# FIREPRO® PIPE COLLAR CE

Penetration sealing device for plastic pipework







# **FIREPRO**<sup>®</sup> **PIPE COLLAR CE**

Part of the comprehensive FIREPRO® range, ROCKWOOL FIREPRO® Pipe Collar CE is designed and tested to seal service penetration apertures containing plastic pipework. FIREPRO® Pipe Collar CE provides a high-volume expansion and pressure seal during a fire.

Tested to the harmonised European Standard EN 1366-3:2009 and proven to perform as a penetration seal, FIREPRO® Pipe Collar CE offers up to 4 hours fire resistance for differing plastic pipework services and substrate constructions.



# Description

Tested to the harmonised European Standard EN 1366-3:2009, FIREPRO® Pipe Collar CE provides up to 4 hours fire stopping in rigid floor constructions and up to 2 hours fire stopping in flexible/rigid wall constructions. The penetration seal is certified to internationally recognised standards such as Certifire and CE marking.

FIREPRO<sup>®</sup> Pipe Collar CE is slim in design (depth 30mm or 40mm) allowing it to be installed around a service where space is restricted. FIREPRO® Pipe Collar CE can be installed on flexible wall, rigid wall and rigid floor constructions. When used around plastic combustible pipes, FIREPRO® Pipe Collar CE will form a penetration seal to reinstate the fire resistance performance of the wall or floor construction.

FIREPRO® Pipe Collar CE consists of a corrosion resistant powder coated steel sleeve, containing a flexible graphite based intumescent liner which is manufactured to suit standard diameter plastic pipework. Under fire conditions, the intumescent material within the collar expands, crushing the pipework and closing the void left by the pipework, preventing the passage of fire.

# Applications

Tested to reinstate the fire performance of rigid and flexible walls (minimum 100mm) and rigid floors (minimum 150mm) where combustible plastic pipes penetrate.

Fire resistance testing to EN 1366-3 and proven to perform for up to El 240 in rigid floors and EI 120 in flexible/rigid walls.

Used to seal standard plastic pipe penetrations 32mm - 250mm diameter.

Standard plastic pipes tested are PVC-U, PP, PE. FIREPRO® Pipe Collar CE is supplied in assembled form, without fixings. The collar is wrapped around the pipe at the soffit of a rigid floor or both faces of rigid/ flexible walls.

# Advantages

- High performance intumescent
- Quick and easy to install
- Up to EI240<sup>\*</sup> fire resistance
- Suitable for flexible wall and rigid wall/floor constructions
- Available to suit plastic pipe sizes ranging from 32mm to 160mm OD and PP pipes up to 250mm OD
- Allows for thermal and mechanical movement of pipe

\*EI = Integrity/Insulation

# Performance

## Table 1:

Pipe Collar CE faced fixed on underside of Rigid Floor (min. 150mm thickness)

			Fire performance	
Penetration specification	Diameter (mm)	Wall thickness (mm)	Integrity (E)	Insulation (I)
PP Pipes	32 - 160	2.9 - 14.6	240	240
PE Pipes	32 - 160	2.9 - 10	240	240
PVC-U	32 - 160	1.8 - 9.5	240	240

### Table 1A:

Pipe Collar CE faced fixed on both sides of Rigid Floor (min. 150mm thickness)

			Fire performance	
Penetration specification	Diameter (mm)	Wall thickness (mm)	Integrity (E)	Insulation (I)
PP Pipe	110	2.7	120	120
PP Pipe	160	4	120	120

### Table 1B:

Face Fixed on Both Sides of Rigid Floor (min 150mm thick)

			Fire performance
Penetration specification	Diameter (mm)	Wall thickness (mm)	Classification
PP Pipes	110	2.7	EI 120 U/ U*
PP Pipes	160	4	EI 120 C/U*

\*U = Uncapped (pipe end open) C = Capped (pipe end closed)

All pipes tested according to EN 1366-3 have been tested with a specific pipe end configuration. All pipes have been tested U/C unless otherwise stated in the tables.

The EN test standard EN 1366-3 states, "it is important to ensure that sealing systems have been tested with appropriate pipe end conditions."

The specification of pipe closure devices will be determined based on the scope of test data and whether the pipework is ventilated or not.



