

FyreBOX[™] Mini



The FyreBOX[™] Mini and Maxi are a retro-fit multi-service penetration system designed to prevent the spread of fire through small or large service penetrations, in the smallest footprint possible. FyreBOX[™] has been tested rigorously with a range of mixed service types and bundles in common wall and floor types and is one of the most fire tested products in the world, with industry leading FRL's of up to -/240/240 (system specific).



Click to Watch Installation Video



KEY FEATURES

NEW IMPROVED
FYREFLANGE

- Allows multiple and mixed services to pass through one opening
- Mixed services approved in any quantity or configuration
- Retro-fit or new construction
- Space saving, eliminates the need for 200mm separation between adjacent services
- Tested in Hebel®, single/ double layer plasterboard, Speedpanel® and many other common wall/floor systems
- Fire tested in independent laboratories
- Thoroughly tested to AS1530.4-2014

APPLICATIONS

Electricians	Power Data cables Conduits
Plumbers	Steel and Copper pipes PVC pipes PEX pipes PEX-AL-PEX pipes
HVAC&R	Insulated pipes
Active Fire	Sprinkler pipes Fire cables

TRADES



FyreBOX[™] Maxi



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[Click to Watch Installation Video](#)



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Electricians	Power
	Data cables Conduits
Plumbers	Steel and Copper pipes
	PVC pipes
	PEX pipes PEX-AL-PEX pipes
HVAC&R	Insulated pipes
Active Fire	Sprinkler pipes
	Fire cables

TRADES

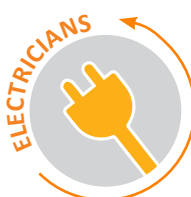


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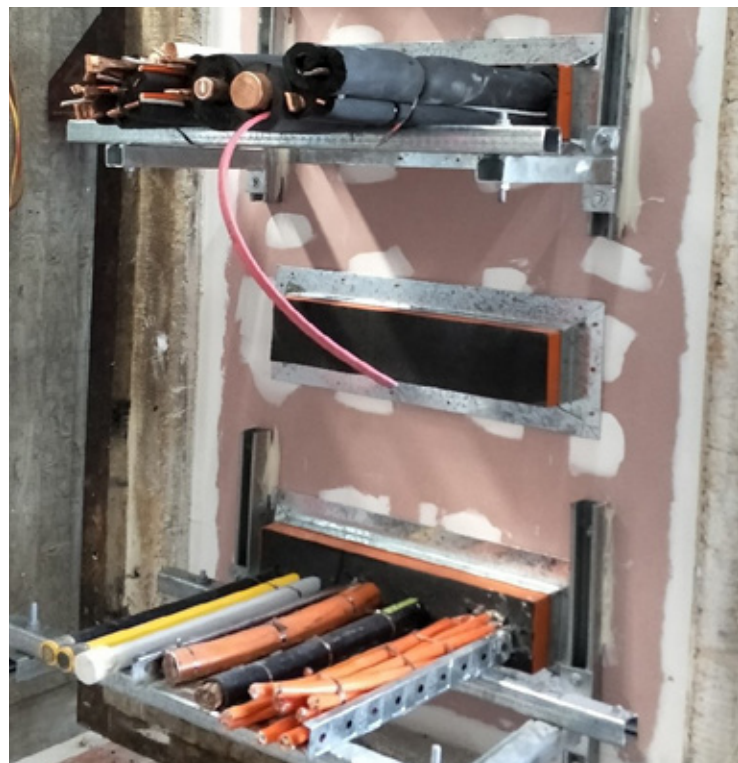
FyreBOX[™] Maxi and Mini

WHAT IS FYREBOX[™] MAXI/MINI?

Trafalgar Fire's FyreBOX[™] Maxi & Mini are an intumescent lined product designed to prevent the spread of fire through service penetrations. Think of the FyreBOX[™] Range as fire rated holes, and as a fire takes hold the intumescent material expands to close off the penetration, forming a tight seal around the services and crushing off plastic pipes. Intumescent foam plugs are also fitted, giving the FyreBOX[™] superior reliability and acoustic properties, and the ability to allow for adds, moves and changes.

FyreBOX[™] Maxi and Mini's are fire tested for multiple and mixed service types, which remove the need to separate service penetrations such that all contractors can run their services through the one penetration.

The FyreBOX[™] Maxi and Mini systems come in various sizes to suit most applications and can be used in conjunction with Trafalgar Fire's FyreBOARD Maxilite[®] bulkhead and penetration systems.



APPLICATIONS

FyreBOX[™] Maxi and Mini systems are suitable for use in any building where penetrations are made through fire rated plasterboard, Speedpanel[®], Hebel[®], Walsc[®], Pronto Panel, FyreBOARD Maxilite[®], masonry/concrete walls and concrete floors. They have been tested and approved for the following services:

- Electrical, data and communication cables
- Steel and copper pipes
- Insulated copper pipes
- CPVC sprinkler pipes
- Small conduits
- PVC pipes (floors only)
- PEX and Gas PEX-AL-PEX



FyreFLANGE™ FOR FyreBOX™ Maxi and Mini

WHAT IS FYREFLANGE™?

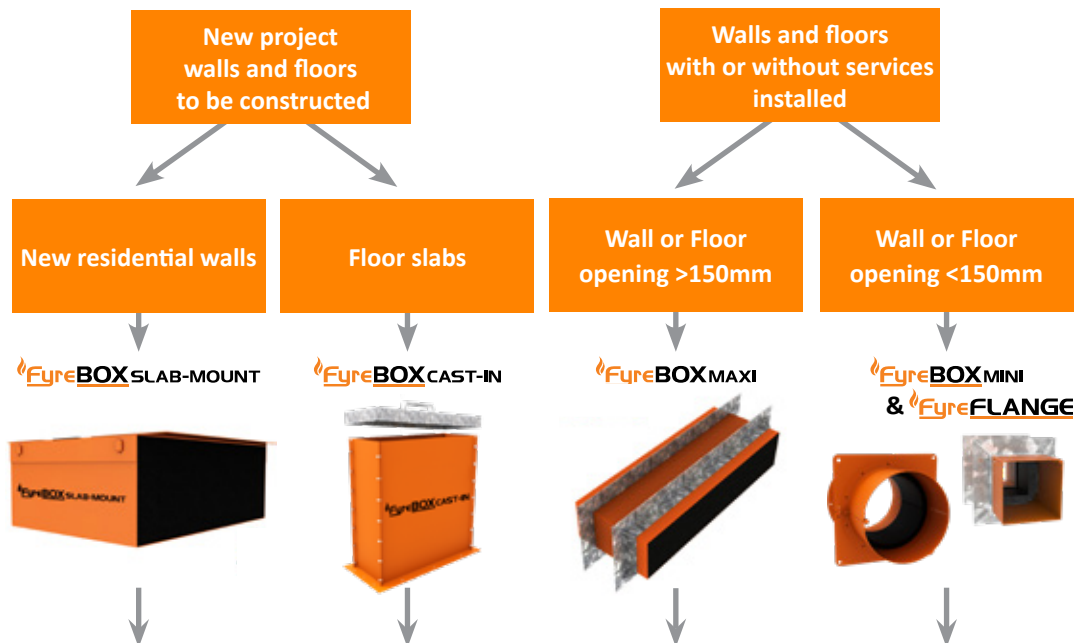
Every FyreBOX™ Maxi or Mini system is now supplied with the updated FyreFLANGE™ for easy mounting to cover larger core holes and openings. The latest testing allows for annular gaps up to 20mm around the FyreBOX™ when using the FyreFLANGE™ mounting brackets, making the FyreBOX™ Mini or Maxi a great choice for a bigger range of penetrations.

Where larger annular gaps occur on site contact Trafalgar Fire for even larger custom mounting flange systems, or use FyreBOARD Maxilite®.



Product	Depth mm	Height mm	Width mm	FyreFLANGE™ Dimensions
FyreFLANGE Mini Round 100	16	160	160	
FyreFLANGE Mini Round 150	16	210	210	
FyreFLANGE Mini Square	30	30	-	
FyreFLANGE Maxi	30	50	-	

FyreBOX SYSTEM SELECTOR



Installation Prior to Fire Barrier Construction		✓	✓	×	×
Hole Cutting Required		×	×	✓	✓
Fire Barrier	Floors	Concrete Slab	×	✓	✓
	Floors	FyreSET Mortar	×	✓	×
	Walls	Masonry Walls	✓	×	✓
		Concrete Walls	✓	×	✓
		Plasterboard	✓	×	✓
		Hebel®	✓	×	✓
		Walsc®	✓	×	✓
		Speedpanel®	✓	×	✓
		FyreBOARD Maxilite®	✓	×	✓
		FyreBATT	×	×	✓
Services	Power Cables	✓	✓	✓	✓
	Data Cables	✓	✓	✓	✓
	Cable Trays	✓	✓	✓	×
	Metal Pipes	✓	✓	✓	✓
	CPVC Pipes	✓	✓	✓	✓
	PVC Pipes	×	✓	Floors Only	Floors Only
	PEX	✓	✓	✓	✓
	PEX-AL-PEX	✓	✓	✓	✓
	Insulated Copper	✓	✓	✓	✓
	Pair Coils	✓	✓	✓	✓

FyreBOX™ Maxi and Mini

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.

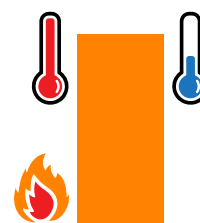
ie: a brick wall supporting a concrete floor slab above.



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.

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

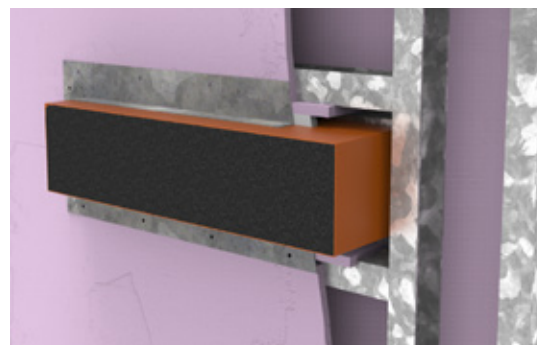
The FyreBOX™ Maxi or Mini system will achieve the integrity performance for up to 2 hours physically stopping the direct spread of fire, however the insulation performance of the penetration will be limited to the type of wall being used and conductivity of the services in the penetration.

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™ Maxi or Mini 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.

PLASTERBOARD 60MIN

Studs: 64mm
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	-/60/30	-/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/-	-/60/60	300mm
	PEX-AL-PEX pipes	up to 25mm OD	-/60/30	-/60/60	300mm
		32mm OD	-/60/30	-/60/60	450mm
		up to 32mm OD insulated + E-Flex ST 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
	Pair coil 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 other copper core power cables or cable trays up to 1000mm wide		-/60/30	-/60/60	300mm

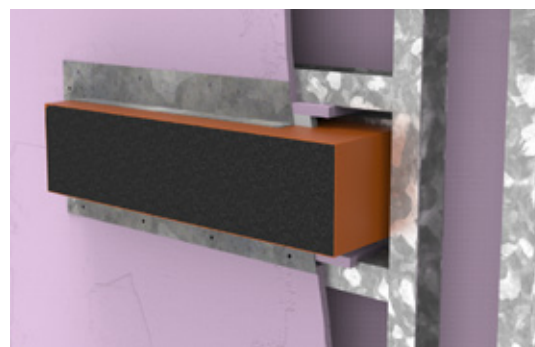
Where TWRAP™ is required for increased insulation performance, it is to be installed on both sides of the wall.

FyreWrap® Elite 1.5 may be substituted for any of the above TWRAP™ applications.

Approvals shown in orange do not require TWRAP™ for -/60/60 in this wall type.

PLASTERBOARD 60MIN

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

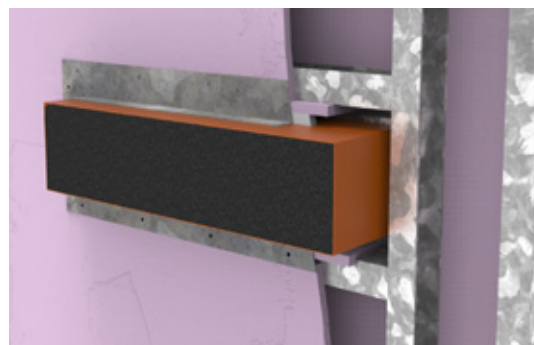


Service Type	Service Specification		FRL no wrap required	FRL with TWRAP™	TWRAP™ Length required
Plastic Pipes	uPVC conduits Rigid or flexible (with or without cables)	up to 32mm OD	-/60/60	-/60/60	300mm
	PEX pipes	up to 20mm OD	-/60/60	-/60/60	300mm
		25-32mm OD	-/60/60	-/60/60	450mm
		up to 32mm + FR 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
	Pair coil 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.

PLASTERBOARD 90MIN

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

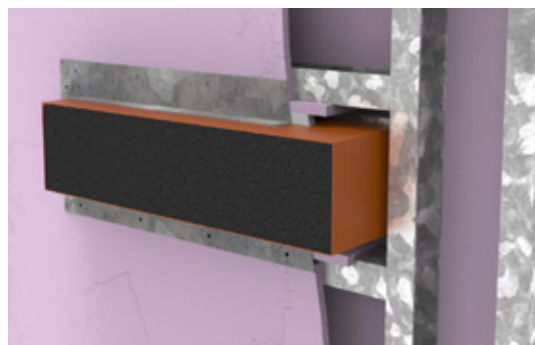


Service Type	Service Specification		FRL no wrap required	FRL with TWRAP™	TWRAP™ Length required
Plastic Pipes	uPVC conduits Rigid or flexible (with or without cables)	up to 32mm OD	-/90/60	-/90/90	300mm
	PEX pipes	up to 20mm OD	-/90/60	-/90/90	300mm
		25-32mm OD	-/90/60	-/90/90	450mm
		up to 32mm + FR 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™ applications.

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 (<i>with or without cables</i>)	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 20mm OD	-/120/60	-/120/120	300mm
		25-32mm 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
	Pair coil 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*	600mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	450mm
FyreBOX™ Mini Only	Drinks Python	90mm OD, consisting of up to 10x nylon pre/postmix with 19mm FR insulation	-	-/120/120	300mm
	Aluminium Cables	Bundle up to 6x 70mm ² core or 2 x 240mm ² AL core power cables	-	-/120/120	300mm

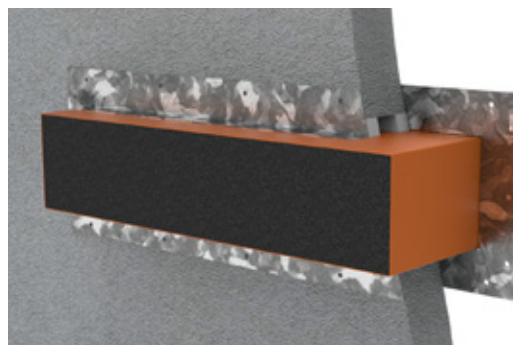
Where TWRAP™ is required for increased insulation performance, it is to be installed on both sides of the wall.

* Loose TWRAP™/FyreWrap® infill material to be packed under the TWRAP™ for at least 300mm off the penetration (refer to drawings on pages 43 (FyreBOX Maxi) and 58 (FyreBOX Mini)).

FyreWrap® Elite 1.5 may be substituted for any of the above TWRAP™ applications.

AAC PANEL WALL 90MIN

Thickness:
75mm Hebel® and Walsc®
AAC panel walls

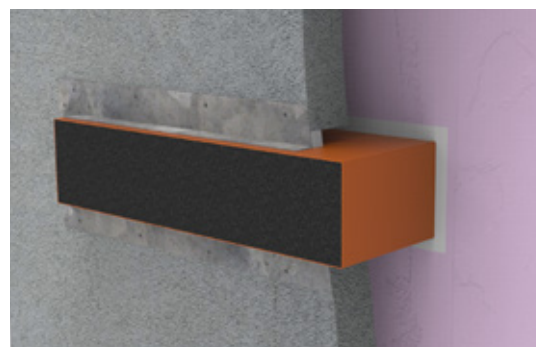


Service Type	Service Specification		FRL no wrap required	FRL with TWRAP™	TWRAP™ Length required
Plastic Pipes	uPVC conduits Rigid or flexible (with or without cables)	up to 32mm OD	-/90/30	-/90/90	300mm
	PEX pipes	up to 20mm OD	-/90/30	-/90/90	300mm
		25-32mm OD	-/90/30	-/90/90	450mm
		up to 32mm + FR insulation 19mm thick	-/90/30	-/90/90	300mm
	PEX-AL-PEX pipes	up to 20-25mm OD	-/90/30	-/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
	Pair coil 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.

AAC PANEL WALL 120MIN

Thickness: 75mm & Plasterboard Hebel® and Walsc® AAC panel walls

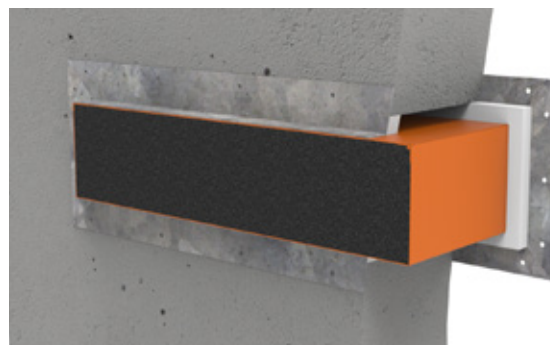


Service Type	Service Specification		FRL no wrap required	FRL with TWRAP™	TWRAP™ Length required
Plastic Pipes	uPVC conduits Rigid or flexible (with or without cables)	up to 32mm OD	-/120/30	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/30	-/120/120	300mm
		25-32mm OD	-/120/30	-/120/120	450mm
	PEX-AL-PEX pipes	up to 20mm OD	-/120/30	-/120/120	300mm
		25-32mm OD	-/120/-	-/120/120	450mm
	cPVC sprinkler pipes	up to 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	-/120/30	-/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
	Pair coil 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	450mm

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.

CONCRETE/MASONRY 120MIN

Thickness: 116mm or as per AS3600/AS3700 Tilt-up Slabs, Blockwork, Bricks, AFS Rediwall, Dintel



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 20mm OD	-/120/60	-/120/120	300mm
		25-32mm 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
	Pair coil 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*	600mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/60	-/120/120*	450mm
FyreBOX [™] Mini Only	Drinks Python	90mm OD, consisting of up to 10x nylon pre/postmix with 19mm FR insulation	-	-/120/120	300mm
	Aluminium Cables	Bundle up to 6x 70mm ² core or 2 x 240mm ² AL core power cables	-	-/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 43 (FyreBOX Maxi) and 58 (FyreBOX Mini)).

FyreWrap[®] Elite 1.5 may be substituted for any of the above TWRAP[™] applications.

CONCRETE/MASONRY 240MIN

Thickness:
180mm Minimum or
as per AS3600/AS3700



Service Type	Service Specification		FRL no wrap required	FRL with TWWRAP™	TWWRAP™ 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
	Pair coil 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 185mm ² (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		-/120/60	-/120/120	450mm
FyreBOX™ Mini Only	Pair Coil	Up to 2 x pair coil bundles with FR insulation	-/240/180	Wrap Free	-

Where TWWRAP™ is required for increased insulation performance, it is to be installed on both sides of the wall.

* Loose TWWRAP™/FyreWrap® infill material to be packed under the TWWRAP™ for at least 300mm off the penetration (refer to drawings on pages 43 (FyreBOX Maxi) and 58 (FyreBOX Mini)).

FyreWrap® Elite 1.5 may be substituted for any of the above TWWRAP™ applications.

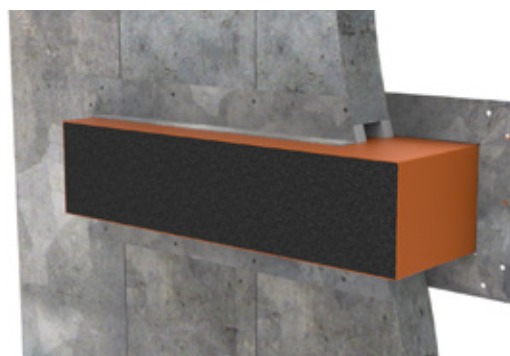
SPEEDPANEL[®] 120min

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 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
	Pair coil 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.

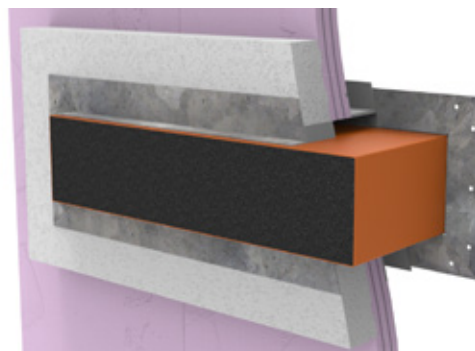
* Loose TWRAP[™]/FyreWrap[®] infill material to be packed under the TWRAP[™] for at least 300mm off the penetration (refer to drawings on pages 43 (FyreBOX Maxi) and 58 (FyreBOX Mini)).

FyreWrap[®] Elite 1.5 may be substituted for any of the above TWRAP[™] applications.

FRL limited to that of the wall system being used.

LAMINATED SHAFTWALL

Stud: N/A
Plaster: 3 x 16mm Minimum
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	-/120/0	-/120/120	300mm
	PEX pipes	up to 20mm OD	-/120/0	-/120/120	300mm
		25-32mm OD	-/120/0	-/120/120	450mm
	PEX-AL-PEX pipes	up to 20mm OD	-/120/0	-/120/120	300mm
		25-32mm OD	-/120/0	-/120/120	450mm
	cPVC sprinkler pipes	up to 60mm OD	-/120/0	-/120/120	300mm
Bare Metal Pipes	Copper pipes	up to 50mm OD	-/120/0	-/120/120	300mm
	Steel pipes	up to 60mm OD	-/120/0	-/120/120	300mm
Insulated metal pipes	Copper pipes	up to 50mm OD with PE insulation up to 20mm thick	-/120/0	-/120/120	300mm
		up to 50mm OD with FR insulation	-/120/0	-/120/120	300mm
		up to 20mm OD with rockwool-type insulation	-/120/0	-/120/120	300mm
	Pair coil pipes	up to 9.5 and 19mm OD with PE insulation up to 13mm thick	-/120/0	-/120/120	300mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/0	-/120/120	300mm
Power Cables	Bundles of up to 12x TPS		-/120/0	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/0	-/120/120	600mm
Comms Cables	All other copper core power cables or cable trays up to 1000mm wide		-/120/0	-/120/120	450mm

Laminated shaft walls require FyreBOARD Maxilite[®] board to thicken the wall around the penetration. Refer to drawings on page 68. 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

CONCRETE FLOOR SLABS 120MIN

Thickness: 120mm minimum or as per AS3600 (including bondek slabs)



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
	PVC Stack pipes	up to 80mm OD	-/120/-	-/120/120	300mm
	PEX pipes	up to 32mm OD	-/120/-	-/120/120	450mm
	PEX-AL-PEX	up to 32mm OD	-/120/-	-/120/120	450mm
Bare Metal Pipes	Copper pipes	up to 42mm OD	-/120/-	-/120/120	450mm
		50 to 100mm OD	-120/-	-/120/120	600mm & 450mm*
	Steel pipes	up to 50mm OD	-/120/-	-/120/120	450mm
		50 to 100mm OD	-/120/-	-/120/120	600mm & 450mm*
Insulated Metal Pipes	Copper Pipes	up to 50mm OD with FR insulation	-/120/30	-/120/120	300mm
	Stainless Steel Pipes	up to 50mm OD with EPS or PE insulation (replaced with Rockwool through FyreBOX™)	-/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	450mm
		up to 9.5 and 19mm OD with FR insulation up to 20mm thick	-/120/30	-/120/120	450mm
Power Cables	Bundles of up to 10 x TPS		-/120/30	-/120/120	300mm
	19mm diameter three core and earth		-/120/30	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/90/30	-/90/90	500mm
Comms Cables	Up to 150 x CAT6 bundle		-/120/30	-/120/120	300mm
	All other copper core power cables or cable trays up to 1000mm wide		-/120/30	-/120/120	500mm
FyreBOX™ Mini Only	Drinks Python	90mm OD, consisting of up to 10x nylon pre/postmix with 19mm FR insulation	-	-/120/120	300mm

Where TWRAP™ is required for increased insulation performance, it is to be installed on top side of the slab.

FyreWrap® Elite 1.5 may be substituted for any of the above TWRAP™ applications.

*First layer of TWRAP™/FyreWrap® measured and applied from the foam of the box and second layer of TWRAP™/FyreWrap® measured and applied from slab.

