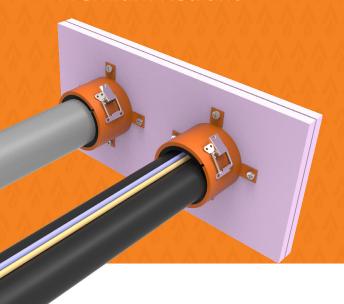




FyreCOLLAR

Premium Retrofit



Trafalgar Fire FyreCOLLAR Premium Retrofit are designed to provide maximum protection against the spread of fire through walls and floors that are penetrated by plastic conduits, plastic pipes or air-conditioning service bundles. FyreCOLLAR are simple to install, simply retro-fit around the service and fix to the wall or floor.



Click To Watch

INSTALL VIDEO









KEY FEATURES

- Intumescent fire stopping for plastic pipes, conduits and airconditioning bundle penetrations.
- Actively expands during fire conditions, forms a tight seal and prevents the spread of fire through the service penetration.
- Fire tested in a range of wall and floor systems and a wide variety of service types.
- Solid hinge and clasp with durable powder coated finish.
- Simple design allows for quick and easy installation of the collars.
- Sizes from 50-150mm

APPLICATIONS

Electricians	Data NBN Conduits Electrical Conduits
Plumbers	HDPE pipes PVC pipes PEX pipes PEX-AL-PEX pipes

HVAC&R

HVAC bundle Insulated pipes & cables



TRADES



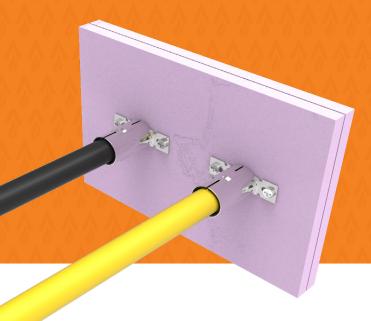








FyreCOLLAR Conduit



Trafalgar Fire FyreCOLLAR Conduit are designed to provide maximum protection against the spread of fire through walls and floors that are penetrated by plastic conduits, plastic pipes. FyreCOLLAR are simple to install, simply retro-fit around the service and fix to the wall or floor.



Click To Watch









KEY FEATURES

- Intumescent fire stopping specifically for plastic pipes and conduit penetrations.
- Actively expands during fire conditions, forms a tight seal and prevents the spread of fire through the service penetration.
- Fire tested in a range of wall and floor systems including a wide variety of service types.
- Stainless steel construction
- Simple design allows for quick and easy installation of the collars.
- Sizes 25-40mm





Electricians

Data NBN Conduits **Electrical Conduits**

Plumbers

PVC pipes PEX pipes PEX-AL-PEX pipes



TRADES





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FyreCOLLAR

WHAT ARE FyreCOLLAR?

Trafalgar Fire's Collar range includes the FyreCOLLAR Conduit and the larger FyreCOLLAR Premium Retrofit. They utilise a simple lock mechanism to secure around a service before being fastened to the wall or floor using integrated fixing tabs at the base of the collar.

FyreCOLLAR systems have been extensively tested and approved to AS1530.4-2014 & AS4072.1 in accordance with the National Construction Code, and are suitable for use under NCC2022 test requirements.

The FyreCOLLAR Conduit features the innovative two-piece 'slide-lock joint' mechanism, and are ideal for use in tight, difficult to reach locations. Their stainless-steel casing is supplied standard and is ideal for use in aggressive environments.

The FyreCOLLAR Premium Retrofit has a high-quality powder-coated finish and is ideal for applications where aesthetics of the system is important and easy identification is paramount.

Fure COLLAR CONDUIT



APPLICATIONS

FyreCOLLAR Conduit Collars (25-40mm)

- PVC conduits including NBN or other fibre conduits.
- PVC conduits with residential (TPS) and three-phase (three core and Earth) power cables.
- PVC drain lines.
- PEX and PEX-AL-PEX pipes.

