TRAFALGAR FIRE

FyreBOX SLAB-MOUNT BAMBINO

HVAC&R

FyreBOX™
Slab-Mount Bambino

The FyreBOX™ Slab-Mount Bambino is specifically manufactured for individual trades to simplify the job allowing installation of services before the wall construction, providing predictable site costs and a reliable method of fire stopping, with independence from other contractor schedules.

A proudly Australian made passive fire penetration system made for trades.

AUSTRALIAN MADE AND OWNED

NCC 2022 READY

KEY FEATURES

- Allows for multiple pipes, cables and drains in the one penetration
- Pipes can be installed, charged and tested before the walls are constructed
- Tested with typical A/C bundles (mixed services) and larger refrigerant lines
- Reduces penetration size
- Suitable for apartment entry and riser shaft penetrations
- Fully tested and compliant to AS1530.4-2014
- Training and support provided

APPROVED SERVICES

Pair coil	with PE or FR insulation
Copper	up to DN50 plus insulation up to 25mm thick
Rockwool/ Nitrile Rubber	(FR) and PE insulations tested
Power/Data	cables up to 25mm diameter
PVC	drain pipes up to 32mm

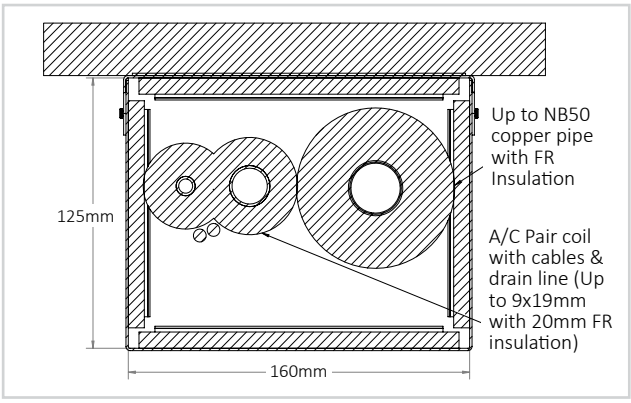


TABLE OF CONTENTS

FyreBOX™ Slab-Mount

BENEFITS

- Patented System
- NCC 2022 Ready
- Thoroughly tested to AS1530.4-2014
- Compliance made visible
- Space saving- one pentration point
- Multi-service solution
- One solution for the life of the building
- Acoustic rating
- Saves time
- Install before the walls or after

FyreBOX SLAB-MOUNT

Passive Fire Protection from Trafalgar a brand you can Trust 75 years of innovation

Full Product Support by the Trafalgar Fire Technical Team

We have had many dealings with the Trafalgar team during the growth period of our new business, and on an ongoing basis for many discussions.

They have a very knowledgeable technical team – not only on their products, but also the industry and it's issues in general. Chris has been very supportive in technical meetings at the FPA providing background, legislative interpretation, and papers etc.

John has provided many insights from historical and current experience, and we appreciate their willingness to test to remove grey areas.

Trafalgar are reliable suppliers who bridge the gap between caring about selling products and solving life safety issues.

Well done, and keep up the good work!

Gina Patrick
Plus Passive Fire

FyreBOX SYSTEM SELECTOR

- **New project walls and floors to be constructed**
  - **New residential walls** → FyreBOX SLAB-MOUNT
  - **Floor** → FyreBOX CAST-IN
- **Walls and floors with or without services installed**
  - **Wall or Floor opening >150mm** → FyreBOX MAXI
  - **Wall or Floor opening <150mm** → FyreBOX MINI & FyreFLANGE

			FyreBOX SLAB-MOUNT	FyreBOX CAST-IN	FyreBOX MAXI	FyreBOX MINI & FyreFLANGE
Installation Prior to Fire Barrier Construction			✓	✓	×	×
Cutting Required			During Wall Construction	None	Preformed or core holes	Preformed or core holes
Fire Barrier	Floors	Concrete Slab	×	✓	✓	✓
		FyreSET Mortar	×	✓	×	×
	Walls	Masonry Walls	✓	×	✓	✓
		Concrete Walls	✓	×	✓	✓
		Plasterboard	✓	×	✓	✓
		Hebel	✓	×	✓	✓
		Walsc	✓	×	✓	✓
		SpeedPanel	✓	×	✓	✓
		FyreBOARD Maxilite™	✓	×	✓	✓
Services		Power Cables	✓	✓	✓	✓
		Data Cables	✓	✓	✓	✓
		Cable Trays	✓	✓	✓	×
		Metal Pipes	✓	✓	✓	✓
		CPVC Pipes	✓	✓	✓	✓
		PVC Pipes	×	✓	Floors Only	Floors Only
		PEX	✓	✓	✓	✓
		PEX-AL-PEX	✓	✓	✓	✓

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

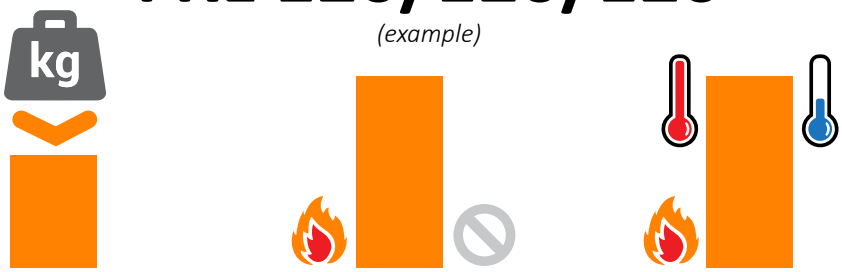
FyreBOX™ Slab-Mount

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:

FRL 120/120/120

(example)



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.

Note: Penetrations are not required to have a Structural Adequacy rating and is usually expressed as a dash. For example, a penetration through a 2 hour load bearing wall would be written as -/120/120.

Integrity

The FyreBOX™ Slab Mount system will achieve the integrity performance for up to 2 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 FyreBOX™ Slab Mount penetration systems, our 25mm thick TWrap foil encased blanket can be wrapped around the services and metal casing of the FyreBOX™ to achieve up to 2 hours of insulation performance. There are some applications that won't require any TWrap to achieve the full FRL, please refer to the tables below for specific details.

FRL Approvals Tables

PLASTERBOARD & SHAFTLINER 60MIN

Studs: 64mm minimum
Plaster: 1 x 13mm both sides or
1 x 25mm Shaftliner & 1 x 16mm plaster

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/60/30	-/60/60	300mm
	PEX pipes	up to 20mm OD	-/60/30	-/60/60	300mm
		25-32mm OD	-/60/30	-/60/60	450mm
		up to 32mm + FR insulation 19mm thick	-/60/30	-/60/60	300mm
	PEX-al-PEX pipes	up to 25mm OD	-/60/-	-/60/60	300mm
		32mm OD	-/60/-	-/60/60	450mm
		up to 32mm OD + FR insulation 19mm thick	-/60/30	-60/60	300mm
	cPVC sprinkler pipes	up to 60mm OD	-/60/-	-/60/60	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/60/-	-/60/60	300mm
	Steel pipes	up to 60mm OD	-/60/30	-/60/60	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/60/30	-/60/60	300mm
		up to 50mm OD with FR insulation	-/60/30	-/60/60	300mm
		up to 20mm OD with rockwool-type insulation	-/60/30	-/60/60	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/60/30	-/60/60	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/60/30	-/60/60	300mm
Power Cables	Bundles of up to 12x TPS		-/60/30	-/60/60	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/60/30	-/60/60	300mm
Comms Cables	All comms cables		-/60/30	-/60/60	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

FRL Approvals Tables

PLASTERBOARD 60MIN

Studs: 92mm minimum
Plaster: 1 x 13mm on both sides

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/60/60	-/60/60	300mm
	PEX pipes	up to 20mm OD	-/60/60	-/60/60	300mm
		25-32mm OD	-/60/60	-/60/60	450mm
		up to 32mm + FR insulation 19mm thick	-/60/60	-/60/60	300mm
	PEX-al-PEX pipes	up to 25mm OD	-/60/60	-/60/60	300mm
		32mm OD	-/60/-	-/60/60	450mm
		up to 32mm OD insulated + E-Flex ST insulation 19mm thick	-/60/60	-60/60	300mm
	cPVC sprinkler pipes	up to 60mm OD	-/60/-	-/60/60	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/60/-	-/60/60	300mm
	Steel pipes	up to 60mm OD	-/60/60	-/60/60	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/60/30	-/60/60	300mm
		up to 50mm OD with FR insulation	-/60/60	-/60/60	300mm
		up to 20mm OD with rockwool-type insulation	-/60/60	-/60/60	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/60/60	-/60/60	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/60/60	-/60/60	300mm
Power Cables	Bundles of up to 12x TPS		-/60/60	-/60/60	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/60/30	-/60/60	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/60/60	-/60/60	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.
Approvals shown in orange do not require TWrap for-/60/60 in this wall type.

FRL Approvals Tables

PLASTERBOARD 90MIN

Studs: 64mm minimum
Plaster: 1 x 16mm on both sides

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/90/60	-/90/90	300mm
	PEX pipes	up to 20mm OD	-/90/60	-/90/90	300mm
		25-32mm OD	-/90/60	-/90/90	450mm
		up to 32mm + FR insulation 19mm thick	-/90/60	-/90/90	300mm
	PEX-al-PEX pipes	up to 25mm OD	-/90/60	-/90/90	300mm
		32mm OD	-/90/-	-/90/90	450mm
		up to 32mm OD + FR insulation 19mm thick	-/90/30	-90/90	300mm
	cPVC sprinkler pipes	up to 60mm OD	-/90/-	-/90/90	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/90/-	-/90/90	300mm
	Steel pipes	up to 60mm OD	-/90/30	-/90/90	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/90/30	-/90/90	300mm
		up to 50mm OD with FR insulation	-/90/30	-/90/90	300mm
		up to 20mm OD with rockwool-type insulation	-/90/30	-/90/90	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/90/30	-/90/90	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/90/30	-/90/90	300mm
Power Cables	Bundles of up to 12x TPS		-/90/30	-/90/90	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applicatiowns.

FRL Approvals Tables

PLASTERBOARD 120MIN

Studs: 64mm minimum
Plaster: 2 x 13mm both sides or
1 x 25mm Shaftliner & 2 x 16mm plaster

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/120/60	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/60	-/120/120	300mm
		25-32mm OD	-/120/60	-/120/120	450mm
	PEX-al-PEX pipes	up to 25mm OD	-/120/60	-/120/120	300mm
		32mm OD	-/120/-	-/120/120	450mm
	cPVC sprinkler pipes	up to 60mm OD	-/120/-	-/120/120	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/120/-	-/120/120	300mm
	Steel pipes	up to 60mm OD	-/120/60	-/120/120	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/60	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/60	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/60	-/120/120	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/120/60	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/60	-/120/120	300mm
Power Cables	Bundles of up to 12x TPS		-/120/60	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
* Loose Twrap/FyreWrap infill material to be packed under the TWrap for at least 300mm off the penetration (refer to drawings on pages 22-23).
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

FRL Approvals Tables

AAC PANEL WALL 90MIN

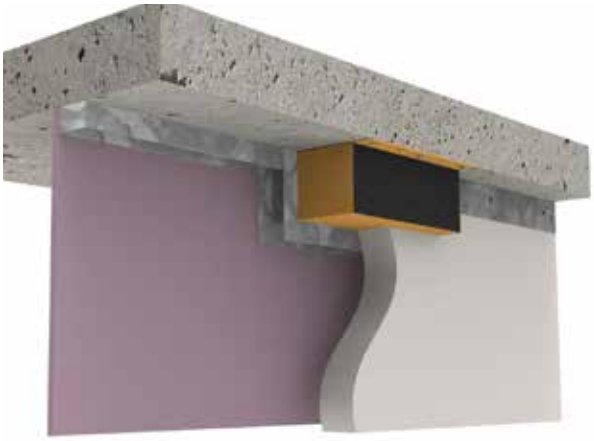
Thickness: 75mm

Hebel and Walsc AAC panel walls

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/90/30	-/90/90	300mm
	PEX pipes	up to 20mm OD	-/90/30	-/90/90	300mm
		25-32mm OD	-/90/30	-/90/90	450mm
		up to 32mm + FR insulation 19mm thick	-/90/30	-/90/90	300mm
	PEX-al-PEX pipes	up to 20mm OD	-/90/30	-/90/90	300mm
		25-32mm OD	-/90/-	-/90/90	450mm
		up to 32mm OD + FR insulation 19mm thick	-/90/30	-90/90	300mm
	cPVC sprinkler pipes	40- 60mm OD	-/90/-	-/90/90	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/90/-	-/90/90	300mm
	Steel pipes	up to 60mm OD	-/90/30	-/90/90	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/90/30	-/90/90	300mm
		up to 50mm OD with FR insulation	-/90/30	-/90/90	300mm
		up to 20mm OD with rockwool-type insulation	-/90/30	-/90/90	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/90/30	-/90/90	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/90/30	-/90/90	300mm
Power Cables	Bundles of up to 12x TPS		-/90/30	-/90/90	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

