



KEY FEATURES

- Lightweight
- Simple to cut and install
- Friction-fit system
- Environmentally safe
- Suitable for small and larger openings
- For use in walls, shafts and floors
- Approved with 1x and 2x layer batt systems to AS1530.4 and AS4072.1

),	APPLICATIONS			
(/	Electricians	Power a		

Power and Comms Bundles Cable Tray Conduits

Copper and Steel Pipes
Plumbers
PEX Pipes

PVC Pipes

HVAC&R Pair coil bundles Insulated Copper

Active Fire Sprinkler pipes Fire cables



TRADES













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FyreBATT

Fire Rated Batt Systems

What is FyreBATT

Trafalgar FyreBATT is a coated stonewool batt, designed for use as a fire seal for service penetrations. Consisting of a high-density lamella core, sealed on both sides with a flexible fire rated ablative coating. FyreBATT's offer a high fire protection, along with an effective smoke and acoustic seal.

FyreBATT's are used to seal various service penetrations in fire rated walls, shafts or floors located in dry environments, providing a fire rating for up to 4 hours where required by the National Construction Code (NCC).

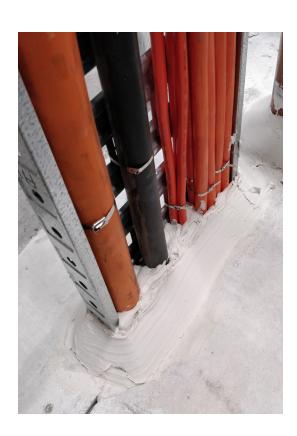
FyreBATT's have been fire tested and approved in numerous configurations and with a multitude of service penetration types to AS1530.4.-2014 and AS4072.1-2005. FyreBATT is simple to cut and install, making them the ideal solution for your next project!



Applications

FyreBATT systems are suitable for:

- Power and comms bundles
- Cable tray penetrations
- PVC Conduits
- Copper and steel pipes
- PEX pipes
- PVC pipes
- Fire cables
- Sprinkler pipes
- Pair coil bundles
- Insulated copper pipes
- Complex penetrations FyreBATT's can be cut to permanently seal around various services
- Approved for all common wall, shafts and floor types.
 See page 6



WARNING: FyreBATT SYSTEMS ARE NON-LOADBEARING







FyreBATT Fire Rated Batt Systems



Compliance with the National Construction Code (NCC)

Formerly known as BCA

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

Section C3.15 - Openings for Service Installations

Where any service penetrates a fire barrier that has a Fire Resistance Level (FRL) with respect to integrity and insulation, the installation should comply with a Fire Tested System. That is — an identical prototype, installed in the same wall or floor system that has been tested/approved to the fire testing standard AS1530.4 and AS4072.1 which has achieved an FRL of equal to or greater than that required by the fire barrier.

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

Test and Assessment Reports

Fire testing is a timely and expensive process, and it is impossible to test every single possible service configuration 'identically' in a practical sense.

Under the building code C3.15(a)(i)(B) a testing authority is permitted to write a formal assessment confirming the likely fire performance (FRL) of the penetration. The guidelines for what can and can't be included in a formal assessment are outlined in AS4072.1.

The Trafalgar FyreBATT Assessment (FAS 210023) is written by expert Fire Engineers from a NATA approved laboratory in accordance with AS1530.4-2014, and provides evidence of compliance under the 2019 NCC, and is ready for NCC 2022 requirements.

Compliance will only be achieved when the installation on site mirrors the tested system. Please refer to the following installation intructions and FRL tables for your specific application.







FyreBATT

Fire Rating – How is fire performance measured?

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



Structural Adequacy

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

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





Integrity

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

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



Insulation

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

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

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

As a blank penetration seal one layer of 60mm FyreBATT will achieve the integrity performance for up to 2 hours, and up to 4 hours for double layer Batt systems to physically stopping the direct spread of fire. Where services penetrate the FyreBATT they must be sealed using an appropriate method as detailed in this manual.

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 FyreBATT penetration systems, additional fire stopping materials are applied such our TWRAP $^{\text{TM}}$ foil encased blanket, which can be wrapped around the 'hot' services to insulate them and provide up to 4 hours of insulation performance. There are some applications that won't require any TWRAP $^{\text{TM}}$ to achieve the full FRL, so please refer to the tables below for specific details.







CONCRETE & MASONRY WALLS

Approved Interface Configurations

There are a number of approved 'blank seal' FyreBATT installation configurations that can be used based off the specific fire rated wall or floor, any of which can be selected to provide to maintain the FRL of the fire barrier. Where services are present, please select an a system that has the correct number of FyreBATT layers needed as per the <u>Service Penetration FRL's from page 10</u>.

Walls - 2 Way Fire Protection

Concrete/Masonry

The maximum FRL of these walls should be determined in accordance with AS3600 & AS3700, but limited by the FyreBATT system approvals. For example, if a wall is rated to -/240/240 and the FyreBATT with a service penetration is rated to an FRL of-/240/180, then the lower FRL will apply.

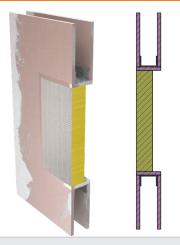
Single Layer FyreBATT	Double Layer FyreBATT			
Single Layer FyreBATT, flush to one side of the wall. Max. FRL -/240/90	Double Layer Batt, Flush to one side of the wall. Max. FRL-/240/240	Double layer FyreBATT, installed flush with each side of the wall (with cavity in centre). Max. FRL-/240/240		
Max size (HxW): 1200mm x Unlimited width	Max Size (HxW): 1200x1200mm	Max size (HxW): 1200x1200mm		
System Ref. TBS2	System Ref. TBD1	System Ref. TBD1		





PLASTERBOARD WALLS

Single Layer FyreBATT Configuration



Single Layer FyreBATT, friction fit into the opening either flush with the face of the wall, or centered to the wall.

Max. FRL-/120/90.

Max size (HxW): 600x1200mm

System Ref. TPS1

Plasterboard Wall Systems

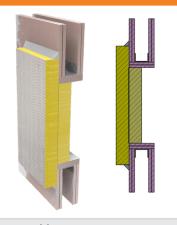
FyreBATT is approved for use in fire rated **single-layer plasterboard** walls that have either 13 or 16mm plasterboard on each side of a 64mm stud (minimum 90mm overall thickness).

FyreBATT are also approved for use in fire rated **double-layer plasterboard** walls that have of 2x13mm plasterboard on each side of a 64mm stud (minimum 116mm).

Depending on the FRL required, the FyreBATT's can be applied as a single layer (1x60mm) system as shown on the left, or a double layer (2x60mm) system as shown below.

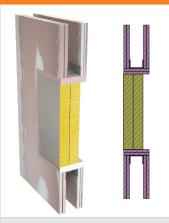
For plasterboard shaft wall construction please see over page.

Double Layer FyreBATT configurations



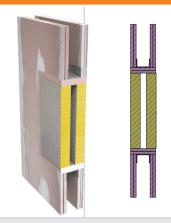
Double Layer Batt, Pattress fit with one layer friction fit into the wall (flush with the face of the wall), and the second surface mounted with a 100mm overlap onto the barrier.

Max FRL-/120/120.



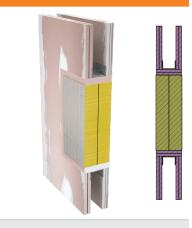
Double layer FyreBATT, Flush with one side of the wall.

Max FRL-/120/120.



Double layer FyreBATT, flush with each side of the wall (with cavity in the middle).

Max FRL-/120/120.



Double layer FyreBATT, Centred to the wall. Max FRL-/120/120.

Max size in single layer plasterboard wall: 1000x1200mm. System Ref. TBD3 Max size in double layer plasterboard walls (HxW): 1200x2400mm. System Ref. TBD2

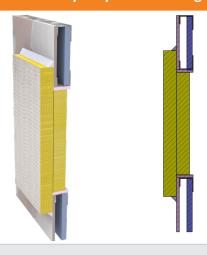






SHAFTLINER, HEBEL, WALSC & SPEEDPANEL WALLS

Double Layer FyreBATT configuration



Double Layer Batt, Pattress fit, with one layer friction fit into the wall (flush with the face of the wall), and the second surface mounted with a 100mm overlap onto the barrier. Max. FRL -/120/120.

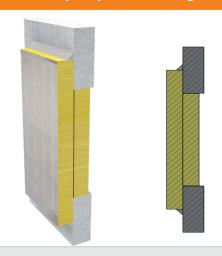
Max size (HxW): 1200x2400mm

System Ref. TBD2

Shaftliner Plasterboard Wall Systems

FyreBATT are approved for use in shaftliner C-H Stud style shaftliner wall systems that use 25mm shaftliner panel with a minimum of 16mm fire grade plasterboard on the other side of the C-H stud (Minimum 80mm overall thickness). Max FRL in accordance with wall manufacturers specifications, & limited by the FyreBATT system approvals.

Double Layer FyreBATT configuration



Double Layer Batt, Pattress fit, with one layer friction fit into the wall (flush with the face of the wall), and the second surface mounted with a 100mm overlap onto the barrier. Max. FRL-/120/120.

Max size (HxW): 1000x1200mm

System Ref. TBD4

Speedpanel, Hebel & Walsc panel wall systems

FyreBATT are approve for use with:

- Speedpanel walls (51, 64 & 78mm systems)
- AAC Hebel & Walsc (75mm) panel walls

The max. FRL will be accordance with wall manufacturers specifications, limited by the system approvals.