FyreCOLLAR Premium Retrofit (50-150mm)

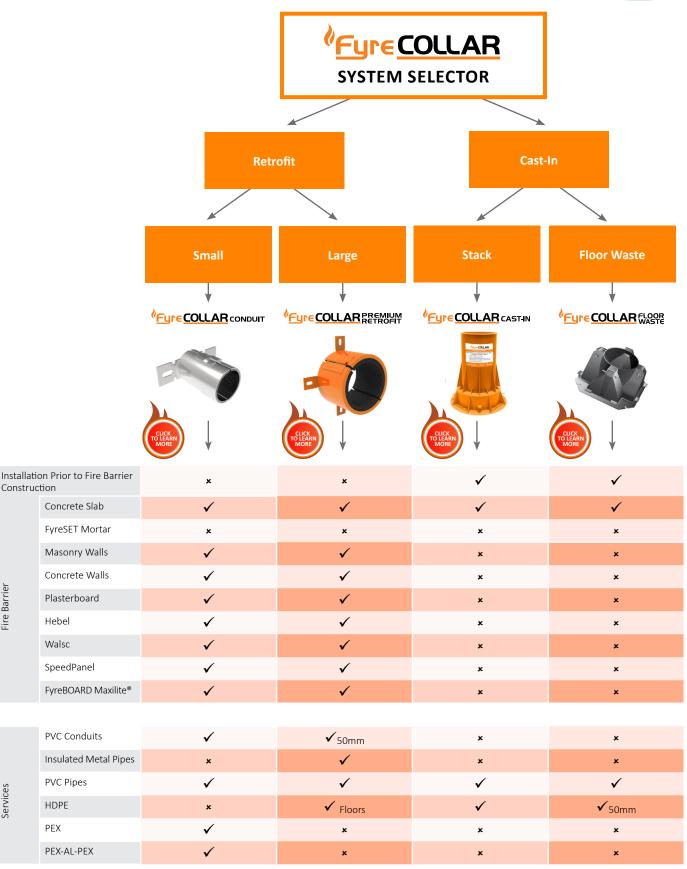
- PVC, PP-R and HDPE stack pipes (DWV) in floors.
- PVC stack pipes with elbow sockets in floors.
- PVC stack pipes (DWV) in walls.
- HVAC & R service bundles with multiple sets of pair coil and their associated cables through walls and floors.

Not suitable for Floor Waste applications. Contact Trafalgar Fire for more details.

Fure COLLAR PREMIUM







For full FRL details please consult the relevant technical guide or contact Trafalgar Fire. Fire testing of Trafalgar Fire products is always ongoing.



Construction

Plasterboard Hebel Walsc SpeedPanel

PVC Conduits

PVC Pipes

PEX-AL-PEX

HDPE

PEX

Fire Barrier

Services



FyreCOLLAR CONDUIT AND PREMIUM RETROFIT

FIRE RATING – HOW IS FIRE PERFORMANCE MEASURED?

An FRL (fire resistance level) is a handy way of summarising the performance of a building element. It consists of 3 numbers, all given in minutes:





Structural Adequacy

The ability of the building element to support the weight of adjacent building elements.

ie: a brick wall supporting a concrete floor slab above.



Integrity

The ability of an element to prevent the passage of flames and hot gasses.

ie: a plasterboard wall remaining intact and not allowing holes to form.



Insulation

The ability of an element to resist heat transfer from the exposed face to the unexposed face.

ie: a bundle of cables remaining below a set temperature limit on the unexposed side of the wall penetration system.

Penetrations are not required to have a Structural Adequacy rating and is usually expressed as a dash. For example, a penetration through a 4-hour load bearing wall would be written as -/240/240.

INTEGRITY

The FyreCOLLAR system will achieve the integrity performance for up to 4 hours physically stopping the direct spread of fire, however the insulation performance of the penetration will be limited to the type of wall being used and conductivity of the services in the penetration.

INSULATION (TEMPERATURE RISE)

Heat transfer via conduction (or heat rise) will occur through the conductive parts of any penetration system. To limit the heat rise through the FyreCOLLAR penetration systems, our 25mm thick TWRAP $^{\text{TM}}$ foil encased blanket can be wrapped around the services to achieve up to 2 hours of insulation performance. There are some applications that won't require any TWRAP $^{\text{TM}}$ to achieve the full FRL, please refer to the tables below for specific details.