FRL Approvals Tables



AAC PANEL WALL 120MIN

Thickness: 75mm & Plasterboard

Hebel and Walsc AAC panel walls

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/120/30	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/30	-/120/120	300mm
		25-32mm OD	-/120/30	-/120/120	450mm
	PEX-al-PEX pipes	up to 20mm OD	-/120/30	-/120/120	300mm
		25-32mm OD	-/120/-	-/120/120	450mm
	cPVC sprinkler pipes	up to 40mm OD	-/120/-	-120/120	300mm
		40- 60mm OD	-/120/30	-/120/120	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/120/-	-/120/120	300mm
	Steel pipes	up to 60mm OD	-/120/30	-/120/120	300mm
Insulated Metal Pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/30	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/30	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/30	-/120/120	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/120/30	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/30	-/120/120	300mm
Power Cables	Bundles of up to 12x TPS		-/120/30	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/30	-/120/120	600mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/30	-/120/120	400mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

FRL Approvals Tables

CONCRETE/MASONRY 120MIN

Thickness: 116mm or as per AS3600/AS3700

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/120/60	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/60	-/120/120	300mm
		25-32mm OD	-/120/60	-/120/120	450mm
	PEX-al-PEX pipes	up to 25mm OD	-/120/60	-/120/120	300mm
		32mm OD	-/120/-	-/120/120	450mm
	cPVC sprinkler pipes	up to 60mm OD	-/120/-	-/120/120	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/120/-	-/120/120	300mm
	Steel pipes	up to 60mm OD	-/120/60	-/120/120	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/60	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/60	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/60	-/120/120	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/120/60	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/60	-/120/120	300mm
Power Cables	Bundles of up to 12x TPS		-/120/60	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
* Loose Twrap/FyreWrap infill material to be packed under the TWrap for at least 300mm off the penetration (refer to drawings on pages 22-23).
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

Click here to go back to Contents

FRL Approvals Tables

CONCRETE/MASONRY 240MIN

Thickness: 180mm Minimum or as per AS3600/AS3700

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 25mm OD	-/240/120	Wrap Free	-
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/240/-	-/240/120	300mm
	Steel pipes	up to 50mm OD	-/240/60	-/240/120	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/60	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/60	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/60	-/120/120	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/240/120	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/240/120	-/120/120	300mm
Power Cables	5 x 19mm OD 3C+E copper cables		-/240/120	Wrap Free	-
	Three core and Earth copper core cables up to 185mm2 (up to 54mm diameter)		-/240/60	-/120/120*	600mm
	All other copper core power cables or cable trays up to 1000mm wide		-/240/60	-/120/120*	600mm
Comms Cables	20 x CAT6 cable bundle		-/240/120	Wrap Free	-
	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
* Loose Twrap/FyreWrap infill material to be packed under the TWrap for at least 300mm off the penetration (refer to drawings on pages 22-23).
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.

FRL Approvals Tables

SPEEDPANEL 120MIN

Thickness:
78mm (-/120/120)
64mm (-/90/90) plus FyreBOARD Maxilite
51mm (-/60/60) plus FyreBOARD Maxilite

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/120/-	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/-	-/120/120	300mm
		25-32mm OD	-/120/-	-/120/120	450mm
	PEX-al-PEX pipes	up to 20mm OD	-/120/-	-/120/120	300mm
		25-32mm OD	-/120/-	-/120/120	450mm
	cPVC sprinkler pipes	up to 40mm OD	-/120/-	-/120/120	300mm
	cPVC sprinkler pipes	40-60mm OD	-/120/-	-/120/120	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/120/-	-/120/120	300mm
	Steel pipes	up to 60mm OD	-/120/-	-/120/120	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/-	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/-	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/-	-/120/120	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/120/-	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/-	-/120/120	300mm
Power Cables	Bundles of up to 12x TPS		-/120/-	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/-	-/120/120*	600mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/-	-/120/120*	450mm

Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
* Loose Twrap/FyreWrap infill material to be packed under the TWrap for at least 300mm off the penetration (refer to drawings on pages 22-23).
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications.
FRL limited to that of the wall system being used.

FRL Approvals Tables

LAMINATED SHAFTWALL

Stud: N/A
Plaster: 3 x 16mm Minimum

Service Type	Service Specification		FRL no wrap required	FRL with TWRAP	TWRAP Length required
Plastic Pipes	uPVC conduits Rigid or flexible *(with or without cables)*	up to 32mm OD	-/90/30	-/90/90	300mm
	PEX pipes	up to 20mm OD	-/90/30	-/90/90	300mm
		25-32mm OD	-/90/30	-/90/90	450mm
		up to 32mm + FR insulation 19mm thick	-/90/30	-/90/90	300mm
	PEX-al-PEX pipes	up to 25mm OD	-/90/30	-/90/90	300mm
		32mm OD	-/90/-	-/90/90	450mm
		up to 32mm OD insulated with E-Flex ST insulation 19mm thick	-/90/30	-90/90	300mm
	cPVC sprinkler pipes	UP TO 60mm OD	-/90/-	-/90/90	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/90/-	-/90/90	300mm
	Steel pipes	up to 60mm OD	-/90/30	-/90/90	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/90/30	-/90/90	300mm
		up to 50mm OD with FR insulation	-/90/30	-/90/90	300mm
		up to 20mm OD with rockwool-type insulation	-/90/30	-/90/90	300mm
	Paircoil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/90/30	-/90/90	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/90/30	-/90/90	300mm
Power Cables	Bundles of up to 12x TPS		-/90/30	-/90/90	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	300mm

Laminated shaft walls require Maxilite board to thicken the wall around the penetration. Refer to drawings on page 27.
Where TWrap is required for increased insulation performance, it is to be installed on both sides of the wall.
FyreWrap Elite 1.5 may be substituted for any of the above TWrap applications

INSTALLATION
STAGE 1: Slab-Mount the FyreBOX™

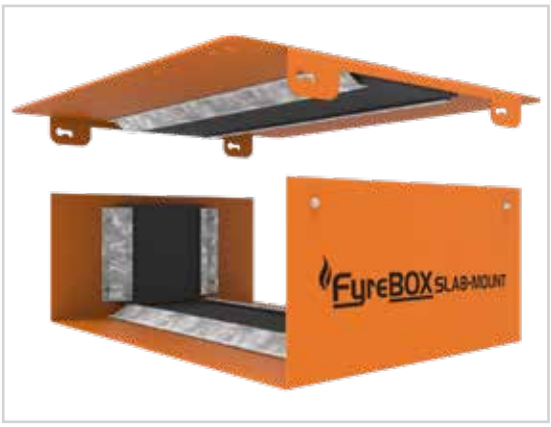
ALL WALLS

MARK

Mark the location where the wall is to be constructed and position the FyreBOX™ Slab-Mount in the desired penetration position.

Ensure that the FyreBOX™ will be located centrally to the thickness of the wall.

SEPARATE



Separate the bottom section of the FyreBOX™, and the foam end plugs, which are to be put in a safe location for later use.

FIX

Fix the top section of the FyreBOX™ to the floor slab using **M6 masonry anchors, 4mm gas or powder actuated anchors** or any other **all-steel anchor** of equal pull out rating through the pre-formed mounting holes at two per side, or 300mm centres.

SERVICES

Install services through the FyreBOX™ as required, ensuring all are approved for use. Please refer to the FRL tables for a list of all approved services (NB extra services can be installed at any stage of the FyreBOX™ installation).

INSTALLATION
STAGE 2: Wall Installation

PLASTERBOARD

CLOSE

Retrieve the bottom section of the FyreBOX™ and fit around the services, to the secured top section, confirming that all fixing tabs are properly locked into place.

FRAME

Install the wall's stud framing around the perimeter of the FyreBOX™ and fix the plasterboard as per the wall manufacturers instruction, ensuring the annular gaps between the FyreBOX™ and **wall openings are within 5-20mm and allow for deflection as required.**

There is no need to line the opening around a FyreBOX™ with plasterboard.

PLASTER

Pasterboard is applied around the FyreBOX™ Slab-Mount

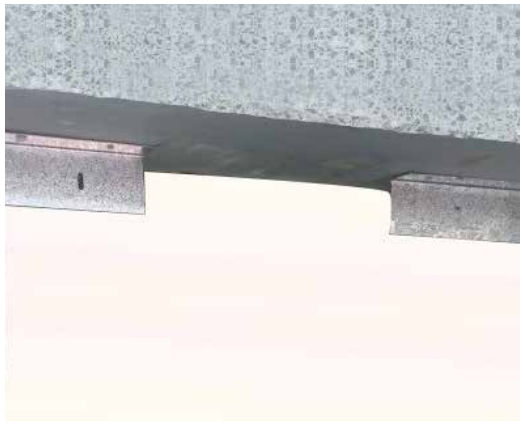
FINISHING

Complete the installation by following the Stages 3-4 steps outlined on pages 20-21.

INSTALLATION
STAGE 2: Wall Installation

AAC PANEL WALL

ANGLES



Install the Hebel wall's fixing angles on either side of the FyreBOX™

PANEL

install the Hebel wall panel as per the supplier's instructions, ensuring the annular gaps between the FyreBOX™ and wall opening are within 5-20mm.

COLLAR

FINISHING

Complete the installation by following the Stages 3-4 steps outlined on pages 20-21.

Construct FyreBOARD Maxilite wall collar, on one side of the penetration, by fixing 30mm thick x 100mm wide FyreBOARD Maxilite strips around the three exposed sides of the FyreBOX™. Fix FyreBOARD Maxilite with 10g x 60mm plasterboard screws at 150mm centres and make certain that FyreBOARD Maxilite is fixed flush with the wall opening (Trafalgar Fire strongly recommends this step is undertaken by a Trafalgar approved FyreBOX™ Certification Partner).

Please note: FyreBOARD Maxilite collar is not needed if you are planning to use the 3 – sided TWrap detail which covers the casing of the FyreBOX™ for 90-minute insulation ratings – refer to table on page 22.

INSTALLATION
STAGE 2: Wall Installation

SPEEDPANEL

ANGLES

Install the SpeedPanel C-Channel to the full perimeter of the FyreBOX™ ensuring the annular gaps between the FyreBOX™ and wall opening are within 5-20mm.

Install FR plasterboard to one side of the wall as per SpeedPanel installation specifications.

PANEL

Install the Speedpanel wall panel as per the supplier's instructions, ensuring the annular gaps between the FyreBOX™ and wall opening are within 5-20mm.

COLLAR

FINISHING

Complete the installation by following the Stages 3-4 steps outlined on pages 20-21.

For Speedpanel walls less than 78mm construct FyreBOARD Maxilite wall collar, on one side of the penetration, by fixing 30mm thick x 100mm wide FyreBOARD Maxilite strips around the three exposed sides of the FyreBOX™. Fix FyreBOARD Maxilite with 10g x 60mm plasterboard screws at 150mm centres and make certain that FyreBOARD Maxilite is fixed flush with the wall opening (Trafalgar Fire strongly recommends this step is undertaken by a Trafalgar Fire approved FyreBOX™ Certification Partner).

INSTALLATION
STAGE 3: Foam Installation

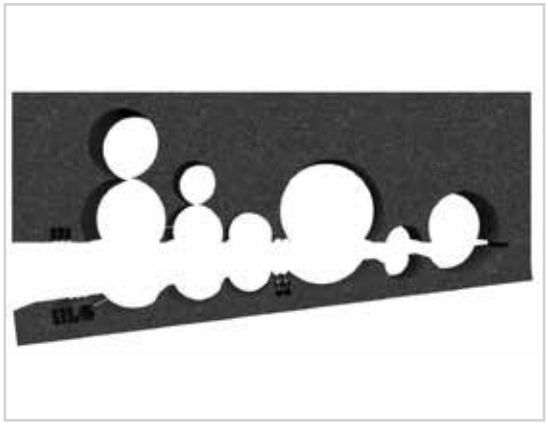
ALL WALLS

Confirm that the installation up to this point has been done in accordance with the requirements for each wall type to ensure compliance.

SEAL

Fill all annular gaps between the FyreBOX™ and wall opening with FyreFLEX Sealant to a depth of 20mm and finish with a 30x30mm fillet on each side of the penetration.

FYREBOX™ FOAM



Retrieve the foam end plugs and cut a horizontal slit allowing you to open the foam. Cut out a rough profile of the services so that the foam can be fit snugly around them. Slide the foam over/around the services and into the FyreBOX™

Please note: 30x30mm FyreFLEX fillet is not needed if you are planning to use the 3 – sided TWrap detail rating

FOAM EXAMPLE

FILL FOAM GAPS

Plug any visible gaps in the end plugs with left over foam off cuts or FyreFLEX Sealant. Note: It is recommended that after the foam is installed, a photograph should be taken for site records to demonstrate a compliant foam installation.