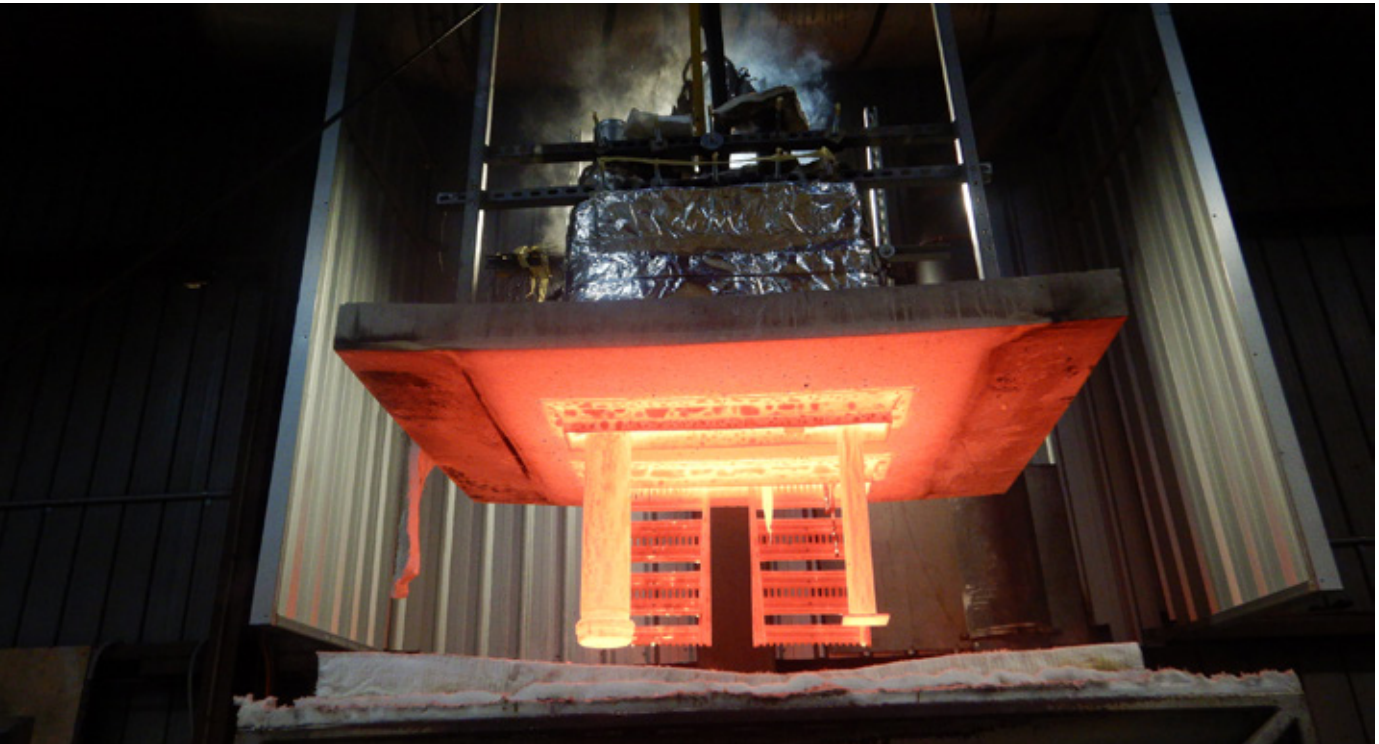
CONCRETE FLOOR
SLABS 240 MIN

Thickness:
180mm minimum
as per AS3600



Service Type		Service Specification		FRL no wrap required	FRL with TWRAP™	TWRAP™ Length required
Bare Metal Pipes		Steel pipes	up to 50mm OD	-/120/-	-/240/240	450mm
Insulated Metal Pipes		Stainless Steel Pipes	up to 50mm OD with EPS or PE insulation (replaced with Rockwool through FyreBOX™)	-/240/30	-/240/240	300mm
Power Cables		Bundle of 2 x 19mm diameter three core and earth		-/240/30	-/240/120	300mm
Comms Cables		5 x CAT6 bundle		-/240/30	-/240/120	300mm
FyreBOX™ Mini Only	Drinks Python	90mm OD, consisting of up to 10x nylon pre/postmix with 19mm FR insulation		-	-/120/120	300mm

Where TWRAP™ is required for increased insulation performance, it is to be installed on top side of the slab.
FyreWrap® Elite 1.5 may be substituted for any of the above TWRAP™ applications.



INSTALLATION

FyreBOX[™] Mini in Walls

ALL WALLS

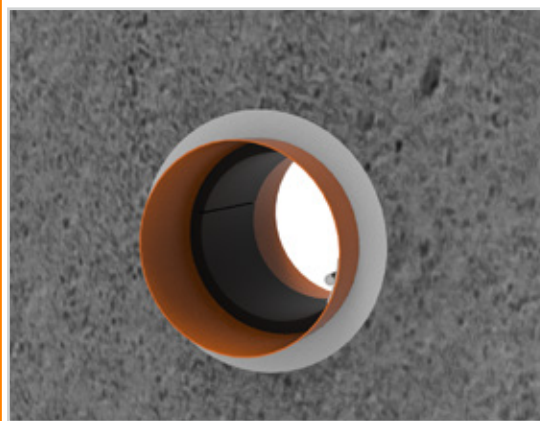
CUT HOLE



Cut a hole in the barrier allowing for an appropriate annular gap (5-20mm between the edge of the hole and the walls of the FyreBOX[™] Mini). Note FyreBOX[™] Mini's do not require openings to be framed or lined.

Example: for a 100mm FyreBOX[™] Mini-R, cut a maximum hole 140mm diameter.

INSERT AND SEAL

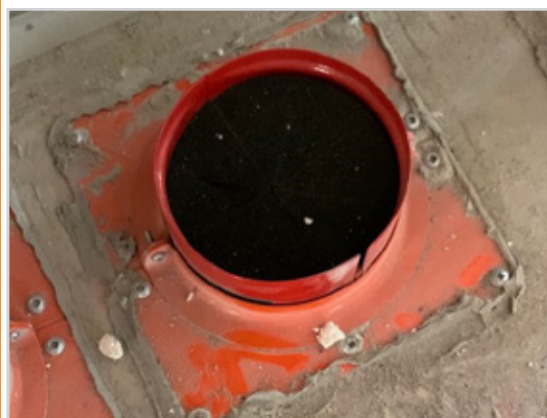


Insert the FyreBOX[™] Mini into the hole, and centre it to the wall or floor. NOTE if barrier is too thick, contact Trafalgar Fire for alternative installations.

Seal the annular gap around the FyreBOX[™] with FyreFLEX[®] Sealant to 20mm depth, on both sides of the wall.

Please note: The FyreBOX[™] Mini can be installed before or after the services are in place, the hinged design allows for the box to be retro fit around services, or services can be run once the box is in place.

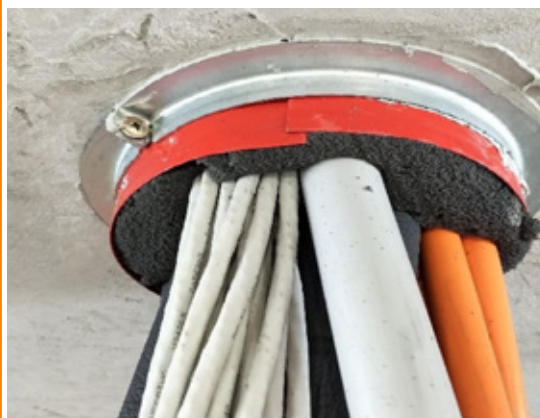
FLANGES



Install the steel mounting flange to both sides of the wall. When using the orange FyreFLANGE[™], use the fixings to suit the wall or floor type as per table 1 on page 21, using 2x fixings per flange.

No fixings are required, simply slide the flange down the FyreBOX firmly against the face of the wall on both sides of the penetration.

FOAM



Cut a slit through the FyreBOX[™] foam plug inserts and notch out holes to suit the services that are installed, then fit the foam in the box around the services.

The fit should be snug, fill any gaps with intumescent (black) foam off-cuts, or FyreFLEX[®] Sealant.

[Click to Watch Installation Video](#)



INSTALLATION

FyreBOX™ Mini in Walls

ALL WALLS

TWRAP™



Where required, wrap the services with the appropriate length of TWRAP™ (per FRL tables above). The TWRAP™ should overlap itself around the pipe by 50mm, if two strips are required to meet the appropriate length, then where the second length meets the first, a 50mm overlap is required.

TWRAP™ is secured to the service used steel cable ties, 50mm from each end and 150mm centres in-between.

LABELLING



Document the penetration. It is general good practice to take photographs and label all completed penetration works to add to the site's documentation for future inspections. AS4072 includes some recommendations and templates for penetration register stickers.

TABLE 1: FyreBOX™ Maxi & Mini Fixings

Wall Type	Fixing
Plasterboard and shaft walls	8gx50mm plasterboard screws
AAC panel (Hebel®, Walsc® etc)	
FyreBOARD Maxilite®	
Speedpanel®	8gx50mm metal drilling head screws
Concrete/Masonry	M6x50mm masonry anchors

INSTALLATION

FyreBOXTM Maxi in Walls

WALL TYPES

PLASTERBOARD OPENING



Openings in plasterboard walls must be lined with steel stud and plaster to support the FyreBOXTM Maxi.

Hebel[®]/AAC WALLS OPENING



In a Hebel[®] wall, cut the appropriately sized hole for the FyreBOXTM Maxi. NOTE: Larger openings in AAC walls may need additionally steel framing as per CSR Hebel[®] recommendations. Refer to appendix for more details.

Please note: When cutting a hole in any wall for a FyreBOXTM, allow for a 5-20mm gap between the box and the edge of the hole.

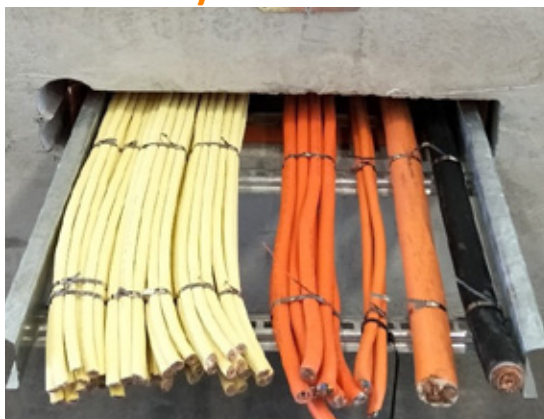
Speedpanel[®] OPENING



Cut the opening in the wall and line with steel u-channel as per Speedpanel[®] requirements.

NOTE: If Speedpanel[®] is less than 78mm thick, one face will have to be lined with 60mm FyreBOARD Maxilite[®] Board for 100mm away from the aperture. Refer to appendix for more details.

CONCRETE/MASONRY OPENING



In a concrete wall, simply cut/form the appropriately sized hole for the FyreBOXTM Maxi.

See Table 1: FyreBOXTM Maxi & Mini Fixings on the previous page to select the correct fixing for the wall type.

[Click to Watch Installation Video](#)



INSTALLATION

FyreBOXTM Maxi in Walls

ALL WALLS

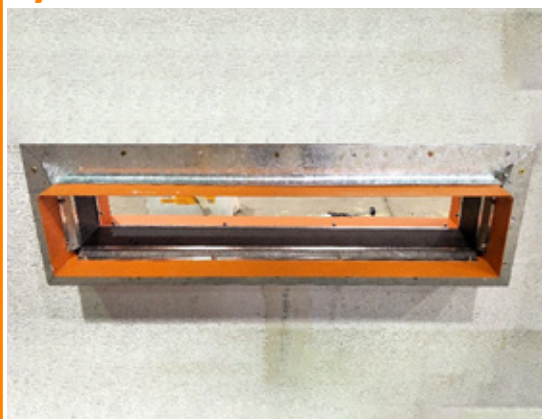
SEALANT



Fill FyreFLEX[®] sealant to 20mm depth, on both sides of the wall.

NOTE: Hebel[®] AAC walls should be filled to the full 75mm depth of panel.

FyreFLANGETM



Fit the FyreFLANGETM mounting flange firmly up against the wall. Fix using every second fixing hole with fixings as per Table 1 on [page 62](#).

Flanges to be installed both sides of the wall.

FOAM



Cut a slit through the FyreBOXTM foam plug inserts and notch out holes to suit the services that are installed.

Fill any gaps with foam off-cuts or FyreFLEX[®] Sealant.

FINISHING



The foam fit should be snug, such that no daylight can be seen through the FyreBOXTM once installed to both sides of the wall.

Click to Watch
Installation Video



INSTALLATION FyreBOXTM Maxi in Walls

ALL WALLS

TWRAPTM



Where required, wrap the services with the appropriate length of TWRAPTM (per FRL tables above).

Cable trays require TWRAPTM infill material to pack out gaps before wrapping.

TWRAPTM AND LABELLING

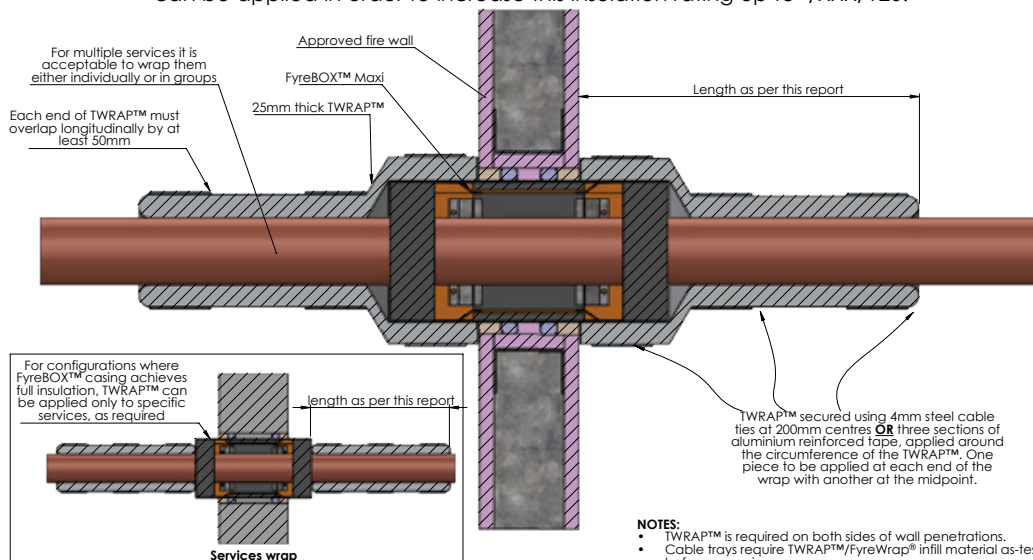


The TWRAPTM should overlap itself around the pipe by 50mm, if two strips are required to meet the appropriate length, then where the second length meets the first, a 50mm overlap is required. TWRAPTM is secured to the service used steel cable ties, 50mm from each end and 150mm centres in-between. Document the penetration. It is general good practice to take photographs and label all completed penetration works to add to the site's documentation for future inspections. AS4072 includes some recommendations and templates for penetration register stickers.

Please note: TWRAPTM may be substituted with FyreWrap[®] Elite (38mm) blanket

TWRAPTM (Standard Details) - Fire Rated Walls

Where the FyreBOXTM and/or services do not achieve full insulation, TWRAPTM can be applied in order to increase this insulation rating up to -/XXX/120.



- NOTES:**
- TWRAPTM is required on both sides of wall penetrations.
 - Cable trays require TWRAPTM/FyreWrap[®] infill material as-tested before wrapping

Click to Watch
Installation Video

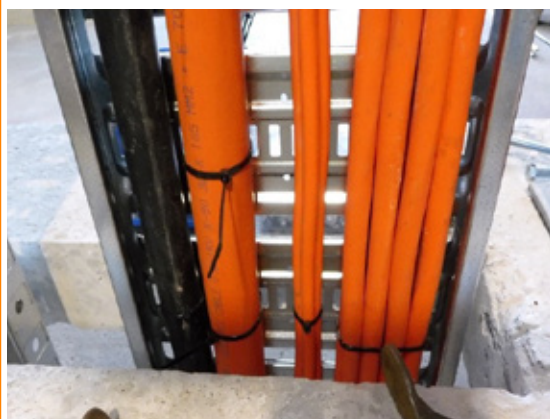


INSTALLATION

FyreBOX[™] Maxi

FLOORS

CUT HOLE



Cut the appropriately sized hole in the Slab (5-20mm annular gap).

NOTE: Cast-in FyreBOX[™]'s are available for new builds, or can be retro fit with FyreSET[®] Mortar.

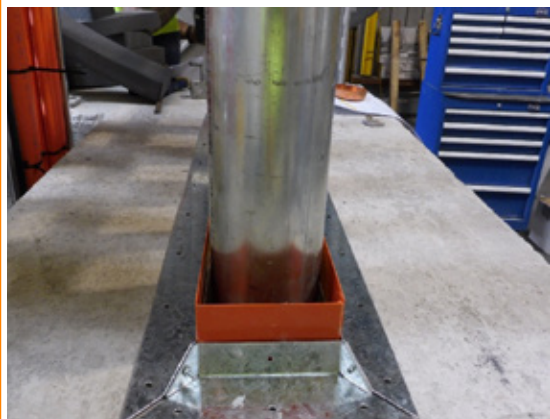
INSERT AND SEAL



Fit the FyreBOX[™] and seal the resulting gaps with FyreFLEX[®] sealant, 20mm on both sides.

Please note: When cutting a hole in any floor for a FyreBOX[™], allow for a 5-20mm gap between the box and the edge of the hole.

FyreFLANGE



Fit the FyreBOX[™] Flange firmly to the slab, fixing into the concrete with M6x50mm anchors at 200mm centers.

NOTE: Flange may be installed on the top side only, as long as FyreFLEX[®] Sealant is applied to the annular gaps on the underside.

FOAM



Cut a slit through the FyreBOX[™] foam plug inserts and notch out holes to suit the services that are installed, then fit the foam in the box around the services on the top side only.

The fit should be snug, fill and gaps with foam off-cuts or FyreFLEX[®] Sealant.

INSTALLATION

FyreBOXTM Maxi

FLOORS

TWRAPTM



Where required, wrap the services with the appropriate length of TWRAPTM (per approvals section) on the top side only. The TWRAPTM should overlap itself around the pipe by 50mm, if two strips are required to meet the appropriate length, then where the second length meets the first, a 50mm overlap is required. TWRAPTM is secured to the service used steel cable ties, 50mm from each end and 150mm centres in-between.

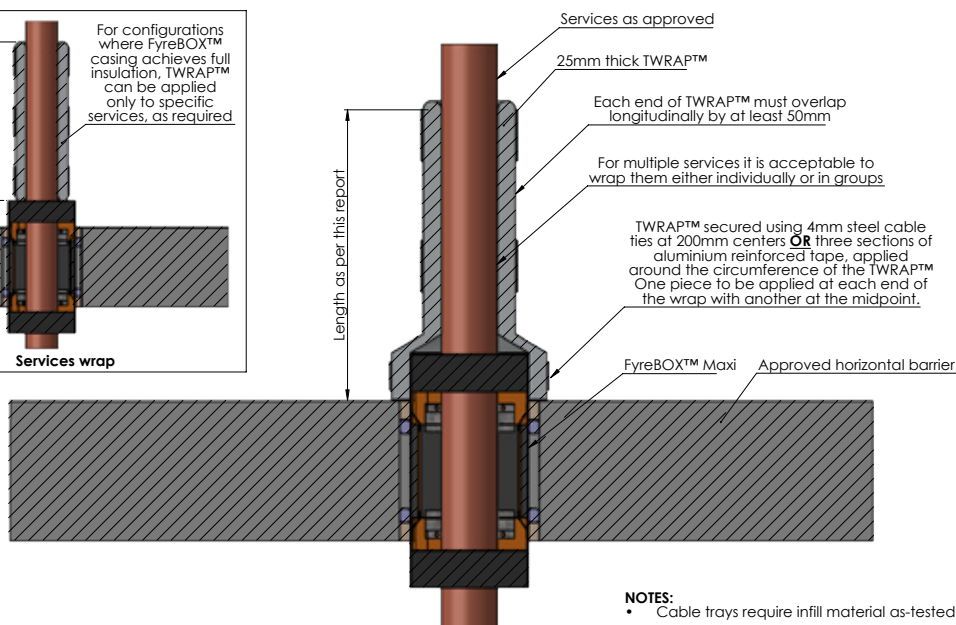
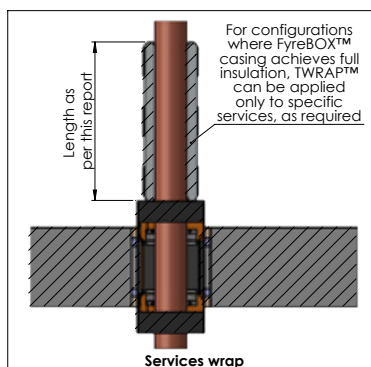
LABELLING



Document the penetration. It is general good practice to take photographs and label all completed penetration works to add to the site's documentation for future inspections. AS4072 includes some recommendations and templates for penetration register stickers.

TWRAPTM (Standard Details) - Fire Rated Floors

Where the FyreBOXTM and/or services do not achieve full insulation, TWRAPTM can be applied in order to increase this insulation rating up to -/XXX/120.



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

INSTALLATION OVERSIZED OPENINGS

FyreBOARD Maxilite[®] PENETRATIONS

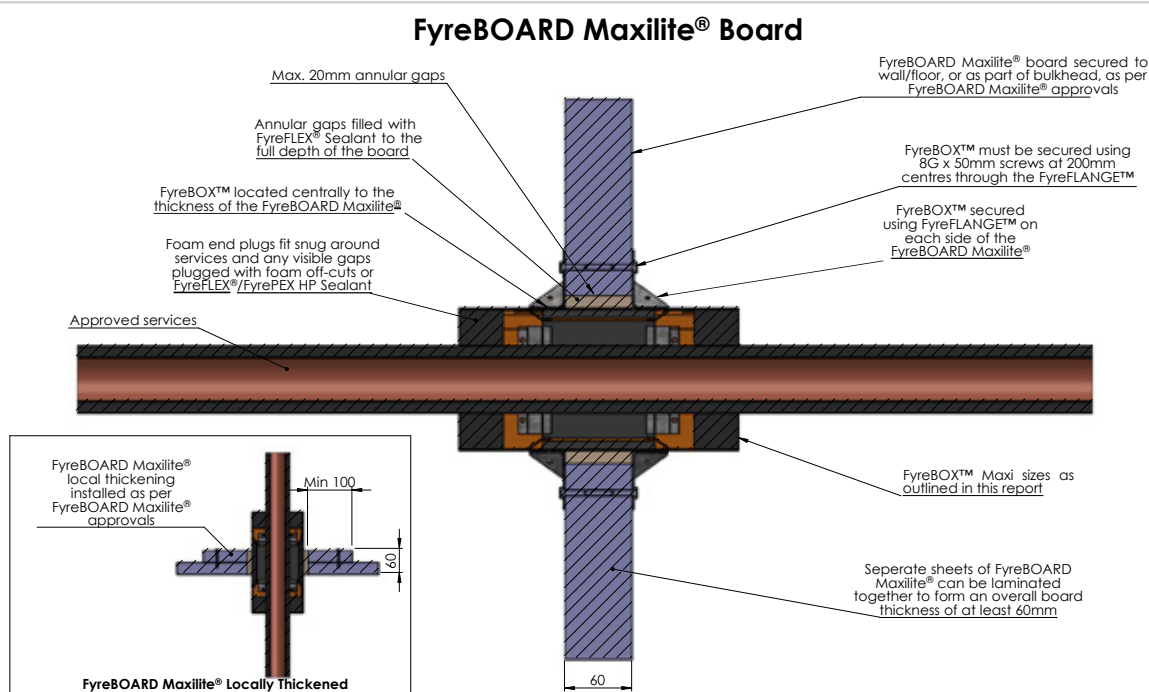


FYREBOARD MAXILITE[®] PENETRATIONS



Where openings in walls/floors are cut oversize, FyreBOARD Maxilite[®] board can be used to board over the larger opening and is compatible with FyreBOX[™] Maxi and Mini penetration systems.

Please note: All penetrations using FyreBOARD Maxilite[®] require at least 60mm thickness of board.



INSTALLATION PROBLEM SOLVER

FyreBOARD Maxilite® PENETRATIONS

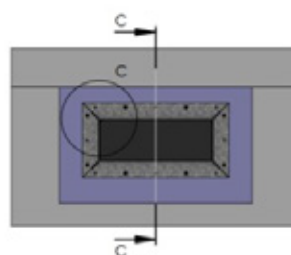
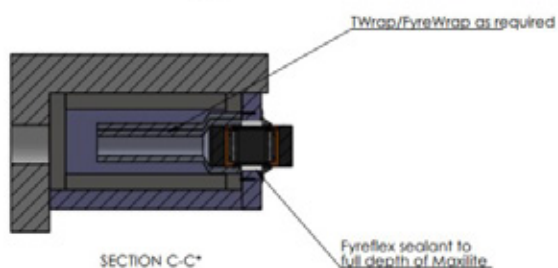
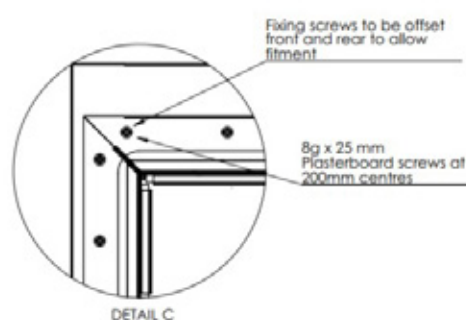
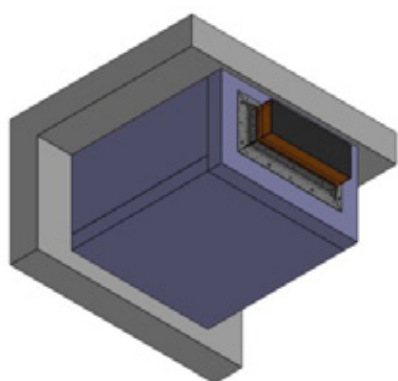


BULKHEADS



Where it is not possible to treat penetrations directly at the wall/floor penetration, FyreBOX™ systems are compatible with FyreBOARD Maxilite® bulkhead systems. Refer to FyreBOARD Maxilite® technical manuals for more information.