# Table 2:

			Fire performance	
Penetration specification	Diameter (mm)	Wall thickness (mm)	Integrity (E)	Insulation (I)
PVC	32 - 160	1.8 - 9.5	120	120
PP	32 - 160	2.9 - 14.6	120	120
PE	32 - 160	2.7 - 10	120	120

### Table 2A:

Pipe Collar CE faced fixed on both sides of Rigid Wall

			Fire performance	
Penetration specification	Diameter (mm)	Wall thickness (mm)	Integrity (E)	Insulation (I)
PP Pipe	110	2.7	120	120
PP Pipe	160	4	120	120
PP Pipe	250	6.2	120	120

## Table 2B:

FIREPRO® Pipe Collar CE installed on both sides of rigid wall

			Fire performance
Penetration specification	Diameter (mm)	Wall thickness (mm)	Classification
PP Pipes	110	2.7	EI 120 U/U*
PP Pipes	160	4	EI 120 U/U*
PP Pipes	250	6.2	EI 120 U/C*

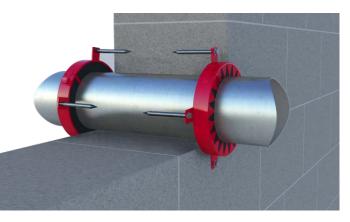
\*U = Uncapped (pipe end open) C = Capped (pipe end closed)

All pipes tested according to EN 1366-3 have been tested with a specific pipe end configuration. All pipes have been tested U/C unless otherwise stated in the tables.

The EN test standard EN 1366-3 states, "it is important to ensure that sealing systems have been tested with appropriate pipe end conditions."

The specification of pipe closure devices will be determined based on the scope of test data and whether the pipework is ventilated or not.

# Pipe Collar CE faced fixed on both sides of Flexible or Rigid Wall (min 100mm thick)



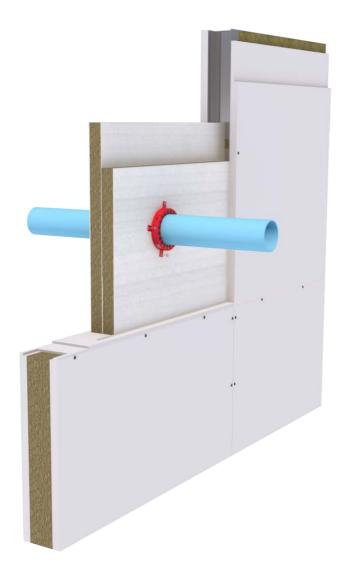
Pipe Collar CE wall application

# Table 3:

FIREPRO<sup>®</sup> Pipe Collar CE secured to both faces of Ablative Coated Batt Seal (2 x 50 or 2 x 60mm). Max. opening 1200mm High x 730mm Wide in min. 100mm thick wall

			Fire per	Fire performance	
Penetration specification	Diameter (mm)	Wall thickness (mm)	Integrity (E)	Insulation (I)	
PVC	32 - 160	1.8 - 9.5	120	120	
PP	32 - 160	2.9 - 14.6	120	120	
PE	32 - 160	2.9 - 10	120	120	

Firepro Pipe Collar CE secured to each face of Ablative Coated Batt Seal utilising 80mm long steel pig tail screws



# **Technical information**

# Standards and approvals

- FIREPRO<sup>®</sup> Pipe Collar CE has been tested to BS EN 1366-3:2009
- FIREPRO® Pipe Collar CE has been third party accredited through Certifire

The independently prepared assessment, detailing the full scope of fire performance, is available from the ROCKWOOL Technical Solutions Team.

ROCKWOOL FIREPRO® Pipe Collar CE provides up to 4 hours fire resistance integrity and insulation for PVC-U, PP and PE pipes up to a maximum 14.6mm wall thickness, for standard diameters 32mm - 250mm.

The performance of FIREPRO<sup>®</sup> Pipe Collar CE will be determined by the performance of the substrate, so should 2 hours be the requirement of the collar then the substrate should be rated to no less than the collar.

For advice on types and sizes of pipes or particular applications, please contact the Technical Solutions Team on 01656 868490.

### Product information

Property	Description	Test standard
Application Temperature	-5°C to 40°C	
Application	Internal or External (Conditioned to Type X: -20°C - +70°C	EOTA TR 024
Expansion Rate	20:1	EOTA TR 024
Expansion Pressure	1.30	EOTA TR 024
Plastic Types	PP, PVC-U, PE	
Colour	Red	
Fire Resistance – Rigid Floors	Up to 4 hours	EN 1366-3:2009
Fire Resistance – Flexible & Rigid Walls	Up to 2 hours	EN 1366-3:2009
Fixing Detail	3 No 60mm x 6mm Expanding Anchors – Rigid Floors	
	3 No Size 70 Wood Screws - Rigid Walls	
	3 No 65mm Spider Fixings - Flexible Walls	
	3 No 35mm Tap in Fixings - Rigid Walls & Floors	
	3 No. 80mm Steel Pigtail Screws - Ablative Coated Batt seals in walls.	
Expected Shelf Life	N/A	Store in dry conditions unopened