INSTALLATION
STAGE 4: Wrapping

ALL WALLS

If TWrap is required for the services to achieve the insulation rating as described in the tables on pages 5-14, install as follows

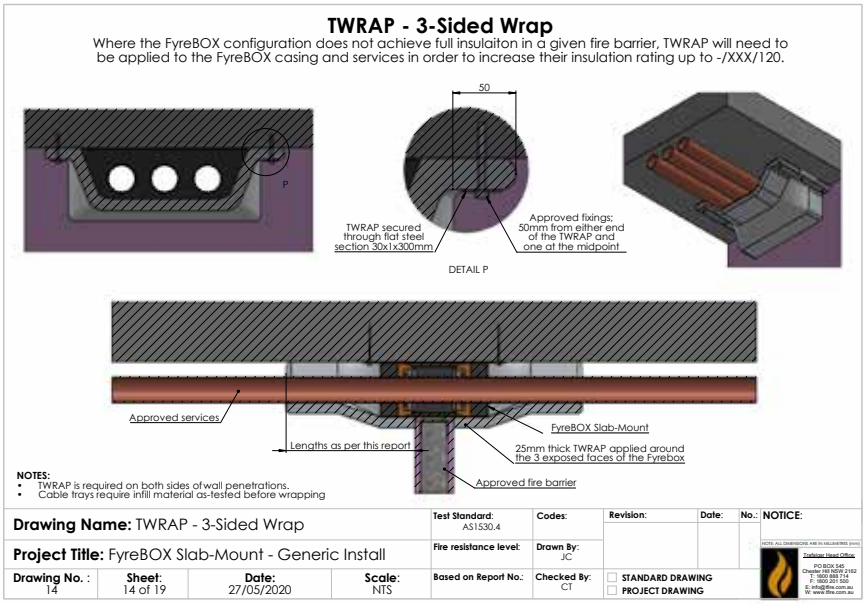
WRAP 60MIN

For a 60 minutes insulation, simply wrap TWrap around the required (or all services), ensuring each end overlaps itself by 50mm, and butt it up against the FyreBOX™'s foam end plugs. Secure the TWrap in three locations with reinforced aluminium tape or stainless-steel cable ties around the entire circumference.

WRAP UP TO 120MIN

For 90 or greater minutes insulation, simply wrap TWrap around the services and FyreBOX™ casing, flaring the edges out against the underside of the slab. These edges should overlap the slab by at least 50mm and be held in place by 30x1x300mm flat steel tabs. Refer to install drawing below.

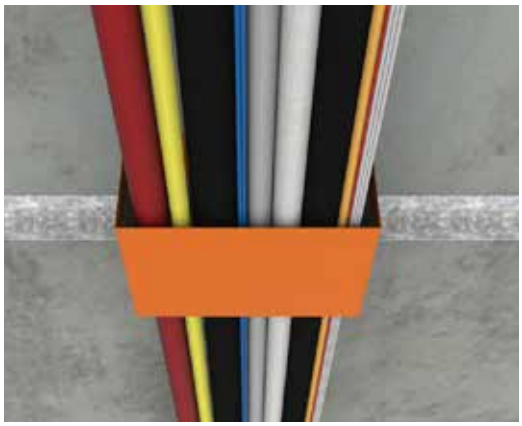
Please note, for a full FRL, TWrap will need to be applied on both sides of the penetration.



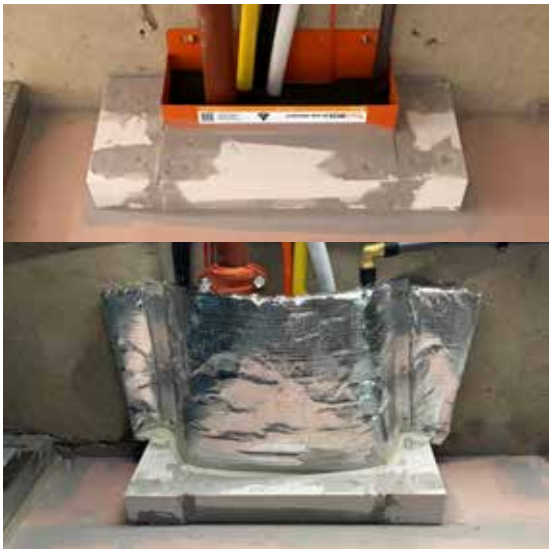
INSTALLATION ALTERNATIVES

RISER SHAFT

RISER SHAFT INSTALLATIONS



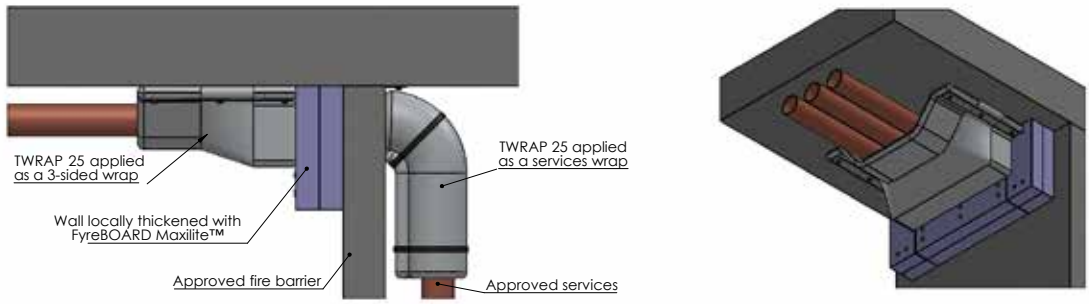
Where the FyreBOX™ cannot be centered in the wall due to narrow risers or slab edges being nearby.

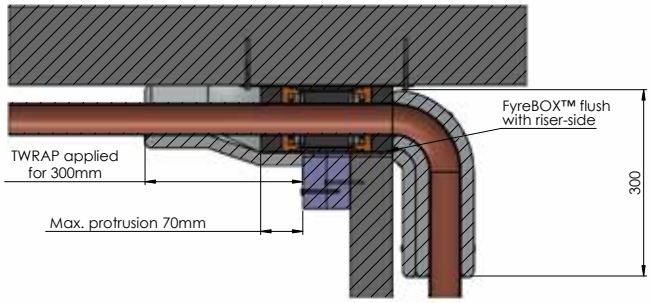


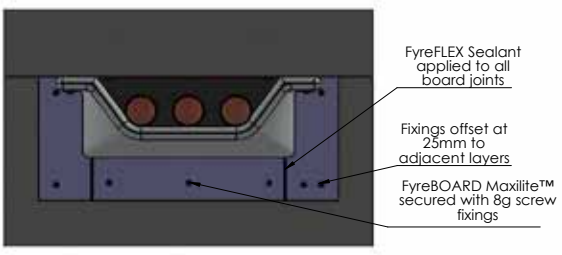
The FyreBOX™can be installed offset to the wall using strips of FyreBOARD Maxilite® to locally thicken the penetration.

Riser Shaft Detail - FyreBOX™ Slab-Mount installed with access from one side

FyreBOX™ Slab-Mount to be installed, offset from the thickness of the fire barrier, as per the standard details for the corresponding barrier type







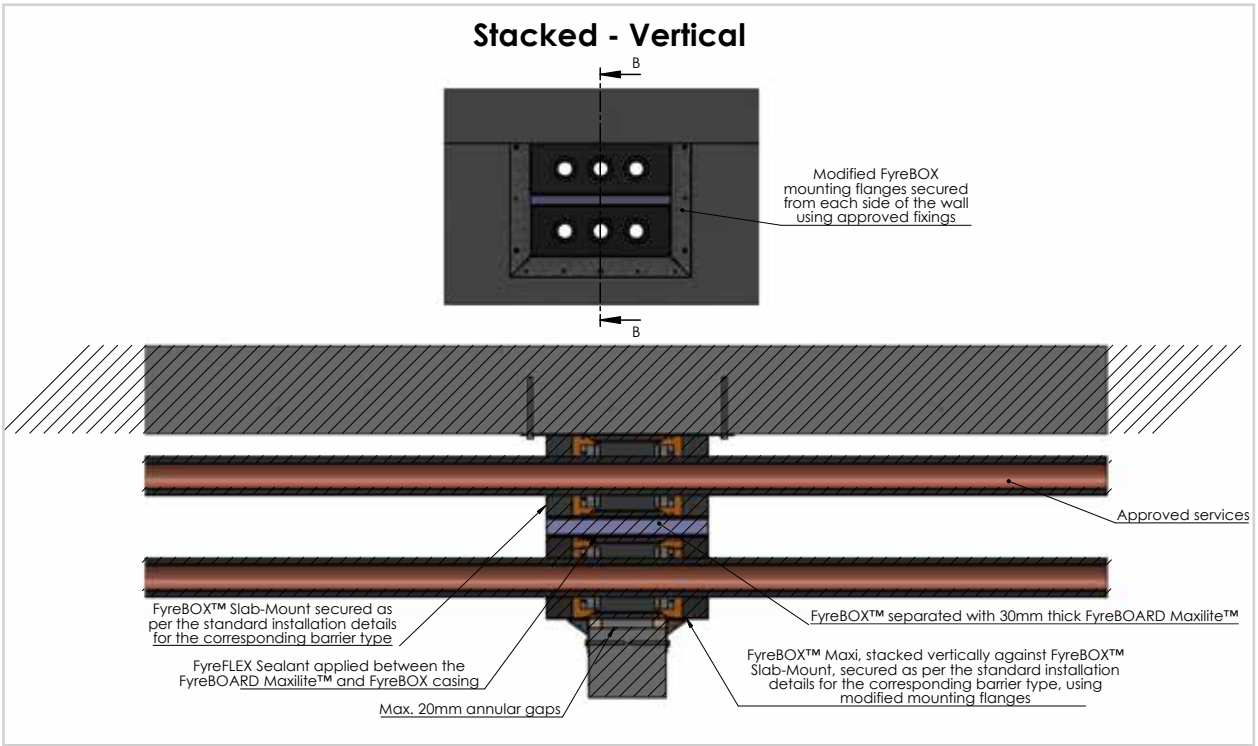
NOTES:
- Cable trays require infill material as-tested before wrapping

INSTALLATION ALTERNATIVES

FYREBOX™ DOUBLE VERTICAL

FyreBOX™ DOUBLE VERTICAL

Where a large run of services needs firestopping in a small width of wall



INSTALLATION ALTERNATIVES

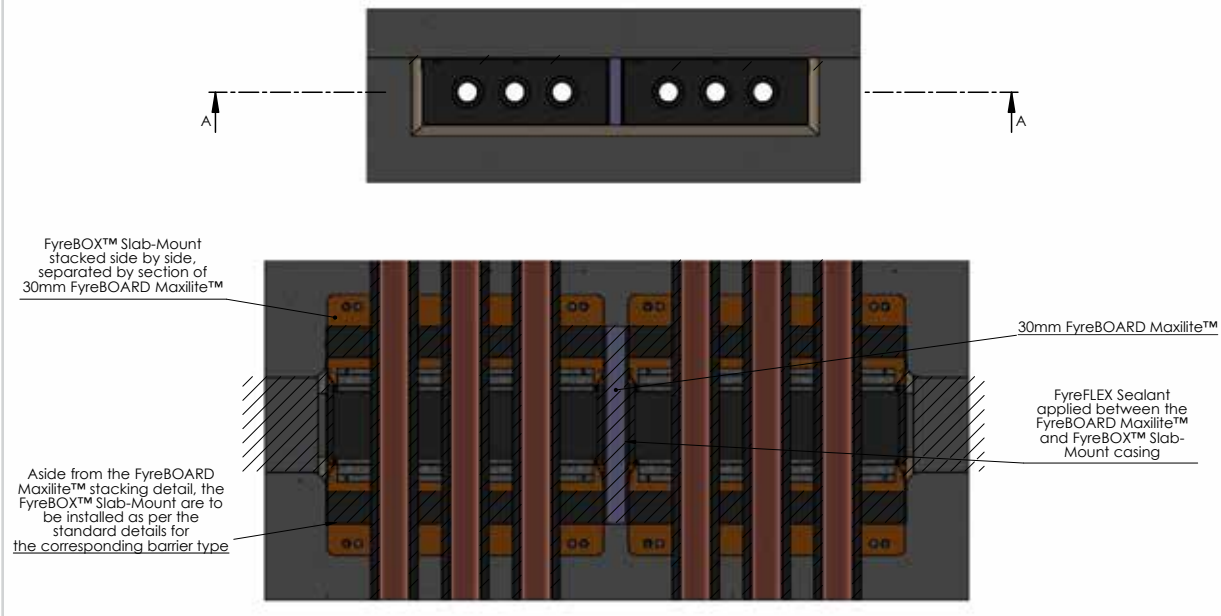
FYREBOX™ DOUBLE HORIZONTAL

DOUBLE HORIZONTAL

For where large amounts of services exit a riser shaft wall.