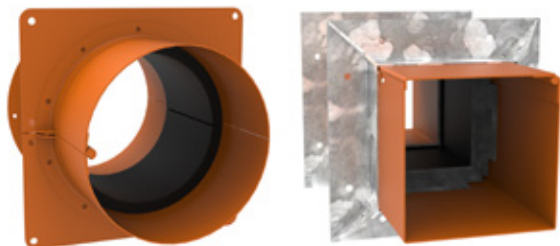
Please note: All penetrations using FyreBOARD Maxilite® require at least 60mm thickness of board.



NOTE:
Services and FRL's as per
Fyrebox testing

*Increased bulkhead dimensions for clarity

FYREBOXTM MINI SYSTEMS



FyreBOX^{MINI} & FyreFLANGE



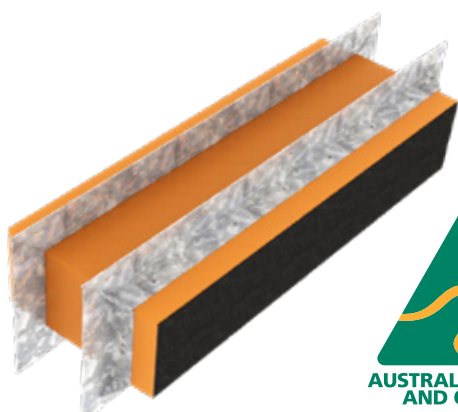
Type	Item Number	Dimensions W x H x D or Diam	Dimensions
Square	FYREBOX-MS-65	65 x 65 x 250mm	
	FYREBOX-MS-100	100 x 100 x 250mm	
	FYREBOX-MINI-FLANGES-S-100mm	to suit FYREBOX-MS-100	
Round	FYREBOX-MR-50	50 x 250mm	
	FYREBOX-MINI-FLANGE-R-50mm	to suit FYREBOX-MR-50	
	FYREBOX-MR-100	100 x 250mm	
	FYREBOX-MINI-FLANGE-R-100mm	to suit FYREBOX-MR-100	
	FYREBOX-MR-150	150 x 250mm	
	FYREBOX-MINI-FLANGE-R-150mm	to suit FYREBOX-MR-150	



FYREBOXTM MINI SYSTEMS COMPONENTS

Item Number	Description	Min Order Qty	Pallet Qty
FYREFLEX 300W/G	300ml White/Grey Cartridge	20	1440
FYREFLEX 600W/G	600ml White/Grey Sausage	18	810
TWRAP 300	300mm wide, 25mm thick blanket	7620mm long roll	24
TWRAP 450	450mm wide, 25mm thick blanket	7620mm long roll	12
TWRAP 600	600mm wide, 25mm thick blanket	7620mm long roll	12

FYREBOX™ MAXI SYSTEMS



FyreBOX MAXI & FyreFLANGE



Item Number	Description	Dimensions
FYREBOX-MAXI-350	350 x 125 x 250mm	
FYREBOX-MAXI-FLANGES-350mm	to suit FYREBOX-MAXI-350	
FYREBOX-MAXI-550	550 x 125 x 250mm	
FYREBOX-MAXI-FLANGES-550mm	to suit FYREBOX-MAXI-550	
FYREBOX-MAXI-650	650 x 125 x 250mm	
FYREBOX-MAXI-FLANGES-650mm	to suit FYREBOX-MAXI-650	
FYREBOX-MAXI-750	750 x 125 x 250mm	
FYREBOX-MAXI-1100	1100 x 125 x 250mm	
FYREBOX-MAXI-Custom	Any depth X 125 X Any length up to 1250mm	

FYREBOX™ MAXI SYSTEMS COMPONENTS

Item Number	Description	Min Order Qty	Pallet Qty
FYREFLEX 300W/G	300ml White/Grey Cartridge	20	1440
FYREFLEX 600W/G	600ml White/Grey Sausage	18	810
TWRAP 300	300mm wide, 25mm thick blanket	7620mm long roll	24
TWRAP 450	450mm wide, 25mm thick blanket	7620mm long roll	12
TWRAP 600	600mm wide, 25mm thick blanket	7620mm long roll	12

FyreBOX™ Maxi and Mini



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 may 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 Fire 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, FyreBOARD 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)

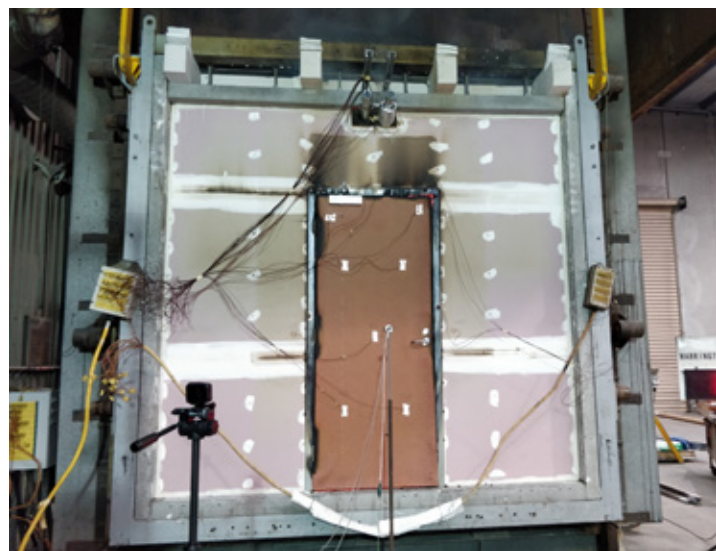
When choosing a multiple service transit penetration system like FyreBOX™, it is important to check that all aspects of your system have been fire tested and are fit for purpose.

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.



FAQ

Q Is the FyreBOX™ Maxi/Mini suitable for my refrigeration lines?

A Yes, the FyreBOX™ Maxi/Mini has been tested with both fire resistant (FR) and non-FR insulation and can be filled with as many lines as will reasonably fit in the box.

Q Can I install a FyreBOX™ Maxi/Mini after the services have been installed?

A Yes, the FyreBOX™ Maxi/Mini has a hinged panel allowing for a retrofit option.

Q My opening is 300 x 600mm. Can I still use a FyreBOX™ Maxi/Mini?

A Yes, the opening can be sealed off with Trafalgar Fire's fire rated [FyreBOARD Maxilite®](#) board, and FyreBOX™ Maxi/Mini can be mounted in the board. Contact Trafalgar Fire for installation details.

Q My certifier told me I need 2-hour insulation rating on my copper pipe penetrations – does the FyreBOX™ Maxi/Mini achieve this?

A TWRAP (or FyreWrap®) will need to be wrapped around the FyreBOX™ to achieve an insulation rating. Contact Trafalgar Fire for installation details and refer to our YouTube channel for installation videos (Trafalgar TV).

Q Do I need to separate my pipes and cables inside the FyreBOX™?

A No, the FyreBOX Range has been fire tested completely full and empty (some trade specific separation may be required).

Q How close together can two FyreBOX be?

A 100mm apart.

Click to Watch Installation Video



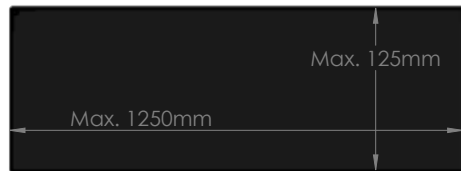
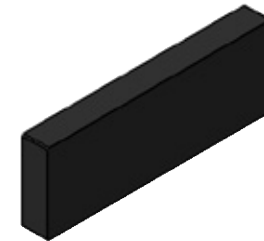
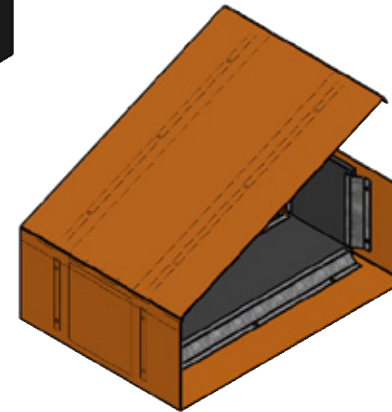
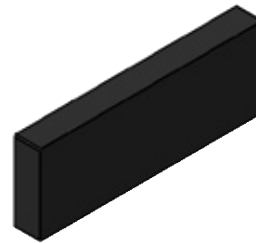
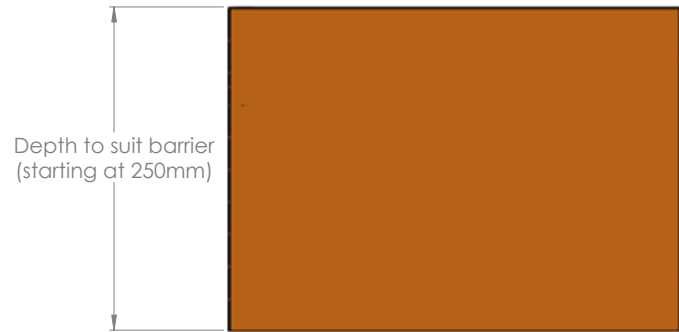
SOCIAL MEDIA




LinkedIn

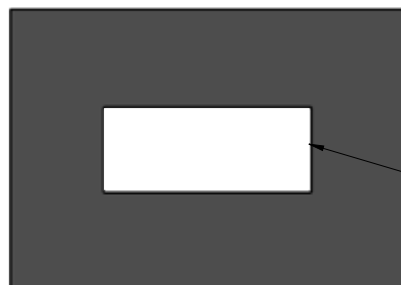
YouTube

FyreBOX™ Maxi - Product Overview

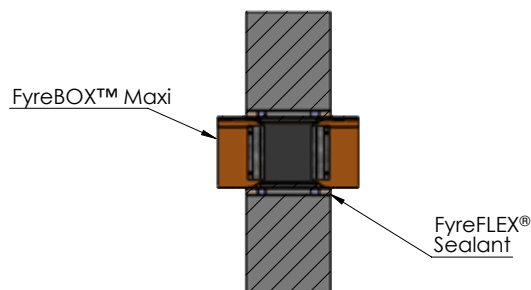


Drawing Name: FyreBOX™ Maxi Overview				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE: <small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Project Title: FyreBOX™ Maxi - Generic Install				Fire resistance level:	Drawn By: JC				
Drawing No. : 1	Sheet: 1 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

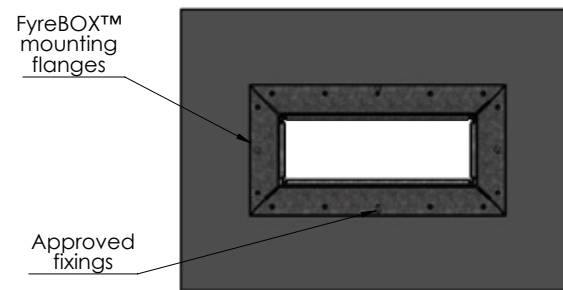
FyreBOX[™] Maxi - Installation Overview

STEP 1


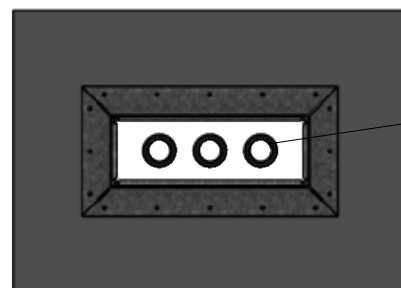
Form opening so that annular gaps between FyreBOX[™] Maxi and wall/floor will be between 5-20mm

STEP 2


Insert FyreBOX[™] Maxi into opening so that it is central to the thickness of the wall/floor. Fill annular gaps with FyreFLEX[®] Sealant to a depth of at least 20mm from each side of the barrier.

STEP 3


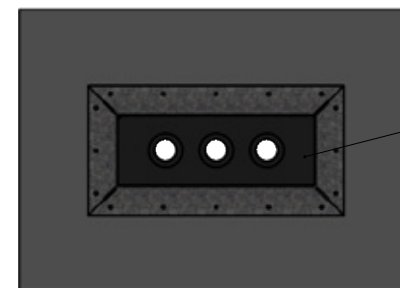
Fit mounting FyreFLANGE[™]s around FyreBOX[™], on each side of the wall/floor, clamping FyreBOX[™] in place. Secure using clamping or fixing method as required

STEP 4


Run approved services through the FyreBOX[™] opening. Please note, the FyreBOX[™] Maxi has a hinged lid and is also suitable for retrofitting around existing services


STEP 5


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

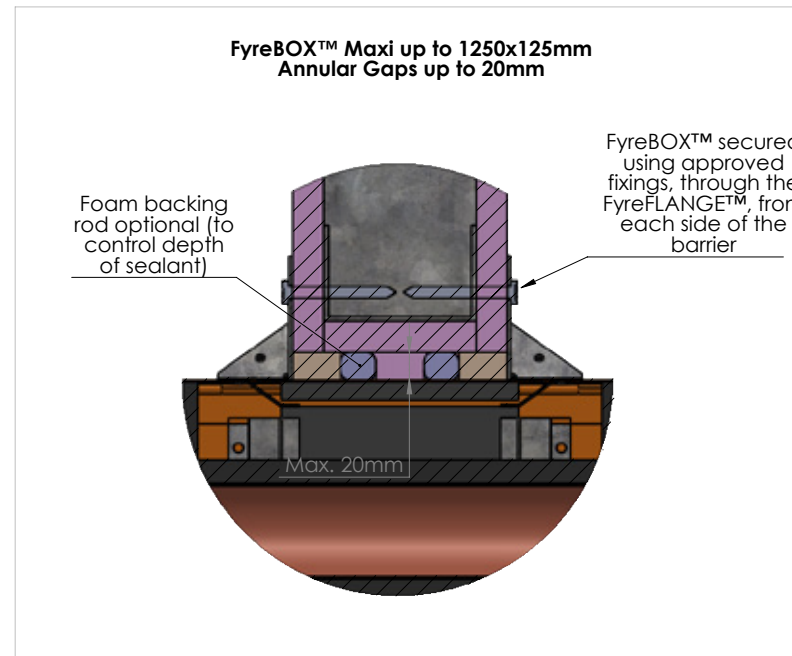
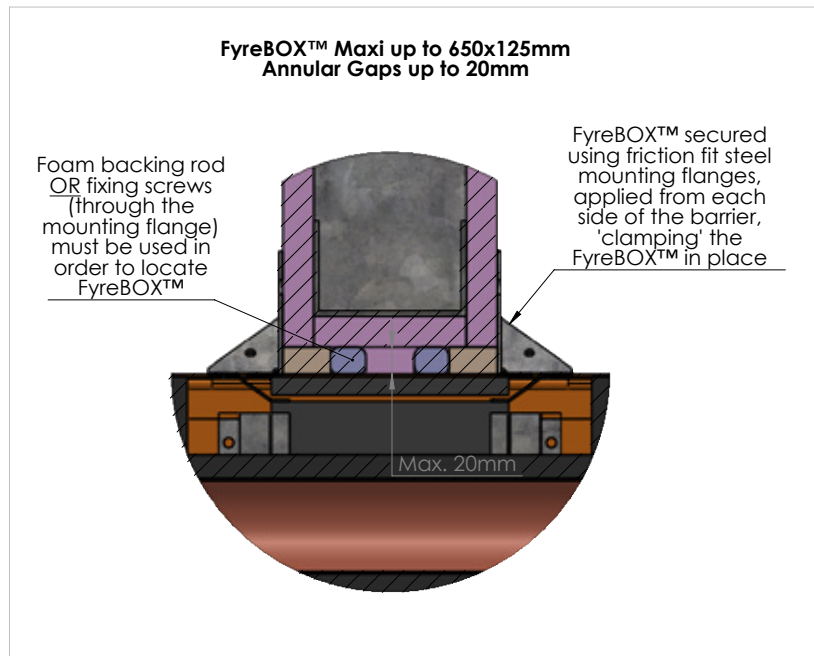
STEP 6


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 relative to each barrier type, please refer to the corresponding installation drawing as follows.


Drawing Name: Installation Overview				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX [™] Maxi - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small> 
Drawing No. : 2	Sheet: 2 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

FyreBOX[™] Maxi - Annular Gaps For Standard Installs

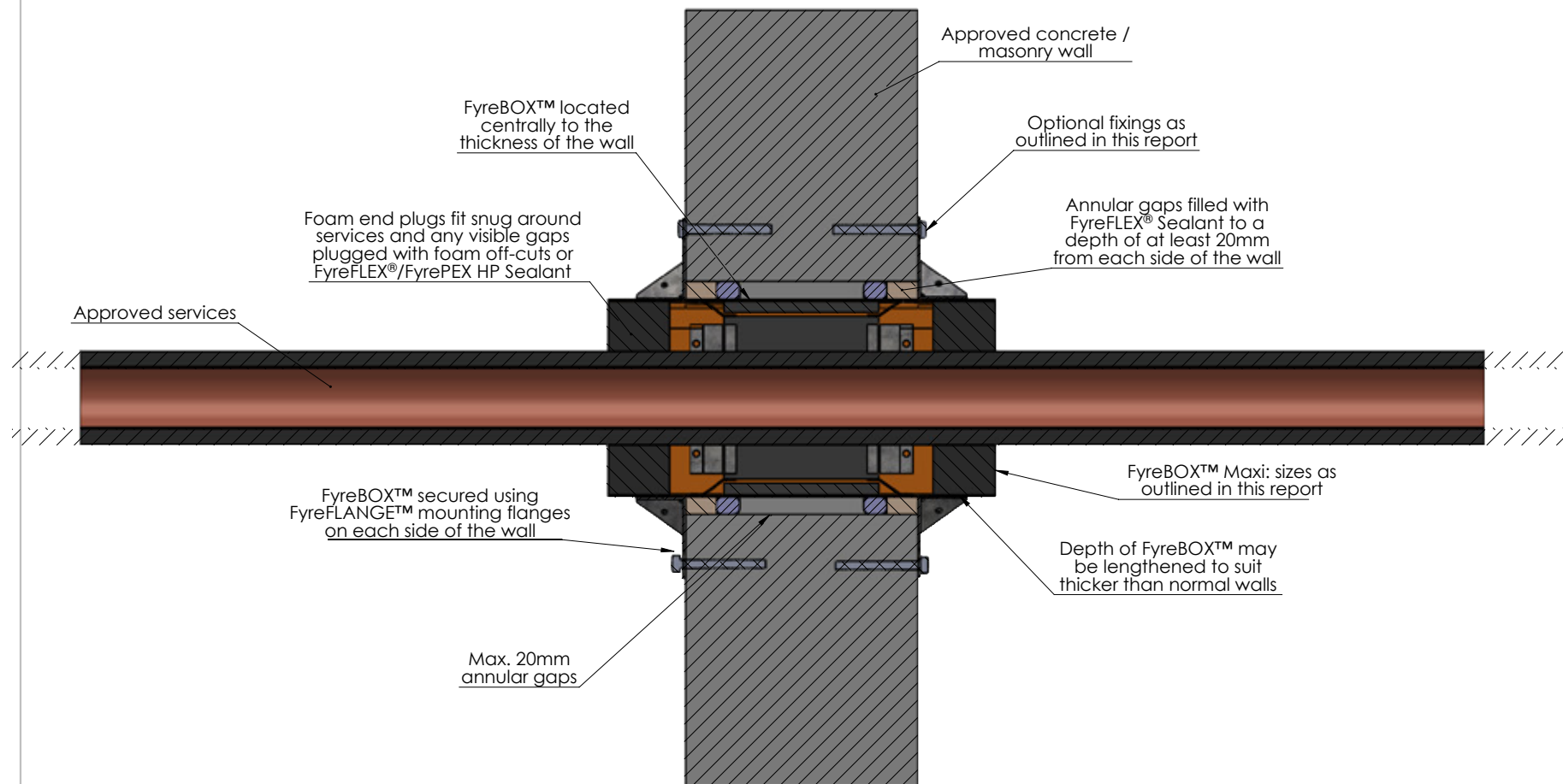



NOTE:

- For annular gaps up to 40mm, please refer to "Oversized / Scalloped Openings" drawing
- Some barriers will require fixings applied through the mounting flange regardless of the FyreBOX[™] dimensions (as outlined in the corresponding installation drawing for that barrier type)

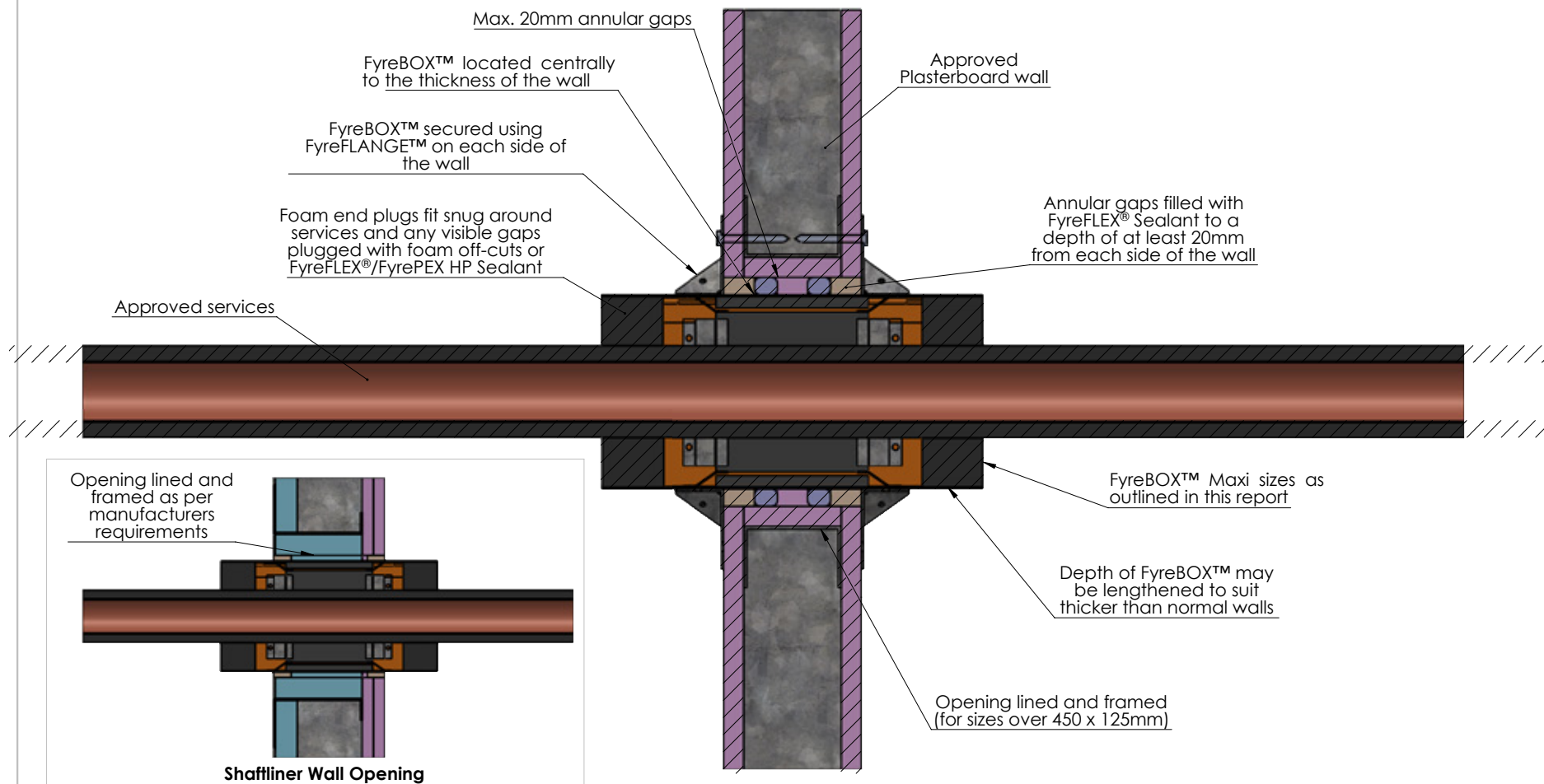
Drawing Name: FyreBOX™ Maxi Annular Gaps				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE: <small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Project Title: FyreBOX™ Maxi - Generic Install				Fire resistance level:	Drawn By: JC				
Drawing No. : 3	Sheet: 3 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Concrete / Masonry Walls (with or without permanent formwork)



Drawing Name: Concrete / Masonry				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Maxi - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small> 
Drawing No. : 4	Sheet: 4 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Plasterboard Walls and Shafts - Plasterboard lined on each side



Drawing Name: Plasterboard - Lined Each Side

Project Title: FyreBOX™ Maxi - Generic Install

Drawing No. : 5

Sheet: 5 of 16

Date: 13/07/2020

Scale: NTS

Test Standard: AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By: JC

Checked By: CT

Revision:

Date:

No.:

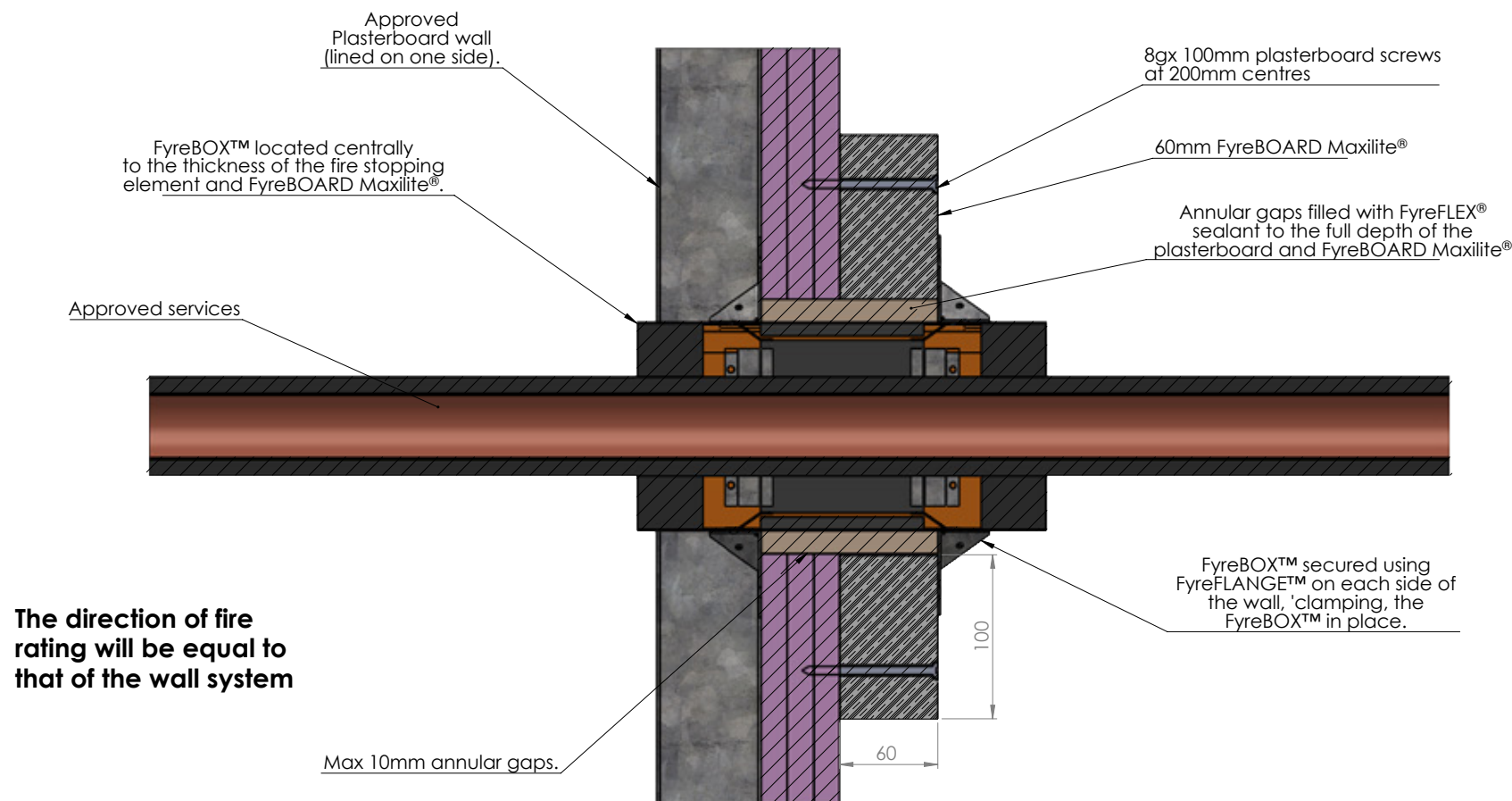
NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)


☐ STANDARD DRAWING
☐ PROJECT DRAWING



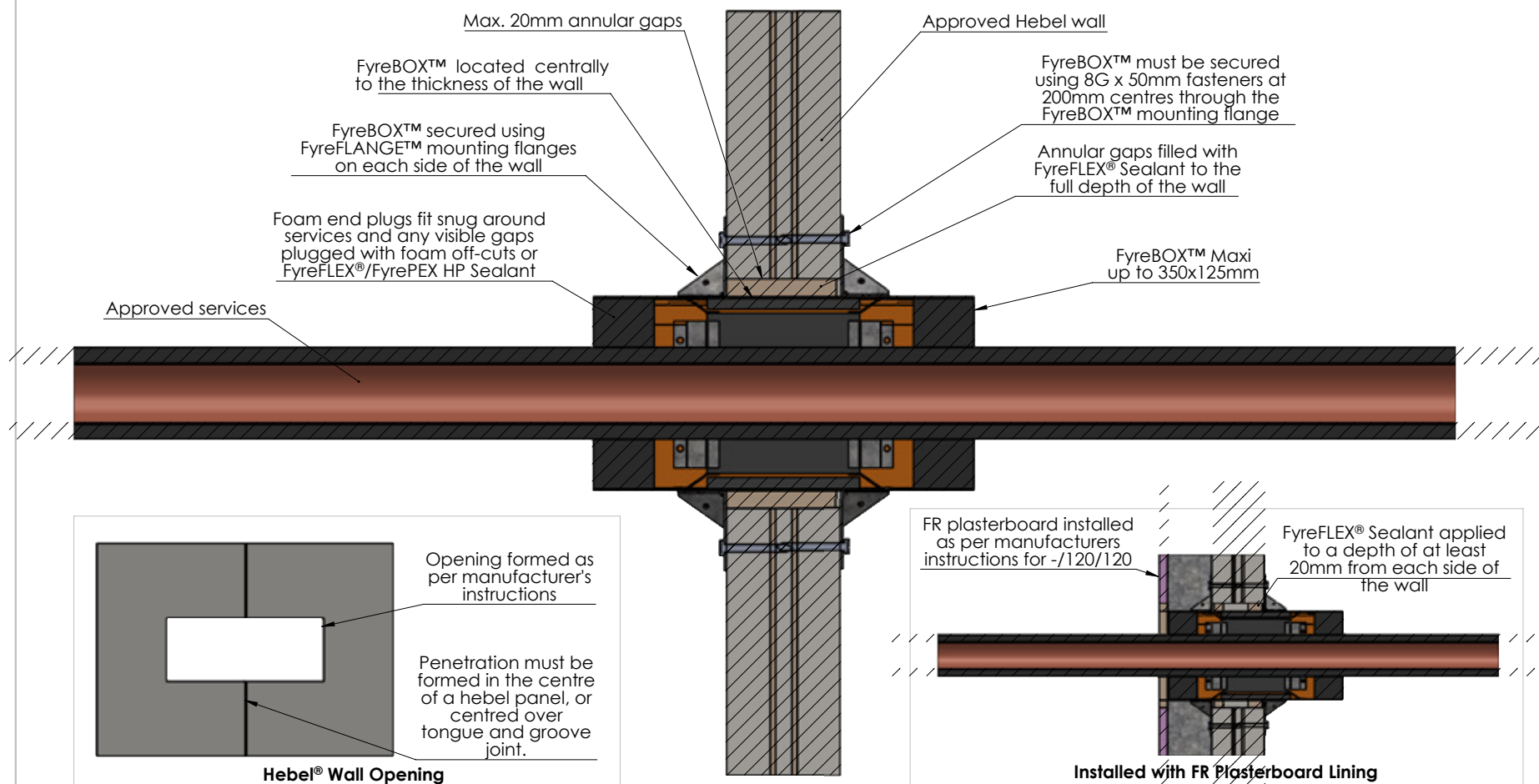
Plasterboard Walls and Shafts - Plasterboard lined on one side



NOTE: If TWRAP™ is to be applied for full insulation, it will only be required in the direction of the fire rating.

Drawing Name: Plasterboard - Lined One Side				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Maxi - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small> 
Drawing No. : 6	Sheet: 6 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Hebel®/Walsc® AAC Walls - Openings less than 400x205mm



Drawing Name: Hebel®/Walsc® - Small Openings

Project Title: FyreBOX™ Maxi - Generic Install

Drawing No. :
7

Sheet:
7 of 16

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

☐ STANDARD DRAWING
☐ PROJECT DRAWING

Date:

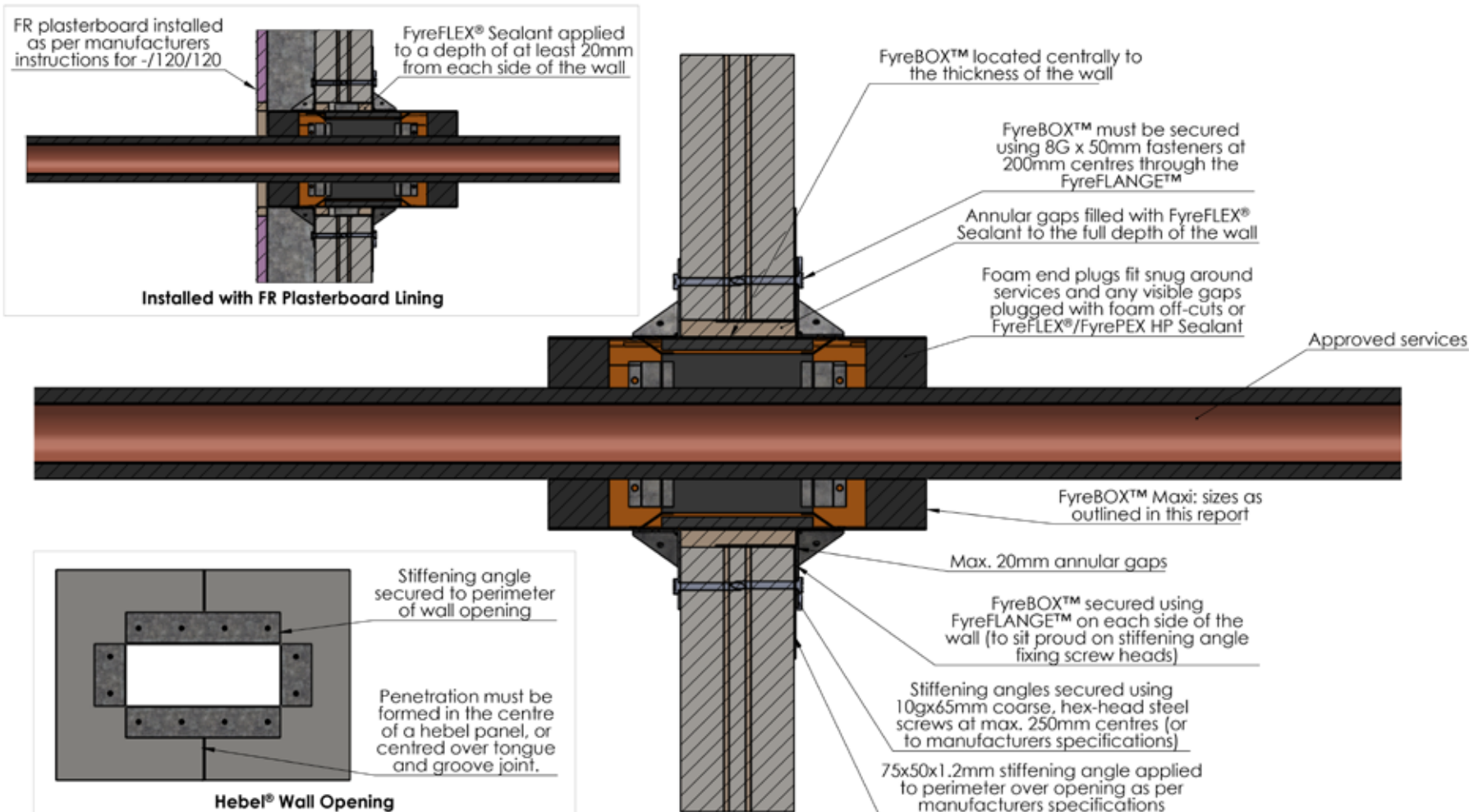
No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)



Hebel®/Walsc® AAC Walls - Openings greater than 400x205mm



Drawing Name: Hebel®/Walsc® - Large Openings

Project Title: FyreBOX™ Maxi - Generic Install

Drawing No. :
8

Sheet:
8 of 16

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

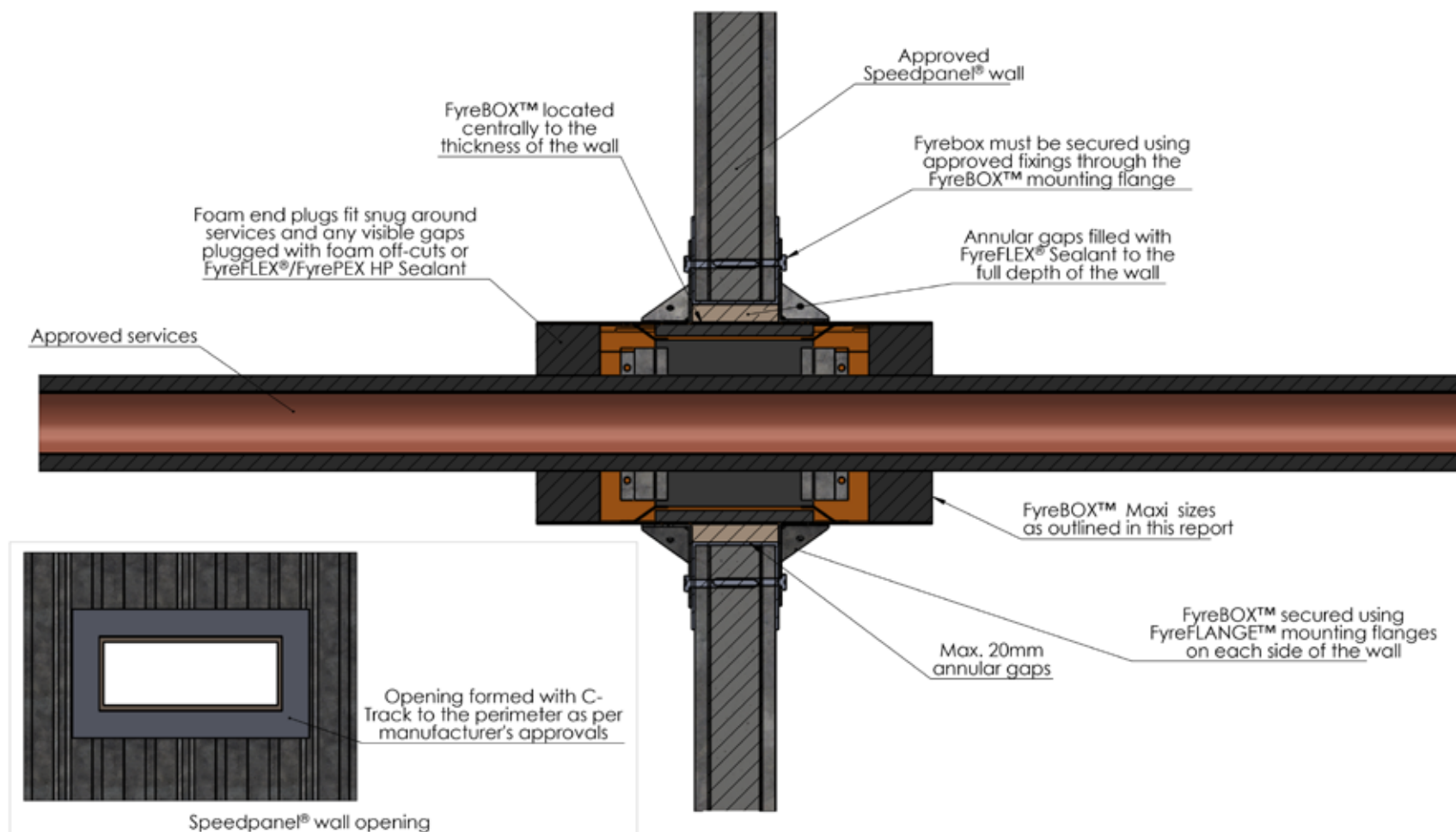
No.: **NOTICE:**

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)



☐ STANDARD DRAWING
☐ PROJECT DRAWING

Speedpanel[®] Walls



Drawing Name: Speedpanel[®]

Project Title: FyreBOXTM Maxi - Generic Install

Drawing No. :
9

Sheet:
9 of 16

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

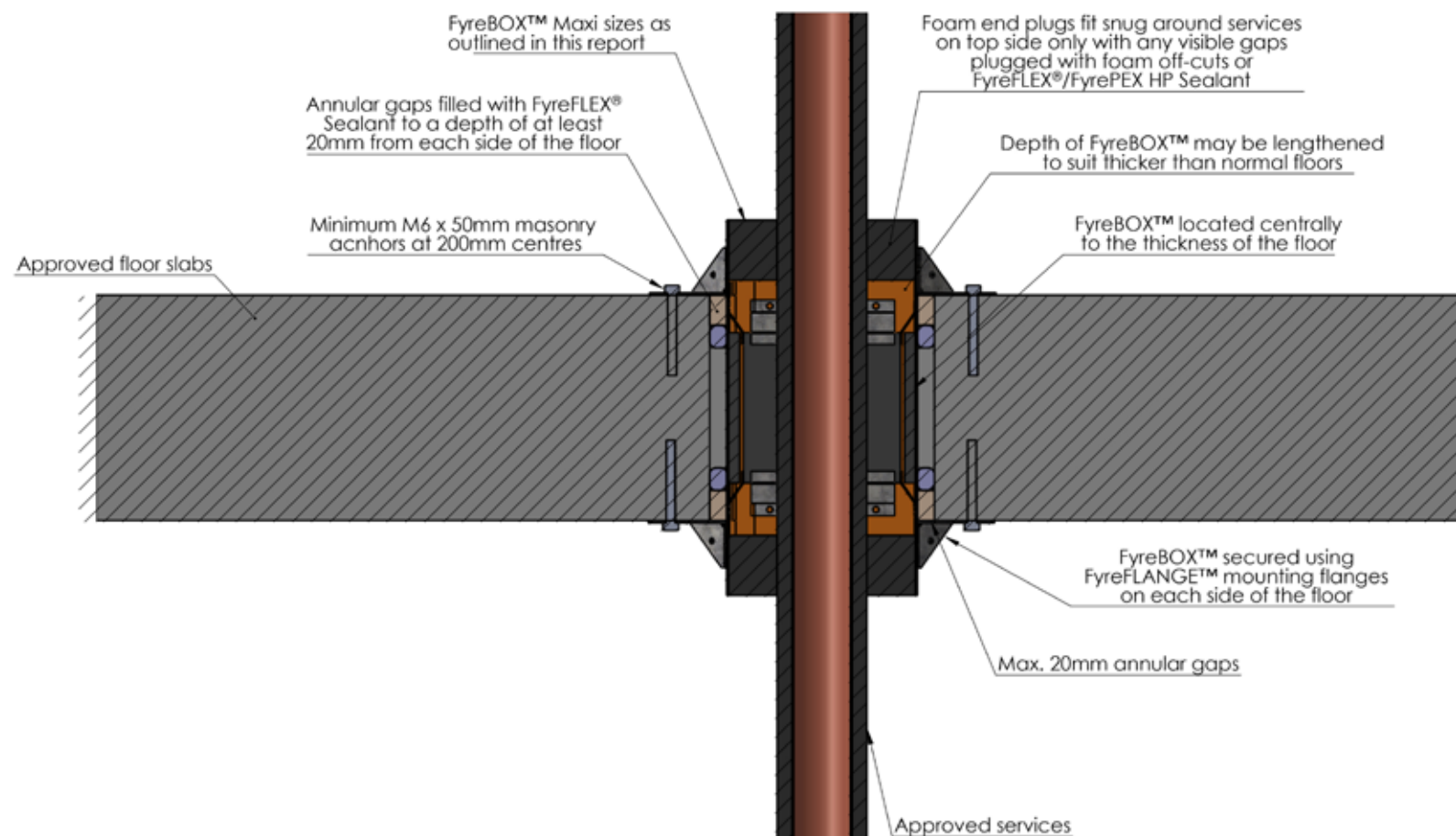
NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (MM)

☐ STANDARD DRAWING
☐ PROJECT DRAWING



Concrete Slabs (with or without permanent formwork)


Drawing Name: Concrete Slabs

Project Title: FyreBOXTM Maxi - Generic Install

Drawing No. :
10

Sheet:
10 of 16

Date:
13/07/2020

Scale:
NTS

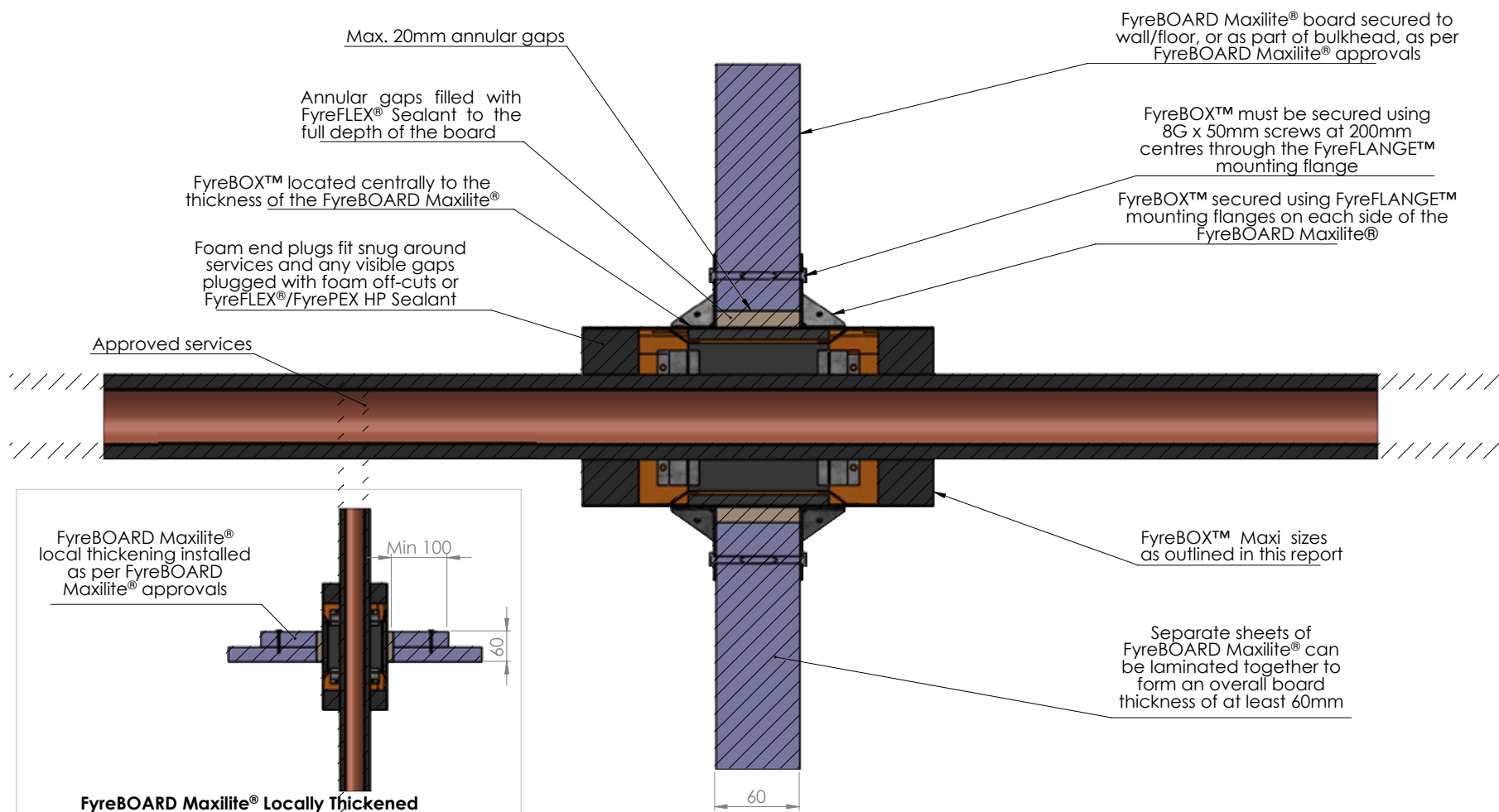
Test Standard:
AS1530.4

Fire resistance level:
Based on Report No.:
Codes:
Drawn By:
JC

Checked By:
CT

Revision:
Date:
No.:
NOTICE:
(NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (MM))
☐ STANDARD DRAWING
☐ PROJECT DRAWING


FyreBOARD Maxilite[®]



Drawing Name: FyreBOARD Maxilite[®]

Project Title: FyreBOXTM Maxi - Generic Install

Test Standard:
AS1530.4

Fire resistance level:

Codes:

Drawn By:
JC

Revision:

Date:

No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

Drawing No. :
11

Sheet:
11 of 16

Date:
13/07/2020

Scale:
NTS

Based on Report No.:

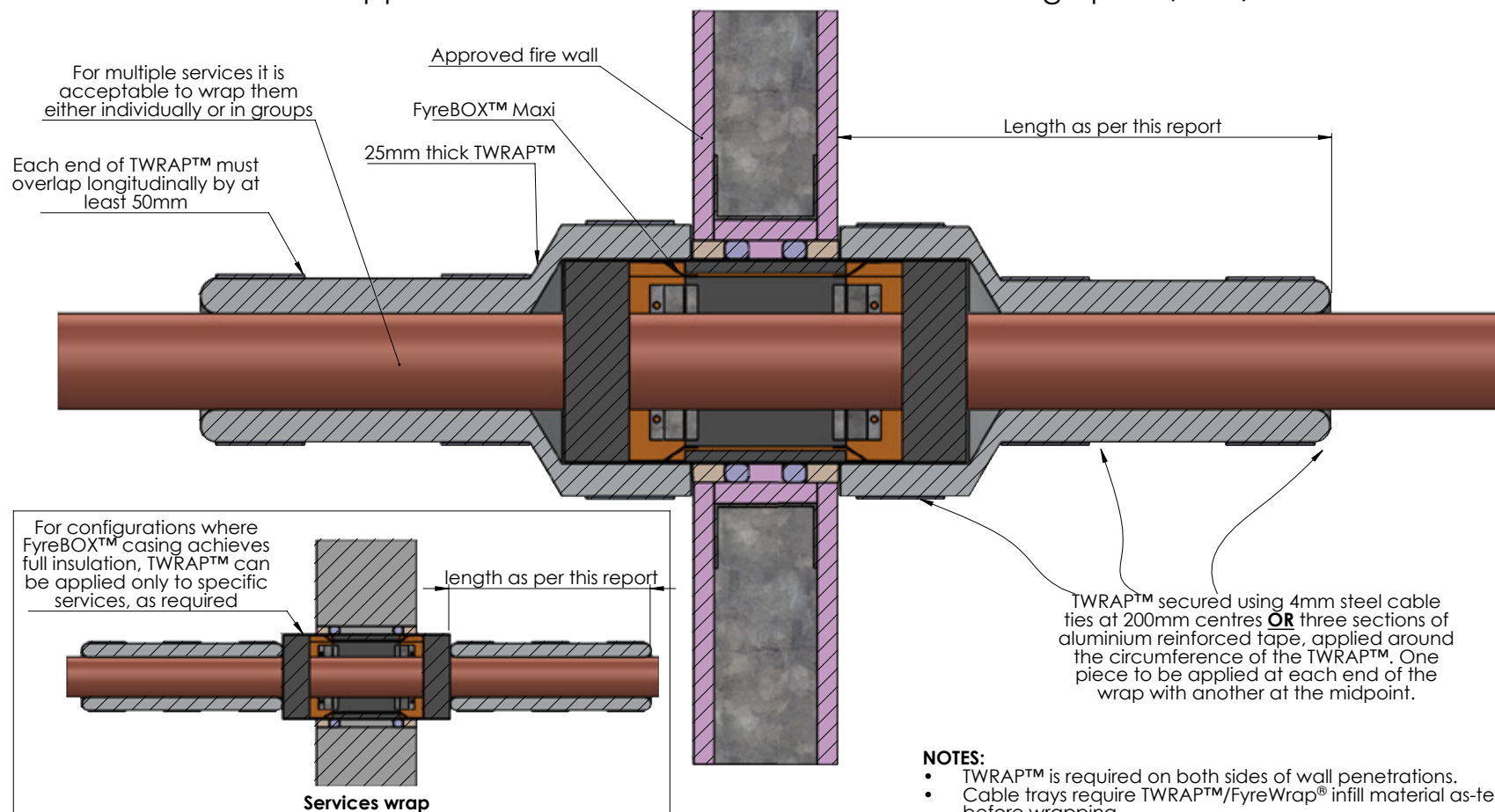
Checked By:
CT

☐ STANDARD DRAWING
☐ PROJECT DRAWING



TWRAP[™] (Standard Details) - Fire Rated Walls

Where the FyreBOX[™] and/or services do not achieve full insulation, TWRAP[™] can be applied in order to increase this insulation rating up to -/XXX/120.



