone wool
Application	Fire stopping of cables in rigid walls
Construction	Minimum wall thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a density of ≥ 650 kg/m³

Fire & Sound classification

Cables ≤ Ø21mm single or in a bundle
≤ Ø100mm in maximum aperture 300x300mm
EI 120 & E 240

Cables ≤ Ø80mm single or in a bundle
≤ Ø100mm in maximum aperture 300x300mm
EI 60 & E 120

Sound reduction (seal only) Rw 62 dB

Polyseam Ltd, 15 St Andrews Road,
Huddersfield, West Yorkshire, HD1 6SB
Tel: +44 (0) 148 4421036
Email: post.uk@polyseam.com

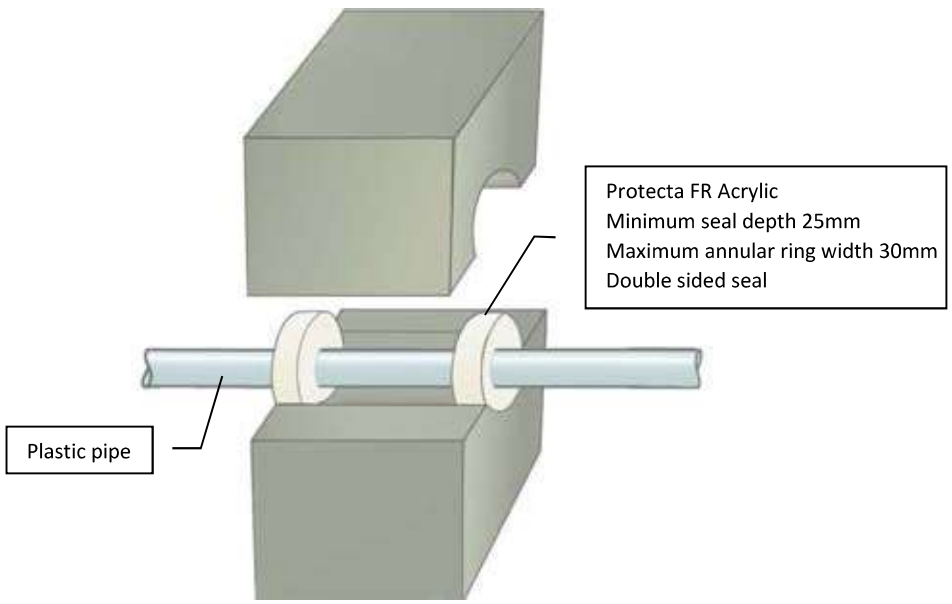
For all technical details on the products specified please refer to the technical data sheets that can be found on www.protecta.eu

Signed and approved:

Sheet size: **A4**	Drawn date & no: 7/3/15
Scale: **NTS**	Drawn by: K.B

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



Client:

Job Title:

Products	Protecta FR Acrylic
Application	Fire stopping of plastic pipes in rigid walls
Construction	Minimum wall thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a density of ≥ 650 kg/m³

Fire & Sound classification

PVC-U or PVC-C pipe ≤ Ø32mm with wall thickness 1.0-1.6mm — EI 120 C/C & E 120 C/C

PVC-U or PVC-C pipe ≤ Ø32mm with wall thickness 1.0-2.4mm — EI 90 U/C & E 120 U/C

PE, ABS or SAN+PVC pipe Ø20mm with wall thickness 2.0mm — EI 120 U/C & E 120 U/C

PE, ABS or SAN+PVC pipe ≤ Ø32mm with wall thickness 2.0-3.0mm — EI 90 C/C & E 90 C/C

PP pipe Ø20mm with wall thickness 2.2mm — EI 120 U/C & E 120 U/C

PP pipe ≤ Ø32mm with wall thickness 1.8-4.4mm — EI 60 C/C & E 60 C/C

Sound reduction (seal only) — Rw 62dB

ETA 18/0904

Protecta®
Polyseam Ltd, 15 St Andrews Road,
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Tel: +44 (0) 148 4421036
Email: post.uk@polyseam.com

