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KNAUF FIRECOLLAR

Knauf Firecollar are designed to maintain the fire resistance of fire rated walls and floors where these are breached by plastic pipes, and may be used in gypsum, masonry and concrete walls and floors.

Each pipe collar consists of a white coated circular steel shell that splits in two to fit around the service penetrations by means of a simple 'slide-lock' system. The steel shell contains a graphite based reactive material which reacts when exposed to heat closing the openings left by the softening plastic pipe in fire.

Minimum separations and limitations: Services can be sealed as specified in the detailed drawings. Services within the Knauf Firecollar systems do not require a minimum separation, only requiring sufficient to securely fit the collars onto the substrate. For larger apertures other than described in these installation instructions, Knauf FPC Panel or Knauf FP Mortar with Knauf Firewrap should be used.

Supporting constructions: Flexible walls must have a minimum 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. Rigid walls must have a minimum thickness of 100 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. The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

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Installation Instructions

1. For sealing plastic pipes in floors, a single firecollar is installed on the underside of the floor and for flexible and solid walls, a firecollar is installed on both sides of the wall.

2. Before fitting the firecollar ensure that any gaps between the pipe and the separating element are sealed as follows:
   - In gypsum walls, gaps between the pipe and the construction below 8mm must have a bead of Knauf FPA Acrylic to cover the opening, and for gaps 8mm or above, the seal must be plugged with 25mm deep Knauf FPA Acrylic.
   - In masonry/concrete walls, gaps between the pipe and the construction below 8mm must have a bead of Knauf FPA Acrylic to cover the opening, and for gaps 8mm or above, the seal must be plugged with 20mm deep Knauf FPA Acrylic on 20mm deep backing of stonewool.
   - In floors, gaps between the pipe and the construction below 10mm must have 20mm deep stonewool to plug the opening, and for gaps 10mm or above, the seal must be plugged with 10mm deep Knauf FPA Acrylic on 40mm deep backing of stonewool.

3. Place a firecollar around the service penetration (pipe) and ensure that the fixing lugs are positioned tightly to the surface of the wall or the floor so that the anchors/fixingscan be inserted fully.

4. Where the surface is uneven, apply a sealing bead of Knauf FPA Acrylic between the wall/floor and the firecollar.

5. Attach the firecollar with steel screws, anchors or fixings that are suitable for the substrate that the firecollar will be fitted to. For flexible walls use ≥ Ø4 mm gypsum-, wood screws or anchors with a length suitable for the number of boards that form the wall. For concrete/masonry walls and floors, use ≥ Ø4 x 50mm long masonry screws or expansion bolts.

6. On site where the penetration size is greater than the pipe diameter and/or the pipe is in an angle an oversized collar can be used. Knauf Firecollars are tested 'oversize', i.e. the internal diameter of the firecollar can be larger than the pipe.

Product description

Knauf Firecollar consists of a white coated circular steel shell that splits in two to fit around the service penetrations by means of a simple 'slide-lock' system.

The steel frame contains a graphite based swelling material that reacts to heat and fills the opening from the melting plastic through-penetration in case of a fire.

Storage

Unlimited storage time when stored in temperatures between 5˚C and 30˚C.

Scope of application

Knauf Firecollar are designed to maintain the fire resistance of fire rated walls and floors where these are breached by continuous plastic pipes, and may be used in gypsum, masonry and concrete walls and floors.

It may be fitted both on the outside of a wall or a floor.

Ø32mm	30mm	**Ø32mm**	50mm	**Ø40mm**	30mm
Ø40mm	50mm	**Ø55mm**	30mm	**Ø55mm**	50mm
Ø63mm	30mm	**Ø63mm**	50mm	**Ø75mm**	30mm
Ø75mm	50mm	**Ø82mm**	30mm	**Ø82mm**	50mm
Ø90mm	30mm	**Ø90mm**	50mm	**Ø110mm**	30mm
Ø110mm	50mm	**Ø125mm**	60mm	**Ø140mm**	60mm
Ø160mm	60mm				

Properties

- Classified for fire sealing in all types of constructions
- Excellent sound insulation
- No emissions - environmentally and user friendly
- Simple to install using widely available standard screws
- Collars come in two different heights for different fire classifications to maximize cost efficiency
- Very high fire classifications up to 240 minutes for both integrity and insulation
- 25 years working life guarantee
- ETA 23/0971
- EAD 350454-00-1104

Pipe end configurations

Intended use of pipe		Pipe end condition
Rainwater pipe, plastic	At roof	C/U
	Further below	C/C
Drainage or sewage pipe, plastic	At drainage	C/U
	Further below	C/C
Pipes in closed circuits (water, gas, vacuum systems, el. etc.)		C/C
Pipes with open ends and at least 50cm pipe on both sides		U/U

Sound insulation

Description	Sound reduction
Collars installed as described in walls	58 dB RW

The sound insulation value is only valid for the collar/pipe and not for other elements in the building construction.

The sound insulation has been tested by the accredited laboratory Exova BM Trada in Great Britain according to EN ISO 10140-2. Test report is available upon request.

Safety

Please observe the EC Safety Data Sheet.