Double Vertical FyreBOX installed above a doorway to allow for the provision of large amounts of services in a small space.

Stacked - Horizontal



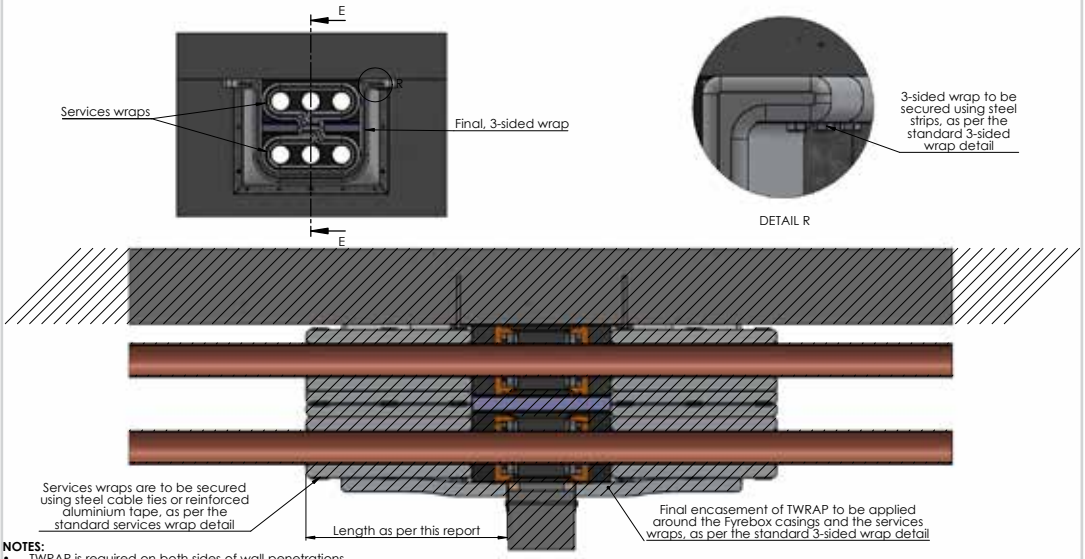
INSTALLATION ALTERNATIVES

FYREBOX™ DOUBLES TWRAP

DOUBLE VERTICAL - WRAPPING

TWRAP - Stacked (Vertical)

- TWRAP detail required on each side ofwall penetrations



NOTES:
- TWRAP is required on both sides of wall penetrations.
- Cable trays require infill material as-tested before wrapping

Drawing Name: Stacked (Vertical) - TWRAP			Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:
Project Title: FyreBOX™ Slab-Mount - Generic Install			Fire resistance level:	Drawn By: JC			
Drawing No.: 18	**Sheet:** 18 of 19	**Date:** 27/05/2020	**Scale:** NTS	Based on Report No.:	Checked By: CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

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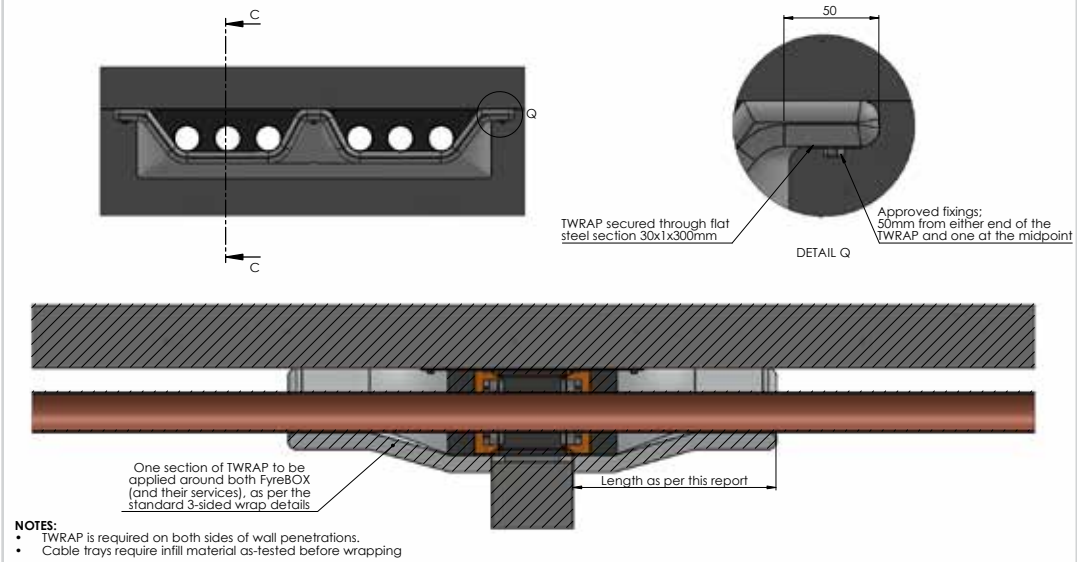
W: www.tfire.com.au

DOUBLE HORIZONTAL - WRAPPING

TWRAP - Stacked (Horizontal)

- TWRAP detail required on each side of wall penetrations andtop side of floors



NOTES:
- TWRAP is required on both sides of wall penetrations.
- Cable trays require infill material as-tested before wrapping

Drawing Name: Stacked (Horizontal) - TWRAP			Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:
Project Title: FyreBOX™ Slab-Mount - Generic Install			Fire resistance level:	Drawn By: JC			
Drawing No.: 17	**Sheet:** 17 of 19	**Date:** 27/05/2020	**Scale:** NTS	Based on Report No.:	Checked By: CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

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INSTALLATION CHECKLIST

PLASTERBOARD

FyreBOX™ Label/Identifer No. _____

Installer Name: _____

Company: _____

Site: _____

Floor/Level: _____ FRL _____

	Installation Checklist	Satisfactory	Action Required
1	Is the FyreBOX™ located centrally to the thickness of the wall?		
2	Are correct fixings (M6 masonry Anchors, 4mm gas or powder actuated anchors, or any other steel anchor of equal pull out rating) used to fix the top side of FyreBOX™ onto the Floor slab?		
3	Are there 2 fixings per side, or maximum gap between the anchors at 300mm?		
4	Does the size of the wall opening allow for annular gap between the opening and FyreBOX™ within 5 to 20 mm?		
5	Are the services running through the FyreBOX™ as per the approved services list on the tech guide/datasheet?		
6	Is the stud framing around the perimeter of the box installed as per the wall manufacturer's instructions?		
7	Is the sealant applied to correct depth of 20 mm on each side with a (fillet size of approximately 30x30mm) Note: If 3-sided wrap is used, fillet not required		
8	Is the foam snugly fit around the services and any visible gaps covered with foam off-cuts or FyreFLEX sealant?		
	60 Minutes Services Insultaion		
1	Does the TWRAP wrap around the services and overlaps itself by 50mm?		
2	Is the TWRAP butted against the FyreBOX™ foam and end plugs?		
3	Is the TWRAP secured in three locations with reinforced aluminium tape or stainless-steel cable ties around the entire circumference?		
	90 Minute Insulation (3-sided Wrap)		
1	Does the TWRAP cover the services including the FyreBOX™ and flaring at least 50mm at edges and against the slab?		
2	Is the correct steel tab (30x1x300mm) used to hold the TWRAP in place on both sides of the FyreBOX™?		
3	Are correct fixings M6 masonry Anchors used to fix the steel tab and TWRAP onto the Floor slab, 3x per side?		
4	Is the TWRAP butted up against the wall, around the box?		

For a full list of installation instructions, refer to the installation pages 17-26 of this FyreBOX ™ Slab-Mount Product Manual.

INSTALLATION CHECKLIST

AAC PANEL WALL

FyreBOX™ Label/Identifer No. _____

Installer Name: _____

Company: _____

Site: _____

Floor/Level: _____ FRL _____

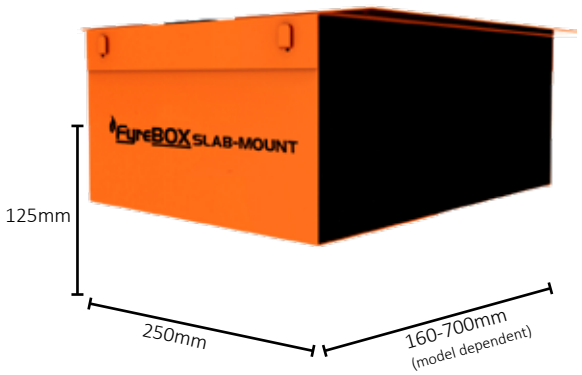
	Installation Checklist	Satisfactory	Action Required
1	Is the FyreBOX™ located centrally to the thickness of the wall?		
2	Are correct fixings (M6 masonry Anchors, 4mm gas or powder actuated anchors, or any other steel anchor of equal pull out rating) used to fix the top side of FyreBOX™ onto the Floor slab?		
3	Are there 2 fixings per side, or maximum gap between the anchors at 300mm?		
4	Does the size of the wall opening allow for annular gap between the opening and FyreBOX™ within 5 to 20 mm?		
5	Are the services running through the FyreBOX™ as per the approved services list on the tech guide/datasheet?		
6	Are the Hebel Wall's Head Track angles installed as per the wall manufacturer's instructions on both sides?		
7	Is the sealant applied to correct depth of 20 mm on each side with a (fillet size of approximately 30x30mm) Note:If 3-sided wrap is used, fillet not required		
8	Is the foam snugly fit around the services and any visible gaps covered with foam off-cuts or FyreFLEX sealant?		
	60 Minutes Services Insultaion		
1	Is the Maxilite Wall Collar constructed correctly? (One side of the penetration using three 30mm thick x 100 mm Maxilite strips) *(Maxilite Collar not needed if planning to use 3-sided TWRAP)		
2	Are the boards fixed using 10gx60mm plasterboard screws at 150mm centres and flush with the wall opening?		
3	Is the resulting gap sealed with FyreFLEX Sealant (full depth and fillet size of 30x30mm)?		
4	Does the TWRAP wrap around the services and overlaps itself by 50mm? (TWRAP only needs to be applied on conductive services)		
5	Is the TWRAP butted against the FyreBOX™ foam and end plugs?		
6	Is the TWRAP secured in three locations with reinforced aluminium tape or stainless-steel cable ties around the entire circumference?		
	90 Minute Insulation (3-sided Wrap)		
1	Does the TWRAP cover the services including the FyreBOX™ and flaring at least 50mm at edges and against the slab?		
2	Is the correct steel tab (30x1x300mm) used to hold the TWRAP in place on both sides of the FyreBOX™?		
3	Are correct fixings M6 masonry Anchors used to fix the steel tab and TWRAP onto the Floor slab, 3x per side?		
4	Is the TWRAP butted up against the wall, around the box?		

For a full list of installation instructions, refer to the installation pages 17-26 of this FyreBOX ™ Slab-Mount Product Manual.

FyreBOX™ Slab-Mount SYSTEMS

FyreBOX SLAB-MOUNT

AUSTRALIAN MADE AND OWNED

Item Number	Description	Dimensions
FYREBOX-SM-BAMBINO	160 x125 x 250mm	
FYREBOX-SM-350	350 x 125 x 250mm	
FYREBOX-SM-550	550 x 125 x 250mm	
FYREBOX-SM-650	650 x 125 x 250mm	
FYREBOX-SM-Custom	Any size from 100 up to 1250 x 125 x 250mm	

FyreBOX™ Slab-Mount SYSTEMS COMPONENTS

Item Number	Description	Min Order Qty
TWrap- 300 x 810mm	300 x 810 x 25mm Pre Cut Strip	1
TWrap- 300 x 1010mm	300 x 1010 x 25mm Pre Cut Strip	1
TWrap Roll- 300mm	300 x7620 x 25mm Full Roll	1
Maxilite Strips FYREBOX SM 350	1 Strip at 580 x 100 x 30mm 2 Strips at 145 x 100 x 30mm	-

FyreBOX™ Slab-Mount

NCC 2022 READY

COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE (NCC)

Formerly known as BCA

Under the NCC requirements, a multiple service transit system for service penetrations should be fire tested in every configuration that it is intended for use in, both completely empty (blank seal), partially full and completely full of services so that the product many be installed with as many or as little services as required on site. It is important to fire test in all the different walls types and with different configurations, quantities and types of services which is a time consuming (and expensive) exercise.

Trafalgar FyreBOX systems have been fire tested extensively to AS1530.4-2014 and approved in accordance with Section 4 AS4072.1 as required by Schedule 5 of the NCC. This includes over 200 hours of accredited furnace time and 30 plus individual test reports to cover the full range of service and wall configurations that allow us to comfortably stand behind our multiple SYSTEM approvals.