Fixings table (for all pattress fit configurations in walls)

Note: For Patress fit, suitable washers must be used.

Barrier type	Fixings	Centers	FyreFLEX Sealant fillet size	
Plasterboard wall constructions	10gx100mm plasterboard screws	200mm	25x25mm at the perimeter	
Concrete/masonry constructions	M6x100mm masonry screws/anchors	200mm	25x25mm at the perimeter	
Hebel/Walsc walls	10gx100mm plasterboard screws	200mm	25x25mm at the perimeter	
Speedpanel walls	10gx100mm self tapping hex head screws	200mm	25x25mm at the perimeter	







CONCRETE FLOORS

The maximum FRL of these floors should be determined in accordance with AS3600, but also limited by the FyreBATT system approvals. For example, if a floor is rated to -/240/240 and the FyreBATT with a service penetration is rated to an FRL of--/240/180, then the lower FRL will apply.

Single Layer FyreBATT Double Layer FyreBATT Double layer FyreBATT, flush Single Layer FyreBATT, flush with Single Layer FyreBATT, flush with Double layer FyreBATT, flush with both sides of the floor the underside of the floor the top side of the floor. with the top side of the floor. (with cavity in middle). Max. FRL-/180/120. Max. FRL-/180/120. Max FRL -/180/180. Max FRL -/180/180. Max size (HxW): 1200x600 Max size (HxW): 1200x600 Max size (HxW): 1200x600 Max size (HxW): 1200x600 System Ref. TBS3 System Ref. TBS3 System Ref. TBD5 System Ref. TBD5

Penetrations in Single Layer Batts (Floors)

Local Patch

A single layer of FyreBATT installed as per the above tables will achieve the FRL as a blank seal however where service penetrations pass through the penetration, the system may require 2 x layers of FyreBATT. As an alternative to two full layers of FyreBATT, you can use a single layer system with a local patch of FyreBATT installed around the services.

As shown below, a small patch may be installed at the penetration extending 100mm past the penetration on all sides. The patch peice must be fixed to the first layer of FyreBATT using 90mm pigtail Screws in each corner.

Single layer FyreBATT with local thickening around penetrations. Services, fire stopping and FRL per system approvals. Max FRL -/180/120 Max size (HxW):1200x600 System Ref. (Refer to service specific system numbers) Single layer FyreBATT with local thickening around penetrations. Services (or 2x layers of FyreBATT). Max FRL-/180/120 Max size (HxW): 1200x600 System Ref. (Refer to service specific system numbers) Single layer FyreBATT with local thickening around penetrations. Services (or 2x layers of FyreBATT). Max FRL-/180/120 System Ref. (Refer to service specific system numbers)

Cable Trays Installed next to a wall





CONCRETE FLOORS - Cont.

The maximum FRL of these floors should be determined in accordance with AS3600, but also limited by the FyreBATT system approvals. For example, if a floor is rated to -/240/240 and the FyreBATT with a service penetration is rated to an FRL of-/240/180, then the lower FRL will apply.

Single Layer FyreBATT	Double layer FyreBATT
Single layer FyreBATT, surface mounted, overlapping 120mm. Max. FRL-/180/120.	Double layer FyreBATT, surface mounted, overlapping 150mm. Max. FRL-/180/180.
Max size (HxW): 1200x600	Max size (HxW): 1200x600
System Ref. TBS3	System Ref. TBD5

Penetrations in Surface mounted batts (Floors)

A single layer of FyreBATT installed as per the above tables will achieve the FRL as a blank seal however where service penetrations pass through the penetration, the system may require 2 x layers of FyreBATT. As an alternative to two full layers of FyreBATT, you can use a single layer system with a local patch of FyreBATT installed around the services.

As shown below, a small patch may be installed at the penetration extending 100mm past the penetration on all sides. The patch peice must be fixed to the first layer of FyreBATT using 90mm pigtail Screws in each corner.

Local Patch	Full Double Layer
Single layer surface mounted across entire penetration, with a second layer applied as a local patch around the service. Applicable for up to-/180/120 FRL's.	Double layer surface mounted across the full penetration, with service penetration. Applicable for up to -/180/180 FRL's.
Max size (HxW):1200x600	Max size (HxW): 1200x600
System Ref. (Refer to service specific system numbers)	System Ref. TPD36 & TPD38







FRL TABLE - Cables

WALLS

Single Layer 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.



Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
Cable tray up to 300mm	AS1530.4-2014 appendix D1 power cables	FyreBATT cut to fit around services, sealed with FyreFLEX to full depth of	200	100 100	TSP2
	AS1530.4-2014 appendix D2 comms cables	sealed with FyreFLEX to full depth of Batts, finished with a 30x30mm fillet on both sides of the wall	300mm	-/90/90	TSP1

^{*}TWrap installed on both sides of the FyreBATT System

Double layer 2x 60mm Batt System



Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
Cable trays up to 300mm	AS1530.4-2014 appendix D1 pow- er cables	FyreBATT cut to fit around services, sealed with FyreFLEX to full depth of Batts, finished with a 30x30mm fillet on both sides of the wall	300mm	-/120/90	TPD2
			450mm	-/120/120	TPD3
	AS1530.4-2014 appendix D2 com- ms cables		300mm	-/120/120	TPD1
TPS Cables	Max size 2.5mm², bundle of 5x	FyreBATT cut to fit around services, sealed with FyreFLEX to full depth of Batts, finished with a 50x50mm fillet on both sides of the wall	Wrap Free!	-/120/120	TPD8
	Max size 2.5mm², bundle of 15x	Sealant filled to full depth of Batts, with a 50x50mm fillet applied both sides of wall	300mm	-/120/120	TPD4
Fire Alarm Cables	Max size 1.5mm², bundle of 15x	Sealant filled to full depth of Batts, with a 50x50mm fillet applied both sides of wall	Wrap free!	-/120/120	TPD5
CAT6 Cables	Max bundle of 15x cables	Sealant filled to full depth of Batts, with a 50x50mm fillet applied both sides of wall	Wrap free!	-/120/120	TPD6

^{*}TWrap installed on both sides of the FyreBATT System







FRL TABLE - Cables

FLOORS



Double layer 2x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

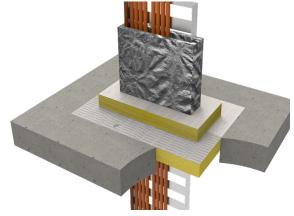
Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
Cable trays up to 300mm, with bare copper cables only	AS1530.4-2014 appendix D1 power cables		450mm	-/90/90	TPD35
	Copper core power cables UP TO 185mm ²		450mm	-/120/120	TPD36
	Copper core power cables OVER to 185mm ²	Opening to suit service, sealed with a 100mm Fill depth of FyreFLEX Sealant. Finished with a 50x50mm fillet top	600mm	-/120/120	TPD36
	AS1530.4-2014 appendix D2 comms cables	side only.	300mm	-/90/90	TPD37
	AS1530.4-2014 appendix D2 comms cables with tray cut short		450mm	-/180/120	TPD38
TPS Cables	Up to 15 x TPS cables (2.5mm2) with 1 x fibre optic NBN cable	Opening to suit service, sealed with a 100mm Fill depth of FyreFLEX Sealant.	Wrap free!	-/180/120	TPD40
Fibre Cables	1 x fibre optic NBN cable	Finished with a 30x30mm fillet top side only.	Wrap free!	-/180/120	TPD40

^{*}TWrap installed on the top side of the FyreBATT system only

ALTERNATE INSTALLATION DETAILS FOR FLOORS

LOCAL PATCH:

3-SIDED WRAP:



Above penetrations can pass through a single layer FyreBATT, with a local patch of FyreBATT extending 200mm in all directions.



Cable trays can also be installed hard up against walls, TWrap pinned to the wall with 1mm metal strap, 3x fixings per side.







FRLs - Metal Pipes

WALLS

Single Layer 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.



^{*}TWrap installed on both sides of the FyreBATT System

Double layer 2x 60mm Batt System

Service	Specification (up to)	Fire Stopping Specification	TWrap*	FRL	System Ref.
	DN50		300mm	-/240/120	TPD27
	DN100	Max 20mm annular gap, sealed	600mm	-/240/120	TPD26
Copper	DN150		First layer 1100mm & second layer 300mm	-/240/240	TPD34
	NB50	to the full depth of the batt's with FyreFLEX sealant, and finished with	300mm	-/240/120	TPD27
	NB100	a 50x50mm fillet on both sides of the wall.	600mm	-/240/120	TPD32
			600mm	-/240/120	TPD32
Steel Pipe	NB150		First layer 1100mm & second layer 300mm	-/240/240	TPD32
	NB300 Schedule 5 stainless 316 grade		600mm	-/120/60	FSV2163

^{*}TWrap installed on both sides of the FyreBATT System









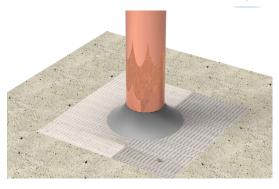


FRLs - Metal Pipes

FLOORS

Double layer 2x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.



