

PROMASEAL®/PROMASTOP® FIRE COLLAR FIXINGS TECHNICAL NOTE

The purpose of this Technical Note is to clarify the issues with regards to the use of the correct fixings currently available in the marketplace for fire collars and explain the differences between them.

It is essential that fire collars are only installed with the correct size **ALL STEEL** fixings. In the past alloy-based fixings have been tested and have shown that they will not provide the required fire performance.

Currently some fixing products available are marketed as all metal, or zinc alloy. These types of anchors need to be thoroughly checked because some of them have other alloys included in the matrix of the fixing and these can melt at lower temperatures than those found in cellulosic fires, thus rendering them inappropriate for supporting fire resistant devices such as fire collars. This list is not exhaustive and if a particular anchor is not shown, it doesn't mean that it is suitable or not suitable. Always check! Consideration of approval of the fixing to AS5216 should also be made.

THE TYPE OF ANCHORS IN TABLE 1 BELOW ARE NOT SUITABLE AS FIXINGS FOR PROMAT FIRE COLLARS UNLESS THERE IS THIRD PARTY TEST EVIDENCE TO SUPPORT THEIR USE.

TABLE 1

Ramset's	Shuredrive		✘
Macsim's	Macdrive		✘
Hilti's	HD Metal Drive Anchor		✘
Power's	Metal Pin Anchor		✘

THE ANCHORS IN TABLE 2 BELOW ARE SUITABLE AS FIXINGS FOR PROMAT FIRE COLLARS

TABLE 2

Ramset's Dynabolt		Macsim's DBZ Metal Pin Anchor	
Ramset's Trubolt		Macsim's Masonbolt	
Ramset's Redidrive		Power's Sleeve Anchor	
Hilti's DBZ		Power's Powerbolt	
Hilti's HSA Stud Anchor		Power's PBZ Wedge Anchor	
Hilti's HUS-P Concrete Screw		Ramset Ankascrew	

Bridgland Set Anchors are also acceptable.