PVC PIPES



Plasterboard, AAC/Hebel Walls Speedpanel, Concrete/Masonry Walls Concrete Floors



	Collar Size	Plasterboard (64mm stud)		AAC Walls/	Speedpanel**	Concrete/	Concrete Floors		
PVC Pipe Size		Single Layer		Double Layer Hebel		Эресиранен	Masonry	Thickness	
0.20		13mm	16mm	13mm	75mm	78mm	Walls	120mm	180mm*
16		-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
20	25mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
25		-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
32	32mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
40	40mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
50	50mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
65	65mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
80	80mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
100	100mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/240/240
100 (Socket)	130mm	-	-	-	-	-	-	-/120/120	-/240/240
150	150mm	-	-	-	-	-	-	-	-/180/180

^{*}Also suitable for HDPE pipes up to-/240/240 up to 100mm in size.

FyreCOLLAR are also suitable for use with <u>FyreBOARD Maxilite</u>, if the opening is too large and needs to be closed.

APPLICATIONS RANGE (DWV)

In accordance with Australian Standards, tested pipes are approved for drain, waste and vent applications such as toilets, sinks and showers. Tested pipes are not suitable for floor waste pipes, contact Trafalgar Fire for assistance with this if required.





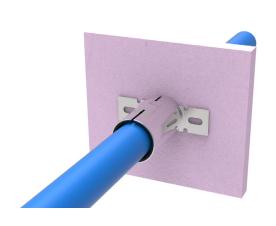
^{**} Additional thickening required, see page 13.



PEX & PEX-AL-PEX PIPES



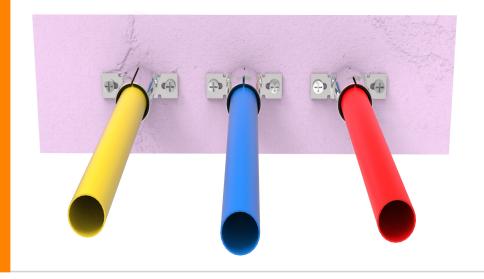
Plasterboard, AAC/Hebel Walls Speedpanel, Concrete/Masonry Walls Concrete Floors



	Pipe Size		Plasterboard (64mm stud)			AAC Walls/	Speedpanel	Concrete/	Concrete Floors
Pipe Type			Single Layer		Double Layer	Hebel		Masonry Walls	Thickness
			13mm	16mm	13mm	75mm	78mm	vvans	120mm
PEX-A	25mm		-/60/60	-/90/90	-/120/120	-/90/90	-/120/120	-/120/120	-/120/120
PEX-B	25mm	25mm	-/60/60	-/90/90	-/120/120	-/90/90	-/120/120	-/120/120	-/120/120
PEX-AL-PEX	25mm		-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120

FyreCOLLAR Conduit are also suitable for use with <u>FyreBOARD Maxilite</u>®, and <u>FyreBATT</u> penetration systems, ideal for closing oversized openings.

FyreCOLLAR Collars may be installed on penetrations as close as 40mm apart.





PVC Conduits Electrical & Data



Plasterboard, AAC/Hebel Walls Speedpanel, Concrete/Masonry Walls Concrete Floors



Conduit		Plasterboard (64mm stud)			AAC Walls/	Speedpanel*	Concrete/	Concrete Floors
Size	Collar Size	Single Layer		Double Layer	Hebel		Masonry Walls	Thickness
		13mm	16mm	13mm	75mm	78mm		120mm
20	2Emm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120
25	25mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120
32	32mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120
40	40mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120
50	50mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120

^{*} Additional thickening required, see page 13.

The conduits may contain any combination of the following up to the maximum that can be accommodated inside of the PVC conduit:

- 2C & E 2.5mm² TPS cable.
- CAT5/CAT6 data cables.
- 3C & E PVC sheathed power cables up to 19 mm diameter.
- Fibre optic cables including NBN.