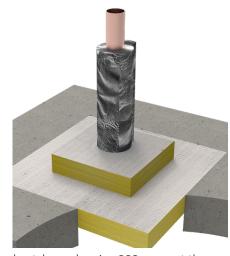
Service	Specification (up to)	Fire Stopping Specification	TWrap*	FRL	System Ref.
Copper Pipe	DN50	Max 20mm annular gap, sealed to the full depth of the batt's with FyreFLEX sealant, and finished with a 50x50mm fillet on the top side only.	450mm	-/240/120	TPD52
	DN100		600mm	-/240/120	TPD54
	DN150		UniGUARD (600mm)	-/180/180	TPD55
Steel Pipe	NB100		450mm	-/240/120	TPD51
	NB150		600mm	-/180/120	TPD50
	NB150	Max 20mm annular gap, sealed to the full depth of the batt's with FyreFLEX sealant. Finished with a 30x30mm fillet on the top side only.	UniGUARD (600mm)	-/180/180	TPD55

^{*}TWrap installed on the top side of the FyreBATT system only

Single layer FyreBATT can be installed with a 'local patch' as an alternative to two full layers of FyreBATT. Refer to the installation configurations pages for details.



TWrap or a UniGUARD are required to maintain the insulation (or heat rise) rating of the penetration.



Local patch overlapping 200mm past the service on all sides.







FRLs - HVAC & R

WALLS



Single Layer 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification (up to)	Fire Stopping Specification	T-Wrap*	FRL	System Ref.
Single Pair coil bundle	3/8" & 5/8" size pipes with 19mm FR insulation, including	170mm core hole in Batt system, FyreBOX Mini-Round-150mm installed into FyreBATT with FyreFLEX			
Multiple pair coil bundles up to 3x	up to 3 x CAT6 cable, 3 x electrical cables, 1 x Ø25mm PVC drain pipe	Sealant applied to the annular gaps around the box. Pigtail screws through the mounting flanges	300mm	-/120/60	TPS3

^{*}TWrap installed on both sides of the FyreBATT System

Double layer 2x 60mm Batt System

Service	Specification (Up to)	Fire Stopping Specification	T-Wrap*	FRL	System Ref.
Single pair			Wrap Free!	-/120/120	TPD10
coil bundles	1 x 1/4" & 1/2" size pipes with 13mm insulation (with 1xCAT6 and 1x electrical cable)	from one side only (2-way FRL)	Wrap Free!	-/120/120	TPD11
Multiple pair coil bundles up to 3x	3/8" & 5/8" size pipes with 19mm FR insulation, including up to 3 x CAT6 cable, 3 x electrical cables, 1 x Ø25mm PVC drain pipe	170mm core hole in Batt system, FyreBOX Mini-Round-150mm installed into FyreBATT with FyreFLEX Sealant applied to the annular gaps around the box. Pigtail screws through the mounting flanges	300mm	-/240/120	TPD12
Single	DN22 company pin a with 25 may	110mm opening, FyrePEX HP Sealant filled to full depth of Batt's	204	-/240/90	TPD23
insulated copper pipe	DN32 copper pipe with 25mm FR insulation	110mm opening, FyrePEX HP Sealant filled to full depth with a 50 x 50mm fillet on each side of the FyreBATT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-/120/120	TPD24

^{*}TWrap installed on both sides of the FyreBATT System







Contents



FRLs - HVAC & R

FLOORS



Double Layer 2 x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
Single pair coil	1 x 3/8" & 3/4" size pipes with 19mm FR insulation, 1 x CAT6 Cable, 1 x Electrical cables, 1 x Ø20mm PVC drain-pipe	100mm opening sealed with FyrePEX HP filled to 100mm depth from the top side only	Wrap Free!	-/180/120	TPD39
Single pair coil	1 x 3/8 + 3/4 pair coils with 19mm FR insulation, 1 x CAT6 Cable, 1 x Electrical cable	170mm core hole in Batt system, FyreBOX Mini-Round-150mm installed into FyreBATT with FyreFLEX	300mm	-/180/180	TPD41
Multiple pair coil	Up to 3x 3/8" & 3/4" size pipes with 19mm FR insulation, 3 x CAT6 Cable, 3 x Electrical cables, 3 x Ø20mm PVC drain-pipe	Sealant applied to the annular gaps around the box. Pigtail screws through the mounting flanges	300mm	-/180/120	TP42

^{*}TWrap installed on the top side of the floor only

Single layer FyreBATT can be installed with a 'local patch' as an alternative to two full layers of FyreBATT. Refer to the installation configurations pages for details.









FRLs - Conduits

WALLS





Single Layer 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification	Fire Stopping Specification	TWrap	FRL	System Ref.
PVC Conduits	Ø25mm	25mm opening, FyreCOLLAR Conduit Collar applied to both sides of the Batt installed with pigtail screws	Wrap Free!	-/120/60	TPS4

Double layer 2x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification	Fire Stopping Specification	TWrap	FRL	System Ref.	
PVC	Ø25mm 65mm opening, FyrePEX HP sealant filled to full depth.		Wrap Free!	-/120/120	TPD13	
Conduits	Ø40mm	45mm opening, FyreCOLLAR Conduit Collar applied to both sides of the batt installed with pigtail screws.	Wrap Free!	-/240/120	TPD14	

FRLs - Conduits

FLOORS

Double layer 2x 60mm Batt System





Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
	Ø25mm	65mm opening, FyrePEX HP sealant filled to full depth with a 30 x 30mm fillet on the top side	Wrap Free!	-/240/180	TPD44
	Ø40mm	44mm opening, FyreCOLLAR Conduit Collar applied to the underside only	Wrap Free!	-/120/120	TPD43
PVC Conduits	3 x Ø25mm conduits in a bundle	170mm core hole in Batt system, FyreBOX Mini-Round-150mm installed into FyreBATT with FyreFLEX Sealant applied to the annular gaps around the box. Pigtail screws through the mounting flanges	300mm	-/180/180	TPD42
	50mm NBN	75mm hole in FyreBATT, FyrePEX Sealant filled to 100mm depth from the top side	Wrap Free!	-/240/120	FRT 220259

^{*}TWrap installed on the top side of the floor only



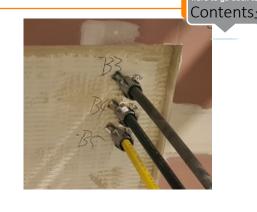


FRLs - PEX Pipes

WALLS



Penetrations in FyreBATT can be spaced as close as 40mm apart.



Service	Specification	Fire Stopping Specification	TWrap	FRL	System Ref.
PEX-A	Ø20mm			-/120/60	TPS5
PEX-B	Ø20mm	20mm opening, FyreCOLLAR Conduit Collar installed to both sides of the wall with pigtail screws	Wrap Free!	-/120/90	TPS6
PEX-AL-PEX	Ø20mm	with pigtall screws		-/120/60	TPS7

Double layer 2x 60mm Batt System

Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
PEX-A	Ø20mm		Wrap Free!	/120/120	TPD15
PEX-B	Ø20mm	60mm opening, FyrePEX HP Sealant filled	wrap riee!	-/120/120	TPD16
PEX-AL-PEX	Ø20mm	to full depth of Batt system from one side of the wall (2-way FRL)	Wrap Free!	-/120/60	TPD17
TEXALTEX			300mm	-/120/120	TPD18
PEX-AL-PEX	Ø20mm	60mm opening, FyrePEX HP sealant Sealant filled to full depth of Batt's with a 25x25mm fillet on both sides of the wall	300mm	-/240/120	TPD20

^{*}TWrap installed on both sides of the FyreBATT System



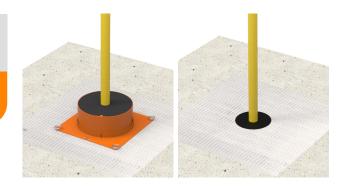






FRLs - PEX Pipes

Floors



Double layer 2x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification	Fire Stopping Specification	TWrap*	FRL	System Ref.
PEX-A		60mm opening, sealed with FyrePEX HP sealant to full depth and a 30x30mm fillet applied to the top side only 60mm opening, FyrePEX HP sealant	Wrap Free!	-/180/180	TPD48
PEX-B	Ø20mm				TPD47
PEX-AL-PEX			Wrap Free!	-/240/90	TPD45
PEX-AL-PEX			300mm	-/120/120	TPD46
Mixed PEX Pipes	1 x Ø20mm PEX- AL-PEX pipe 1 x Ø20mm PEX B pipe	170mm core hole in Batt system, FyreBOX Mini-Round -150mm installed into FyreBATT with FyreFLEX Sealant applied to the annular gaps around the box. Pigtail screws through the mounting flanges	300mm	-/180/120	TPD42

^{*}TWrap installed on the top side of the floor only

Single layer FyreBATT can be installed with a 'local patch' as an alternative to two full layers of FyreBATT. Refer to the installation configurations pages for details.









FRLs - PVC Pipes

WALLS



Double layer 2x 60mm Batt System

Penetrations in FyreBATT can be spaced as close as 40mm apart.

Service	Specification	Fire Stopping Specification	TWrap	FRL	System Ref.
PVC Pipes	Ø50mm	56mm opening, FyreCOLLAR 50mm Premium Retro fit applied to both sides of the wall with pigtail screws	Wrap Free!	-/240/120	TPD21
PVC Fipes	Ø100mm	110mm opening, FyreCOLLAR 100mm Premium Retro fit applied to both sides of the wall with pigtail screws		-/240/60	TPD22

Single layer FyreBATT can be installed with a 'local patch' as an alternative to two full layers of FyreBATT. Refer to the installation configurations pages for details.