These configurations include but are not limited to:

- Service fill ratio: Empty (blank seal), half full and completely full of services
- Barrier types: Various types of plasterboard, concrete, Blockwork, Hebel, Walsc, Speedpanel, Pronto panel, Maxilite board, concrete floors etc
- Services: Bare and insulated metal pipes, cable trays and cable bundles, PVC pipes & conduits, PEX and PEX-AL-PEX pipes, CPVC pipes etc
- Configurations: Blank seal (empty), full of services, double stacked, side by side etc
- Insulation performance: Tested both wrapped and unwrapped with TWrap to ensure the system works in both configurations
- Penetration sizes: 150 x 125, 350x125, 550x125, 1100x125
- FyreBOX Variants: Slab Mount, Slab Mount Bambino, Cast-in, Maxi & Mini (retrofit)

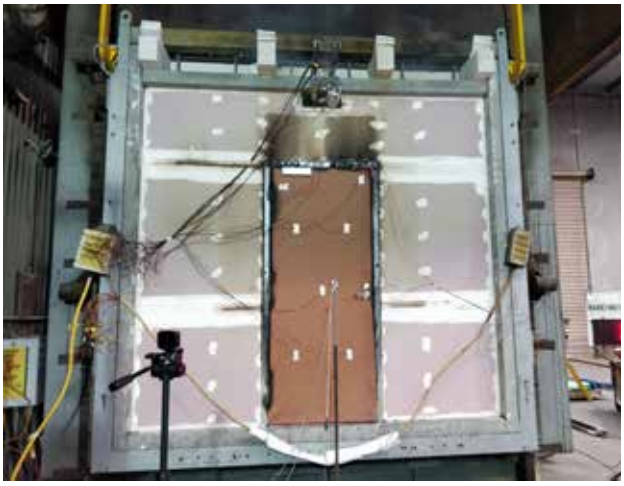
When choosing a multiple service transit penetration system like FyreBOX, it is important to check that all aspects of your system have been fire tested and are fit for purpose.

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

TEST AND ASSESSMENT REPORTS

The above-mentioned fire testing reports have all been conveniently summarised into **BRANZ assessment report FC10266 (available on www.tfire.com.au)** which neatly tabulates the approved services in a range of fire barriers, for all FyreBOX variants and applications, and covers only minor variations to the tested systems, thereby providing trouble free certification according to NCC.

Importantly, every aspect of the assessment report are backed up by the fire test data and the individual fire test reports are available on request for certification purposes.



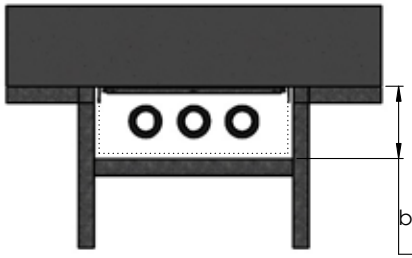
FyreBOX Slab-Mount - Installation Overview

STEP 1

Approved fixings at max. 300mm centres

Secure top-section of FyreBOX to slab soffit, ensuring it will be located centrally to the thickness of the wall

STEP 2

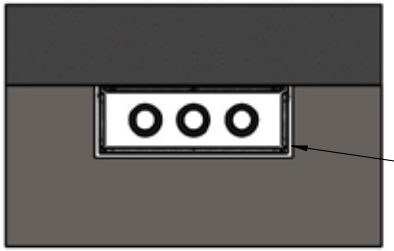


Size to suit box + movement requirements

Run approved services through the FyreBOX, ensuring they will be located within the completed FyreBOX opening.

NOTE: Services can be run at any stage of the install

STEP 3

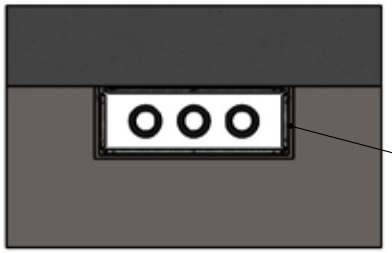


Ensure 5-20mm annular gaps between the FyreBOX and wall opening

Clip together the bottom-section of the FyreBOX and construct the approved fire wall

NOTE: The FyreBOX Slab-Mount can also be retrofit into existing wall systems

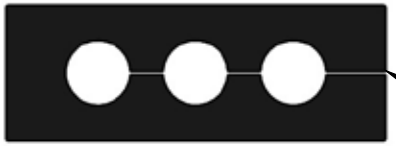
STEP 4



FyreFLEX Sealant

Fill annular gaps with FyreFLEX Sealant to a depth of at least 20mm, from each side of the wall

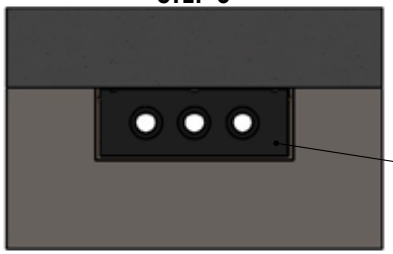
STEP 5



Cut slit through foam openings

Retrieve foam end plugs and form openings to match the services within the FyreBOX. Cutting a slit through these openings will allow for the plug to be opened and inserted around the existing services

STEP 6



Foam end plugs fit snug around services

Fit foam end plugs tightly around the services, from each side of the FyreBOX, and plug any gaps with foam off cuts or FyreFLEX/FyrePEX HP Sealant. Continue to TWRAP drawings if wrapping will be required for full insulation.

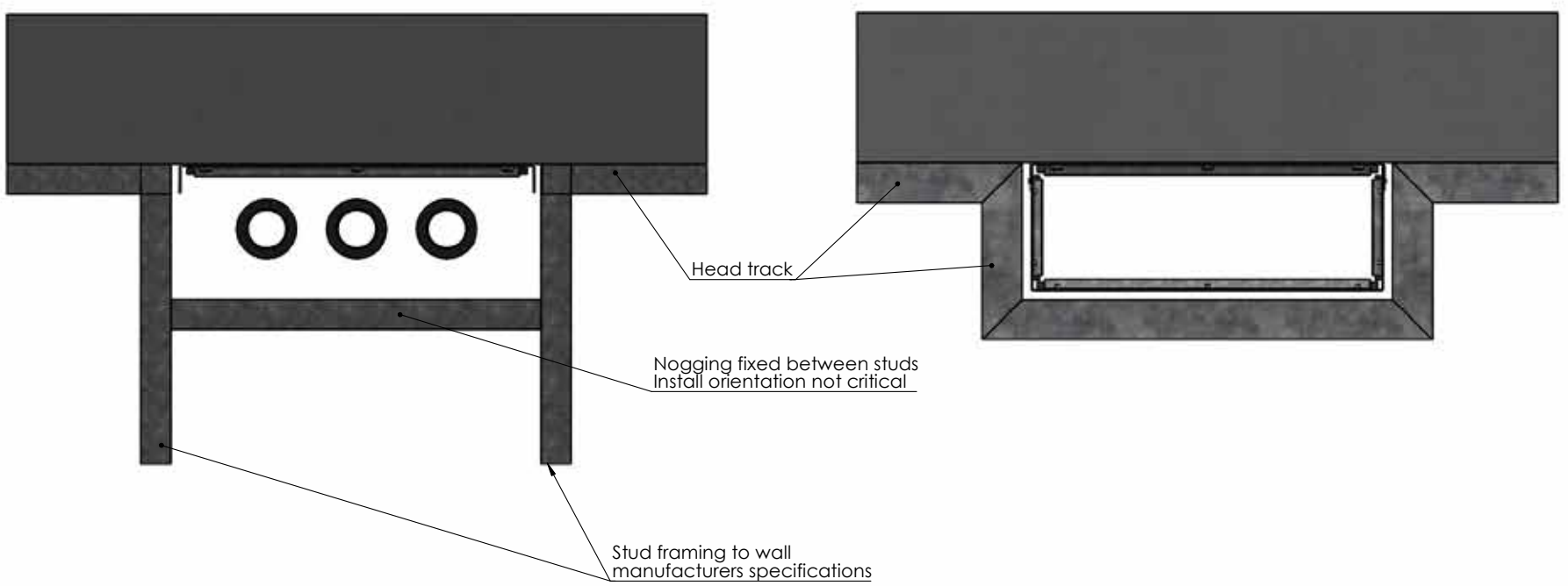
NOTE: This is a generic installation guide. For specific details relevant to each barrier type, please refer to the corresponding installation drawing.

Drawing Name: Installation Overview			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:**	**No.:** **NOTICE:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC			NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 2	**Sheet:** 2 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ **STANDARD DRAWING** ☐ **PROJECT DRAWING**	TRAFALGAR FIRE

Plasterboard framing details

Option A - Full-width nogging between studs
Recommeded for areas above fire doors

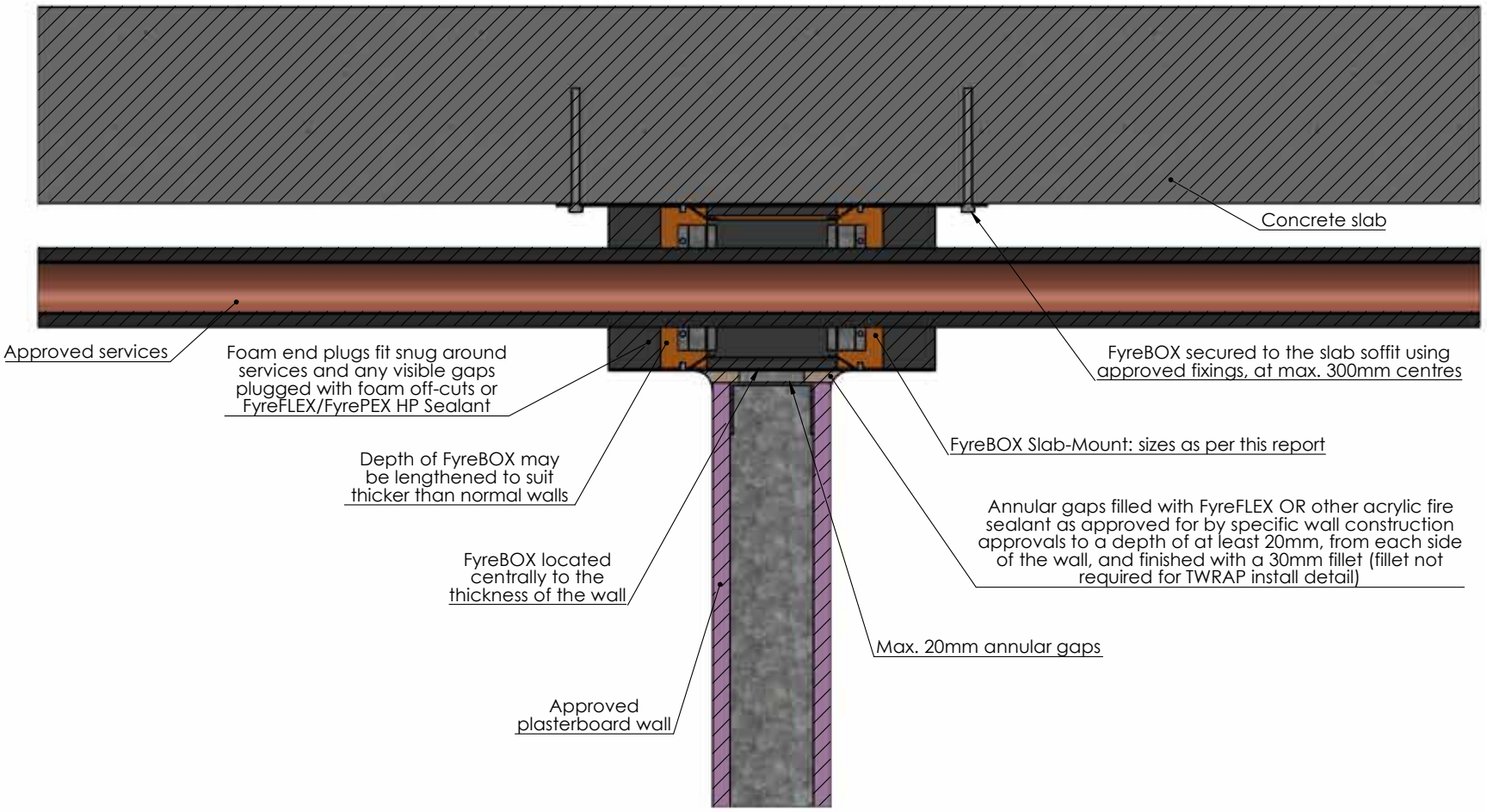
Option B - Head track contoured around opening
Recommended for penetrations remote from fire doors



Notes:
- Both options are as-tested
- Both options have been tested without the opening being lined with plasterboard
- When located above fire doors, option A is the recommended installation detail
- Openings are to allow sufficient clearance for building movement