NOTES:

- TWRAP[™] is required on both sides of wall penetrations.
- Cable trays require TWRAP[™]/FyreWrap[®] infill material as-tested before wrapping

Drawing Name: TWRAP[™] - Walls

Project Title: FyreBOX[™] Maxi - Generic Install

Drawing No. :
13

Sheet:
13 of 17

Date:
11/11/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

NOTICE:

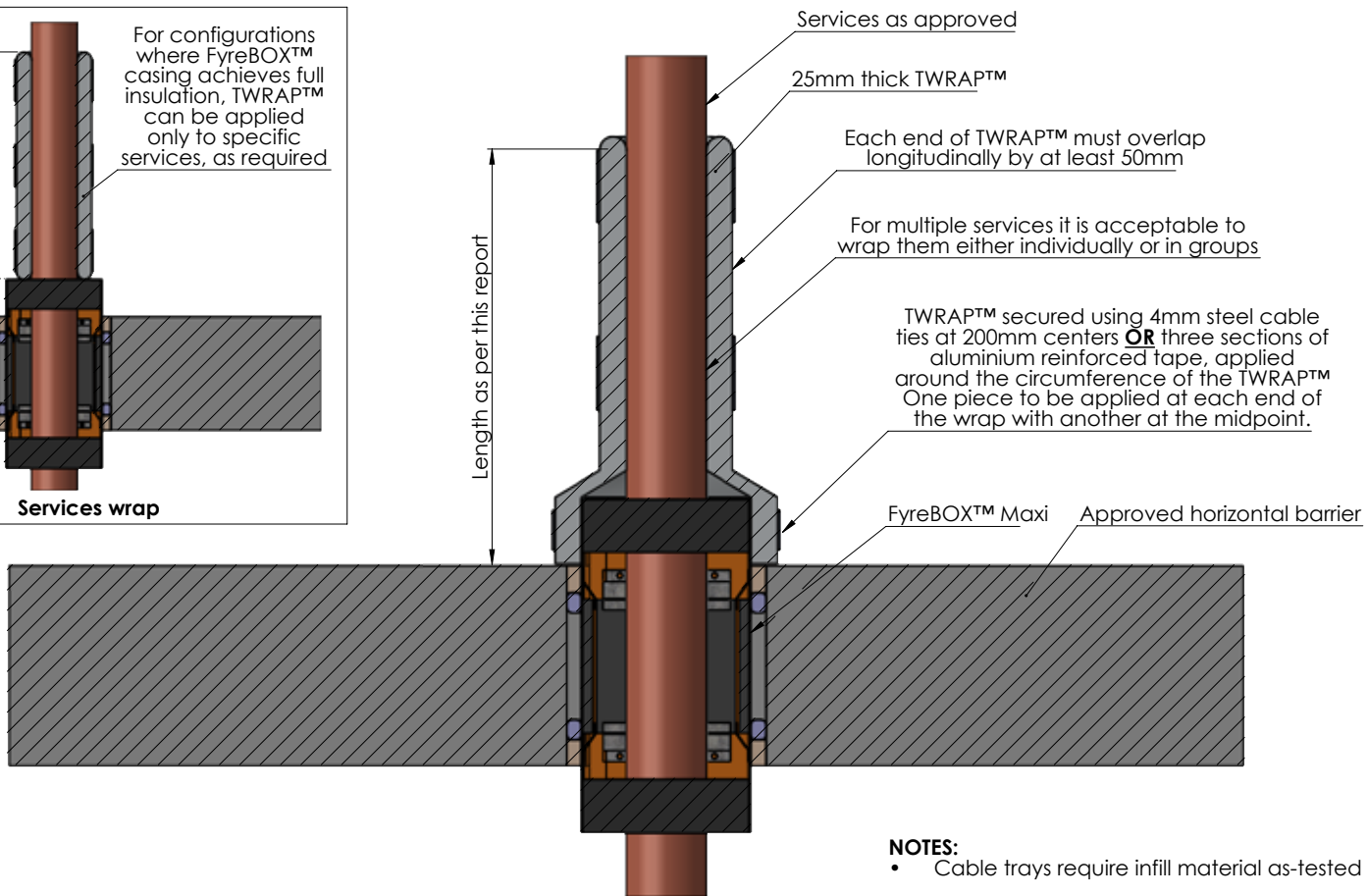
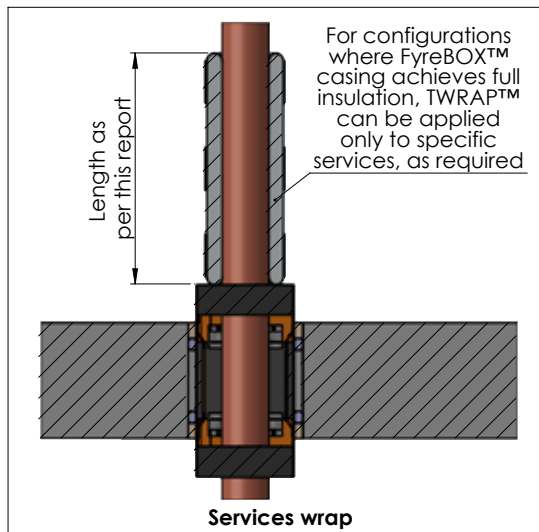
NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)



- ☐ STANDARD DRAWING
☐ PROJECT DRAWING

TWRAP™ (Standard Details) - Fire Rated Floors

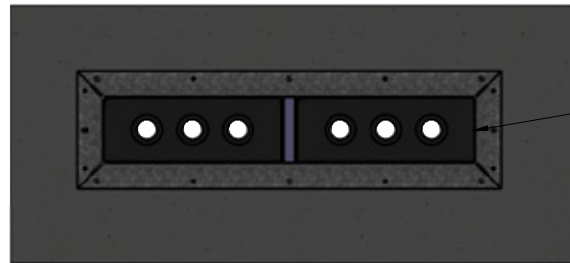
Where the FyreBOX™ and/or services do not achieve full insulation, TWRAP™ can be applied in order to increase this insulation rating up to -/XXX/120.



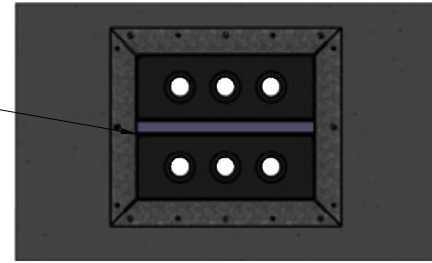
- NOTES:**
- Cable trays require infill material as-tested before wrapping

Drawing Name: TWRAP™ - Floors				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: Floor				Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 14	Sheet: 14 of 17	Date: 11/11/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Multiple FyreBOX™ Stacked

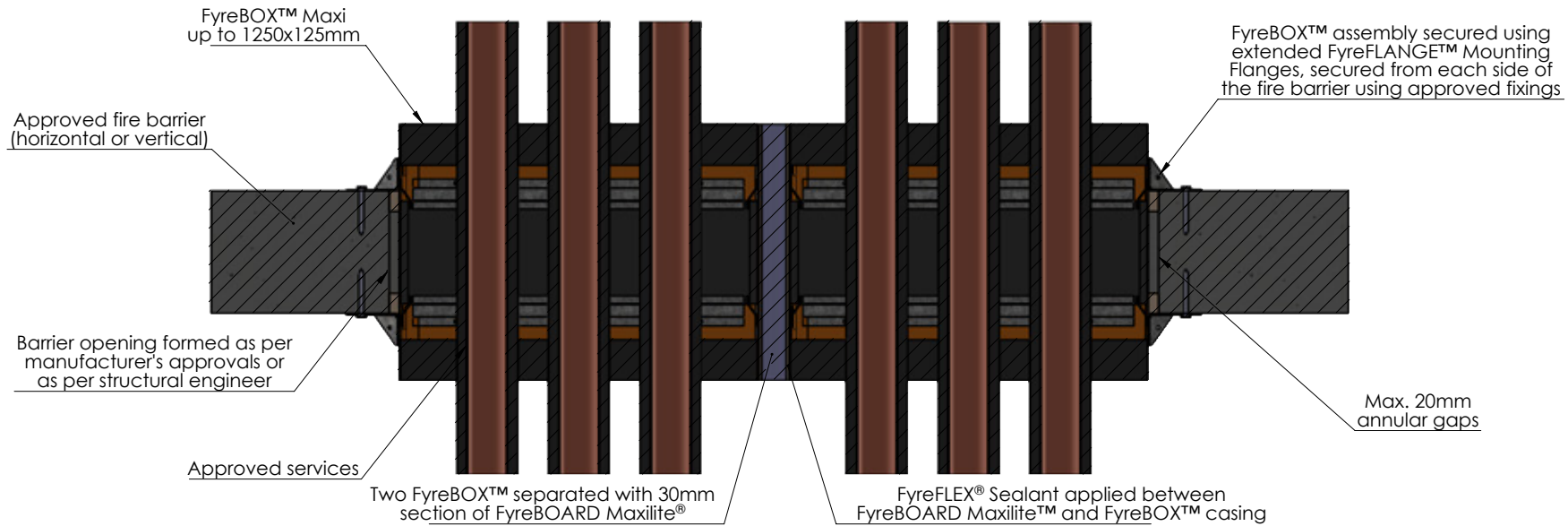


Stacked Horizontal



Stacked Vertical

Multiple FyreBOX™ can be stacked side by side, separated by a piece of 30mm FyreBOARD Maxilite®



NOTES: This detail is also applicable to the FyreBOX™ Mini square
The barrier must be approved to sustain the opening sizes required
Cable trays require infill material as-tested before wrapping

Drawing Name: Stacked

Project Title: FyreBOX™ Maxi - Generic Install

Drawing No. : 14 Sheet: 14 of 16 Date: 13/07/2020 Scale: NTS

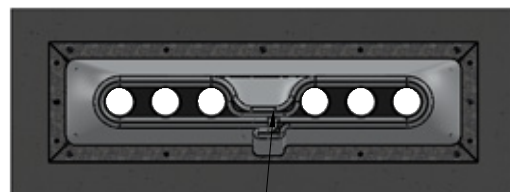
Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			



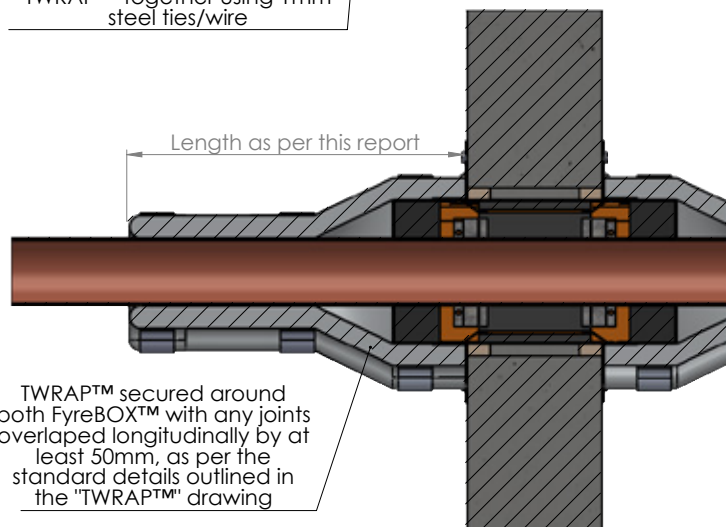
Applying TWRAPTM To Stacked FyreBOX

- TWRAPTM detail required on each side of wall penetrations and top side of floors
- Each section of TWRAPTM secured using 4mm steel cable ties at 200mm centers **OR** three sections of aluminium reinforced tape, applied around the circumference of the TWRAPTM. One piece to be applied at each end of the wrap with another at the midpoint.
- Cable trays require infill material as-tested before wrapping

Stacked Horizontal



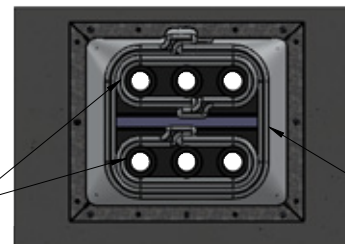
Where there are any gaps over 150mm between services, pin TWRAPTM together using 1mm steel ties/wire



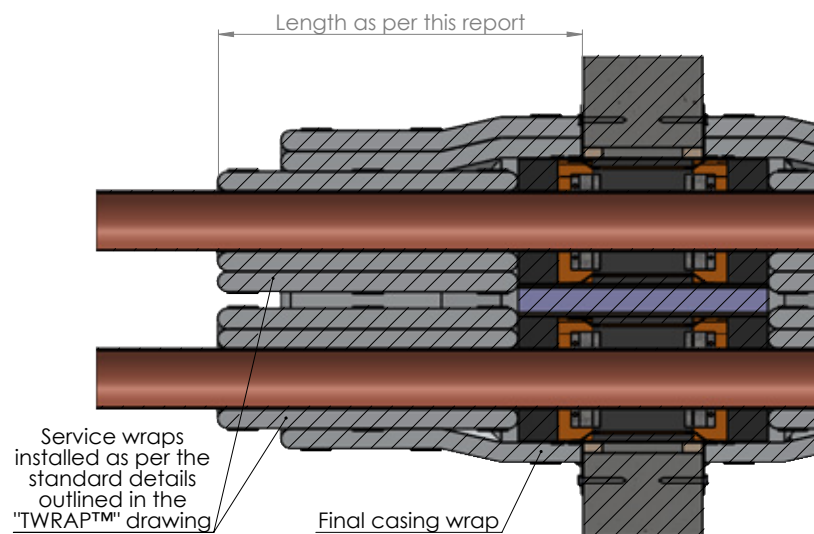
TWRAPTM secured around both FyreBOXTM with any joints overlapped longitudinally by at least 50mm, as per the standard details outlined in the "TWRAPTM" drawing

Stacked Vertical

TWRAPTM is to be first applied to the service bundles, penetrating out of each FyreBOXTM, with any joints overlapped longitudinally by at least 50mm



Finally, TWRAPTM is applied around both FyreBOXTM (and the both of the service wraps) with any joints overlapped longitudinally by at least 50mm



Drawing Name: Stacked - TWRAPTM

Project Title: FyreBOXTM Maxi - Generic Install

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

Drawing No. :
15

Sheet:
15 of 16

Date:
13/07/2020

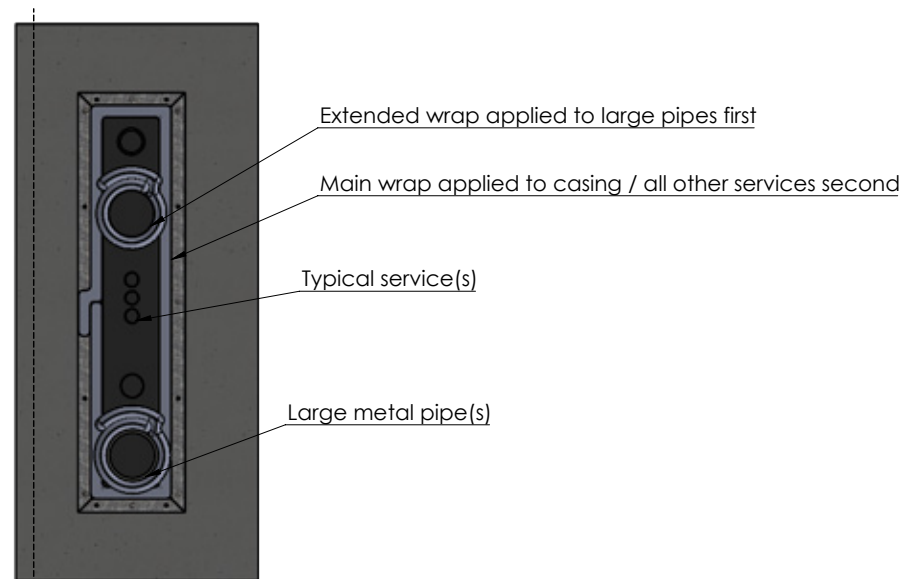
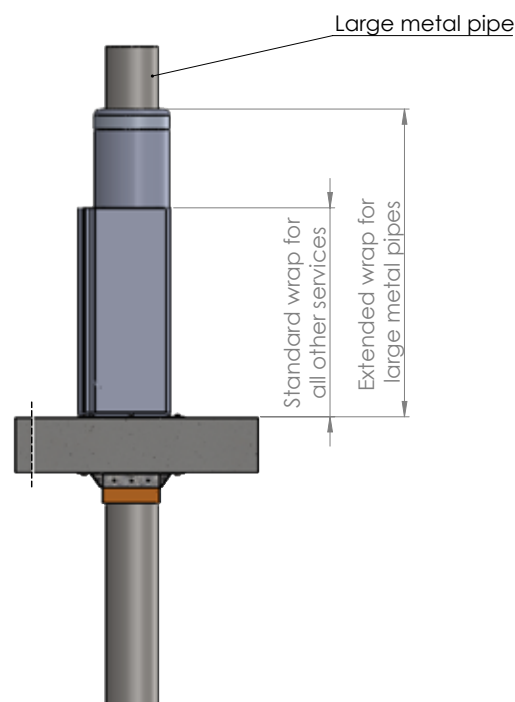
Scale:
NTS

☐ STANDARD DRAWING
☐ PROJECT DRAWING




Applying TWRAPTM to metal pipes above NB50

- TWRAPTM applied around pipes first for large pipes, specific lengths as detailed in this report for pipes greater than NB50.
- Each section of TWRAPTM secured using 4mm wide steel cable ties at 200mm centers **OR** three sections of aluminium reinforced tape, applied around the circumference of the TWRAPTM. One piece to be applied at each end of the wrap with another at the midpoint.
- Secondary wrap applied around casing / all other services (as needed) for standard lengths as per this report

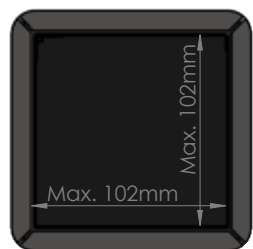
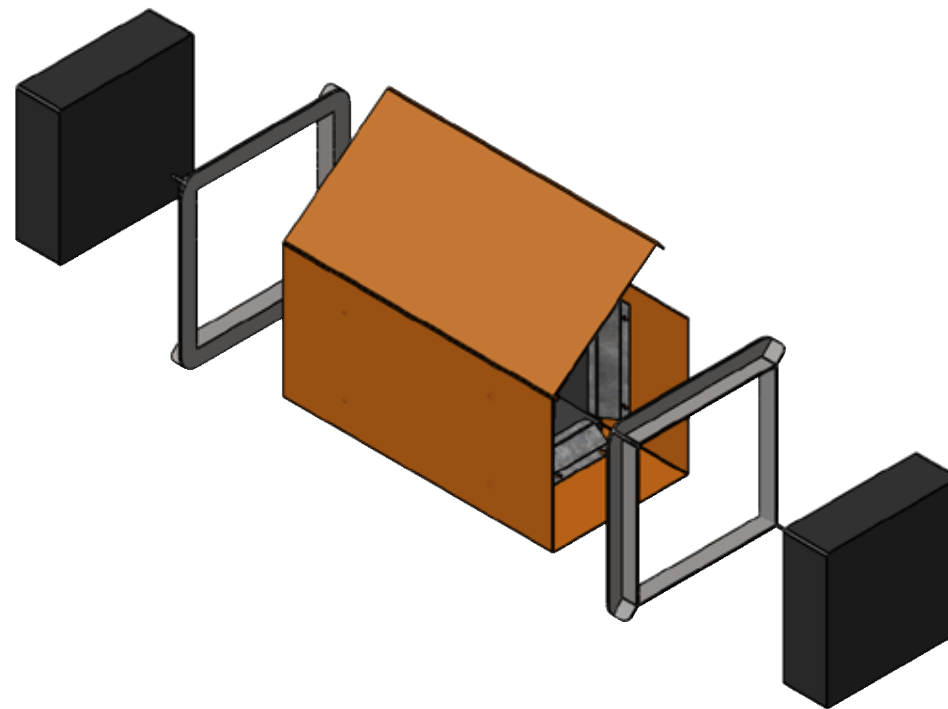
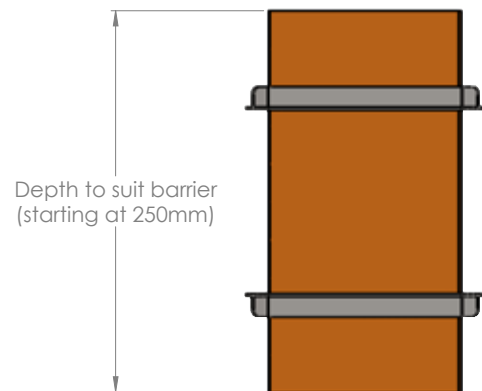


NOTES:

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

Drawing Name: TWRAP TM - Large metal pipes				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX TM Maxi - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small> 
Drawing No. : 16	Sheet: 16 of 16	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

FyreBOXTM Mini - Product Overview



FyreBOXTM Mini Square



FyreBOXTM Mini Round

Drawing Name: FyreBOXTM Mini Overview

Project Title: FyreBOXTM Mini - Generic Install

Test Standard:
AS1530.4

Fire resistance level:

Codes:

Drawn By:
JC

Revision:

Date:

No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

Drawing No. :
1

Sheet:
1 of 12

Date:
13/07/2020

Scale:
NTS

Based on Report No.:

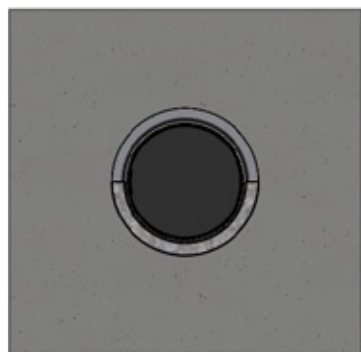
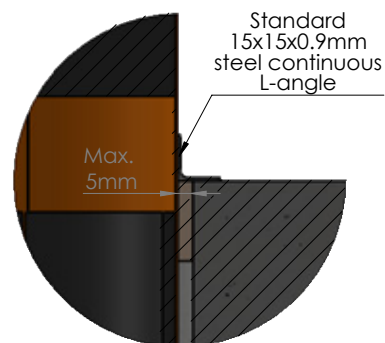
Checked By:
CT