FRLs - PVC Pipes

FLOORS



Double layer 2x 60mm Batt System

Service	Specification	Fire Stopping Specification	TWrap	FRL	System Ref.
uPVC Pipes	Ø50mm	60mm opening, FyreCOLLAR 50mm Premium Retro fit applied to the underside only with pigtail screws	Wrap Free!	-/180/180	TPD49







INSTALLATION FyreBATT

FyreBATT penetration systems will only be compliant if they are installed exactly how they have been tested, otherwise the FRL performance can't be confirmed. It is important that the following installation instructions are followed closely.



Determine the FyreBATT install type specified for your wall or floor, refer to page 6-9 for approved FyreBATT configurations (pattress, friction fit etc).





Plasterboard walls require openings to be framed with stud and lined with plasterboard to maintain the FRL of the wall. Refer to the wall manufacturer for complete instructions on how to frame their walls.

If unsure of the details, contact Trafalgar at technical@tgroup.com.au.

STEP 2 - AAC PANEL WALLS (HEBEL™/WALSC™) PREPARE OPENING



Depending on the wall and the opening size, additional framing around the opening may be required. Refer to the wall manufacturer's instructions.

STEP 2 - SPEEDPANEL™ PREPARE OPENING



Line Speedpanel openings with U-track per the wall manufacturers instructions.





INSTALLATION FyreBATT

STEP 2 - CONCRETE AND MASONRY PREPARE OPENING



For a hollow masonry system, it is required to backfill the blocks with concrete around the penetration, otherwise simply cut the opening



Measure the distances of the services from the edges of the penetration, and mark out the profile on the face of the FyreBATT to be cut. Make sure to allow an additional 1-3mm to the overall cut so that the FyreBATT will provide a tight friction fit into the aperture of the wall or floor. Where multiple layers of FyreBATT are required, ensure that joints between two layers are offset by at least 100mm.



Cut the FyreBATT using a sharp knife. When cutting the batts to fit around existing services, please check the above FRL tables to make sure you have the corrext size clearnace between the FyreBATT the service. Note that penetrations in FyreBATT can be as close as 40mm apart.





Seal the edges of the FyreBATT and any cut edges, with FyreFLEX sealant. FyreFLEX can be applied to the edges of the batt easily with spatula, or watered down for easier application with a paint brush (100mm water to 1x600ml FyreFLEX sausage).

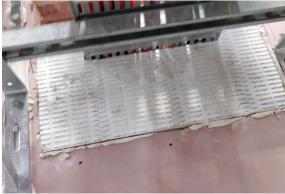




INSTALLATION FyreBATT



STEP 6 FRICTION FIT INSTALL



Fit the FyreBATT pieces around the services, making sure they are friction fit and not going to fall out. Use offcuts of the batts infill material to pack out the gaps between the services like cable trays. Install 1x or 2x layers as per the FRL tables above, **or use a local patch as shown below.**

STEP 7 PATTRESS FIT INSTALL



For pattress applications, friction fit the first layer within the wall, then face fix the second layer over the top with a 100mm overlap onto the wall. Fix the batt into the wall with 10gx100mm screws or M6 masonry anchors every 200mm. Apply a 25x25mm fillet of FyreFLEX to the perimeter of the face-fixed batt.

Installation tip:

For 2 layer surface mounted FyreBATT's, refer to the drawings on page 63-65.



STEP 7-SEAL



Seal the services with the local fire stopping product prescribed FRL tables on pages 11-20. For example, cables and metal pipes should be sealed with FyreFLEX Sealant. Plastic pipes will need FyrePEX HP sealant or a FyreCOLLAR. Additional drawings are available from page 28.

STEP 8 - WRAP (AS REQUIRED)



If required, wrap the services with TWrap for the required distance (refer to tables above) and strap in place with 4.6mm cable ties 50mm from each end, and then at 150mm centres in-between. Refer to the following page for details.

Cable trays can be wrapped against a wall using 1mm steel strap on either side of the tray, pinning the TWrap in place in 3x locations with M6 fixings.

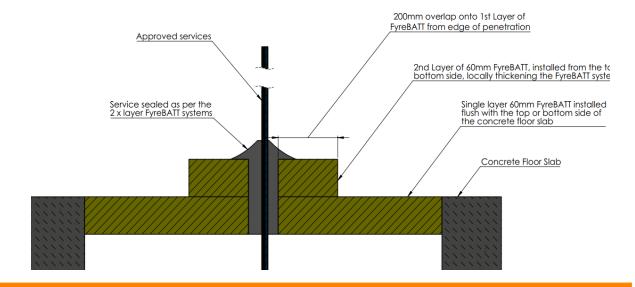




INSTALLATION

FyreBATT - Local Patch

For floor applications, the FyreBATT is approved to provide an FRL of-/180/120 as a blank penetration seal, however testing shows that 2 layers of FyreBATT are required for service penetrations to be included. As an economical solution for large penetrations, Trafalgar have introduced a single layer FyreBATT system with a local patch installed at the base of the services for 200mm in all directions (or hard against a wall for cable trays) as shown below.



Installation tip:

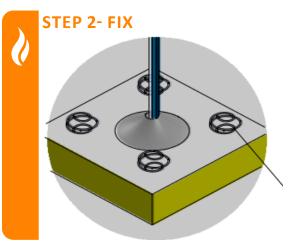
TWrap is required on both sides of a wall, however floors only need TWrap on the top side!

STEP 1 - CUT AND SEAL PATCH



Install the first layer of FyreBATT as per pages 22-23. Cut a local patch of FyreBATT to fit around and extend 200mm past the service. EG a 100mm copper pipe would need a 500x500mm patch.

Bed the patch down with FyreFLEX sealant onto the first layer.



Install a 90mm pigtail screw in each corner (50mm in from the edges) to secure the patch of FyreBATT.





INSTALLATION UniGUARD



For large metal pipe penetrations, insulation wraps start to be come unpractical due to the high heat conduction along the length of the pipe. So Trafalgar has developed an easier and quicker installation option for large metal pipes compared to wrapping systems that allows the pipe to 'breath' and results in a more compact fire stopping system - the UniGUARDTM.

The UniGUARD™ is a flat packed, easy to transport, insulation guard which gives an easy to install solution for fire stopping and can be directly fixed into a concrete floor slab or into a FyreBATT penetration seal in a floor.



STEP 1: SEAL



Seal the pipe to the FyreBATT allowing a max imum 20mm annular gap, sealed to the full depth of the batt's with FyreFLEX sealant, and finished with a 50x50mm fillet on the top side only.

STEP 2: WRAP



The UniGUARD™ comes flat packed and can be simply bent into for a circle using the bend reliefs across the face of the guard. Bend out the feet to 90 degrees, then wrap the UniGUARD™ around the pipe to form a neat circle.

STEP 3: SECURE



Slide the 3x fixing tabs into the preformed slots, and bend them over to hold the UniGUARD™ together in shape.

STED 3 A. SECLIRE

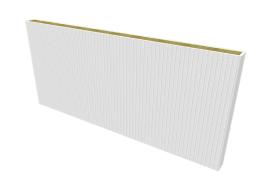


Using the 3x feet tabs, fix the UniGUARD™ to the concrete floor with 90mm pigtail screws. Bend over top fingers ensuring a 30mm air gap around the pipe.





SYSTEM RANGE





Item Number	Description	Min Order Qty	Pallet QTY
FyreBATT 60mm	Coated mineral fibre Batt 60x600x1200	1	48
Pigtail Screw-50mm	Pigtail Screw for single layer FyreBATT systems	1	N/A
Pigtail Screw-90mm	Pigtail Screw for double layer FyreBATT systems	1	N/A

FyreBATT System and Components

Item Number	Description	Min Order Qty	Pallet QTY
FyreFLEX 300W FyreFLEX 300G	FyreFLEX Sealant Cartridge 300ml White or Grey	1	1920
FyreFLEX 600W FyreFLEX 600G	FyreFLEX Sealant Sausage 600ml White or Grey	1	1040
FyreFLEX 10G	FyreFLEX® Sealant Pail 10L Grey	1	64
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
Cable Tie SS 12 x 521	4.6mm wide x 521mm long	25	N/A
Cable Tie SS 12 x 910	4.6mm wide x 910mm long	25	N/A
Tape	Foil tape, 95mm wide, 50m roll	1	N/A
UniGUARD150	600 x 690 x 0.6mm Powder Coated Orange	1	N/A







FAQ?

Q Why do I need to use TWrap?

A TWrap prevents heat rise on the 'non fire side' of the fire barrier, by insulating the services. This is required on some services to achieve the full FRL rating.

Q Can I use FyreWrap instead of TWrap?

A Yes, FyreWrap 38mm can still be used, if it is installed at the correct length as specified for TWrap systems in the above tables.

Q How do I fix a FyreCOLLAR or FyreBOX Mini to a Batt?

A Pigtail screws are used, and a standard phillips head driver bit will be able to install the screws.

Q Can I surface mount the batts?

A In some cases, yes, refer to page 10.

Q Can I treat plastic services (PEX, conduits, etc.) in the batts?

A Yes, refer to the approvals tables for details.