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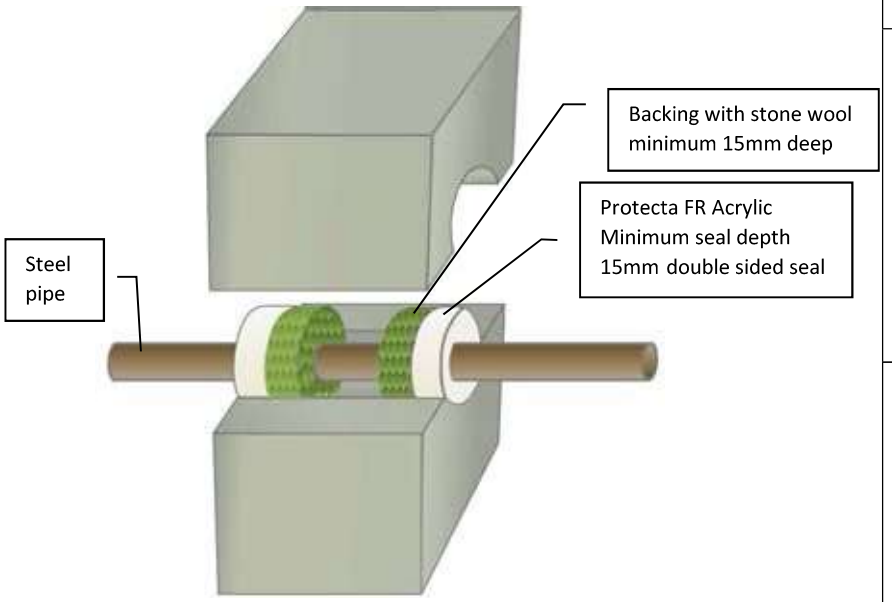
Scale:	Drawn by:
NTS	K.B

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.
2. Where Protecta® FR Acrylic is to be installed against surfaces that cannot tolerate direct contact; appropriate surface preparation should be made (contact Polyseam for guidance in these cases). For paints sensitive to sealing compounds, priming with a PVA primer is recommended.
3. 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.
4. When installing any backing material, cut this slightly oversize and insert into the gap ensuring a tight friction fit. Ensure correct depth is achieved.
5. Fill the gap or joint with Protecta® FR Acrylic to the required depth.
6. Apply the sealant generously to prevent air bubbles. Finish the bead with a moist spatula, pallet knife or brush.
7. Protecta® FR Acrylic can be over-painted with most emulsion or alkyd (gloss) paints.



ETA 18/0904

Client:

Job Title:

Products	Protecta FR Acrylic Stone wool
Application	Fire stopping of steel pipes in rigid walls
Construction	Minimum wall thickness of 120 mm and comprise concrete, aerated concrete or masonry, with a density of ≥ 650 kg/m³

Fire & Sound classification

Steel pipe ≤ Ø324mm without pipe insulation in maximum aperture 300x300mm or Ø344mm

E 120 C/U

Sound reduction (seal only)

Rw 62dB

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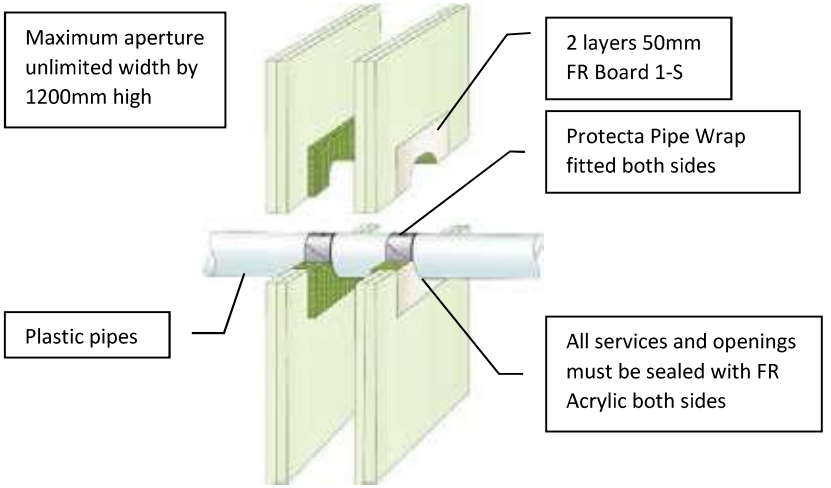
Scale: **NTS**	Drawn by: K.B

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.
2. The coated side of the board should be flush with the surface of the drywall on both sides.
3. 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 Protecta® FR Coating or Protecta® FR Acrylic prior to fitting which will act as an adhesive and ensure a smoke tight seal.
4. All joints, gaps or imperfections in the installed seal must be filled with Protecta® FR Acrylic on both sides.
5. Protecta® FR Board can be over-painted with most emulsion or alkyd (gloss) paints.



