Firebreak FX500 Pipe Collars

TECHNICAL DATA SHEET

Firebreak FX500 Pipe Collars are designed to maintain the fire resistance of floor and walls when penetrated by large plastic pipes up to 400mm diameter. Under fire conditions the intumescent filler expands to many times its original thickness exerting pressure on the softening pipe and closing the opening with a dense block of fire resistant char.

Description
The collars are manufactured using a durable stainless steel outer casing with hinge and toggle latch fixings.

Performance
FX500 Pipe Collars are tested to the latest European requirements for applications in walls and floors.

- Fire classification to EN 13501-2 and CE Mark (ETA 21/0209)

- Flexible walls (stud partitions) or rigid walls (masonry, concrete) of 100mm minimum thickness

- Rigid (concrete) floors of 150mm minimum thickness

- Most testing undertaken using uncapped pipes (U/U) with specification applicable to all types of plastic pipe end uses including ventilation pipes

- Mechanical and durability testing to EAD 350454-00-1104; Y_2 (internal use within full ambient temperature range inclusive of temperatures less than 0°C)

- Third party product certification with UL International (Certificate # UL-EU-00513)

CE
2821

21
2821-CPR-0125

ETA 21/0209
EAD 350454-00-1104

UL
EU

Firebreak FX500 Pipe Collars in concrete floors of minimum thickness 150mm

Penetrating service	Pipe outside diameter (mm)	Pipe wall thickness (mm)	Collar size	Fire performance (mins)
				Integrity & insulation (EI)
PVC-U pipes (EN 1329-1, EN 1452-2, EN 1453-1)	200–250	10.6	Select nearest collar size equal to or greater than pipe ouside diameter (see pipe collar dimensions table)	120
	251–315	12.1		60
	251–400	3.2		240*

Note: All pipes were tested without capping allowing for all end use applications including ventilation except * which was capped outside the furnace.
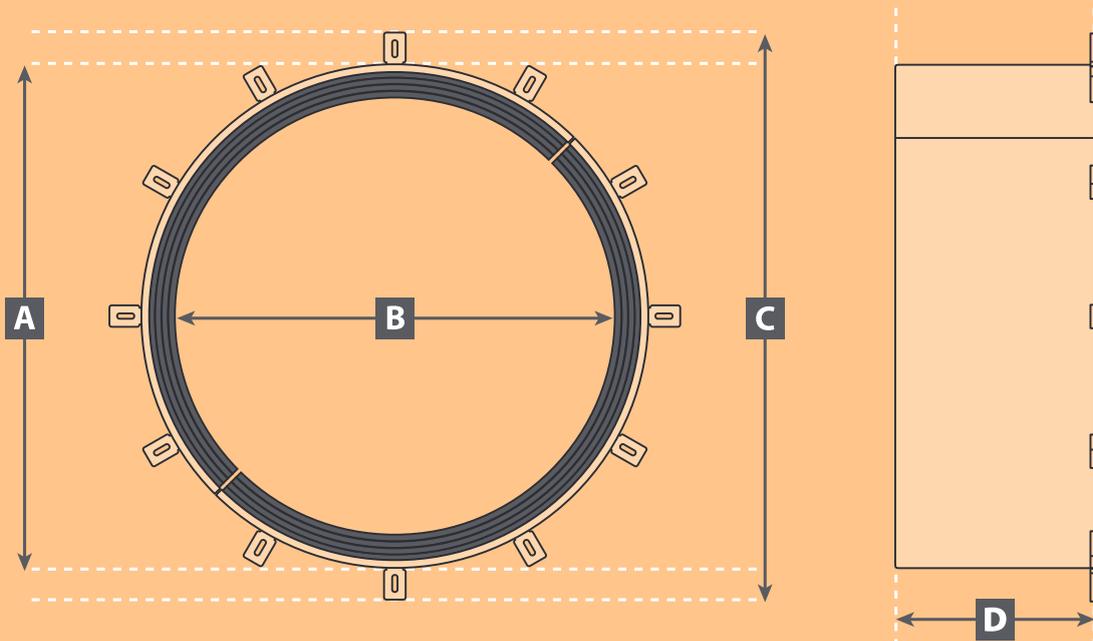
Firebreak FX500 Pipe Collars used in conjunction with minimum 50mm thick Firebreak Compound floor seal supported on 50mm thick 140kg/m³ stone mineral wool permanent shuttering

Penetrating service	Pipe outside diameter (mm)	Pipe wall thickness (mm)	Collar size	Fire performance (mins)
				Integrity & insulation (EI)
PVC-U pipes (EN 1329-1, EN 1452-2, EN 1453-1)	200–250	10.6	Select nearest collar size equal to or greater than pipe ouside diameter (see pipe collar dimensions table)	120
	251–315	12.1		60
	251–400	3.2		120*

Note: All pipes were tested without capping allowing for all end use applications including ventilation except * which was capped outside the furnace.

