



Technical Data



Cast-in Stackwork Fire collars TALL

Order Number	RFCH65S	RFCH100S
Pipe size(nom)/type	PVC 40/50/65mm HDPE 75mm	PVC 80/90/100mm HDPE 100mm. PP 100mm
Body material	Polypropylene ✓	✓
Intumescent material	Expanding fire resistant ✓	✓
Retaining ring	Galvanised steel ✓	✓
Smoke & water seal	Rubber membrane ✓	✓
Full height	250mm	250mm
Full width (base)	162mm	215mm
Internal cutout width (base)	107mm	160mm
Fire Rating Level (FRL)	-/240/240	-/240/240



Cast-in Stackwork Fire collars SHORT

Order number	RFCL40S	RFCL50S	RFCL65S	RFCL80S	RFCL90S	RFCL100S
Pipe size(nom)/type	PVC 40mm	PVC 50mm	PVC 65mm	PVC 80mm	PVC 90mm	PVC 100mm HDPE100mm PP100mm
Body material	Polypropylene ✓	✓	✓	✓	✓	✓
Intumescent material	Expanding fire resistant ✓	✓	✓	✓	✓	✓
Retaining ring	Galvanised steel ✓	✓	✓	✓	✓	✓
Full height	80mm	80mm	80mm	80mm	80mm	80mm
Full width (base)	162mm	162mm	162mm	215mm	215mm	215mm
Internal Cutout width (base)	107mm	107mm	107mm	160mm	160mm	160mm
Fire Rating Level (FRL)	-/240/240	-/240/240	-/240/240	-/240/240	-/240/240	-/240/240



Retrofit Stackwork Fire collars LOW PROFILE

Order number	RFC65R	RFC100R
Pipe size(nom)/type	PVC 40/50/65mm	PVC 80/90/100mm. HDPE 100mm
Body material	Galvanised steel ✓	✓
Intumescent material	Expanding Fire Resistant ✓	✓
Mounting brackets	Galvanised steel ✓	✓
Body height	40mm	40mm
Fire Rating Level (FRL)	-/240/240	-/240/240

Installation Instructions Refer to test data for tested applications and fire rating before use. Go to www.ramset.com.au.

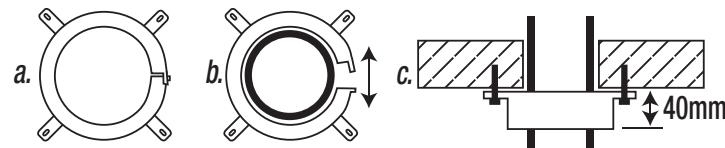
Cast-in Stackwork Fire collars

Fix fire collar firmly to formwork using the tab points around the base. Use appropriate screw, nail or gas pin to suit the formwork to be used. For short fire collars, prior to the concrete pour insert the correct pipe size, length and type, till flush with the surface of the formwork. Ensure pipe length used is greater than the floor thickness and of sufficient length to complete pipe installation. Ensure pipe is installed perpendicular to the formwork prior to the concrete pour. For tall fire collars securely fix the base to the formwork as above and ensure cap is securely attached. After concrete floor has cured, cut cone to floor thickness (if necessary). Seal any gaps between pipe and inside wall of collar with fire rated sealant. Insert and connect correct pipe size.

Retrofit Stackwork Fire collars

Seal the gap between the pipe and edge of pipe hole on the underside of the concrete floor with fire rated sealant (min. depth 5mm). Refer to sealant instructions for correct use. Unlock metal tab and open up body (dia. a & b). Place body around pipe and reconnect tab. Push body up till feet are flush against underside of concrete floor (dia. c). Use 4 x fire rated anchors (5 or 6mm Diam.) to secure fire collar.

Use Ramset AnkaScrew™ 5x30mm Hex. Order No. - AS05030H



STATE BRANCHES

VICTORIA

96 Church Street, Richmond 3121
296-298 Maroondah Highway,
Mooroolbark 3138

SOUTH AUSTRALIA

115 Sir Donald Bradman Drive, Hilton 5033

NEW SOUTH WALES

71 Carnarvon Street, Silverwater 2128
563 Gardeners Road, Mascot 2020
77 Munibung Road, Cardiff 2285

ACT

5/19 Tennant Street, Fyshwick 2609

QUEENSLAND

281 Montague Road, West End 4101
153 Ingham Road, Townsville 4810

WESTERN AUSTRALIA

1/12 Colin Jamieson Drive, Welshpool 6106

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SALES, ORDERS AND ENQUIRIES

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Fire rated devices for pipe penetrations

Cast-in and Retrofit Fire Collars for Stackwork

BlazeBrake™
Fire Protection Systems

Engineered for up to 4 hours fire protection

Ramset™ fire collars are fire and smoke protection devices for stackwork pipe penetrations in concrete structures. Under fire conditions, the intumescent compound in the Ramset™ fire collar expands and seals the softened pipe preventing flames, smoke and gases from spreading between compartments. Prior to activation, the pipes remain obstruction free allowing air and fluids to pass through the pipes completely unrestricted. Ramset™ fire collars were developed by our product engineering laboratory and independently tested by CSIRO to Australian fire standards. After 4 hours of testing under fire conditions to AS1530.4 and AS4072.1, the Ramset™ fire collars were structurally intact and showed superior fire resistance qualities achieving an FRL -/240/240.