# Installation

### Installation of FIREPRO<sup>®</sup> Pipe Collar CE in walls

- 1. Walls shall be a minimum thickness of 100mm or greater.
- 2. Flexible drywalls/partitions shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50mm studs.
- 3. Solid block, masonry and concrete walls shall have a minimum density of 780kg/m<sup>3</sup> and a minimum thickness of 100mm. Aerated concrete block shall have a minimum density of 600kg/m<sup>3</sup>.
- 4. Fire Stopping seals at maximum 1200mm high x 730mm wide consisting of a double layer of Ablative Coated Batt seal 2 x 50mm or 2 x 60mm.
- 5. All walls shall have at least the same fire resistance as that required of the sealing system.
- 6. Services penetrating the division shall be suitably supported via steel angles, hangers or channels, no further than 400mm from the surface of the sealing system on both faces.
- 7. Multiple apertures must be separated by a minimum of 200mm in drywalls and concrete/masonry constructions.
- 8. Check services to be treated are within scope of test data.
- 9. All services and apertures need to be thoroughly clean and clear of dust and loose particles.
- 10. Temperature to be 5°C or above at time of installation.
- 11. Gaps of up to 10mm wide around the service within the substrate can be filled with a minimum 5mm deep FIREPRO® Acoustic Intumescent Sealant.
- 12. In rigid walls, for gaps greater than 10mm wide, ROCKWOOL Firestop compound can be used.
- 13. Fixing straps on the FIREPRO® Pipe Collar CE are opened up and the collar is simply fitted around the plastic pipe with the fixing tabs closest to the face of the wall.
- 14. Lock the FIREPRO<sup>®</sup> Pipe Collar CE around the pipe by closing the fixing strap. The collar is pushed flush to the surface of the wall.
- 15. The collar is then securely fastened to the substrate by means of fire rated fixings to suit the substrate and installed through the fixing tabs. Steel pig tail screws minimum 80mm are utilised to secure the collar through to the Ablative Coated Batt.
- 16. Repeat for the other side of the wall if required

## Installation of FIREPRO® Pipe Collar CE in floors

- 1. Floors shall be a minimum thickness of 150mm or greater.
- 2. Concrete, aerated concrete or masonry floors shall have a minimum density of 650kg/m<sup>3</sup>.
- 3. All floors shall have at least the same fire resistance as that required of the sealing system.
- 4. Services penetrating the division shall be suitably supported via steel angles,
- 5. Check services to be treated are within scope of test data.
- 6. All services and apertures need to be thoroughly clean and clear of dust and loose particles.
- 7. Temperature to be 5°C or above at time of installation.
- 8. Gaps of up to 10mm wide around the service within the substrate can be filled with a minimum 5mm deep FIREPRO® Acoustic Intumescent Sealant.
- 9. For gaps greater than 10mm wide, ROCKWOOL Firestop compound can be used.
- 10. Fixing straps on the FIREPRO® Pipe Collar CE are opened up and the collar is simply fitted around the plastic pipe with the fixing tabs closest to the soffit of the floor.
- 11. Lock the FIREPRO<sup>®</sup> Pipe Collar CE around the pipe by closing the fixing strap. The collar is pushed flush to the soffit of the floor.
- 12. The collar is then securely fastened to the substrate by means of fire rated fixings to suit the substrate and installed through the fixing tabs.

# Specification clauses

FIREPRO® Pipe Collar CE is associated with the following NBS Clauses: P12 Fire Stopping Systems

• 380 Pipe collar: Surface mounted intumescent

# Disclaimers

This product should only be utilised for applications as outlined in the relevant ROCKWOOL product datasheet and in accordance with the relevant ROCKWOOL Fire Resistance Testing. Additionally, the product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit www.rockwool.co.uk or contact our Technical Solutions Team on 01656 868490.

# Supporting information

For further information relating to any aspect of the FirePro range, please refer to the applicable ROCKWOOL standard details at www.rockwool.co.uk or contact the ROCKWOOL technical solution team on 01656 868490 or technical.solutions@rockwool.co.uk.

hangers or channels, no further than 400mm from the upper surface of the floor.

# **Sustainability**

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.

All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:

 $\overline{(a)}$ Fire resistance Acoustic comfort Sustainable materials **Durability** 

# Health & Safety

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC:ROCKWOOL fibres are not classified as a possible human carcinogen.

A Material Safety Data Sheet is available and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

# Environment

Made from a renewable and plentiful naturally occuring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

**ROCKWOOL** is approximately 97% recyclable. For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.



# The ROCKWOOL Trademark

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The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the word.

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# March 2020

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