CONCRETE WALLS / FLOORS	PLASTERBOARD WALLS
Fire Collars should be installed on both sides of the wall.	
<p>For PROMASTOP® UniCollar® installed into concrete walls or floors, steel fixings are supplied within the collar packaging, and the collars should be installed with the requisite number of brackets depending upon the pipe size.</p> <p>For PROMASEAL® FC and PROMASEAL® FCS fire collars installed into concrete walls or floors steel fixings must be installed using all the collar fixing points with the following sizes:</p> <ul style="list-style-type: none"> • For collars up to 100mm, fixings shall be either, min 25mm long expanding anchor, 20mm long knock-ins, 35mm long DBZ or 6 x 50mm anchor screws such as those shown on page 1 Table 2. • For 150mm collars, fixings shall be either, min 35mm long expanding anchor or 6 x 50mm anchor screws • For collars from 250mm to 315mm, minimum 50mm x 6.5mm steel expanding anchors or 6 x 50mm anchor screws. 	<p>For PROMASTOP® UniCollar® installed into plasterboard walls, 40mm x No.10 laminating screws are supplied within the collar packaging and should be installed with the requisite number of brackets depending on the pipe size.</p> <p>For PROMASEAL® FC and PROMASEAL® FCS fire collars installed into plasterboard walls, steel fixings must be installed using all the collar fixing points and using the following fixing sizes:</p> <ul style="list-style-type: none"> • For collars up to 100mm, 40mm x 6-gauge coarse thread screws should be used. • For 150mm collars, 10g x 40mm stitching screws with a 3/16 washer • For collars above 150mm, 8mm diameter threaded rod must pass from one side of the wall to the other and washers and nuts should be placed onto the ends of the rods where they pass through the fixing points of the collar.
Ceilings	
Plasterboard: PROMASEAL® FC - up to 160mm	Promat SYSTEMPANEL-FR - PROMASEAL® FC - up to 160mm
<p>PROMASEAL® FC Retrofit Collars can be installed onto uPVC in 60 to 120-minute fire rated ceilings. Use PROMASEAL® A Acrylic Sealant to seal annular gaps. Provide additional framing to support the collar. Fix the collar through the plasterboard and into the framing above with 50mm x 8 gauge S.M screws. The gap between the ceiling lining board and the pipe should be no more than 15mm and sealed with PROMASEAL® A Acrylic Sealant to the full depth of the lining board.</p>	<p>PROMASEAL®-FC collars can be installed around uPVC and HDPE pipes penetrating the Promat SYSTEMFLOOR™- FR Floor Ceiling System. Before the collar is installed the annular gap between the pipe and ceiling is filled with PROMASEAL®-A Acrylic Sealant. The PROMASEAL® FC Retrofit collars are then installed to the ceiling side with 38mm long plasterboard laminating screws. The gap between the pipe and floor is required to be sealed with PROMASEAL®-A.</p>
SPEEDPANEL	AAC / HEBEL Panels
PROMASEAL® FC - up to 250mm	PROMASEAL® FC 40 & 100mm & PROMASTOP® UniCollar® 110mm
<p>PROMASEAL®-FC collars can be installed on 78mm thick Speedpanel walls with uPVC and HDPE pipes. Before the collar is installed a layer of minimum 25mm PROMATECT®-100 or 250 or two layers of 13mm Fire Resistant plasterboard is required to be fixed on each face of the Speedpanel. Where a single pipe is in a tight opening through the Speedpanel the board is 100mm larger than the pipe on all sides. i.e. for a 110mm pipe the board is 310mm x 310mm. Where there are larger openings or multiple pipes in one opening the board should overlap onto the Speedpanel by minimum 100mm. The board is fixed to the Speedpanel at 100mm centres with 10g x 40mm coarse thread bugle head screws. Any board joints are sealed with PROMASEAL®-A Acrylic Sealant. Where the collars are fixed to PROMATECT®100 or 250 they are fixed with 10g x 40mm coarse thread screws. Where they are fixed to plasterboard then 8g x 60mm long chipboard screws are required. Multiple pipes through one opening are allowed up to an opening size of 600mm wide x 1130mm high.</p>	<p>PROMASTOP® UniCollar® to suit 100mm uPVC and PROMASEAL® FC40 & 100 for uPVC pipe can be fixed to AAC/Hebel panels. The collars are fixed to each face of the wall with a 75mm long Type 17 hex Head screw.</p>
PROMASIL®1100 Super Floors. PROMASEAL® FC up to 100mm	PROMASIL®1100 Super Walls – PROMASEAL® FC up to 100mm
<p>PROMASEAL®-FC collars from 40 to 100mm for uPVC and 40 & 100mm HDPE can be installed on 60mm thick PROMASIL® 1100 Super boards installed in a horizontal orientation. Either in a floor opening or the underside of a PROMASIL® 1100 Super box or bulkhead. For FRL of -/120/120 a 250 x 250mm back block of 60mm PROMASIL® 1100 Super board must be fixed to either the top or underside of the main board with 80mm long chipboard screws. The gap between the two halves of the back block is filled with PROMASEAL® A. The gap between the pipe and the board is first filled with PROMASEAL® AG then the collar is fixed to the underside of the installation with 40mm long self-stitching or laminating screws. For an FRL of -/90/90 the back block is not required.</p>	<p>PROMASEAL®-FC collars from 40 to 100mm for uPVC and 40 & 100mm HDPE can be installed on 60mm thick PROMASIL® 1100 Super boards installed in a vertical orientation. Either in a wall opening or the side of a PROMASIL® 1100 Super box or bulkhead. In this application a collar is required to both faces of the board. Before the collar is fixed, the gap between the pipe and board is to be filled to a depth of 20mm on both faces with PROMASEAL® AG. The collars are then fixed to each face with 40mm long self-stitching or laminating screws.</p>

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