☐ STANDARD DRAWING
☐ PROJECT DRAWING

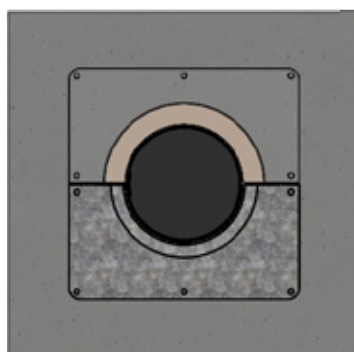
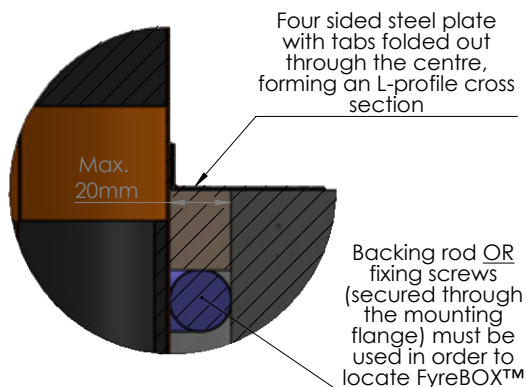


FyreBOXTM Mini (Round or Square) - Annular Gaps

Standard Flange
Up to 5mm annular gaps

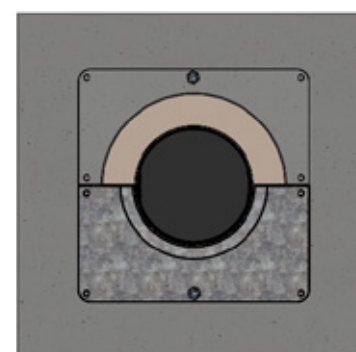
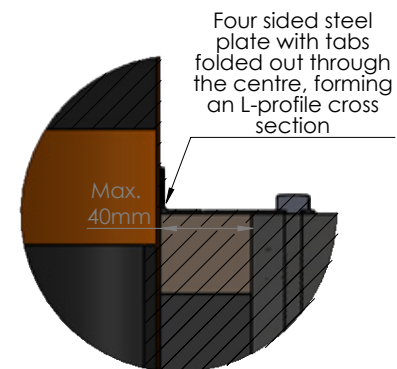


Updated FyreFLANGETM
Up to 20mm annular gaps



Enlarged Updated FyreFLANGETM
Up to 40mm annular gaps*

*Must follow additional details as outlined in the "Oversized / Scalloped Openings" drawing of this report



Drawing Name: FyreBOXTM Mini Annular Gaps

Test Standard:
AS1530.4

Codes:

Revision:

Date:

No.:

NOTICE:

Project Title: FyreBOXTM Mini - Generic Install

Fire resistance level:

Drawn By:
JC

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

Drawing No. :
2

Sheet:
2 of 12

Date:
13/07/2020

Scale:
NTS

Based on Report No.:

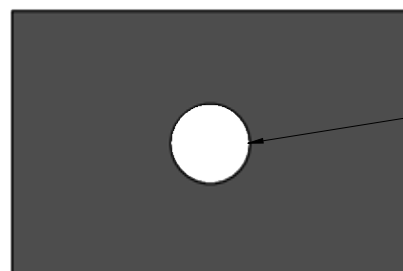
Checked By:
CT

☐ STANDARD DRAWING
☐ PROJECT DRAWING



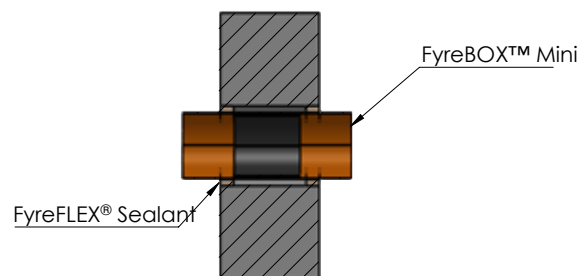
FyreBOX[™] Mini (Round or Square) - Installation Overview

STEP 1



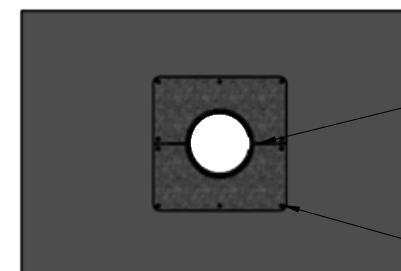
Approved wall/floor opening

Form opening so that annular gaps between FyreBOX[™] Mini and wall/floor will not exceed 20mm



Insert FyreBOX[™] Mini into opening so that it is central to the thickness of the wall/floor. Fill annular gaps with FyreFLEX[®] Sealant to a depth of at least 20mm from each side of the barrier.

STEP 3

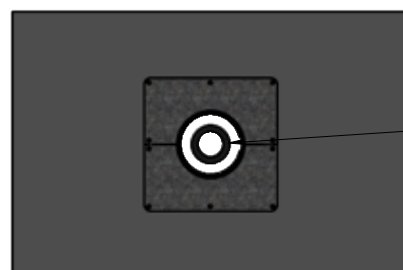


FyreFLANGE[™] Mounting Flanges

Fixings as required for oversized flanges

Fit FyreFLANGE[™] mounting flanges (as per 'FyreBOX[™] Mini Mounting Flanges' drawing) around FyreBOX[™], from each side of the wall/floor, clamping FyreBOX[™] in place. Secure using the clamping method or optional fixings as required

STEP 4



Approved services can be run at any step of the install

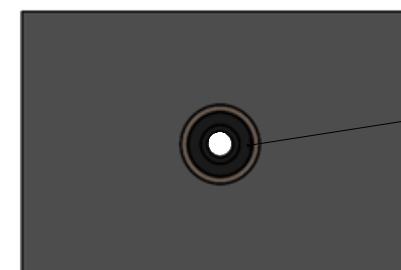
Run approved services through the FyreBOX[™] opening. Please note, the FyreBOX[™] Mini has a hinged lid and is also suitable for retrofitting around existing services

STEP 5



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



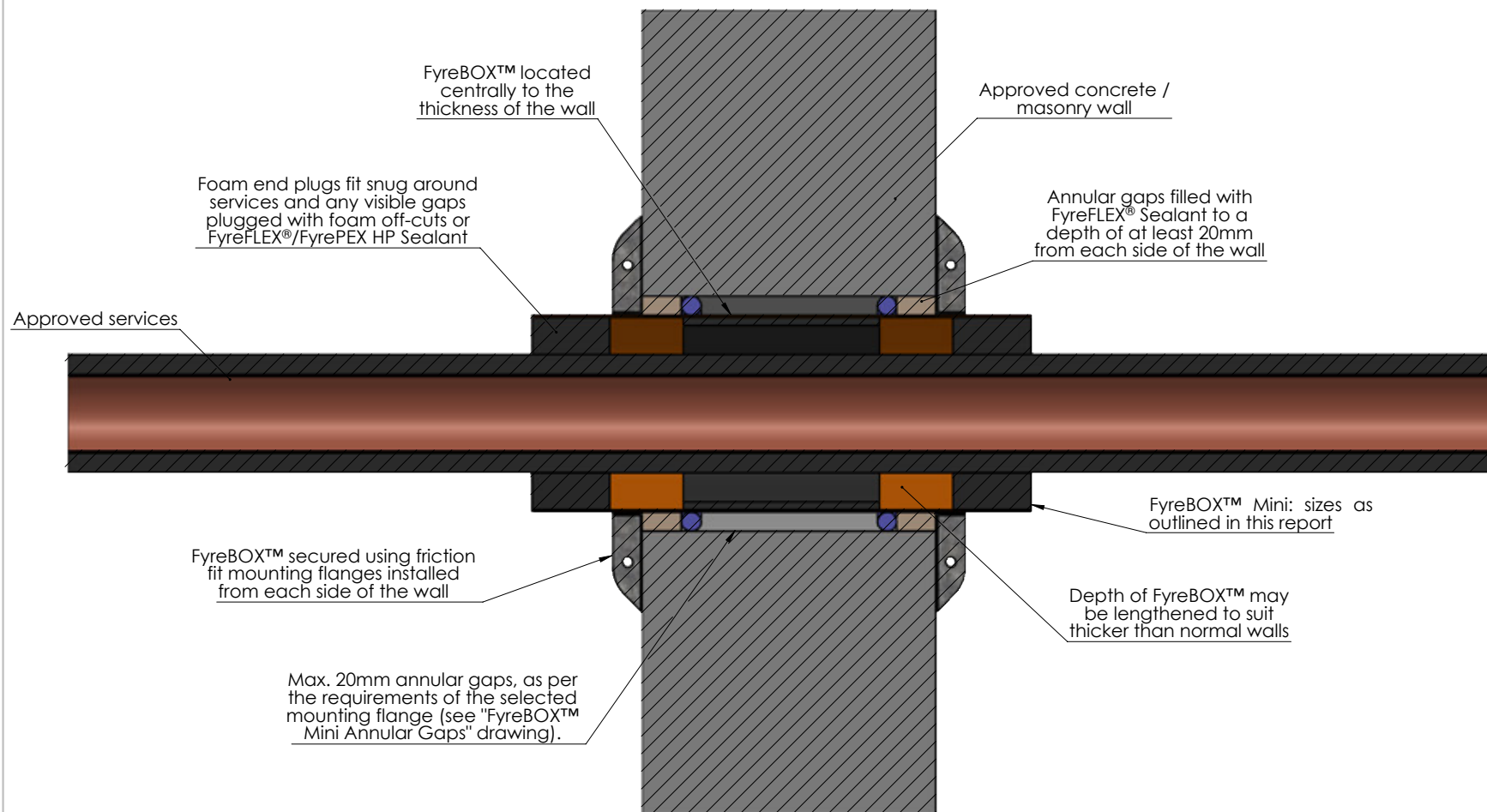
Foam end plugs fit snug around services


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[™]' drawing if wrapping will be required for full insulation.

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

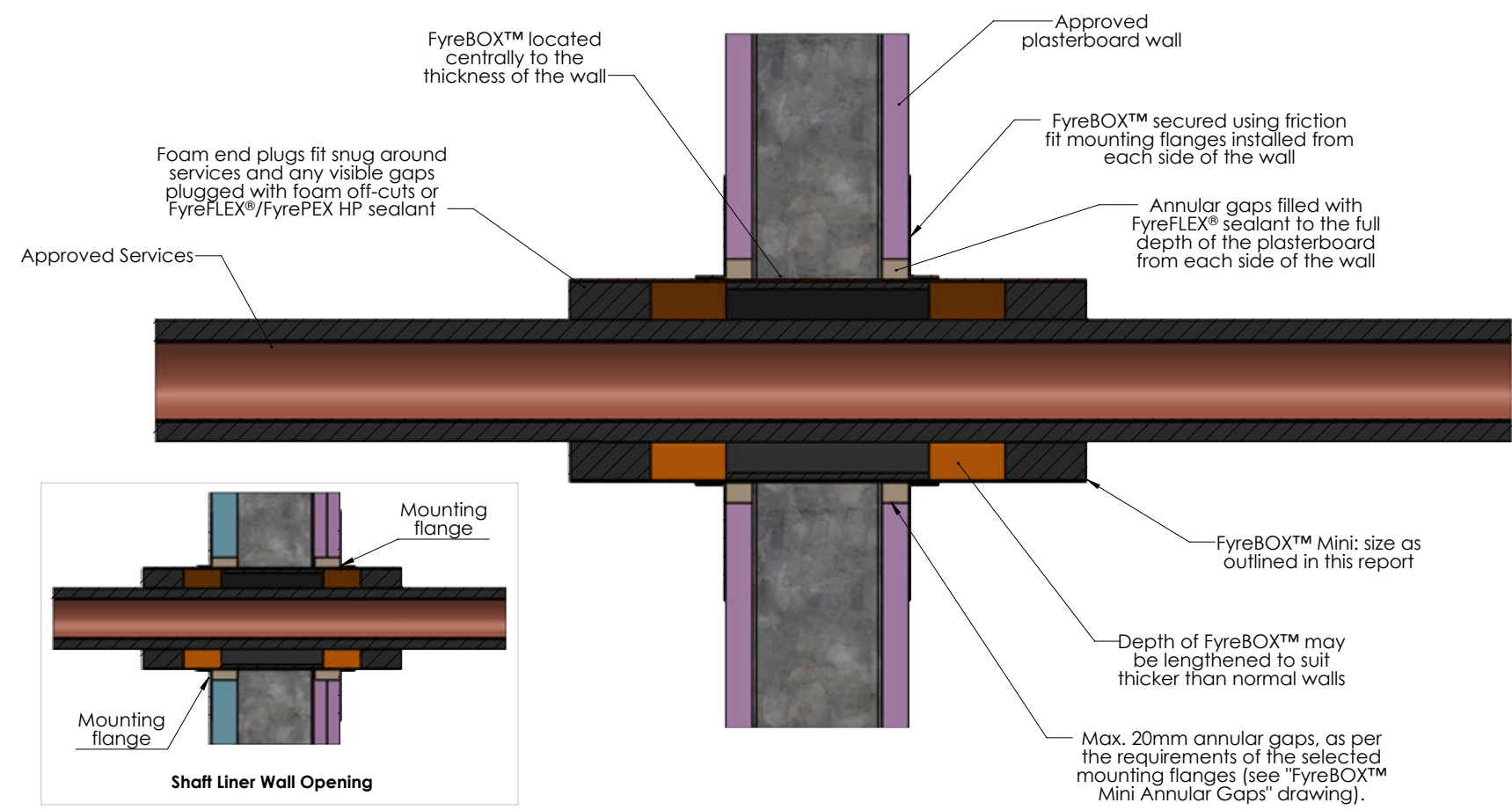
Drawing Name: Installation Overview				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX [™] Mini - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Drawing No. : 3	Sheet: 3 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			


Concrete / Masonry Walls (with or without permanent formwork)



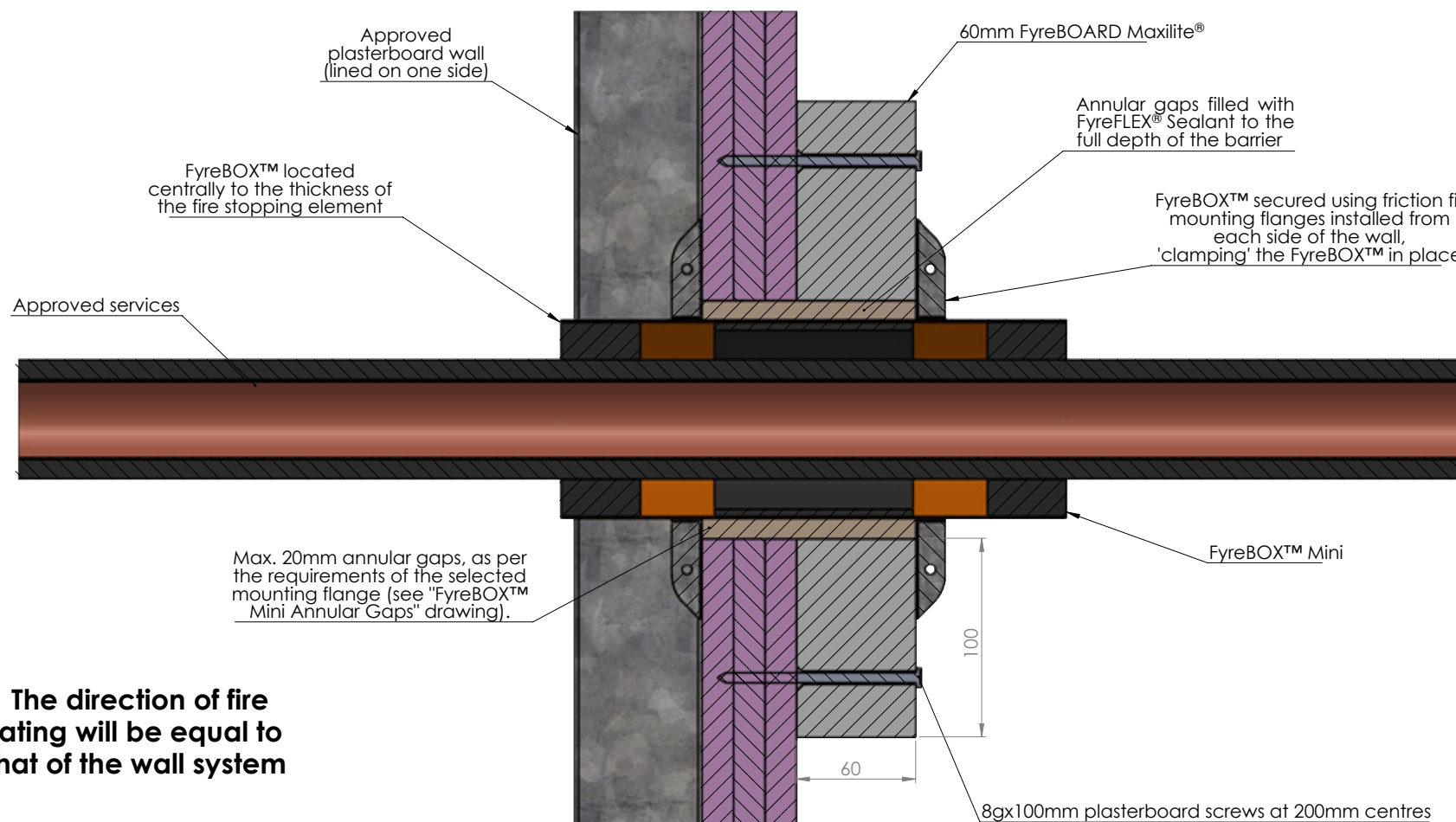
Drawing Name: Concrete / Masonry				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Mini - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Drawing No. : 4	Sheet: 4 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Plasterboard Walls and Shafts - Plasterboard lined on each side




Drawing Name: Plasterboard - Lined Each Side				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Mini - Generic Install				Fire resistance level:	Drawn By: RH				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) 
Drawing No. : 5	Sheet: 5 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: JH	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

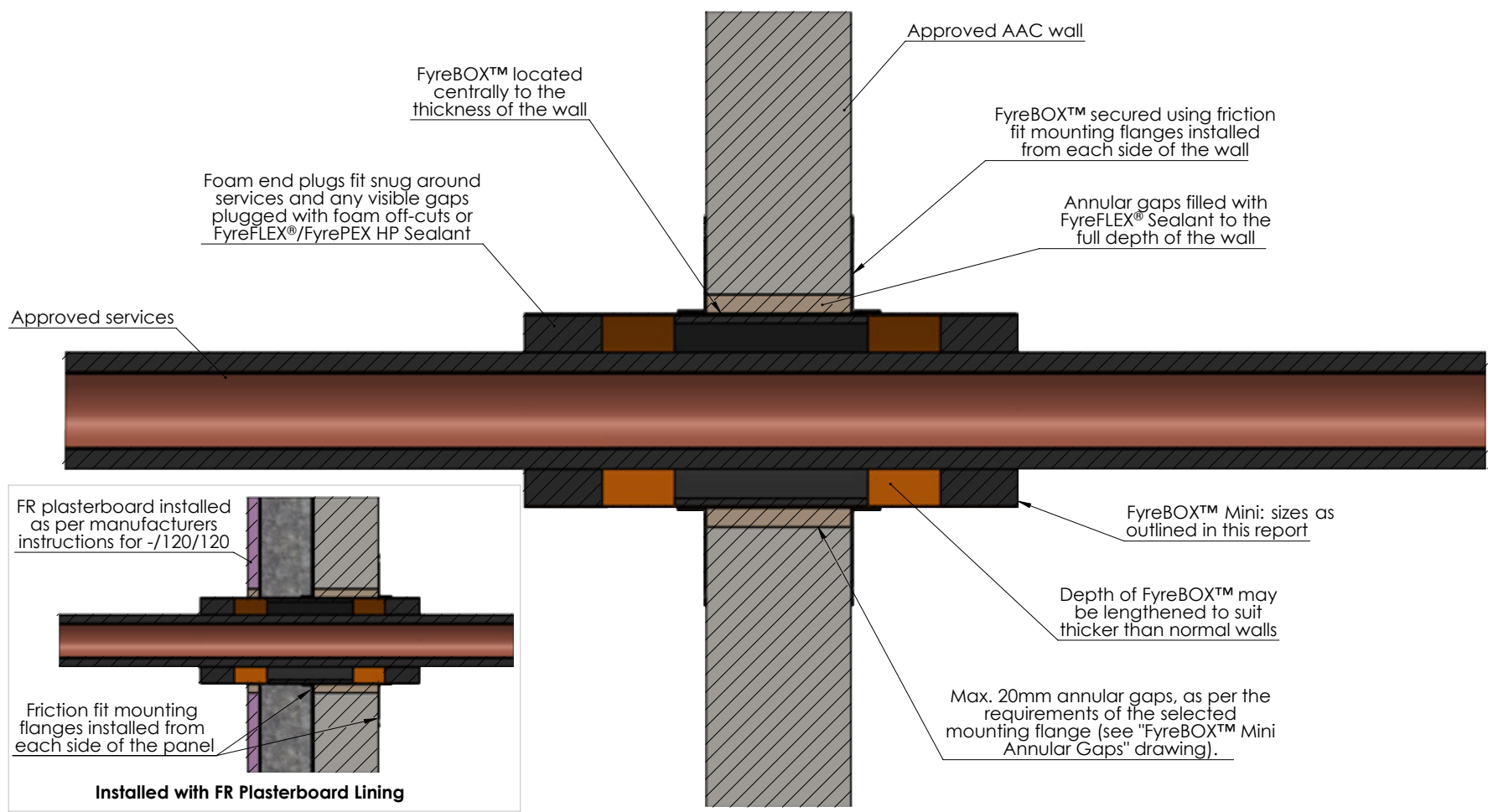
Plasterboard Walls and Shafts - Plasterboard lined on one side



NOTE: If TWRAP™ is to be applied for full insulation, it will only be required in the direction of the fire rating

Drawing Name: Plasterboard - Lined One Side				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Mini - Generic Install				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small> 
Drawing No. : 6	Sheet: 6 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

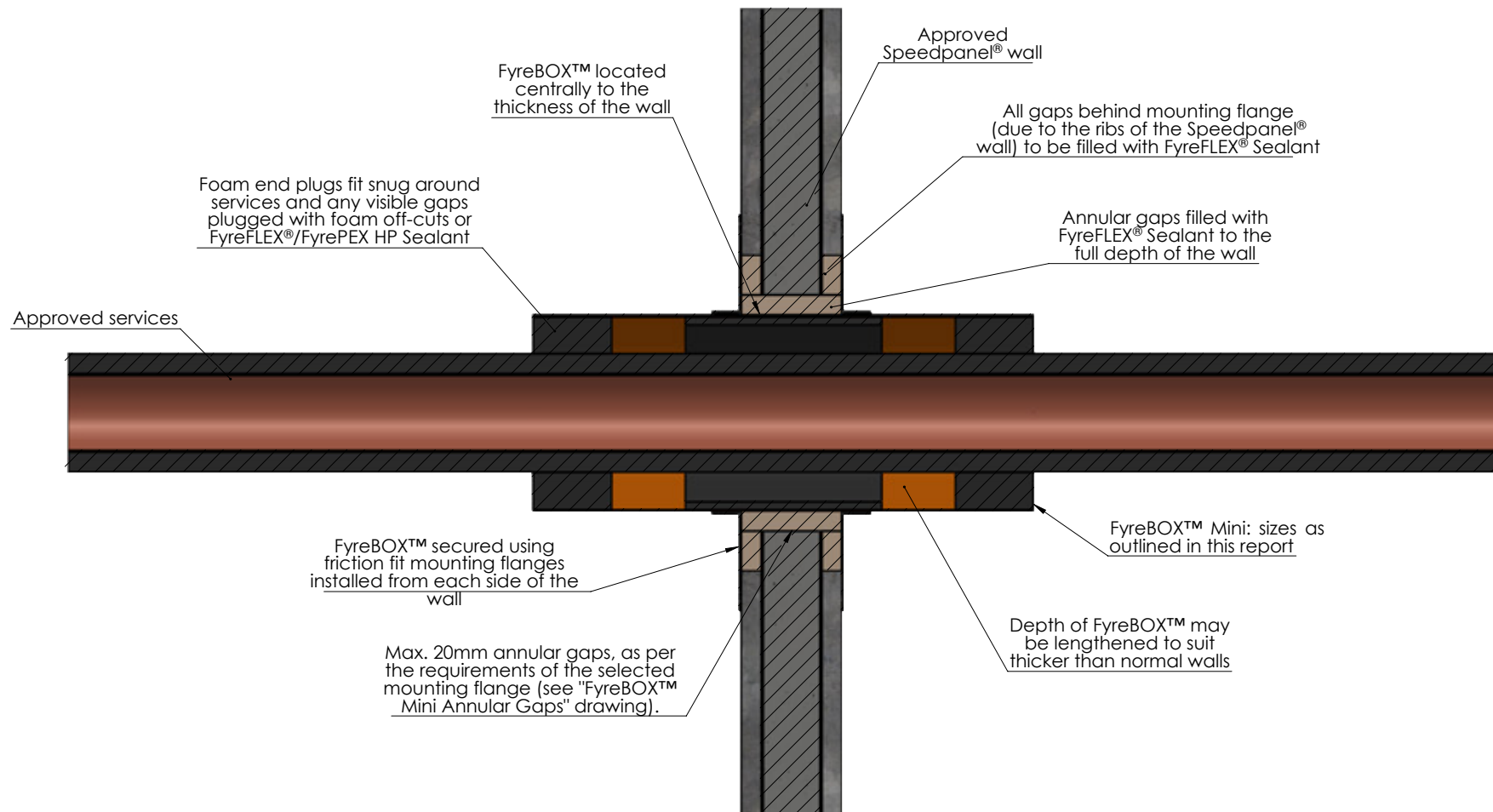
Hebel®/Walsc® AAC Walls




Drawing Name: Hebel®/Walsc® AAC				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Mini - Generic Install				Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 7	Sheet: 7 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