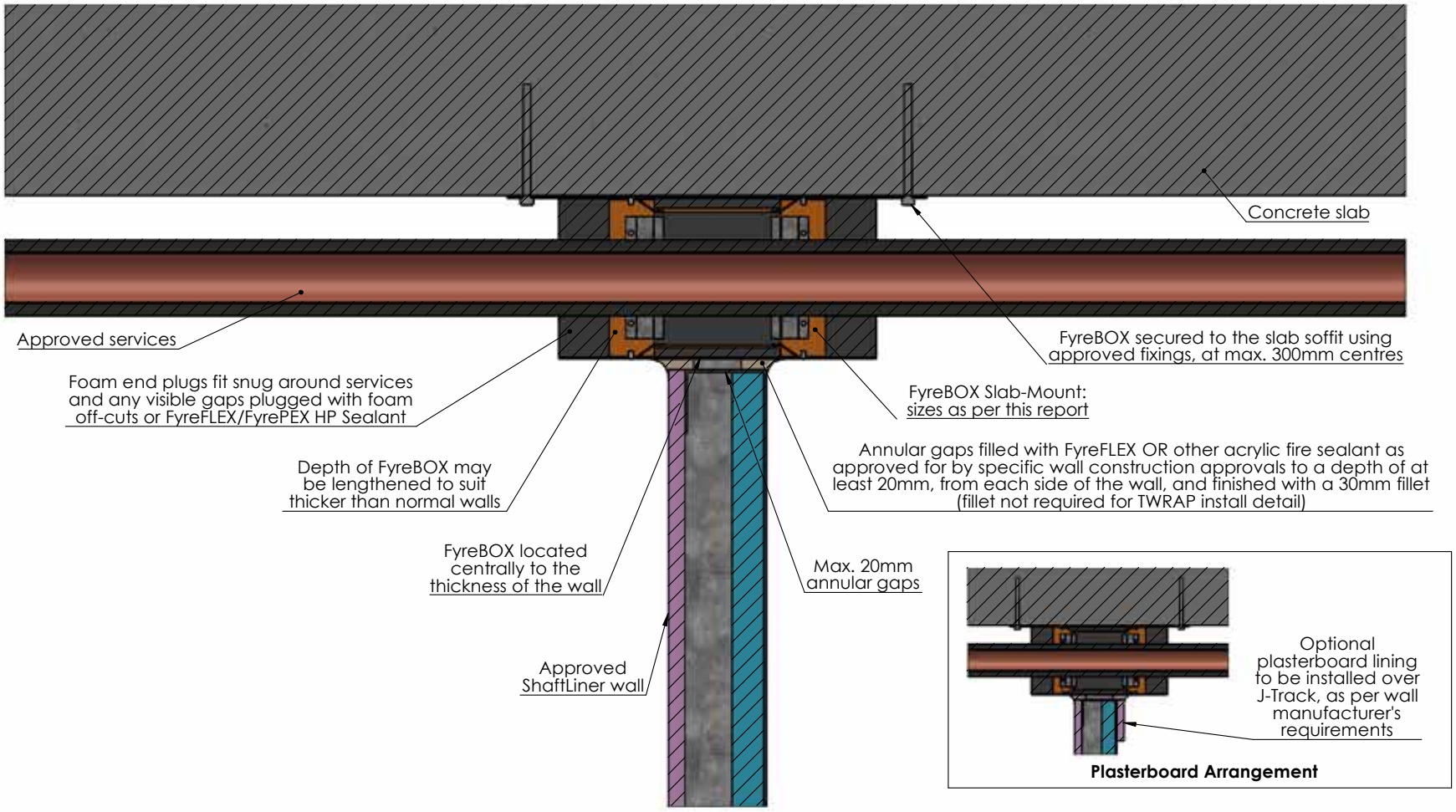
Drawing Name: Plaster framing details			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:** / **No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC		**NOTICE:** NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 3	**Sheet:** 3 of 19	**Date:** 27/05/2020 / **Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	TRAFALGAR FIRE

Standard Plasterboard Walls



Drawing Name: Standard Plasterboard				**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:** / **No.:**
Project Title: FyreBOX Slab-Mount - Generic Install				**Fire resistance level:**	**Drawn By:** JC		**NOTICE:** NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 4	**Sheet:** 4 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	TRAFALGAR FIRE

ShaftLiner Walls



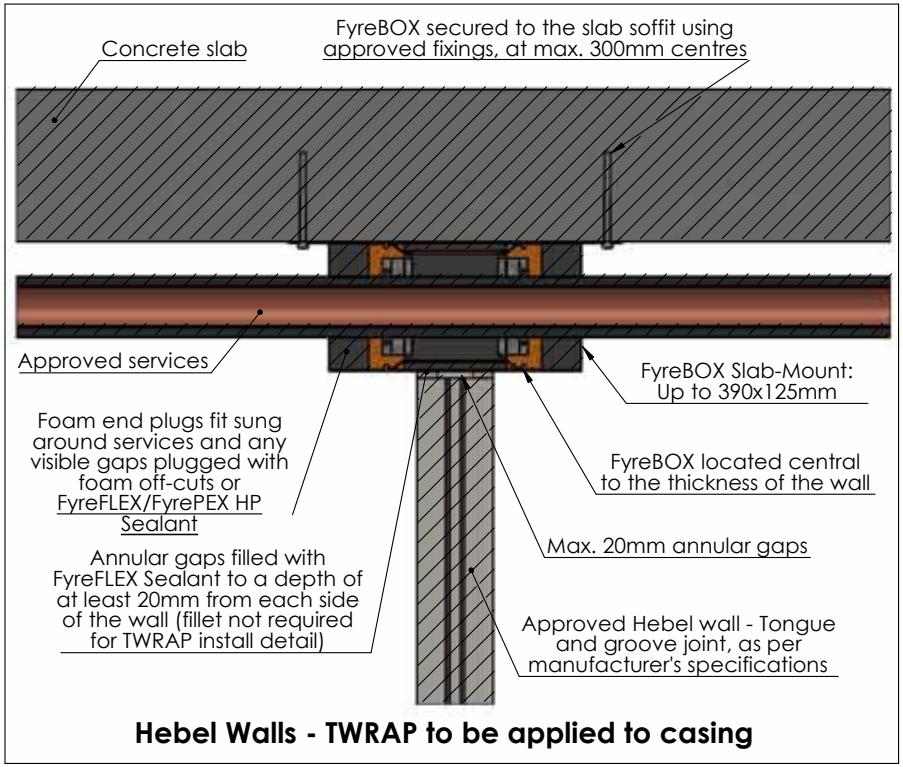
Plasterboard Arrangement

Drawing Name: ShaftLiner			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:**	**No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC			
Drawing No. : 6	**Sheet:** 6 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	

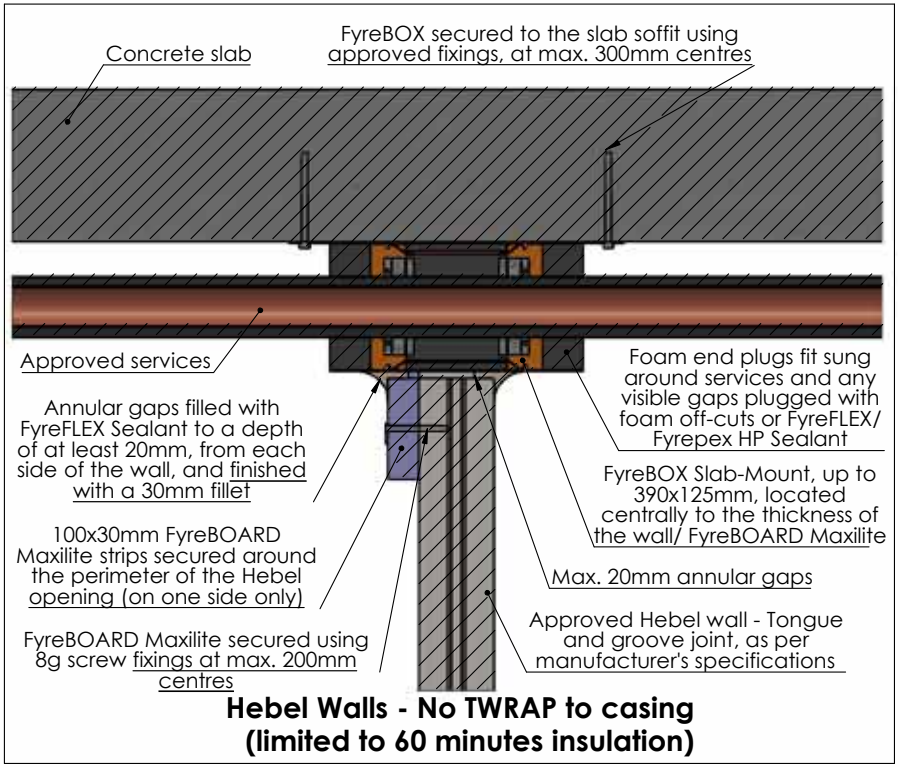
NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

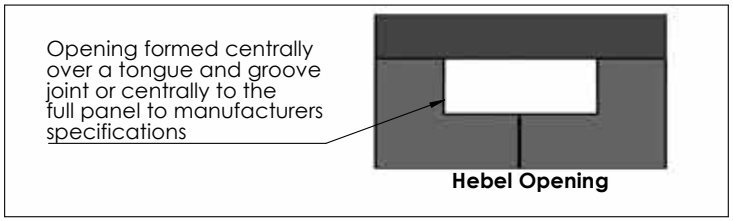
Hebel/Walsc AAC Walls - Openings up to 400x170mm



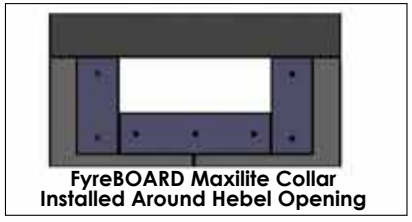
Hebel Walls - TWRAP to be applied to casing



Hebel Walls - No TWRAP to casing (limited to 60 minutes insulation)



Hebel Opening



FyreBOARD Maxilite Collar Installed Around Hebel Opening

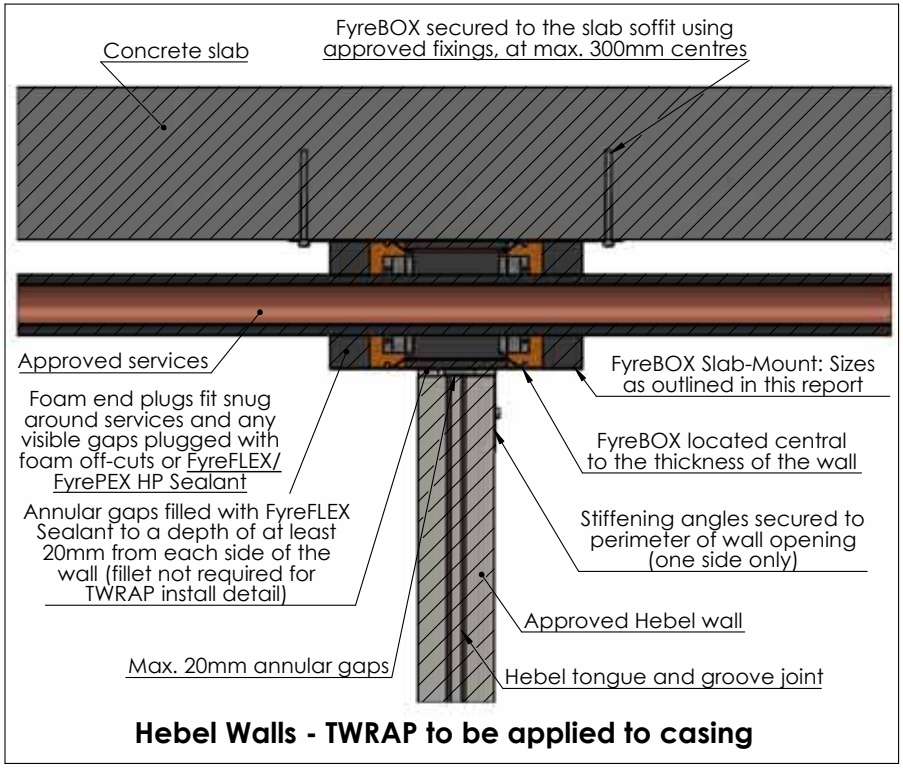
Drawing Name: Hebel/Walsc - Small Openings			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:** / **No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC		
Drawing No. : 7	**Sheet:** 7 of 19	**Date:** 27/05/2020 / **Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	

NOTICE:

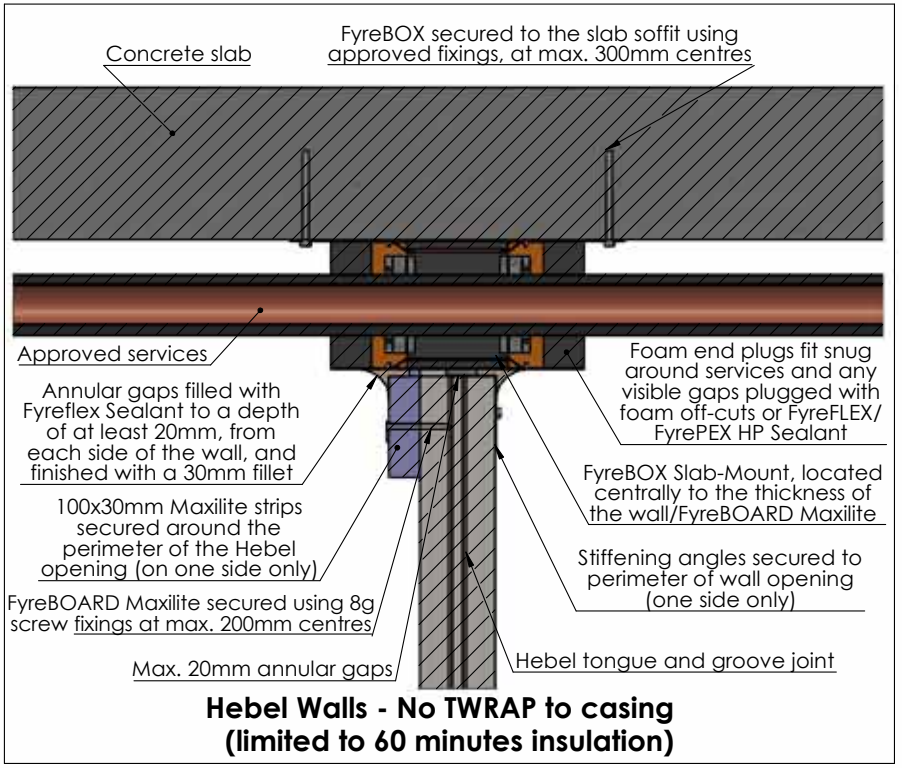
NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

TRAFALGAR FIRE

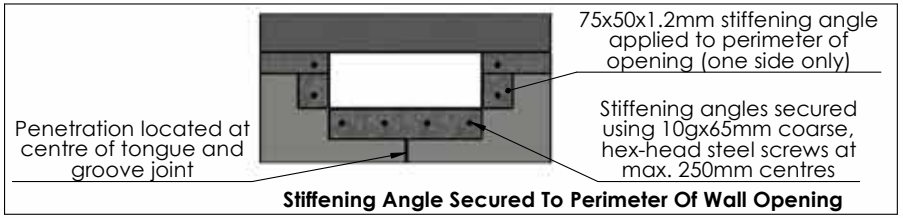
Hebel/Walsc AAC Walls - Openings greater than 400x170mm



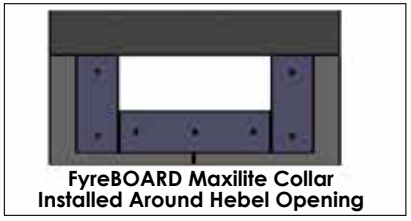
Hebel Walls - TWRAP to be applied to casing



Hebel Walls - No TWRAP to casing (limited to 60 minutes insulation)



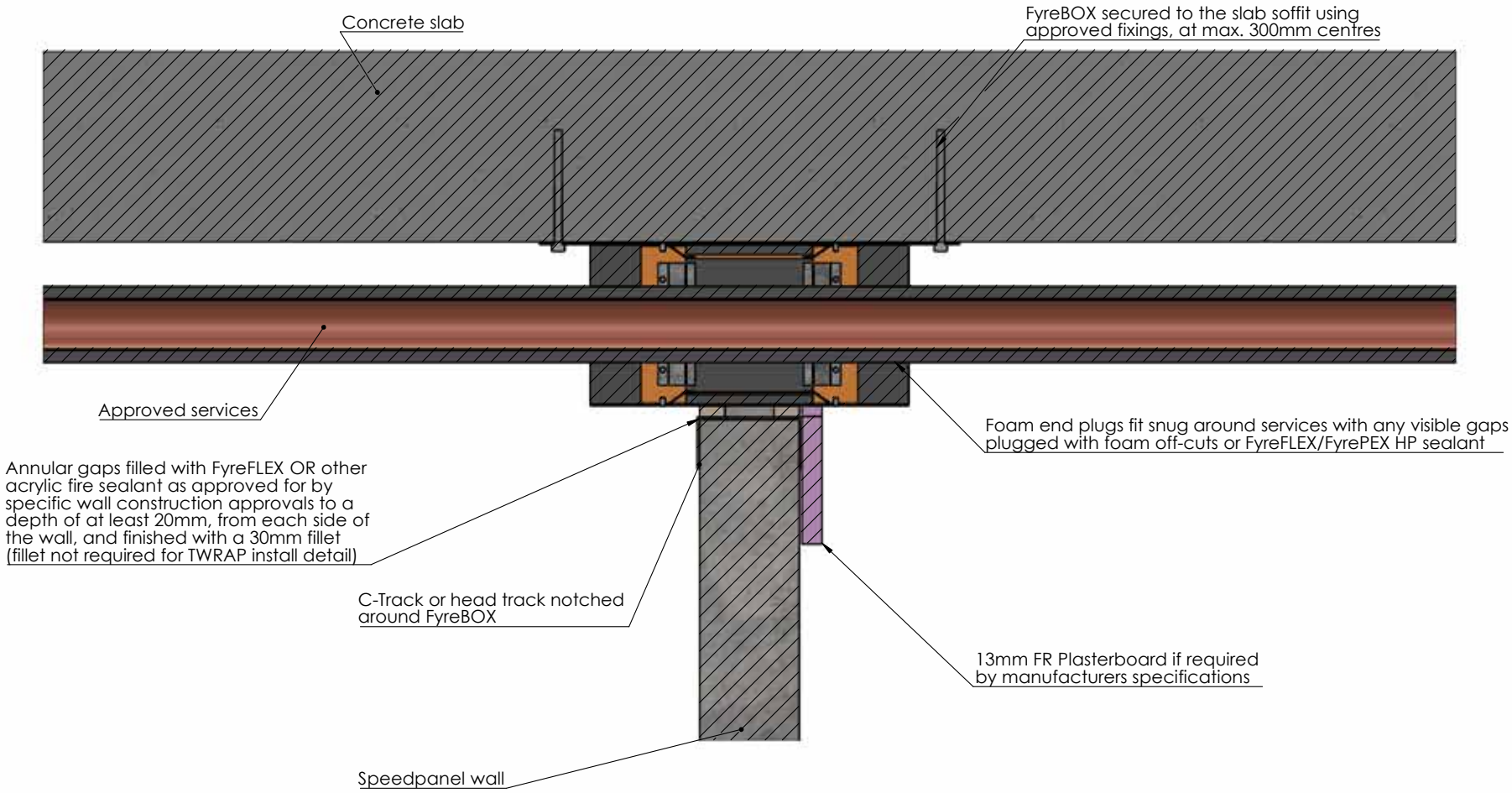
Stiffening Angle Secured To Perimeter Of Wall Opening



FyreBOARD Maxilite Collar Installed Around Hebel Opening

Drawing Name: Hebel/Walsc - Large Openings			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:** / **No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC		**NOTICE:** NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 8	**Sheet:** 8 of 19	**Date:** 27/05/2020 / **Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	TRAFALGAR FIRE

SpeedPanel Walls



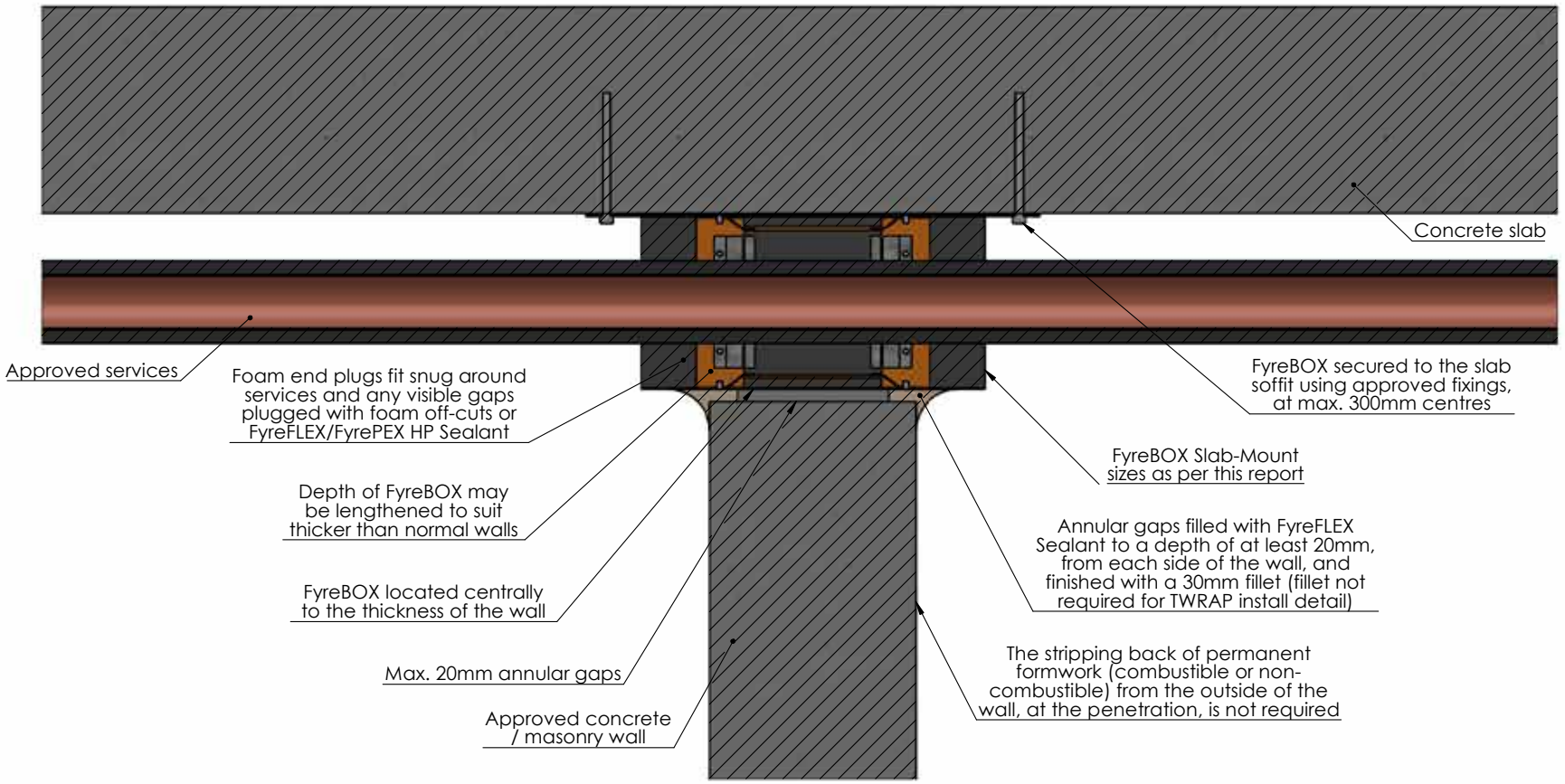
Drawing Name: SpeedPanel			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:**	**No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:** SECTION T-T SCALE 1 : 3	**Drawn By:** JC			
Drawing No. : 10	**Sheet:** 10 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