The FyreCOLLAR are also suitable for PVC Conduits that have been cast into concrete floor slabs (minimum thickness 120mm) so long as the service penetrations remain 50mm apart. Refer to diagram at top of the page.

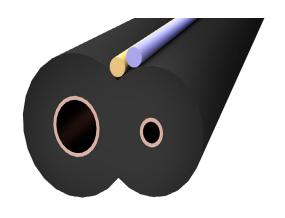




PAIR COIL BUNDLES



Plasterboard, AAC/Hebel Walls, Walsc, Speedpanel, Concrete/Masonry Walls, Concrete Floors



No.		Plasterboard (64mm stud)			AAC Walls/	Speedpanel**	Concrete/	Concrete Floors	
of Pair	Collar Size	Single Layer		Double Layer	Hebel	эресираны	Masonry	Thickness	
Coil		13mm	16mm	13mm	75mm	78mm	Walls	120mm	150mm
1x	50mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120*
1x	65mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120*
2x	80mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120*
3x	100mm	-/60/60	-/90/90	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120	-/120/120

^{*}TWRAP™ not required in floor slabs 150mm or thicker.

Pair coil bundles require TWRAP™ applied for 300mm, each side of the wall.

For example: 2x sets of FR pair coil can be run through an 80mm FyreCOLLAR along with 2x power cables, and 2x data cables.

To achieve the full insulation performance (i.e.-/120/120) the pair coil bundles will need to be wrapped with TWRAP $^{\text{TM}}$ for 300mm on both sides of the barrier, with the exception of 150mm thick concrete floors.

FyreCOLLAR penetrations maybe installed as close as 40 mm apart.



^{**} Additional thickening required, see page 13.



INSTALLATION ANNULAR GAP REQUIREMENTS

HOLE SIZES

WHAT IS AN ANNULAR GAP?

The annular gap is the clearance between the pipe and the hole as illustrated in this image by the orange bar. Annular gaps should be limited to a maximum of 7.5mm, as shown below.



TABLE 1: FyreCOLLAR CONDUIT

Product Code	Collar Size	Max Hole Size
FyreCOLLAR-CC-25	25mm	40mm
FyreCOLLAR-CC-32	32mm	47mm
FyreCOLLAR-CC-40	40mm	55mm



TABLE 2: FyreCOLLAR RETROFIT

Product Code	Collar Size	Max Hole Size	
FyreCOLLAR-PHRC-50	50mm	65mm	
FyreCOLLAR-PHRC-65	65mm	80mm	
FyreCOLLAR-PHRC-80	80mm	95mm	
FyreCOLLAR-PHRC-100	100mm	115mm	
FyreCOLLAR-PHRC-130	130mm	145mm	
FyreCOLLAR-PHRC-150	150mm	165mm	



Note: This table references a maximum annular gap of 7.5mm between the service and the hole in the separating barrier. Annular gaps are to be sealed with FyreFLEX® Sealant.





INSTALLATION FyreCOLLAR IN WALLS

ALL WALLS



Ensure that the opening in the wall/floor is within the approved size range (no more than 7.5mm annular gap as per the table on page 11). Ensure the surface is clean for the installation of FyreFLEX® Sealant.



Fill the annular gap between the service and wall with FyreFLEX® Sealant for a depth of 10mm, on both sides of a wall or top and bottom of a floor.

FyreFLEX® Sealant between the hole and services can be applied flush with the wall without a fillet. Check the table on page 11 for the appropriate hole size for each collar.

FIT



For the FyreCOLLAR Conduit, separate the two halves, fit them on either side of the service before sliding the halves back together.

For the FyreCOLLAR Premium Retrofit, undo the latch to open the collar, secure it around the service/s, and re-secure the latch.

FIX



Use appropriate fixings as per page 13 to secure the collar to the wall/floor using all of the available the fixing tabs.

Click To Watch









INSTALLATION FyreCOLLAR IN WALLS

ALL WALLS



Speedpanel walls require a 60mm thick piece of FyreBOARD Maxilite® to be screw fixed onto one side of the penetration, before attaching the collar. See table below for screw fixings. Seal all gaps and perimeter with FyreFLEX® Sealant.