SOCIAL MEDIA

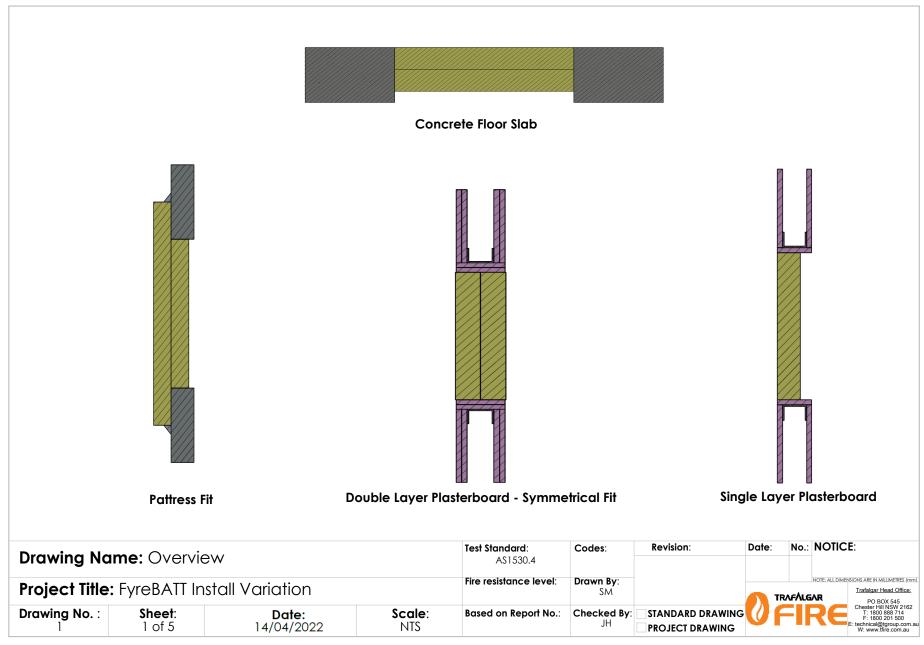








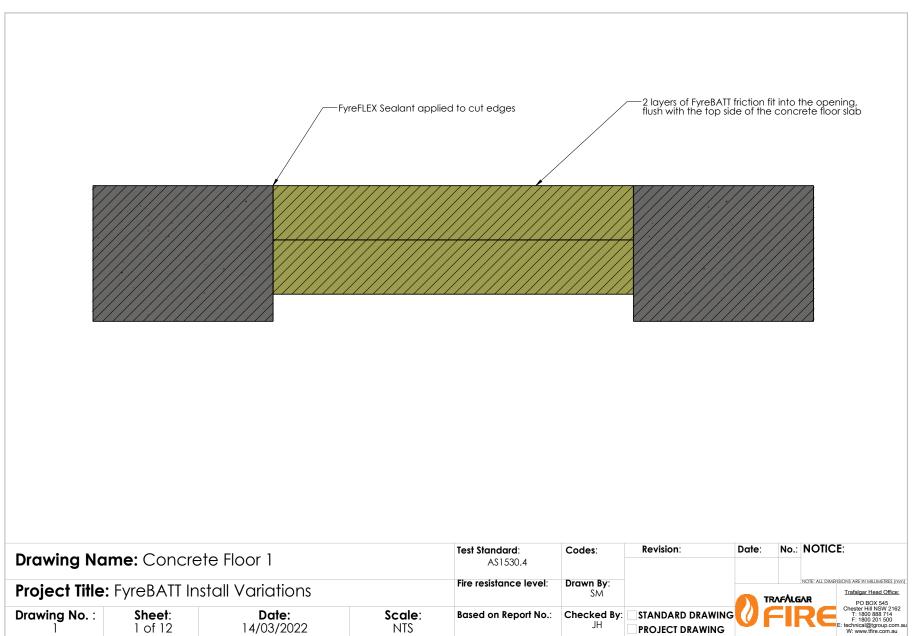








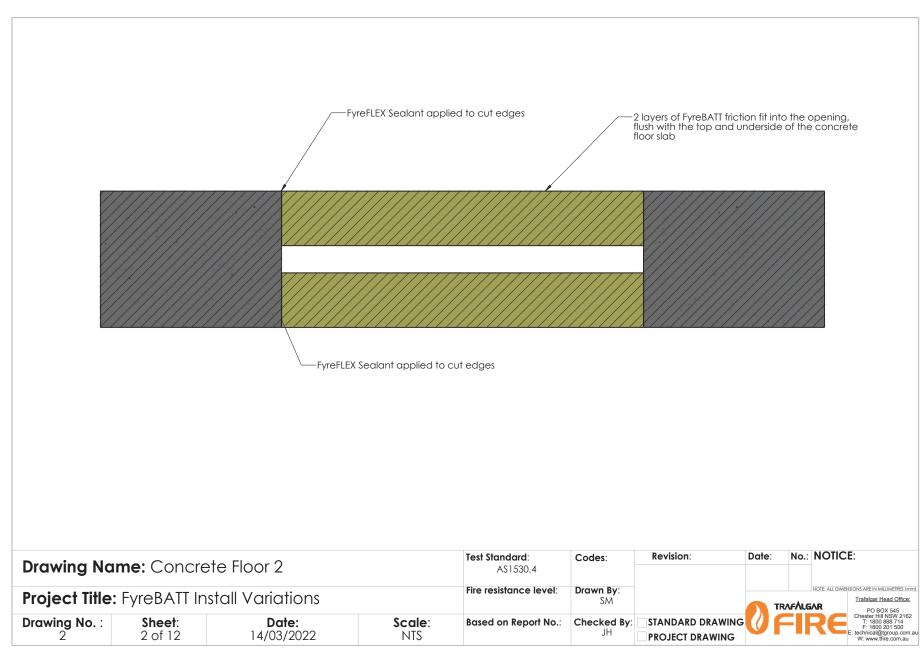








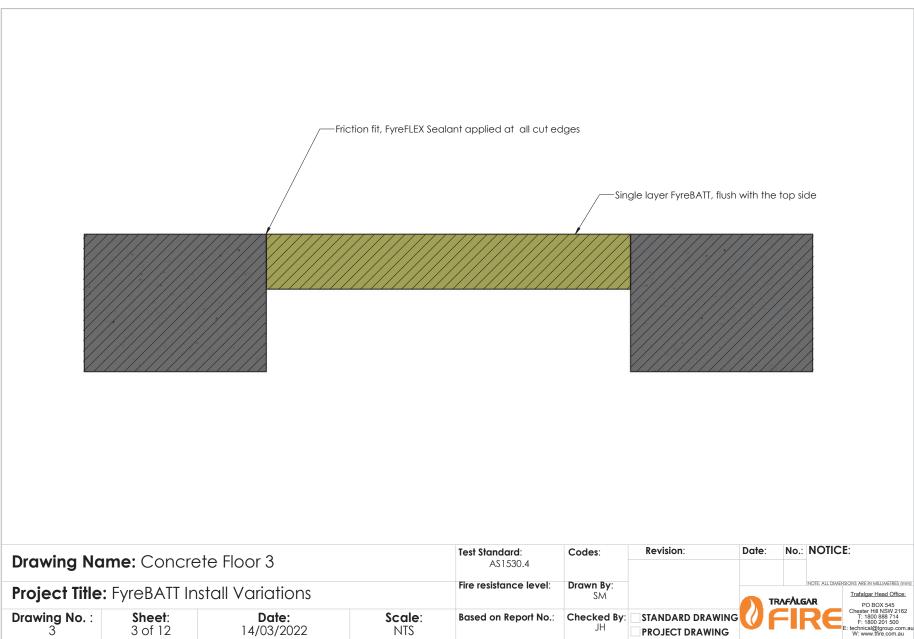








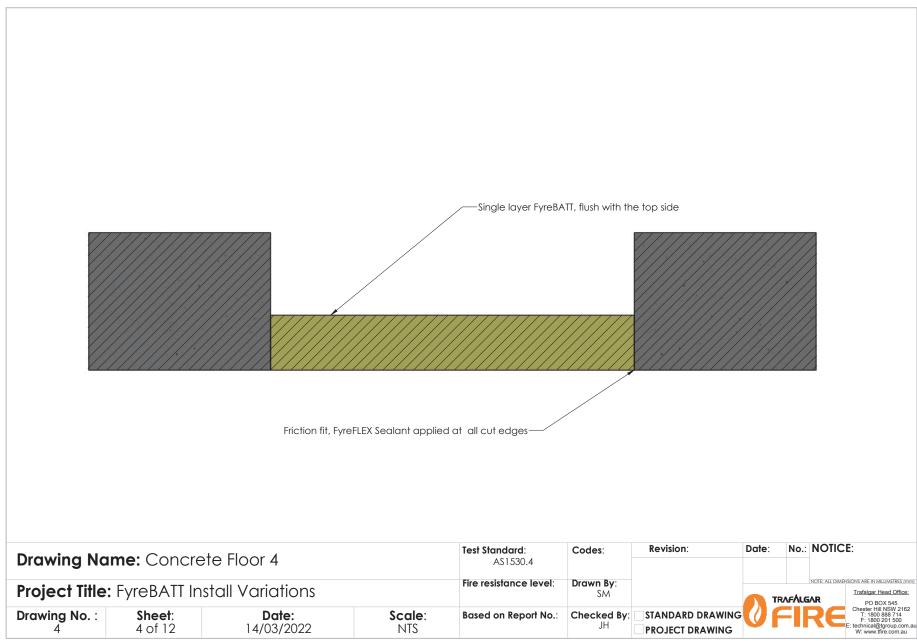








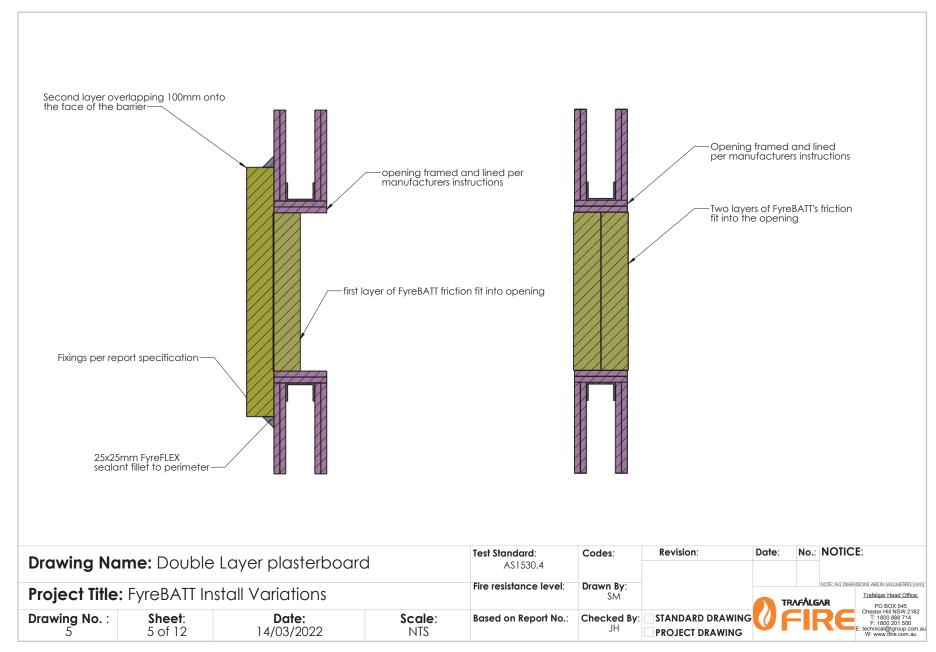








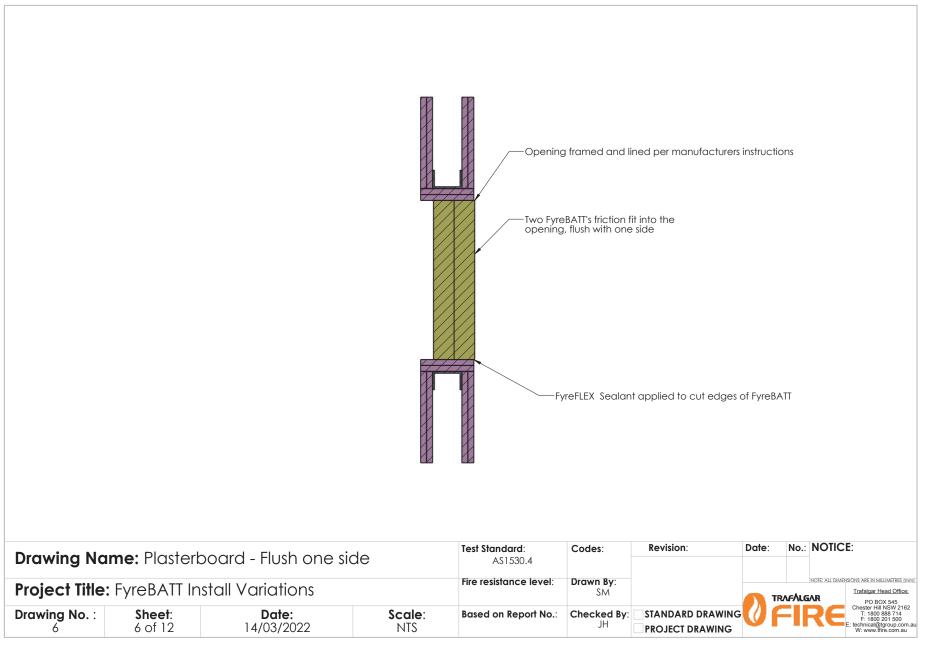








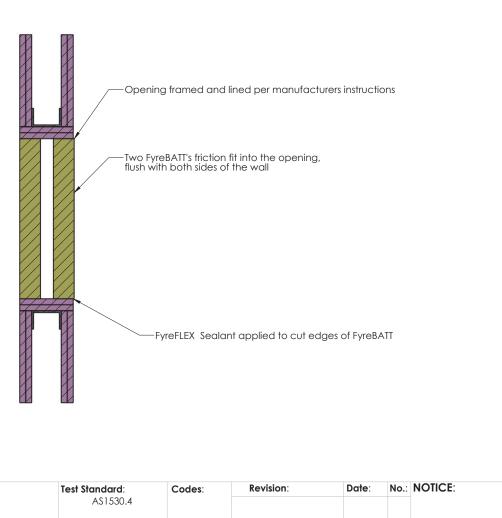