TRAFALGAR FIRE

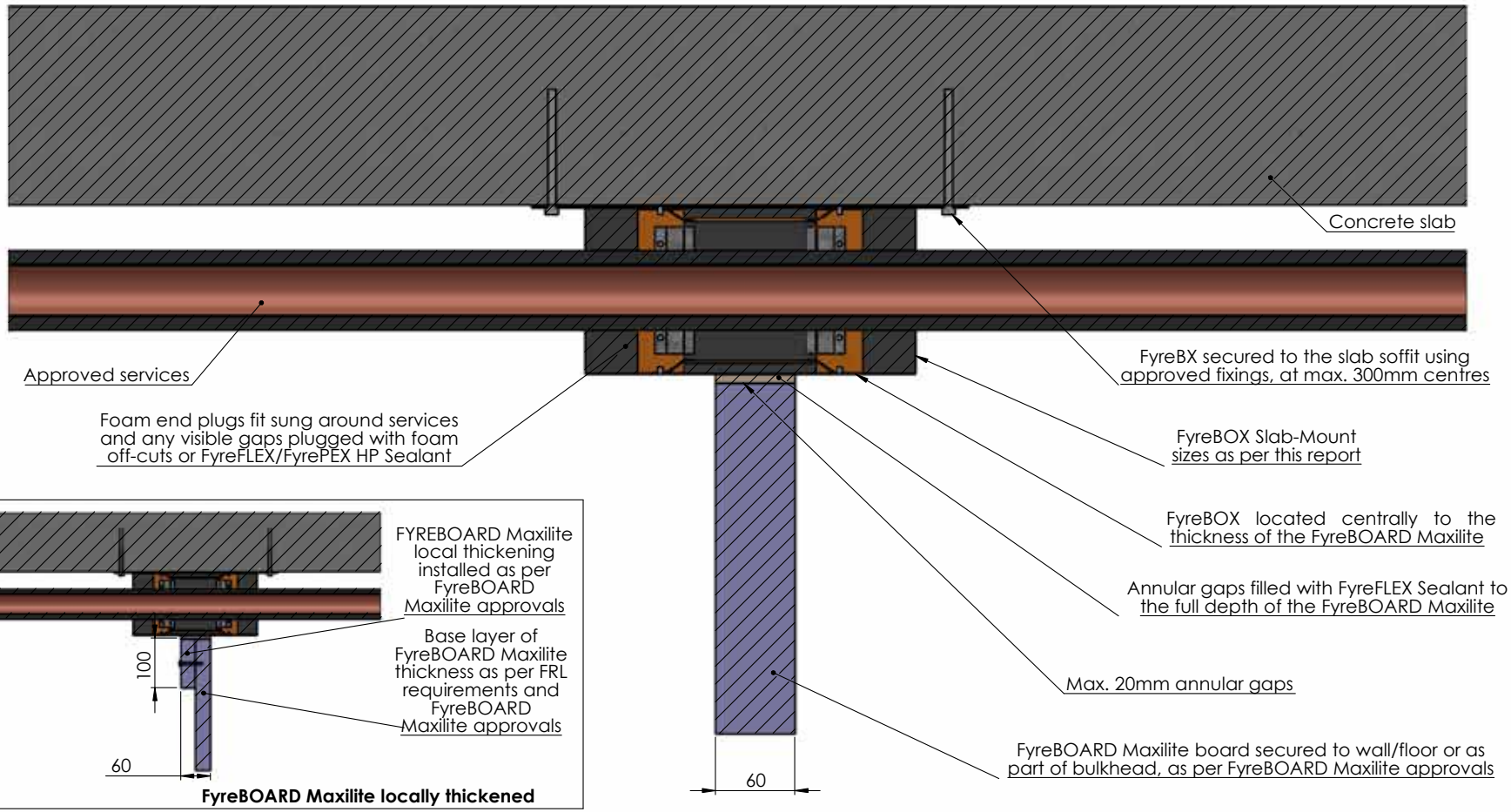
Concrete / Masonry Walls (with or without permanent formwork)



Drawing Name: Concrete / Masonry			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:** / **No.:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC		
Drawing No. : 11	**Sheet:** 11 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING

NOTICE: NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

FyreBOARD Maxilite



Drawing Name: FyreBOARD Maxilite		**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:**	**No.:**
Project Title: FyreBOX Slab-Mount - Generic Install		**Fire resistance level:**	**Drawn By:** JC			
Drawing No. : 12	**Sheet:** 12 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING

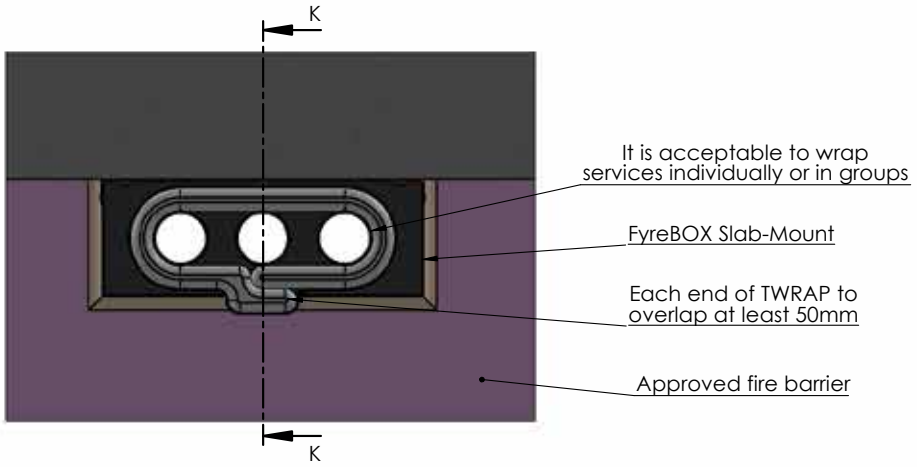
NOTICE:

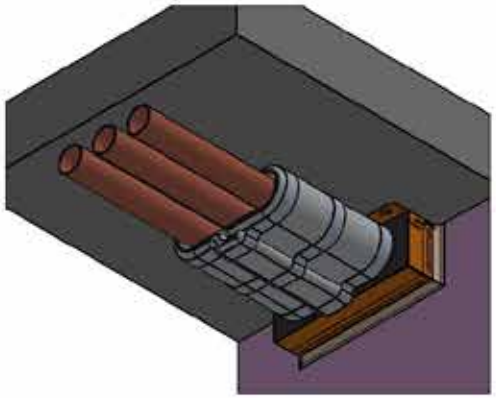
NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

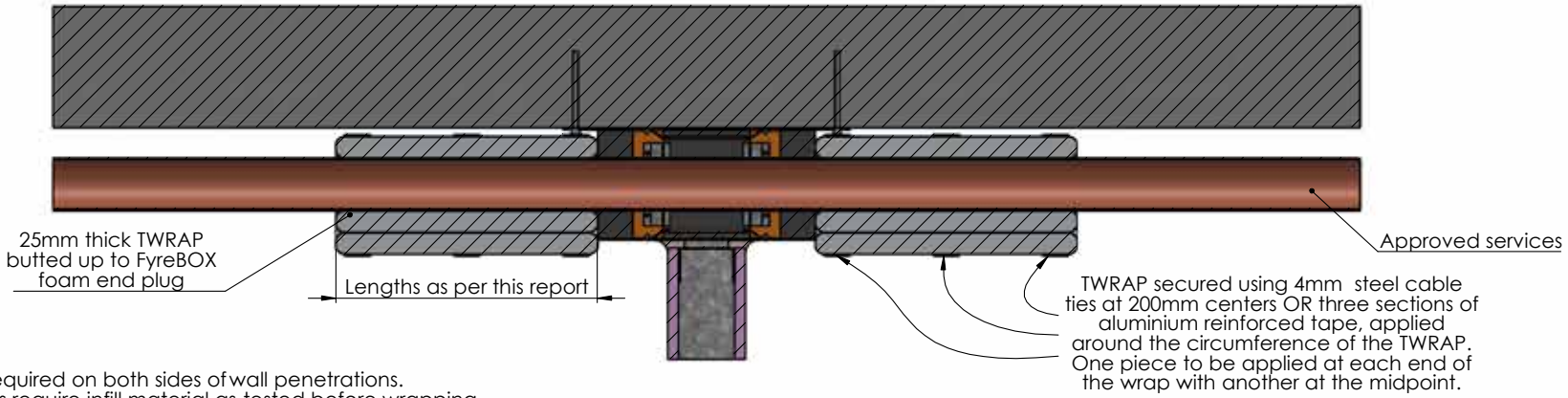
TRAFALGAR FIRE

TWRAP - Services Wrap

Where the FyreBOX configuration doesn't achieve full insulation in a given fire barrier, TWRAP can be applied to individual or groups of services in order to increase their insulation rating up to -/XXX/120, as required.





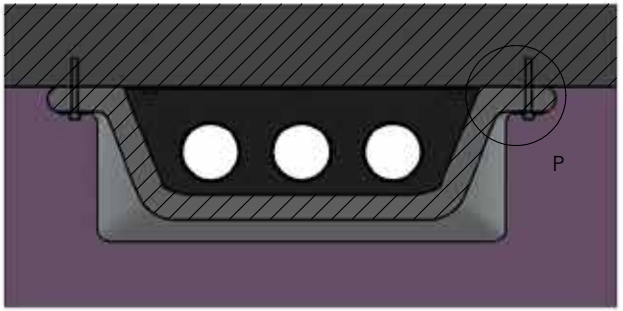


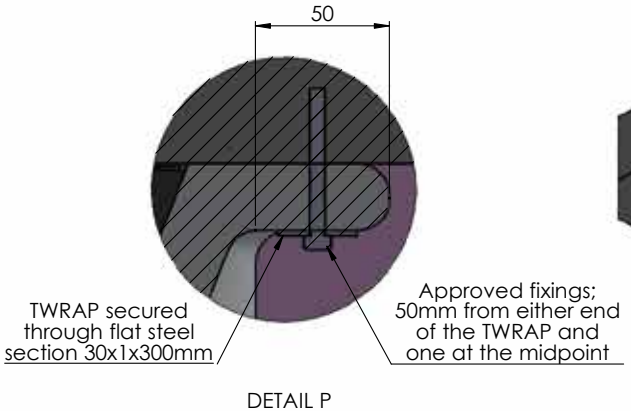
NOTES:
- TWRAP is required on both sides of wall penetrations.
- Cable trays require infill material as-tested before wrapping

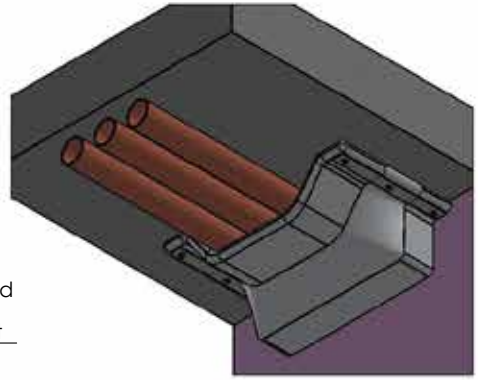
Drawing Name: TWRAP - Services Wrap			**Test Standard:** AS1530.4	**Codes:**	**Revision:** / **Date:** / **No.:**	**NOTICE:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC		NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 13	**Sheet:** 13 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING

TWRAP - 3-Sided Wrap

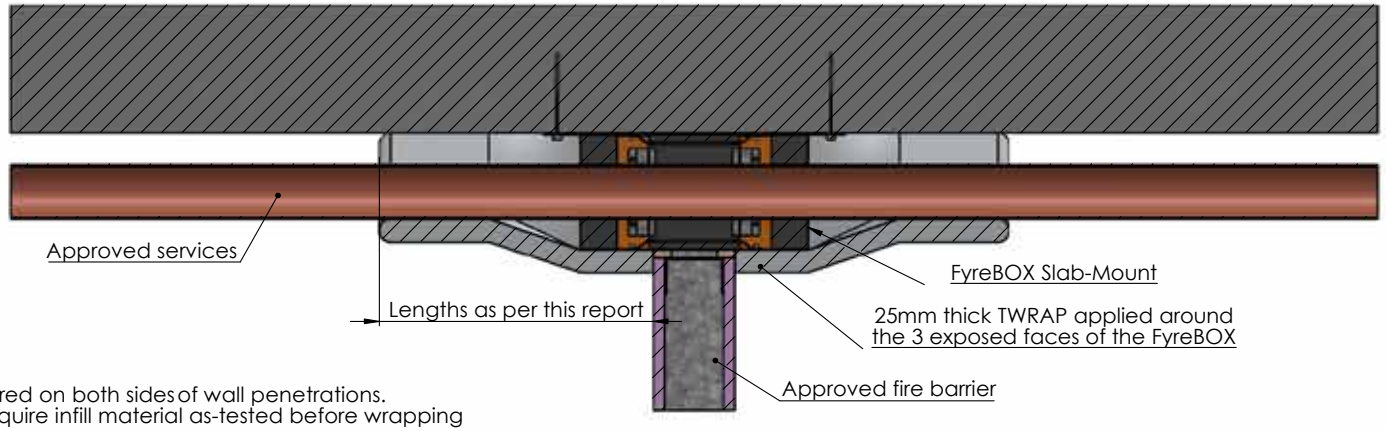
Where the FyreBOX configuration does not achieve full insulation in a given fire barrier, TWRAP will need to be applied to the FyreBOX casing and services in order to increase their insulation rating up to -/ XXX/120.







DETAIL P



NOTES:
- TWRAP is required on both sides of wall penetrations.
- Cable trays require infill material as-tested before wrapping

Drawing Name: TWRAP - 3-Sided Wrap			**Test Standard:** AS1530.4	**Codes:**	**Revision:**	**Date:**	**No.:** **NOTICE:**
Project Title: FyreBOX Slab-Mount - Generic Install			**Fire resistance level:**	**Drawn By:** JC			NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 14	**Sheet:** 14 of 19	**Date:** 27/05/2020	**Scale:** NTS	**Based on Report No.:**	**Checked By:** CT	☐ STANDARD DRAWING ☐ PROJECT DRAWING	TRAFALGAR FIRE