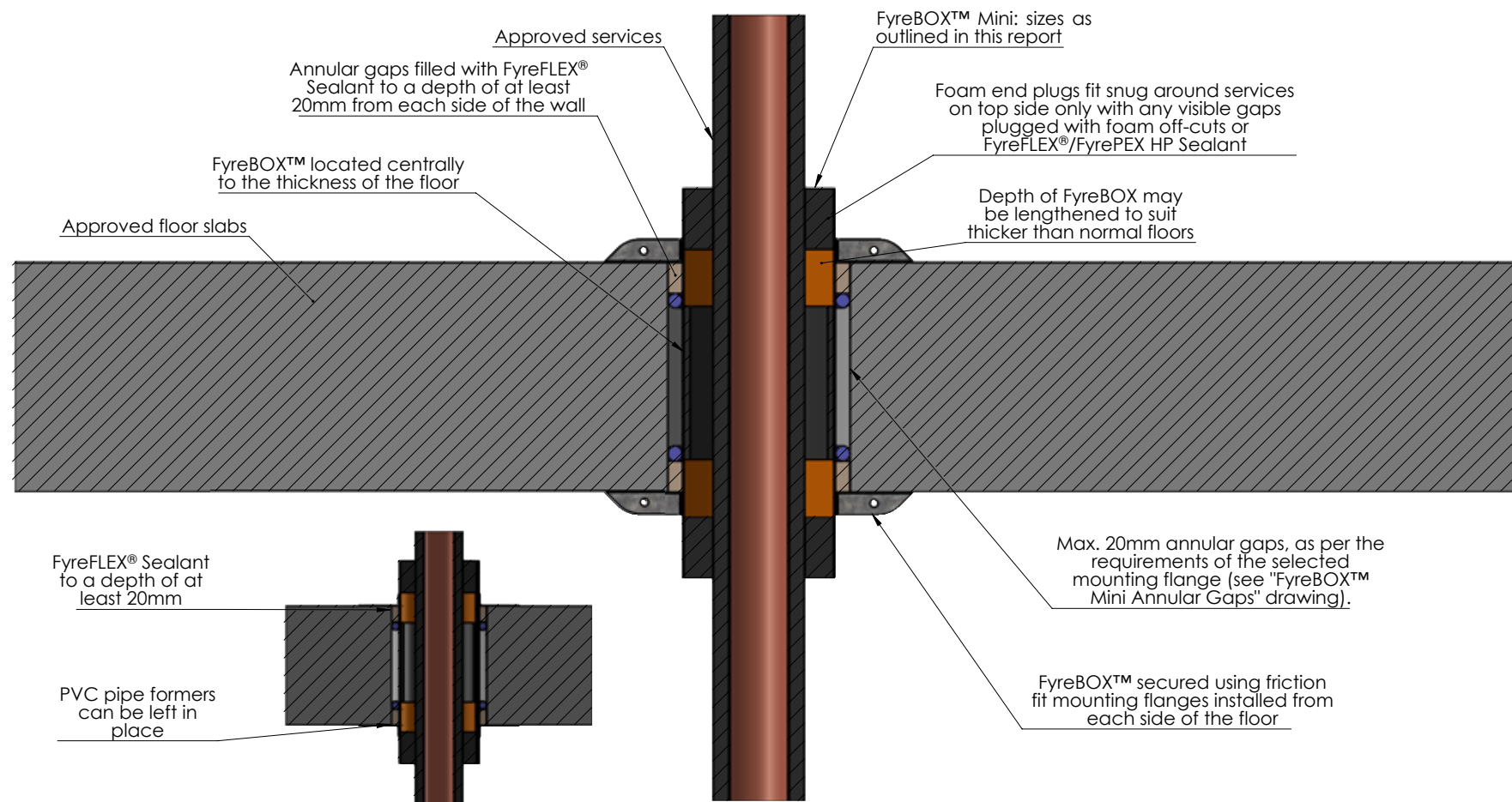


Speedpanel® Walls



Drawing Name: Speedpanel®				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Mini - Generic Install				Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) 
Drawing No. : 8	Sheet: 8 of 12	Date: 13/07/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Concrete Slabs (with or without permanent formwork)



Drawing Name: Concrete Slabs

Project Title: FyreBOX™ Mini - Generic Install

Drawing No. :
9

Sheet:
9 of 12

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

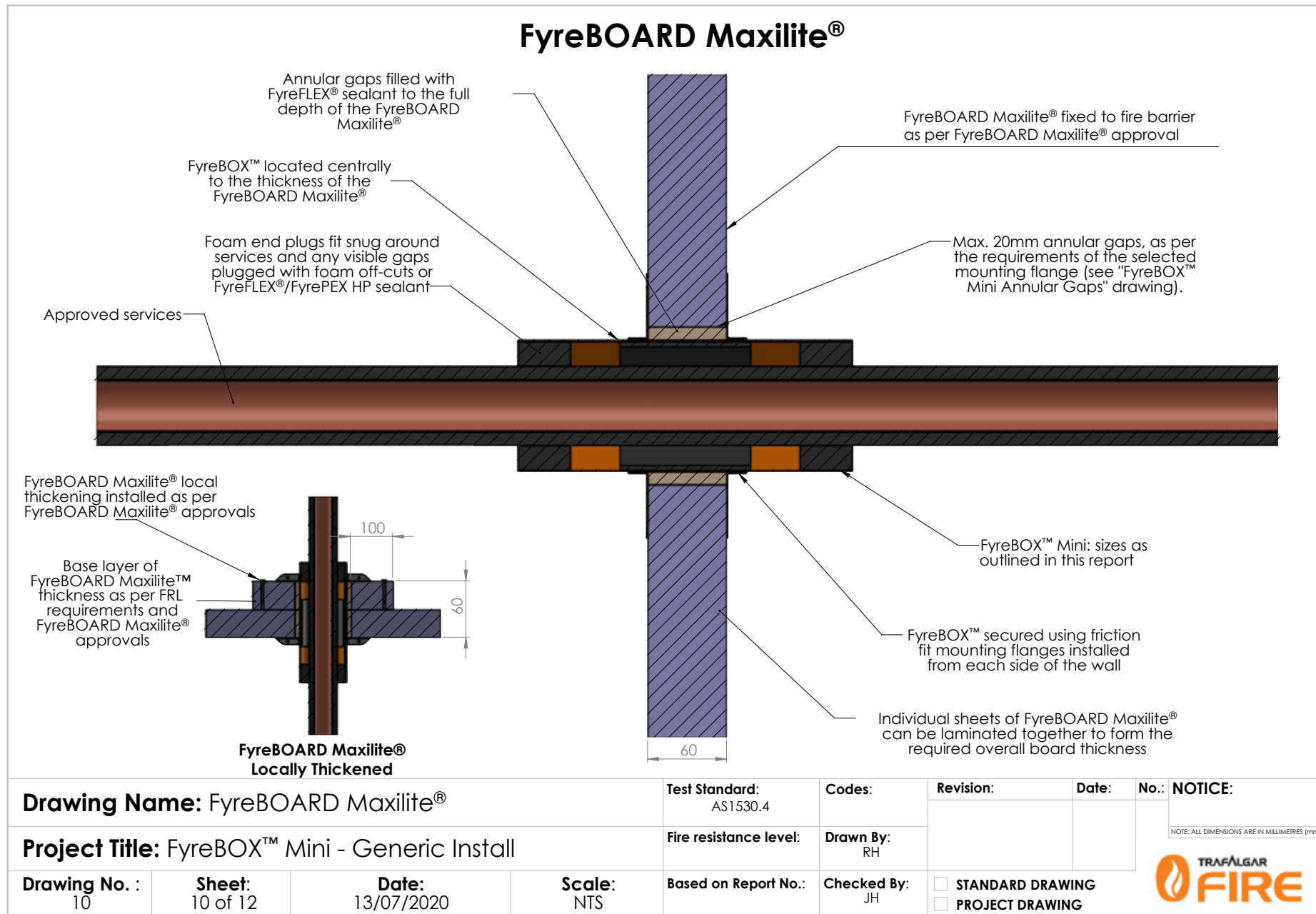
No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

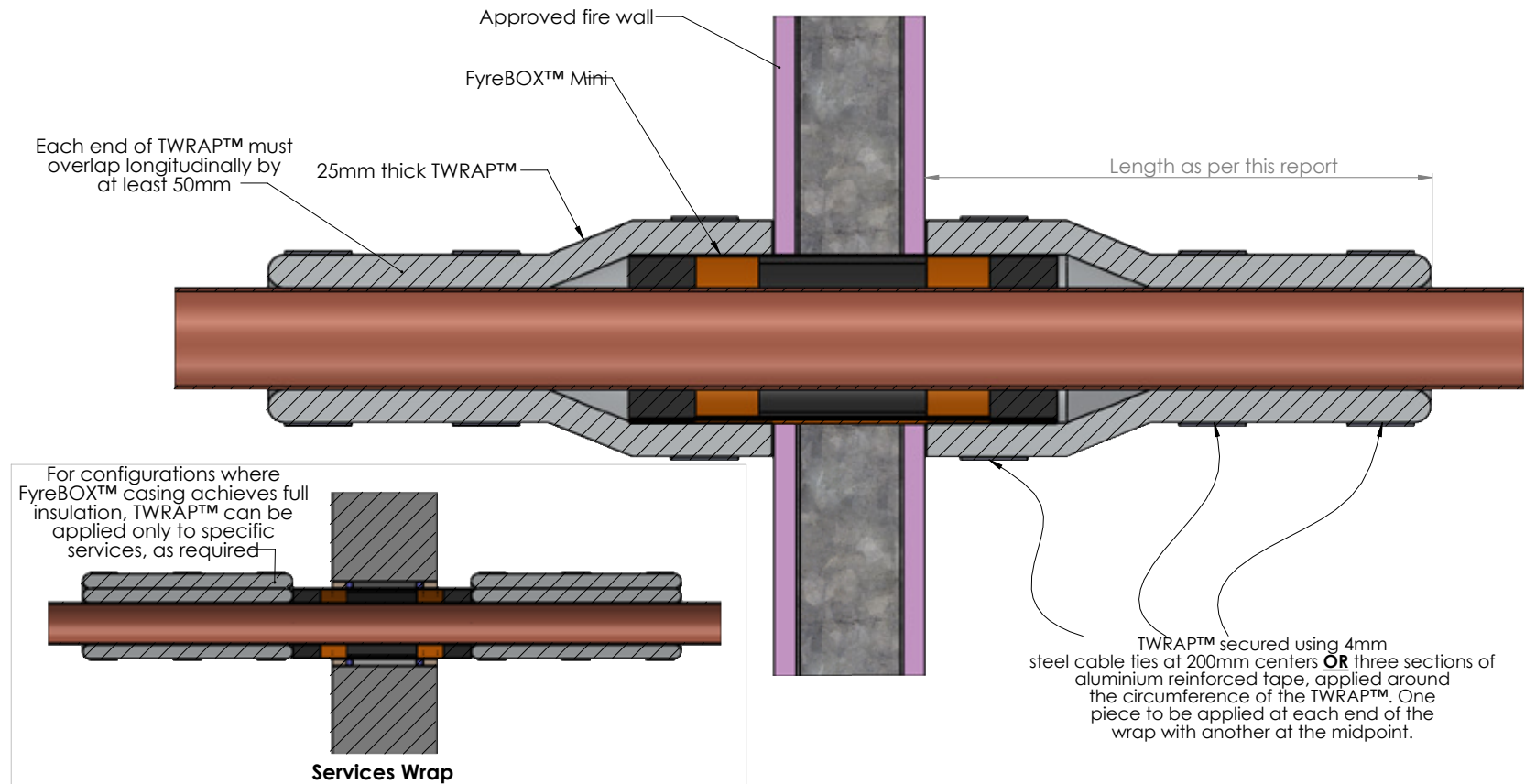
☐ STANDARD DRAWING
☐ PROJECT DRAWING





TWRAPTM - Fire Rated Walls

Where the FyreBOXTM and/or services do not achieve full insulation, TWRAPTM can be applied in order to increase this insulation rating up to -/XXX/120.



Drawing Name: TWRAPTM - Walls

Project Title: FyreBOXTM Mini - Generic Install

Drawing No. :
11

Sheet:
11 of 12

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
RH

Checked By:
JH

Revision:

Date:

No.:

NOTICE:

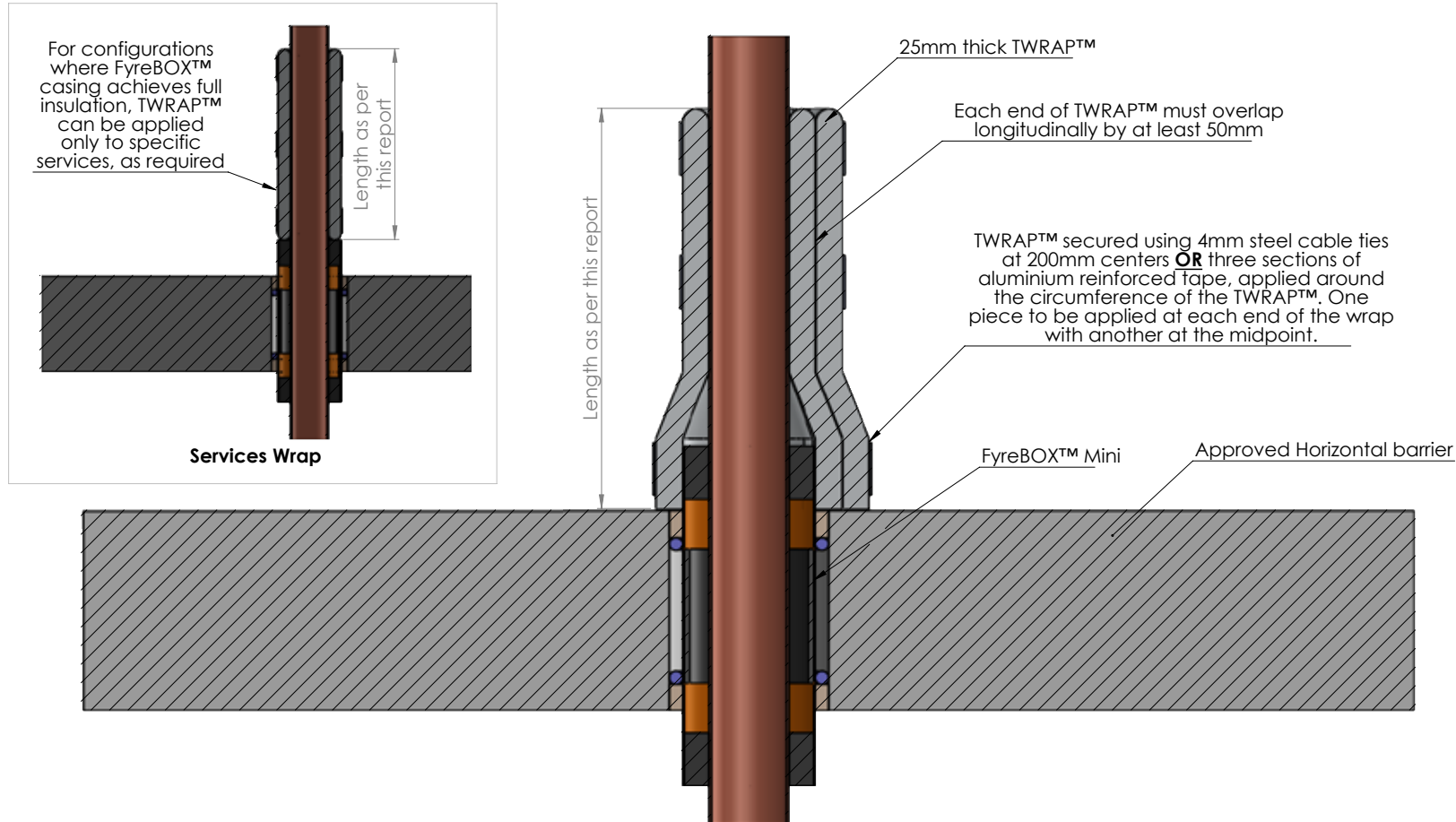
NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)



☐ STANDARD DRAWING
☐ PROJECT DRAWING

TWRAP™ - Fire Rated Floors

Where the FyreBOX™ and/or services do not achieve full insulation, TWRAP™ can be applied in order to increase this insulation rating up to -/XXX/120.



Drawing Name: TWRAP™ - Floors

Project Title: FyreBOX™ Mini - Generic Install

Drawing No. :
12

Sheet:
12 of 12

Date:
13/07/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)

☐ STANDARD DRAWING
☐ PROJECT DRAWING



Approved fixings

FIXING BETWEEN	FIXING SPECIFICATION (MINIMUM)	ALTERNATE
FyreBOX™ Slab-Mount and concrete slab	6mm expanding masonry bolt	4mm Hilti MX nails 6mm screw-type masonry anchors
FyreFLANGE™ mounting flange and plasterboard	40mm laminating screw	8g x 50mm screws (into studwork)
FyreBOX™ mounting flange and Hebel®/ Walsc® AAC	8g x 50mm screws	14g hex-head fixings (as per typical Hebel® specification)
FyreBOX™ mounting flange and Speedpanel®	10g x 25mm self-tapping screws	12-14 x 20mm metal screws
FyreBOX mounting flange and concrete/masonry	6mm expanding masonry bolt	6mm screw-type masonry anchors
FyreBOX™ mounting flange and FyreBOARD Maxilite®	8g x 50mm screws	
TWRAP™ and concrete slab (for 3-sided installation)	6mm expanding masonry bolt	4mm Hilti MX nails 6mm screw-type masonry anchors

Notes:

- All fixings used must be all-steel
- Fixings must be compatible with the barriers as outlined in this report, or as-tested

Drawing Name: Approved fixings

Test Standard:
AS1530.4

Codes:
Revision:
Date:
No.:
NOTICE:
Project Title: FyreBOX™ Install Variations

Fire resistance level:
Drawn By:
JC

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. :
1

Sheet:
1 of 9

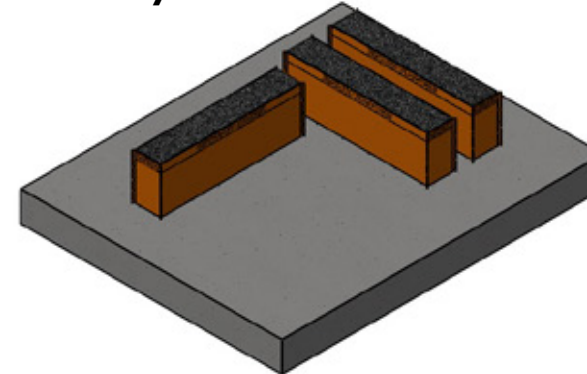
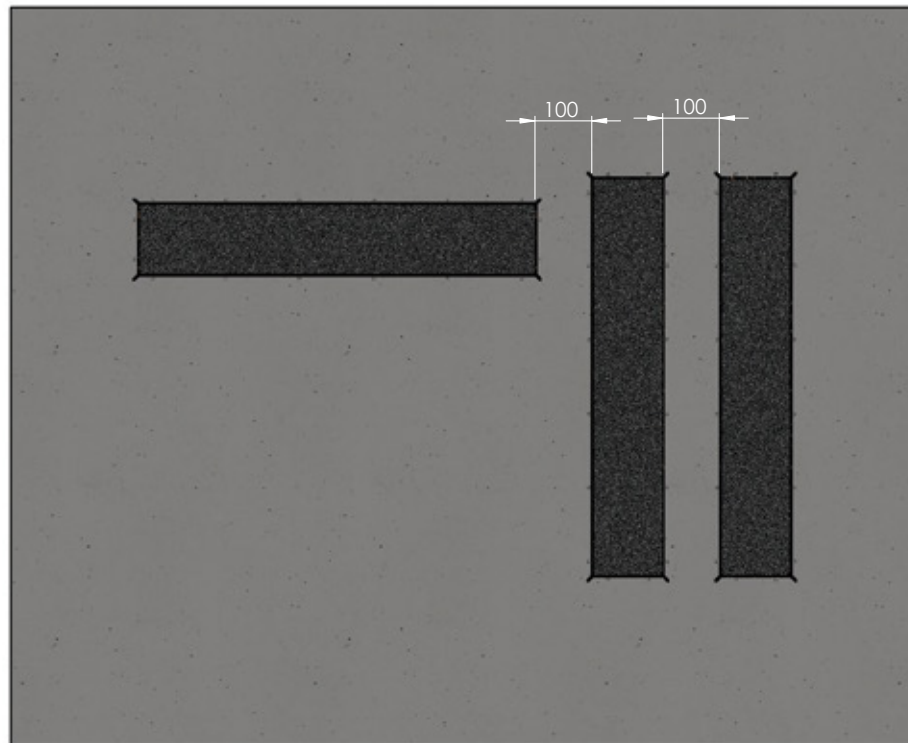
Date:
27/05/2020

Scale:
NTS

Based on Report No.:
Checked By:
CT

☐ STANDARD DRAWING
☐ PROJECT DRAWING



Multiple FyreBOX™ In Close Proximity - Floors



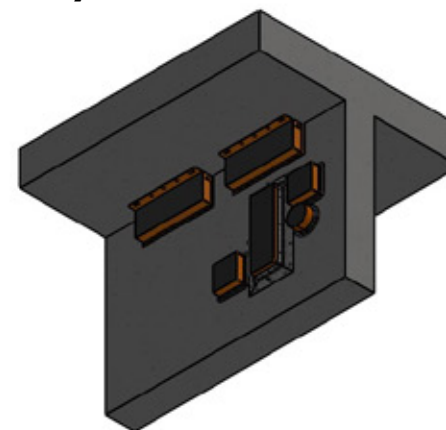
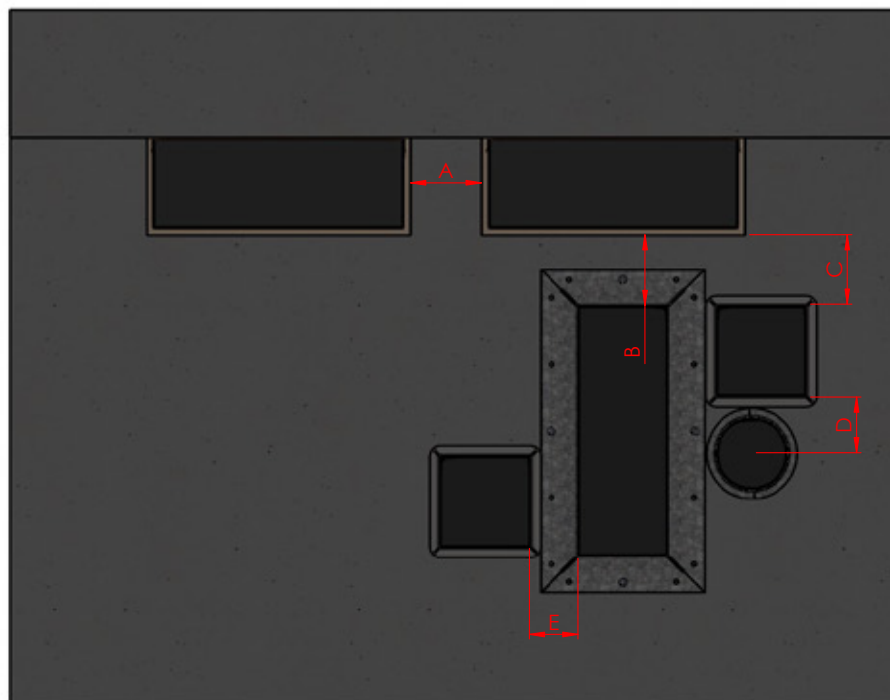
Key	FyreBOX™ Configuration	Minimum Separation Requirement
A	Cast-In to Cast-In (long edges)	100mm between penetrations (Edge of bottom formwork flanges touching)
B	Cast-In to Cast-In (short edges)	100mm between penetrations (Edge of bottom formwork flanges touching)

NOTES:

Barrier must be designed or approved for the openings/spacing required

Drawing Name: FyreBOX™ In Proximity - Floors				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE: <small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Project Title: FyreBOX™ Install Variations				Fire resistance level:	Drawn By: JC				
Drawing No. : 2	Sheet: 2 of 9	Date: 27/05/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

Multiple FyreBOX™ In Close Proximity - Walls



Key	FyreBOX™ Configuration	Minimum Separation Requirement
A	Slab-Mount to Slab-Mount	200mm of barrier between openings
B	Slab-Mount to Maxi	100mm of barrier between openings
C	Slab-Mount to Mini	100mm of barrier between openings
D	Mini to Mini OR Maxi to Maxi or Superstopper to Superstopper	100mm of barrier between openings
E	Mini to Maxi	100mm of barrier between openings

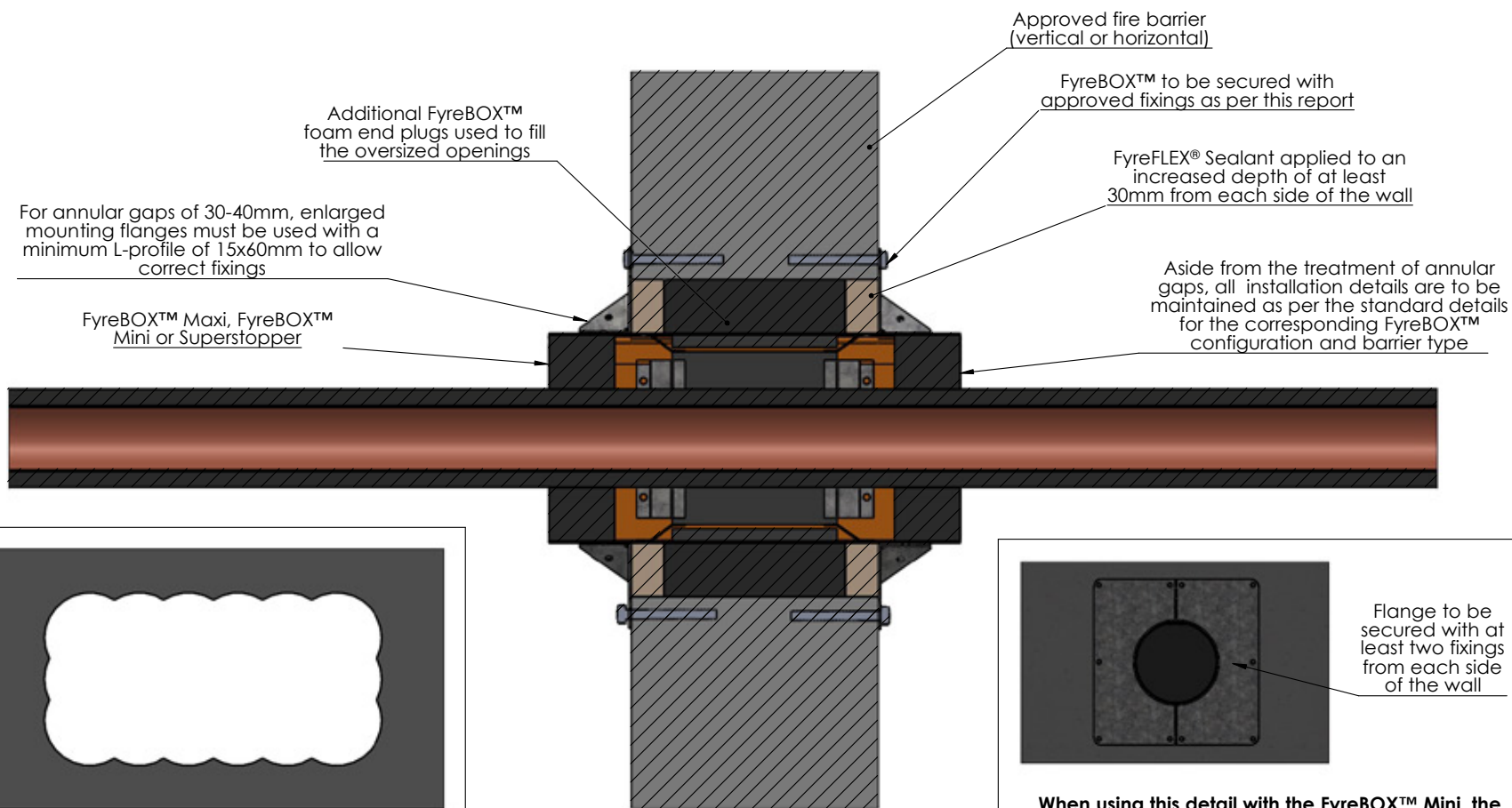
NOTES:

Barrier must be designed or approved for the openings/spacing required.