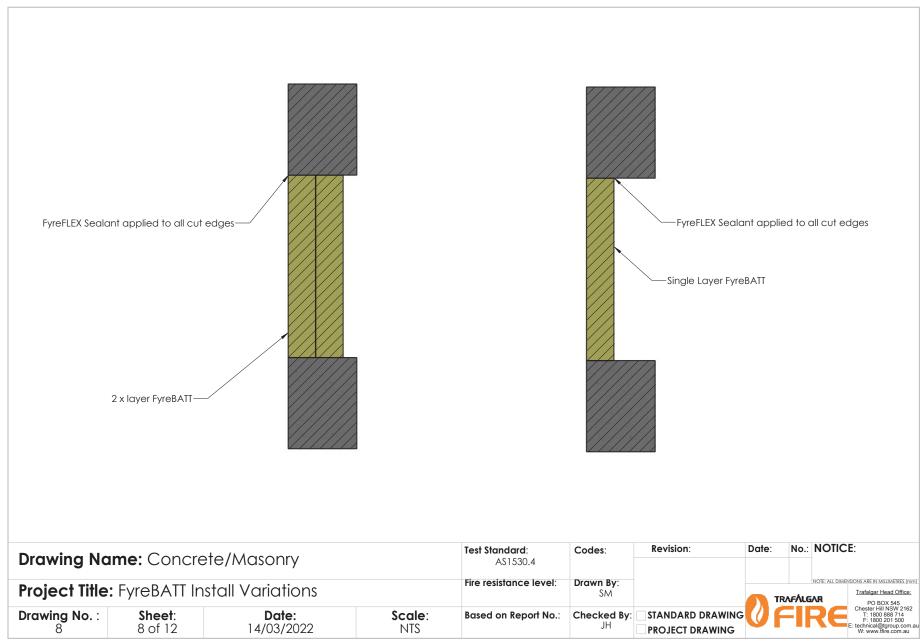


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Drawing Name: Plasterboard - Flush both side				AS1530.4						
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Project Title: FyreBATT Install Variations					SM					
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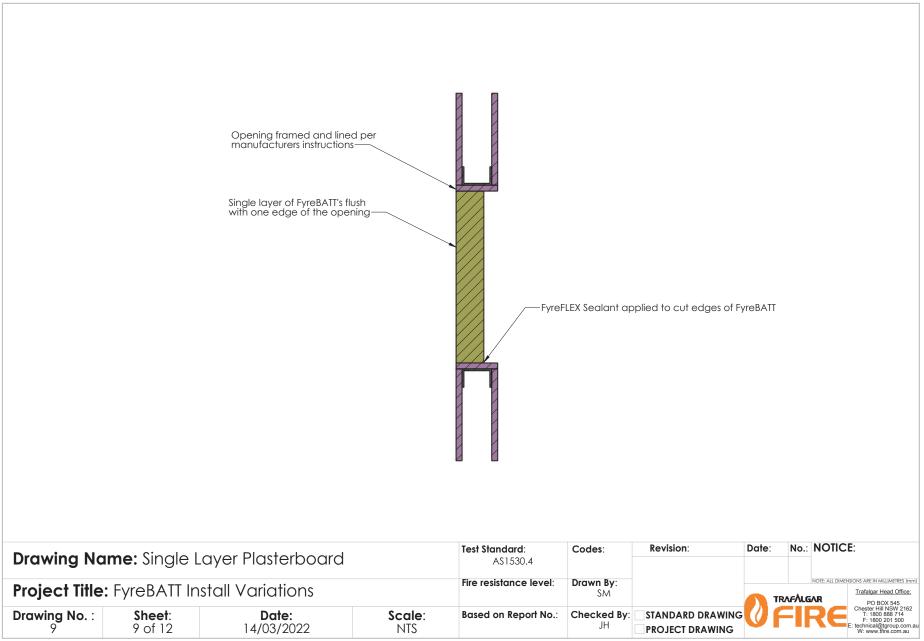








