



Penetration seal

# **PROMASEAL® Retrofit Collars FC** Fire resistant collar for plastic pipes penetration seals

Installation guide





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# PROMASEAL<sup>®</sup> Retrofit Collar FC Installation Instructions

PROMASEAL® Retrofit Collars FC are multi-purpose collars designed for use with concrete slabs, masonry, Speedpanel and lightweight walls and lined ceilings. The collars can be split to enable them to be retrofitted or relocated when necessary. They are available in a range of sizes to suit plastic pipes up to 315mm outside diameter. The collars have been tested for up to -/240/240 fire resistance in accordance with the criteria of AS 1530: Part 4: 2014 and AS 4072: Part 1: 2005 with various types and sizes of plastic pipe. Collars at and above 250mm diameter have a circular base, not square.

Code no.	Pipe nominal diameter	Body			Flange
		н	D1	D2	D3
FC 40	40mm	43mm	45mm	77mm	112mm
FC 50	50mm	43mm	58mm	90mm	125mm
FC 65	65mm	43mm	71mm	103mm	138mm
FC 80	80mm	43mm	85mm	123mm	158mm
FC 100	100mm	53mm	112mm	150mm	185mm
FC 150	150mm	73mm	162mm	200mm	235mm
FC 250	250mm	120mm	254mm	316mm	380mm Ø
FC 300	300mm	160mm	318mm	402mm	466mm Ø





### Installation method

### For pipes up to 315mm outside diameter to the underside of concrete floor slabs



### FC 250 and FC 300 types have circular base

PROMASEAL® Retrofit Collars FC are to be fixed to the under side of the floor slabs. Ensure all fixing points are used. Diameter of pipes can be up to 315mm.

For up to -/240/240 fire resistance application with pipes up to 225mm outside diameter, the collars are bolted to the soffit of a floor slab using 38mm steel expanding anchors or steel wedge anchors. Fixings for collars up to 162mm diameter may be 25mm steel sleeve anchors. Certain pipes with 315mm outside diameter can achieve up to -/120/120 fire resistance in this application.

If there is a possibility of pipe movement occurring that will cause cracks or fissures in the seal between the pipe and mortar mix, it is advisable to seal around the pipe with PROMASEAL®-A Acrylic Sealant to prevent cold smoke leakage. This, however is not required for the fire resistance to be achieved.

If there is a gap greater than 12mm between the pipe and cored hole, backfill with PROMASEAL® Mortar. For gaps less than 12mm, seal with PROMASEAL®-A Acrylic Sealant.

For uPVC pipes up to 110mm outside diameter on walls



For -/120/120 fire resistant masonry or lightweight walls application for uPVC pipes up to 110mm\* outside diameter.

For application on calcium silicate, masonry and plasterboard walls for pipes up to 110mm outside diameter. Minimum wall thickness is 116mm. The collars must be on both faces for lightweight timber or steel framed walls with  $4 \times 6g \times 40$ mm long coarse thread screws. For collars above 150mm outside diameter in walls, 8mm diameter threaded rods must pass from one side of the wall to the other and nuts placed onto the ends of the bolts where they pass through the fixing points of the collar.

<sup>\*</sup> For specific installation for collars over 110mm outside diameter and singlesided application, please consult the Fire Collar selector app or call Promat Technical Support.

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## floors



PROMASEAL® Retrofit Collars FC can be cast into floor slabs for uPVC pipes up to 162mm outside diameter for up to -/120/120 fire resistance. The collar should be installed to the soffit side of the floor.

Nail the collar to the formwork. Cut a length of the pipe and push it firmly into the collar until it touches the formwork. Ensure the pipe is cut level so that the complete pipe sits on the formwork.

PROMASEAL® Retrofit Collars FC are not designed to take a pipe fitting. Please refer to PROMASEAL® CIL or CIH Collar for such application.

## acrylic sealant beneath ceilings



PROMASEAL® Retrofit Collars FC can be installed around uPVC pipes passing through -/60/60 or -/120/120 fire resistant ceilings. Use PROMASEAL®-A Acrylic Sealant to seal edges, provide additional framing to support the collar. This application is for pipes up to 162mm outside diameter.

60 and 120 minute applications with pipes up to 162mm outside diameter, screw fixed to the framing grid to the underside of a ceiling system that provides a similar fire rating. The gap between the pipe and the opening through the ceiling liner board must be no more than 15mm and should be filled with PROMASEAL®-A Acrylic Sealant to the full depth of the lining board. Specific details are available for various ceiling systems on request.

### For pipes up to 162mm outside diameter within For pipes up to 162mm outside diameter (with mortar backfill) within floors



PROMASEAL® Retrofit Collars FC can also be installed into a cored hole with PROMASEAL® Mortar used to back fill for a flush fit. This application is for uPVC pipes up to 162mm outside diameter.

For up to 120 minutes fire resistance with pipes up to 162mm outside diameter, bolted to the soffit of a floor slab using 25mm steel expanding anchors. Ensure all fixing points are used. Back fill the hole in the slab with PROMASEAL® Mortar or commercial grade mortar mix.

### For pipes up to 162mm outside diameter with For other services penetration seals through concrete/masonry floors or plasterboard wall



PROMASEAL® Retrofit Collars FC can be installed around the services and fixed to the underside of the floor slab (or to both sides of the plasterboard wall). Fill any gaps inside the collar caused by the orientation of the services with PROMASEAL® Grafitex. Size of the services should not exceed the inside diameter of the 100mm collar. Contact Promat for specific services and combinations that are approved.

Please contact Promat for Speedpanel wall installation and other services penetration seals through floors and walls.



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#### About Etex

Etex is an international building materials specialist; the company wants to inspire people around the world to build living spaces that are ever more safe, sustainable, smart and beautiful. Founded since 1905 and headquartered in Belgium, Etex currently operates in 110 production sites in 42 countries with over 11,000 employees globally.

Etex fosters a collaborative and caring culture, a pioneering spirit and a passion to always do better for its customers. Building on its experience and global market needs, the company strives to improve its customers quality of living with ever more effective lightweight solutions.

Its three R&D centres support four global sales divisions:

- Building Performance: Leader in plasterboards and fibre cement boards, and the global reference in passive fire protection solutions for the residential and commercial segments.
- Exteriors: Provider of innovative, durable, high performance and beautiful fibre cement exterior materials for architectural, residential and agricultural projects.
- Industry: Front runner of engineering expertise to drive the future of high performance thermal and acoustic insulation as well as passive fire protection in the industrial, aerospace and energy sectors.
- New Ways: As a new division created in January 2020, New Ways offers high-tech offsite modular solutions based on wood and steel framing.

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