PROTECTA® FR COLLAR
TECHNICAL DATA SHEET

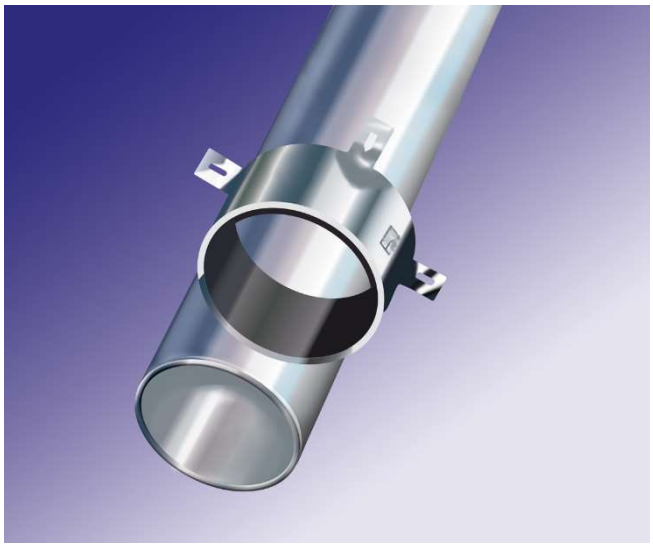
Protecta

General Product Description

Protecta® FR Collar 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.

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.



Properties

- New patented fast expanding graphite material
- For pipe sizes from smallest pipes available to Ø315 mm with a wide range of pipe wall thicknesses
- Collars comes in two different heights for different fire classifications to maximize cost efficiency
- Smaller pipes can be fitted within larger collars with the benefit of accommodating pipes that are at an angle or if the opening around the pipe is too large
- Fire classifications up to 240 minutes for both integrity and insulation
- Certified for PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC and PP pipes
- Tested and certified for U/U pipe end applications
- 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
- Unlimited storage time (under correct conditions)
- 30 years working life guarantee

Pipe end configurations

When testing pipes, one can choose not to cap (or close) the pipe, or cap the pipe inside the furnace, or outside the furnace, or on both sides. The configuration chosen depends on the intended application of the pipe and/or the installation environment. The code defining if a pipe is capped is stated after the fire classification. For instance EI 60 C/U which means the pipe was capped inside the furnace, and uncapped outside the furnace. The test configuration defines the approvals possible.

Our suggestions for engineering judgments are:

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.

Technical Data

Technical Approval	ETAG 026-2
Durability according to ETAG 026-2	Z_2 intended for use in internal conditions with humidity classes other than Z_1, excluding temperatures below 0 °C.
Shell	Powder coated 1mm steel
Conditioning procedure	EN 13238:2010
Expansion ratio	17:1
Expansion pressure	65.4 N
Colour	White shell with anthracite inlay
Graphite weight	1.4 kg/m^2 per mm thickness
Graphite density	1409 kg/m^3
Normal expansion time	Less than 2 minutes
Minimum expansion temperature	105 °C
Storage	Store in temperatures between 5˚C and 30˚C
Life	Under normal conditions; 30 years +

ETA
Technical Data Sheet to ETA 14/0249