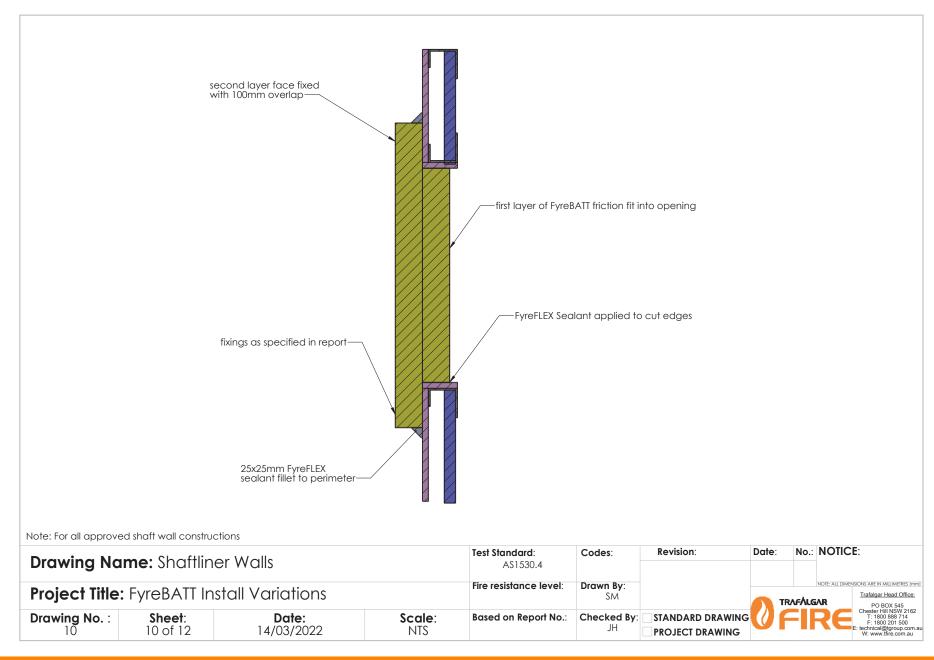








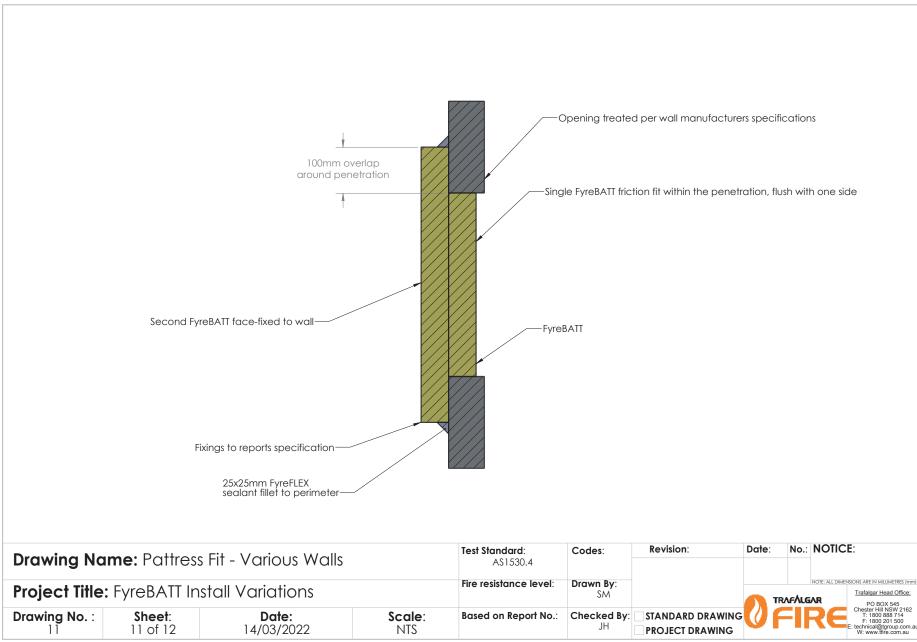








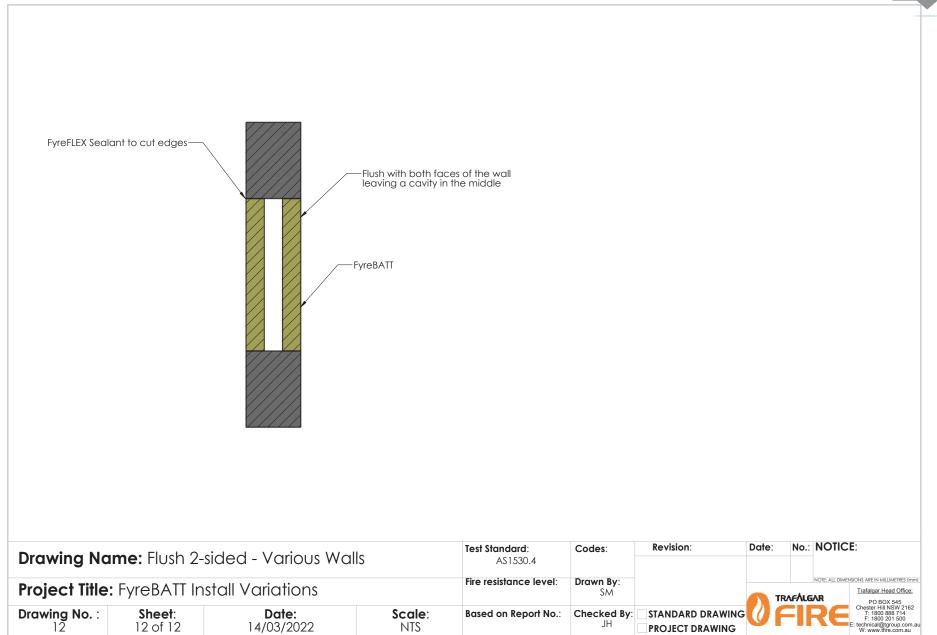








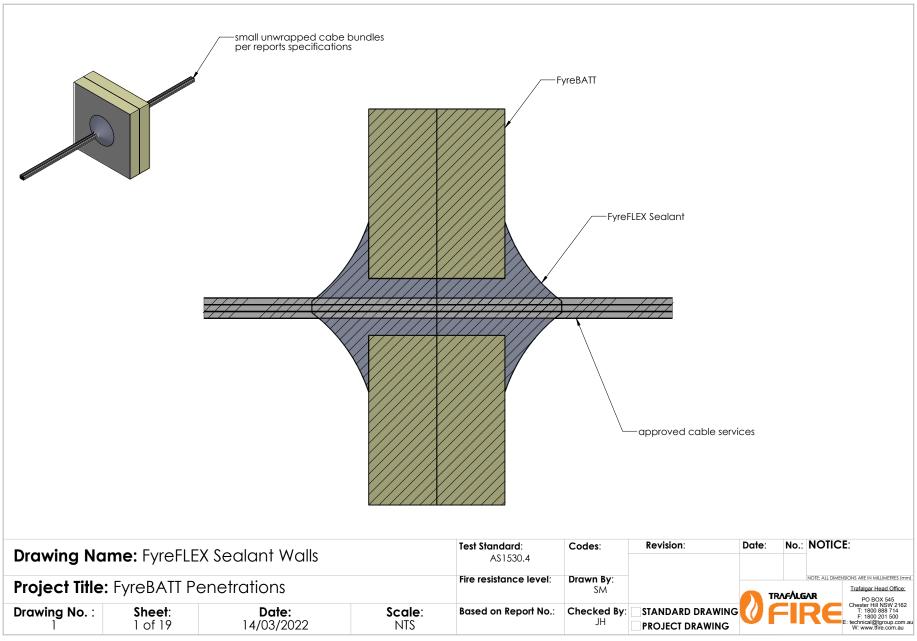








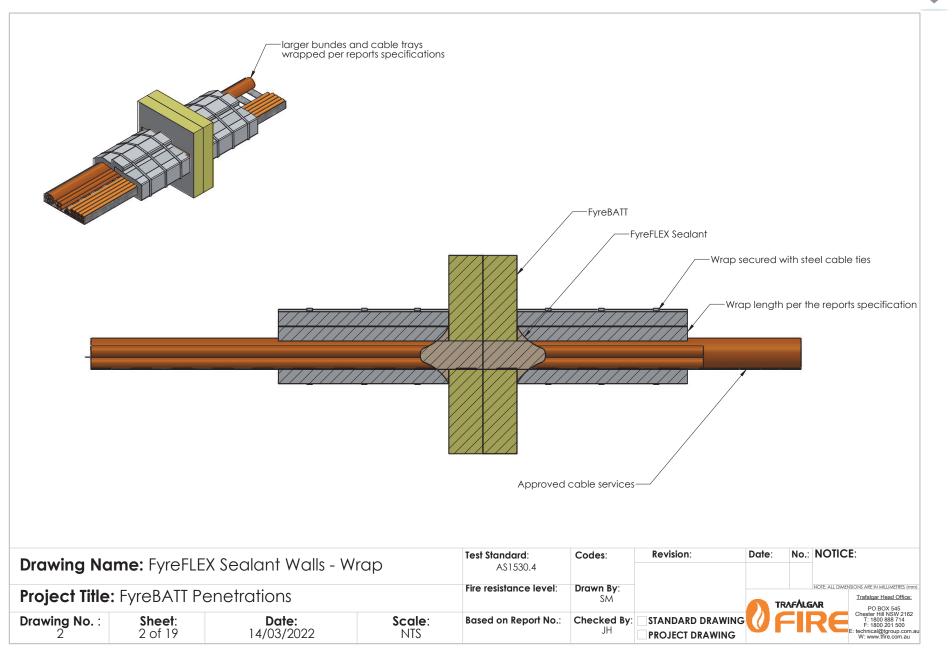