Services	Pipe Wall Thickness	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	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)
≤ Ø 200mm 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)

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 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 plastic pipe penetrations which should be a minimum of 30 mm from other services in the aperture. The total amount of cross sections of services should not exceed 60% of the penetration area.

ETA 13/0673 & 18/0855

Client:

Job Title:

Products Protecta FR Board
Protecta FR Acrylic
Protecta FR Pipe Wrap 25m

Application Fire stopping of plastic pipes in flexible walls

Construction Minimum wall thickness of 100 mm and comprise steel studs or timber studs* lined on both faces with minimum 2 layers of 12.5 mm thick boards

Fire & Sound classification

For fire classifications please see the table on the left.

Sound reduction (seal only)
52 dB

Polyseam Ltd, 15 St Andrews Road, Huddersfield, West Yorkshire, HD1 6SB
Tel: +44 (0) 148 4421036
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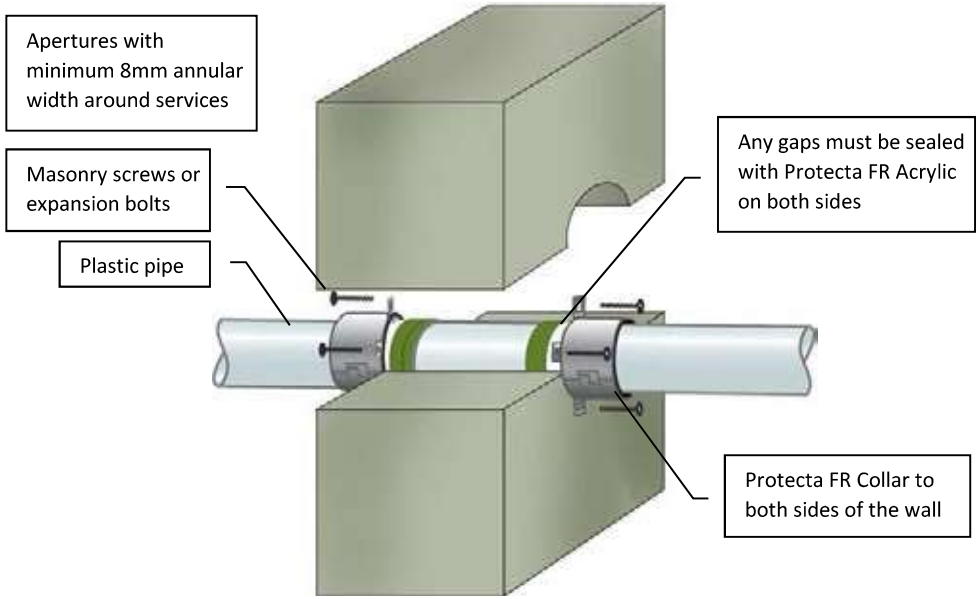
Installation Instructions

1. 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.
3. 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 ≥ Ø4 x 40mm long masonry screws or expansion bolts.



Services	Minimum Collar Height	Classification
≤ Ø110mm PVC-U & PVC-C	50mm	EI 120 C/C
≤ Ø160mm PVC-U & PVC-C	60mm	EI 120 C/C
≤ Ø50mm PE, ABS & SAN+PVC	50mm	EI 120 C/C
≤ Ø110mm PE, ABS & SAN+PVC	50mm	EI 90 C/C (E 120)
Ø110x3.4mm PE, ABS & SAN+PVC	50mm	EI 120 C/C
≤ Ø160mm PE, ABS & SAN+PVC	60mm	EI 90 C/C
Ø160x9.5mm PE, ABS & SAN+PVC	60mm	EI 120 C/C
≤ Ø50mm PP	50mm	EI 120 C/C
≤ Ø110mm PP	50mm	EI 90 C/C (E 120)
≤ Ø140mm PP	60mm	EI 90 C/C (E 120)
Ø160mm PP	60mm	EI 120 C/C

Client:

Job Title:

Products Protecta FR Collar
Protecta FR Acrylic

Application Fire stopping of plastic pipes in rigid walls

Construction Minimum wall thickness of 120 mm and comprise concrete, aerated concrete or masonry, with a density of ≥ 650 kg/m³

Fire & Sound classification

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

Sound reduction (seal only)
Rw 58dB

ETA 18/0854

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