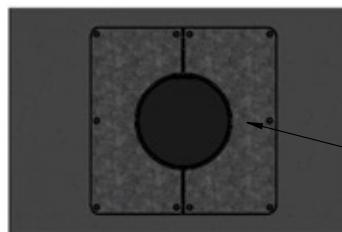
Double-Stacking FyreBOX™ Maxi/Slab-Mount allows closer penetrations

Drawing Name: FyreBOX™ In Proximity - Walls				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Install Variations				Fire resistance level:	Drawn By: JC				<small>(NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm))</small>
Drawing No. : 3	Sheet: 3 of 9	Date: 27/05/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

FyreBOXTM Maxi, FyreBOXTM Mini - Oversized / Scalloped Openings



Scalloped opening formed using a series of adjacent core holes



Flange to be secured with at least two fixings from each side of the wall

When using this detail with the FyreBOXTM Mini, the extended, updated mounting flanges must be used

Drawing Name: Oversized / Scalloped Openings

Project Title: FyreBOXTM Install Variations

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

NOTICE:

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

Drawing No. :
4

Sheet:
4 of 9

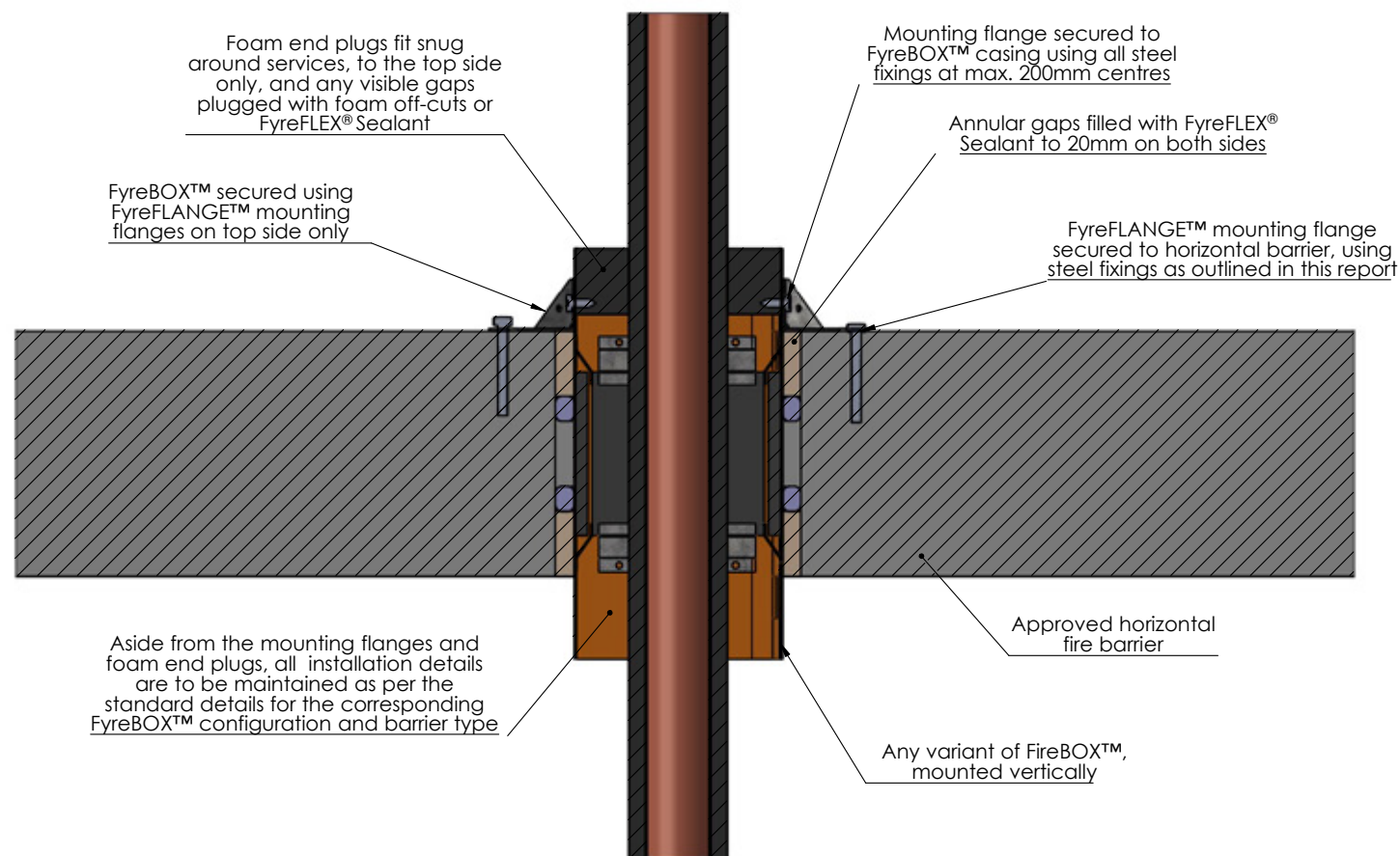
Date:
27/05/2020

Scale:
NTS


☐ STANDARD DRAWING
☐ PROJECT DRAWING



All FyreBOX™ Variants - Bottom Mounting Flange and Foam End Plug Removed

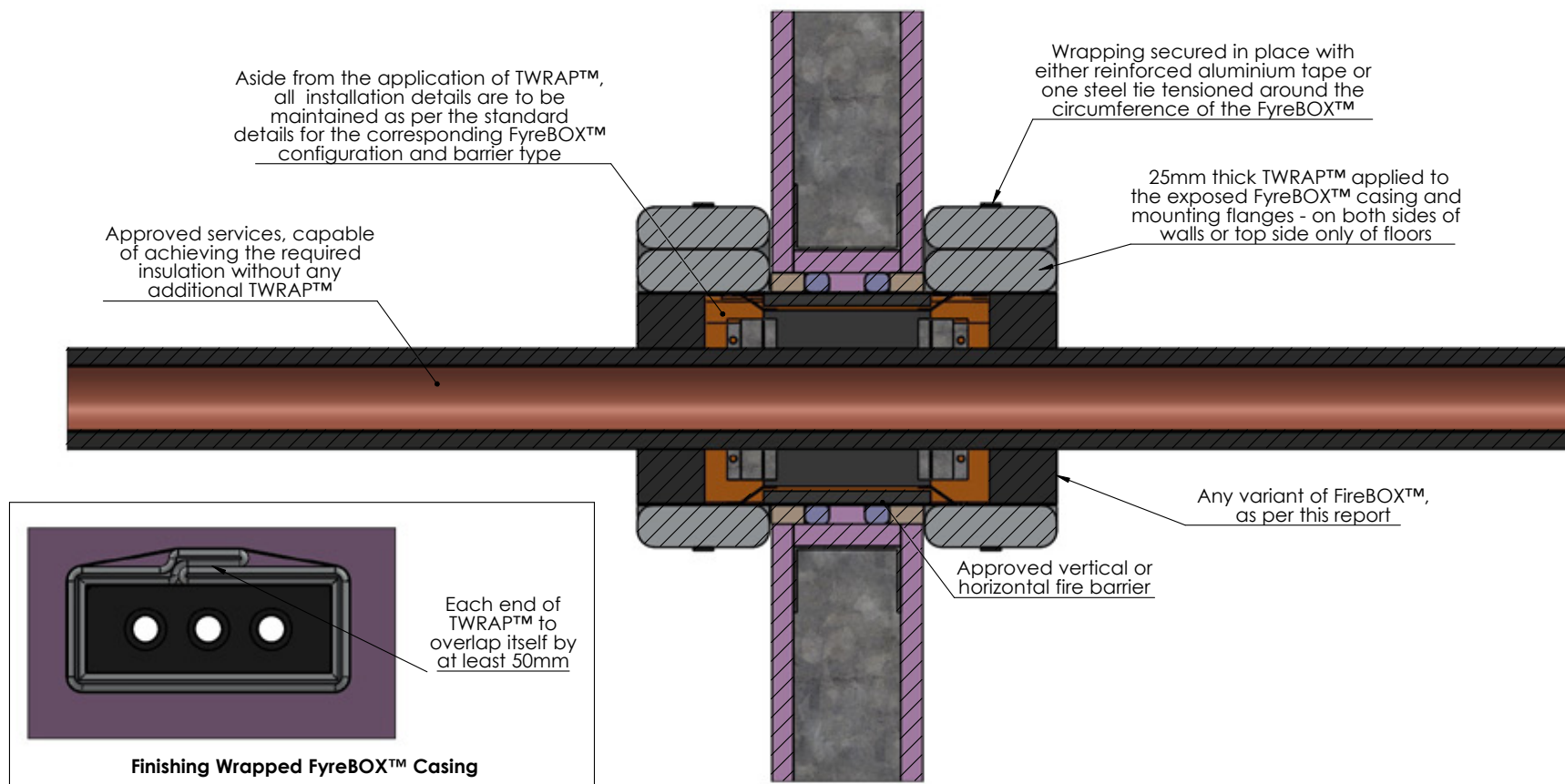


NOTE: Mounting flanges are not required for FyreBOX™ Slab-Mount or FyreBOX™ Cast-In, as per standard installation details

Drawing Name: Bottom Foam and Flange Removed				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreBOX™ Install Variations				Fire resistance level:	Drawn By: JC				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Drawing No. : 5	Sheet: 5 of 9	Date: 27/05/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

All FyreBOX[™] Variants - Wrapped Casing

Where the FyreBOX[™] configuration does not achieve 120 minutes insulation in a given fire barrier, TWRAP[™] can be applied to the exposed FyreBOX[™] casing and mounting flanges in order to increase this insulation rating up to -/XXX/120. This applies to the insulation rating of the FyreBOX[™] only and the insulation rating of individual services may need to be addressed separately.



Drawing Name: Wrapped Casing

Project Title: FyreBOX[™] Install Variations

Drawing No. :
6

Sheet:
6 of 9

Date:
27/05/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

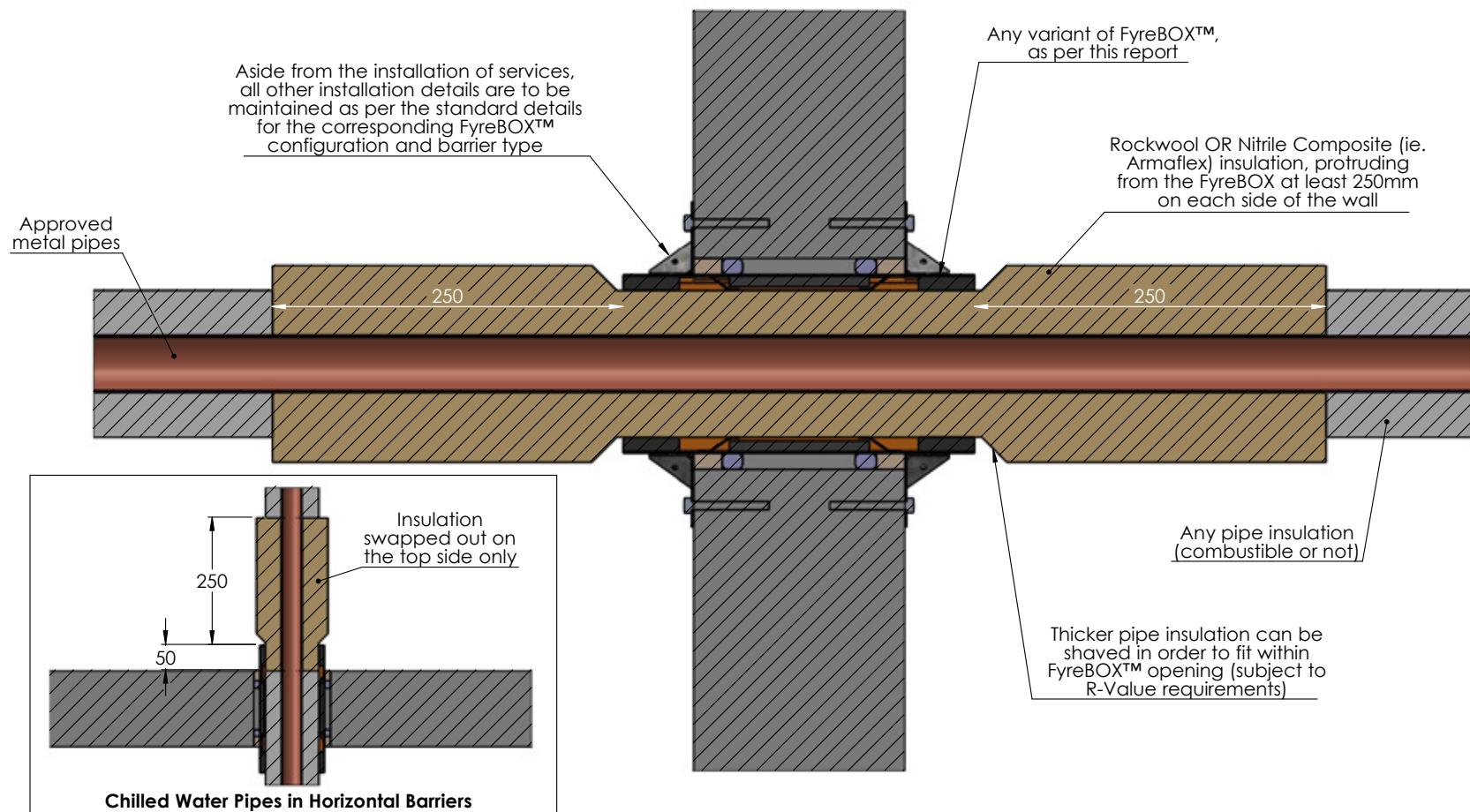
NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)



All FyreBOX™ Variants - Chilled Water Pipes

Metal pipes insulated with any material not already approved for use with the FyreBOX™ (combustible or not), can be run through the penetration by swapping out a section for any thickness of Rockwool or Nitrile Composite (ie Armaflex) insulation



Drawing Name: Chilled Water Pipes

Project Title: FyreBOX™ Install Variations

Drawing No. :
7

Sheet:
7 of 9

Date:
27/05/2020

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
JC

Checked By:
CT

Revision:

Date:

No.:

NOTICE:

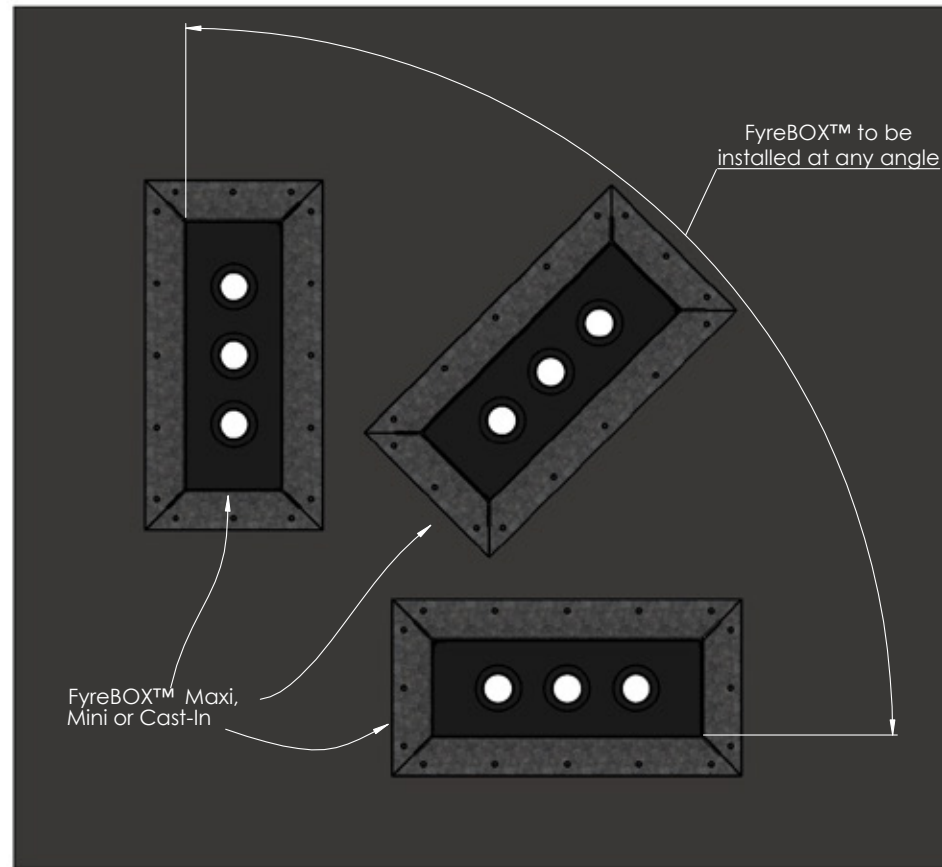
(NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm))



☐ STANDARD DRAWING
☐ PROJECT DRAWING


FyreBOX™ Maxi, FyreBOX™ Mini & FyreBOX™ Cast-In - FyreBOX™ at any angle

FyreBOX™ variant to be installed, in approved vertical or horizontal fire barrier, as per standard details relevant to the barrier type.



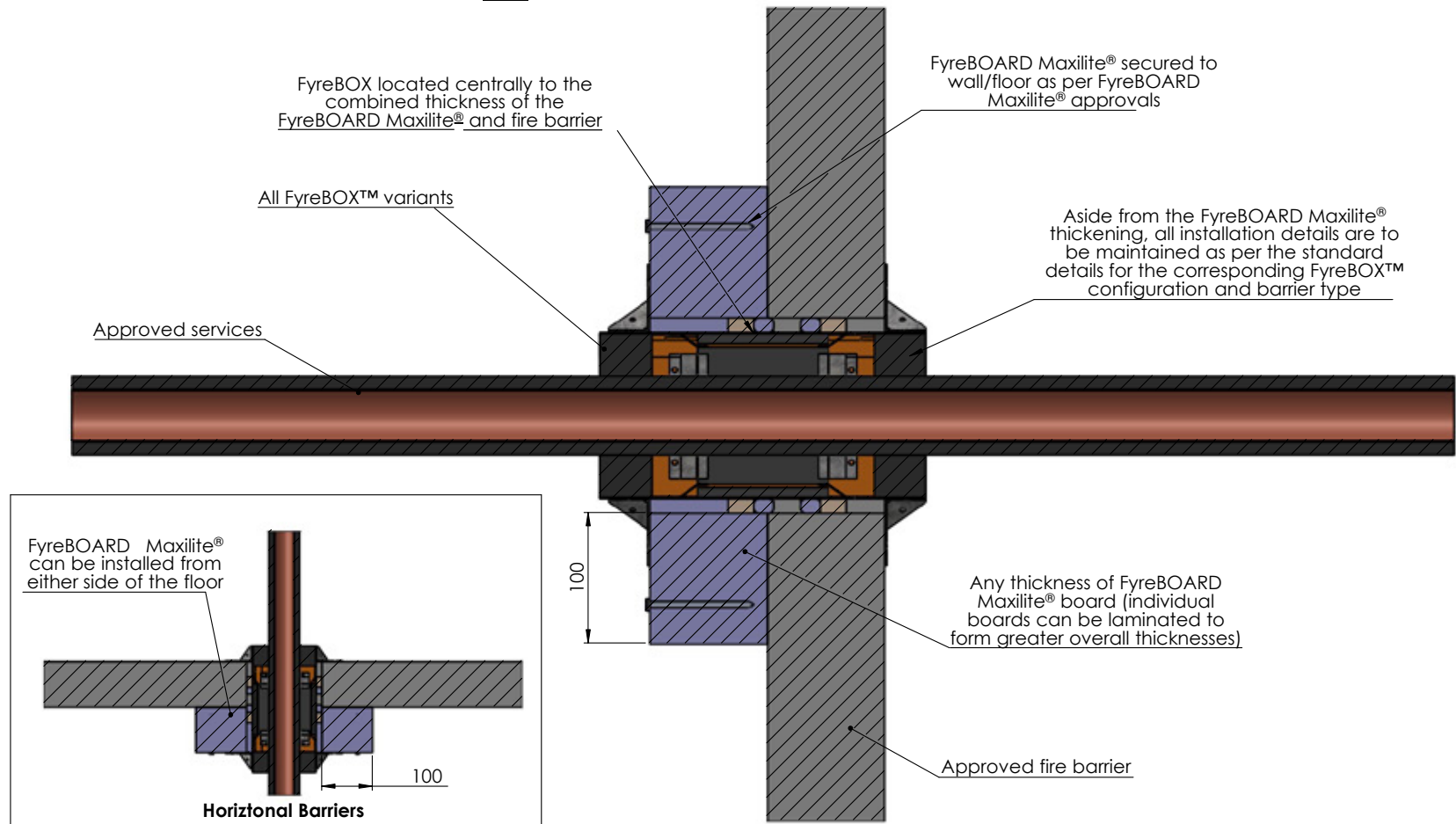
Notes:

Barrier must permit the size and location/orientation of opening
All other installation details as standard

Drawing Name: FyreBOX™ At Any Angle				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE: <small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
				Fire resistance level:	Drawn By: JC				
Project Title: FyreBOX™ Install Variations									
Drawing No. : 8	Sheet: 8 of 9	Date: 27/05/2020	Scale: NTS	Based on Report No.:	Checked By: CT	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

All FyreBOX™ Variants - Centre With FyreBOARD Maxilite®

Note - This installation detail takes the FRL's for FyreBOARD Maxilite® installations



Drawing Name: Centre With FyreBOARD Maxilite®

Project Title: FyreBOX™ Install Variations

Test Standard:
AS1530.4

Fire resistance level:

Codes:

Drawn By:
JC

Revision:

Date:

No.:

NOTICE:

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

Drawing No. :
9

Sheet:
9 of 9

Date:
27/05/2020

Scale:
NTS

Based on Report No.:

Checked By:
CT

☐ STANDARD DRAWING
☐ PROJECT DRAWING