Applications

Ramset™ fire collars have been developed and tested to provide significant fire protection for stackwork pipe penetrations in office buildings, residential apartment buildings, shopping centres, hospitals, airports and other high rise projects.

Vertical stackwork pipe (Internal riser) applications include:

- Plumbing stack (inside of building)
- Bathroom basins
- Laundry troughs
- Kitchen sinks
- Baths and toilets

Use for drainage, waste, ventilation and water pipes. Before use refer to fire test data for tested applications and fire ratings.

Suits common concrete floor thicknesses and methods of formwork construction

Ramset™ fire collars are suitable for concrete floor thicknesses from 100mm upwards and can be used with specialised concrete floor systems such as Ultrafloor® and also with permanent steel formwork systems. For further details contact Ramset™.

Suits common types of pipe and pipe diameters used on building sites

- Tested and approved for use with PVC pipe diameters 40/50/65/80/90/100mm (nom).
- Tested and approved for use with HDPE pipe diameters 75mm and 100mm (nom). PP pipe 100mm.

One step installation

- No fabrication on site, no extra parts to assemble.
- Fast to fix. Screw in anchor, nail or gas pin fix depending on the fire collar design used.
- Reinforced base with multiple fix points ensures firm clamping to formwork or concrete.



Fast fire protection of pipe penetrations

Pipe installations after the concrete floor is poured

When using this method of installation the fire collar is fixed to the formwork in the desired position with the cap fitted. The pipes are installed after the concrete floor has been poured, and the formwork removed.

Cast-in (Tall) Fire collars

- High profile design (250mm height) to suit multiple concrete floor thicknesses.
- Choose from 2 body sizes with tall cones that suit pipe diameters and types:
 - Small body for PVC pipe 40/50/65mm (nom). HDPE pipe 75mm.
 - Large body for PVC pipe 80/90/100mm (nom). HDPE pipe 100mm. PP pipe 100mm.
- Water, debris and smoke tight rubber seal with cap protection.
- Flexible rubber membrane absorbs pipe movement and vibration.
- Suitable for concrete floor slab thicknesses up to 250mm.



Pipe installations before the concrete floor is poured

For this method of installation the fire collar is fixed in position on the formwork, then a pipe of a suitable length for the application is inserted into the fire collar until flush with the surface of the formwork. The pipe installations are completed after the concrete floor has been poured, and the formwork removed.

Cast-in (Short) Fire collars

- Low profile design (80mm height) suitable for concrete floor slab thicknesses from 100mm upwards.
- Pipe tight neck design holds pipe perpendicular and concrete tight.
- Choice of 6 fire collar sizes for pipe diameters and types:
 - PVC 40/50/65/80/90/100mm.
 - HDPE 100mm & PP 100mm.



Pipe penetrations through existing concrete floors

Where a pipe penetration through a cored hole in a concrete floor requires fire protection, use retrofit fire collars. Also suitable for the fire rating of existing pipe penetrations in multiple level buildings undergoing refurbishment, renovation or upgrade. Retrofit fire collars are installed around the pipe, then anchored direct to the underside of the concrete floor.

Retrofit Stackwork Fire collars (Low profile)

- Low profile design (40mm height) for normal space, tight space and close to ceiling applications.
- For pipe clusters with limited space between each pipe.
- One piece galvanised steel body with fixed mounting brackets.
- Choose from 2 body sizes that suit multiple pipe diameters and types:
 - Small body for PVC pipe 40/50/65mm (nom).
 - Large body for PVC pipe 80/90/100mm (nom). HDPE pipe 100mm.



Complimentary fire rated products

- BlazeBrake™ acrylic sealant for sealing gaps between pipe and concrete floor.
- AnkaScrew™ Rod and Stud for fast anchoring of pipe suspension systems.
- AnkaScrew™ 5 x 30mm Hex head for fast fixing of retrofit fire collars.
- RediDrive™ 5 x 30mm. Hammer in anchor for bracket fixing to concrete.
- DynaSet™ M10 flanged and M12 drop in anchors for heavy duty pipe suspensions.
- Before use refer to fire test data for tested applications and fire ratings.



Cast-in & Retrofit floor waste fire collars available

- Tested & compliant to AS1530.4 and AS4072.1. Contact Ramset™ for details.