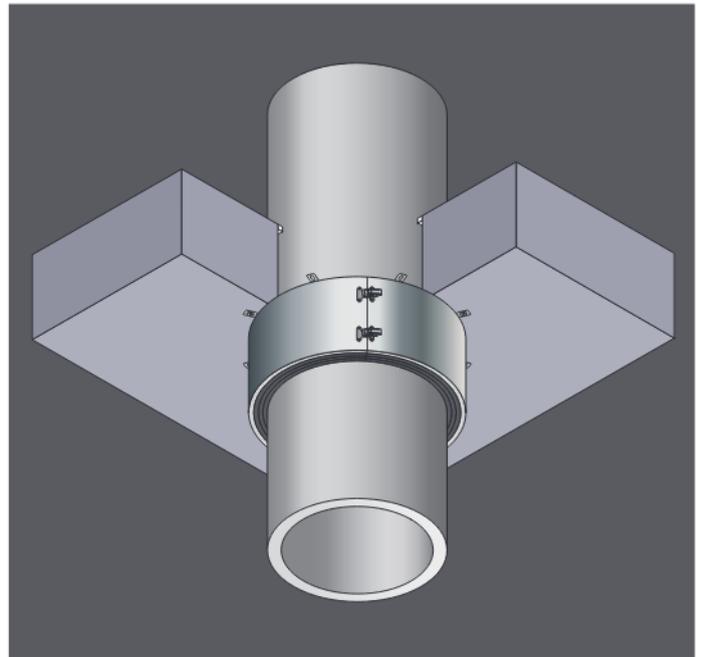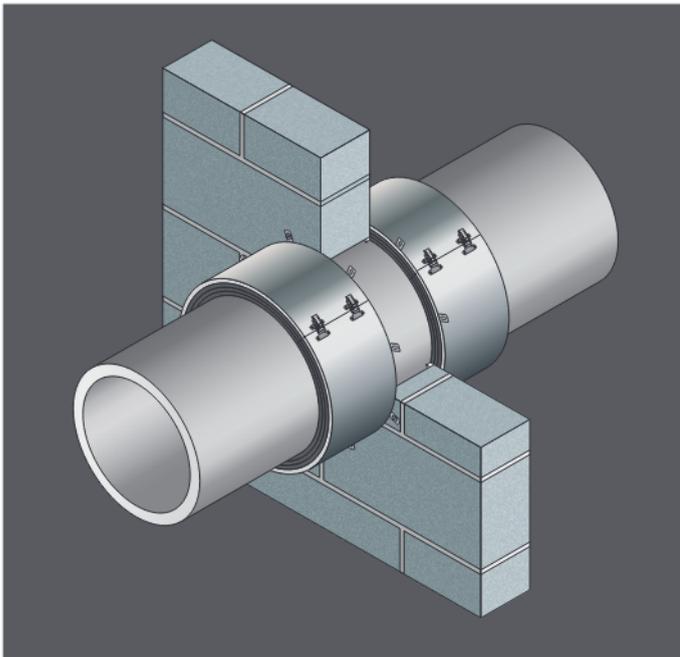## Firebreak FX500 Pipe Collars in walls of minimum thickness 100mm

Penetrating service	Substrate	Pipe outside diameter (mm)	Pipe wall thickness (mm)	Collar size	Fire performance (mins)
					Integrity & insulation (EI)
PVC-U pipes (EN 1329-1, EN 1452-2, EN 1453-1)	Flexible partition	200–250	10.6	Select nearest collar size equal to or greater than pipe ouside diameter (see pipe collar dimensions table)	90
	Blockwork	200–250	10.6		240
	Blockwork	251–315	21.1		120

Firebreak FX500 Pipe Collar dimensions (nominal)

Pipe size (mm)	Outside diameter (mm) A	Inside diameter (mm) B	Diameter including fixing lugs (mm) C	Height (mm) D	Number of fixing lugs
200	242	200	294	130	6
225	295	225	319	130	6
250	300	250	348	130	6
300	354	300	402	130	8
315	373	315	421	130	8
325	391	325	439	130	10
355	421	355	469	130	10
400	482	400	530	130	12

Slotted opening in fixing lugs is 6mm wide and suitable for use with M5 steel fixings.

Installation

- Ensure contact surface for collar is flat and free from obstructions

- Clean away all dirt and loose materials

- Seal any gaps around the pipe using Firebreak 22 Fire Resistant & Acoustic Sealant or Firebreak Compound to maximise acoustic and cold smoke seal performance

- Select suitable steel fixings which do not rely on plastic components for grip (i.e. 50mm x 8mm steel masonry screws, 50mm minimum long expandable steel bolts, or steel cavity fixings)

- Where holes for fixings need to be pre-drilled, place the collar around the pipe and mark the fixing positions on the wall/floor through the fixing tabs before removing and drilling suitably sized holes

- Fix the collar around the pipe using the slide lock or toggle latch and position against the surface aligning the holes in the fixing tabs with the pre-drilled holes as appropriate

- Complete the mechanical fixing to the surface using the selected steel fixings

NOTE: *Collars should be fixed to both sides of walls and to the underside of floors only.*

End use considerations

Whilst Firebreak FX500 Collars are intended for internal use they have been subjected to mechanical and durability testing and the intumescent components are not effected by moisture. The collars are also suitable for use at temperatures below 0°C.

Maintenance

No routine maintenance is required although periodic inspection for possible damage is recommended.

Storage

It is recommended to store in dry conditions between 5°C and 40°C.

Shelf life

Shelf life is unlimited when stored under recommended storage conditions.

Health and safety

Please refer to safety data sheet before use.

Since the product is applied under circumstances beyond our control, Neutron Fire Technologies Limited can accept no direct or consequential liability whether in contract or in tort, for the interpretations of such recommendations and reserves the right to modify the recommendations as necessary.

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Fire Safety by Design

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