Where annular gaps exist between the services and the collar, back-fill these FyreFLEX® Sealant to the full depth of the collar.

Collars are installed to the bottom side of a floor only, or to both sides of a wall.

TABLE 3: FyreCOLLAR FIXINGS

Туре		Fixing		
	Single Layer Plasterboard			
	Double Layer Plasterboard	8gx50mm plasterboard screws		
	FyreBOARD Maxilite®			
	AAC Wall/ Hebel 75mm	6g x 25mm screws		
Walls	Speedpanel 78mm	Side 1 into bare Speedpanel - HEX head metal screws 12-14 x 20mm Side 2 FyreBOARD Maxilite® into Speedpanel - 10g x 100mm plasterboard screws in each corner Side 2 Collar into FyreBOARD Maxilite® - 6 x 25mm screws		
	Concrete/Masonry	M6 x 50mm masonry anchors		
Floors	Concrete/Masonry	M6 x 50mm masonry anchors		





WHAT IS TWRAP™?

[∂]T<u>WRAP</u>

TWRAP™ is a 25mm thick foil-faced, insulation wrap that has been engineered to provide insulation performance on service penetrations as required by the National Construction Code (NCC) in modern construction and has been tested specifically with some FyreCOLLAR systems to AS1530.4-2014.

TWRAPTM is not required for plastic pipe penetration systems however some air-conditioning bundles will require TWRAPTM to achieve the full insulation performance of the penetration (as per page 10).

TWRAP's aluminium foil, fiberglass-reinforced outer layer completely encapsulates the core and provides additional handling strength, protection from tearing and provides a high resistance to mould growth.



If required, TWRAP™ is wrapped around the services for the distance specified in the approval's tables. The TWRAP™ is to overlap itself by 50mm around the services at any joins, and is to be fixed with steel cable ties 50mm from each end and at 150mm centres between (or foil tape).







SYSTEM RANGE

Fure COLLAR CONDUIT



CLICKABLE	Item Number	Collar Size	To Suit Nominal Service Size	Inner Diameter	Outer Diameter	Height	Min Order Qty
	FyreCOLLAR-CC-25	25mm	25mm	26mm	36mm	50mm	1
	FyreCOLLAR-CC-32	32mm	32mm	33mm	44mm	50mm	1
	FyreCOLLAR-CC-40	40mm	40mm	43mm	48mm	50mm	1

SYSTEM RANGE





CLICKABLE	Item Number	Collar Size	To Suit Nominal Service Size	Inner Diameter	Outer Diameter	Height	Min Order Qty
	FyreCOLLAR-PHRC-50	50mm	50mm	58mm	72mm	62mm	1
	FyreCOLLAR-PHRC-65	65mm	65mm	72mm	90mm	62mm	1
	FyreCOLLAR-PHRC-80	80mm	80mm	85mm	102mm	62mm	1
	FyreCOLLAR-PHRC-100	100mm	100mm	115mm	133mm	62mm	1
	FyreCOLLAR-PHRC-130	130mm	100mm Elbow/socket	130mm	155mm	62mm	1
	FyreCOLLAR-PHRC-150	150mm	150mm	160mm	200mm	62mm	1



FyreCOLLAR



COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE (NCC)

Formerly known as BCA

Under the building code, a Deemed to Satisfy (DTS) solution is one that satisfies the performance requirements set out in section C of volume one. Section C specifically deals with the fire protection of openings in fire barriers (i.e. service penetrations in fire rated walls and floors).

Section C3.15 - Openings for Service Installations

Where any service penetrates a fire barrier that has a Fire Resistance Level (FRL) with respect to integrity and insulation, the installation should comply with:

A Fire Tested System – An identical prototype, installed in the same wall or floor system that has been tested/approved to the fire testing standard AS1530.4 and AS4072.1 which has achieved an FRL of equal to or greater than that required by the fire barrier.

For example, if the site has a -/120/120 plasterboard wall system with an electrical conduit penetration, the product used to seal the cables must have been fire tested at an approved laboratory WITH the conduit filled with electrical cables IN the same wall type AND tested for at least 120 minutes without failing the integrity or insulation criteria.

Compliance will only be achieved when the installation on site mirrors the tested system.

TEST AND ASSESSMENT REPORTS

Fire testing is a timely and expensive process, and it is impossible to test every single possible service configuration 'identically' in a practical sense. Under the building code C3.15(a)(i)(B) a testing authority is permitted to write a formal assessment confirming the likely fire performance (FRL) of the penetration. The guidelines for what can and can't be included in a formal assessment are outlined in AS4072.1.

The most recent FyreCOLLAR assessment report is FC11190 which was written by expert Fire Engineers from a NATA approved laboratory in accordance with AS1530.4-2014, and provides evidence of compliance under the current NCC, and is ready for NCC 2022 requirements.







FAQ

Q Can the collars be fitted around a conduit that's already been installed?

A Yes, the collars are easily retrofit-able.

Q Do I need to use sealant around the services?

A Yes, all annular gaps are to be filled with FyreFLEX® Sealant. If there is a large gap between the collar and the service, FyreFLEX® Sealant must be used to backfill the collar.

Q I've used collars on PVC pipes before, can I use them on HDPE?

A In floors, yes. FyreCOLLAR have been tested on HDPE up 100mm and PPR plastic pipes up to 50mm. Contact Trafalgar Fire for more information.

Q Can I use FyreCOLLAR on air-conditioning pair coil?

A Yes, at the correct size. FyreFLEX® Sealant should be used to fill all gaps between the services and the collar.

Q Can I use FyreCOLLAR on floor waste pipes?

A No. For plastic pipes, FyreCOLLAR can only be used for DWV applications including plumbing stacks, sinks, basins, baths and toilets. See our floor waste collars for this application.

Q Can FyreCOLLAR be fit into bondek floor slabs?

A Yes using FyreBOARD Maxilite[®]. Contact Trafalgar Fire for more information.



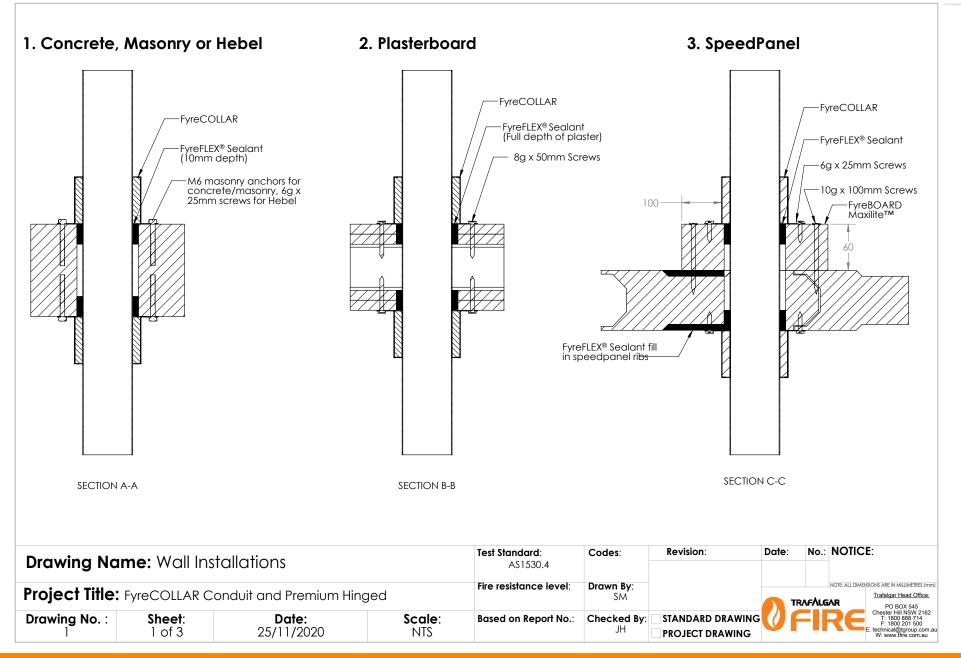
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