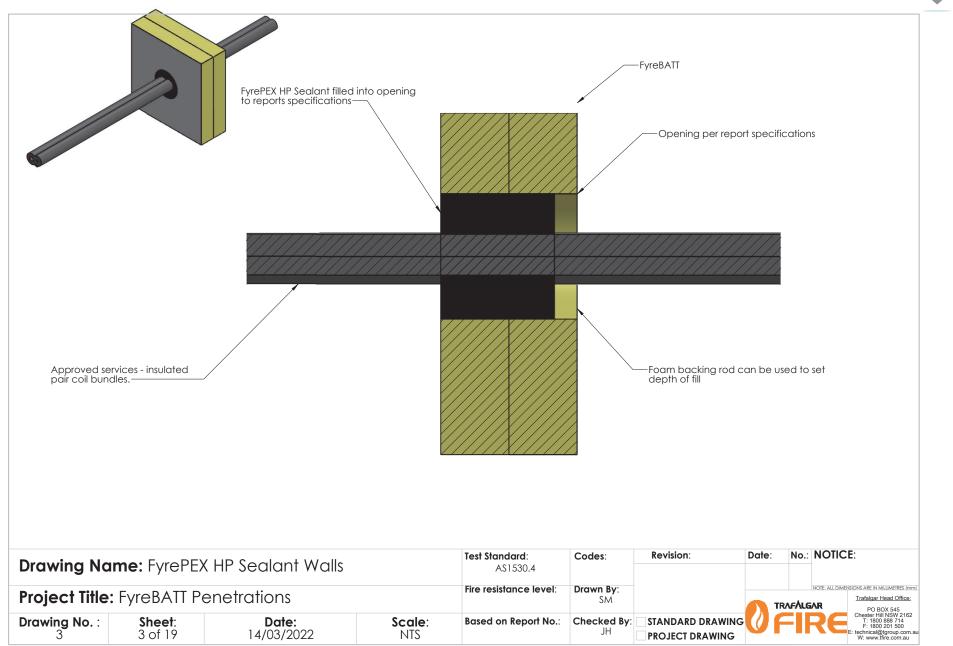








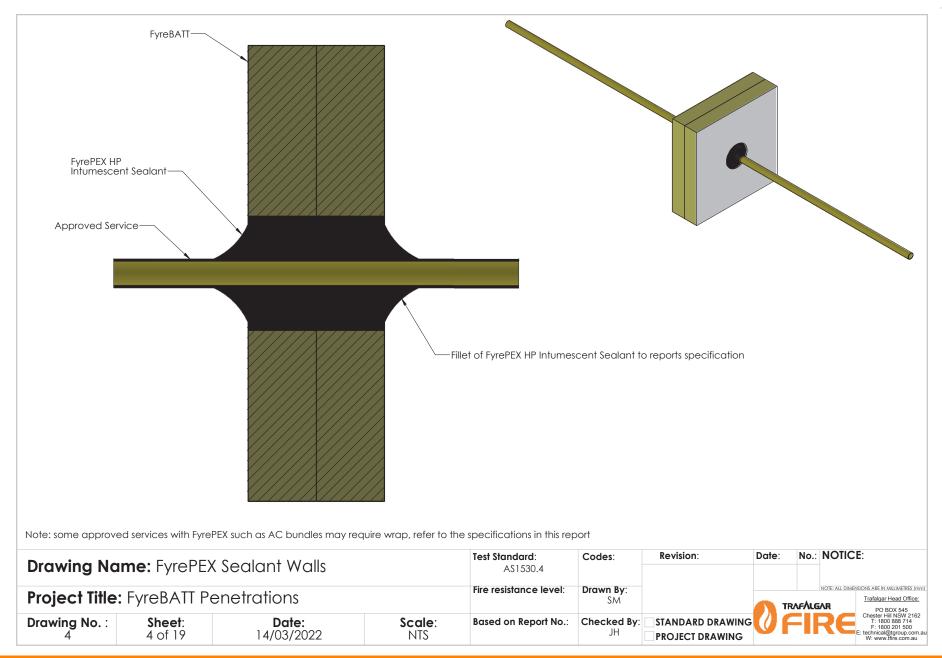








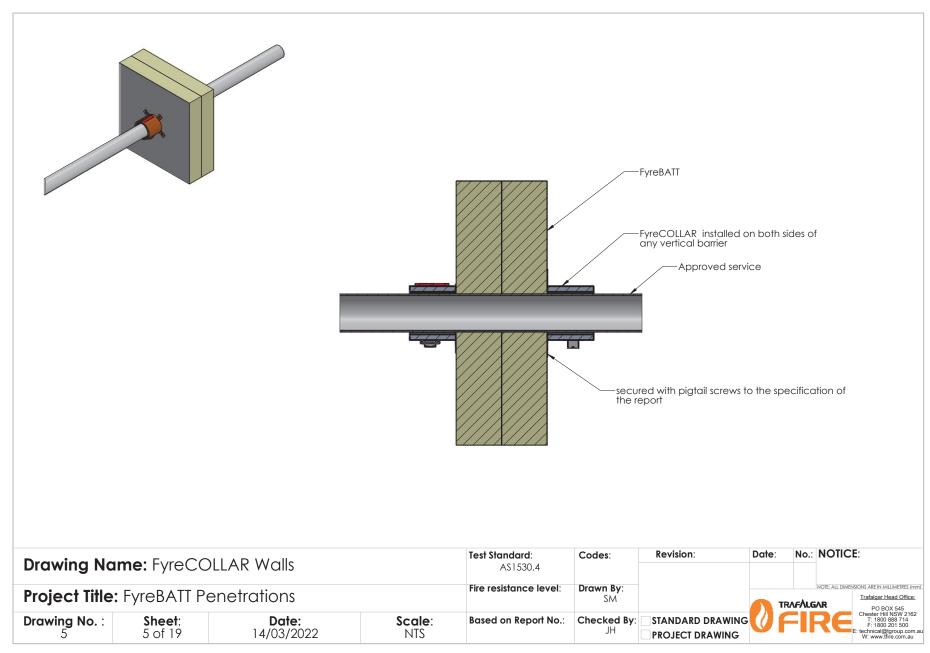








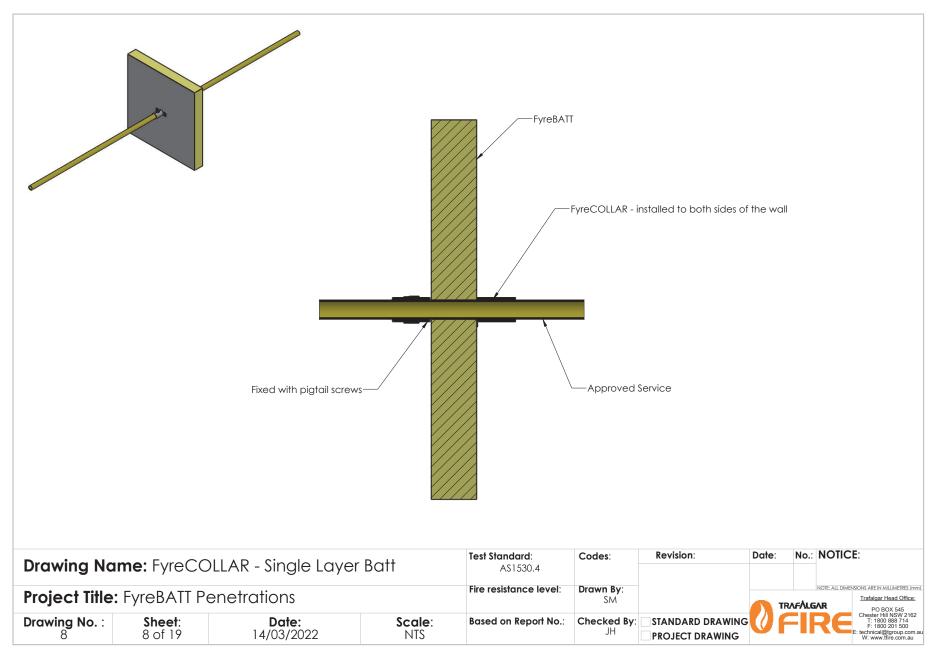








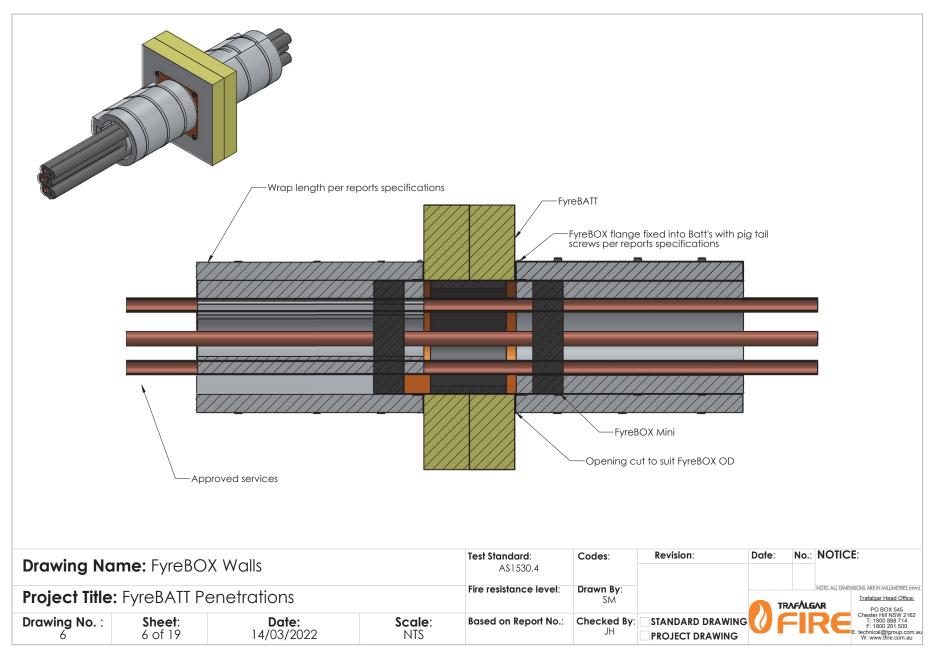








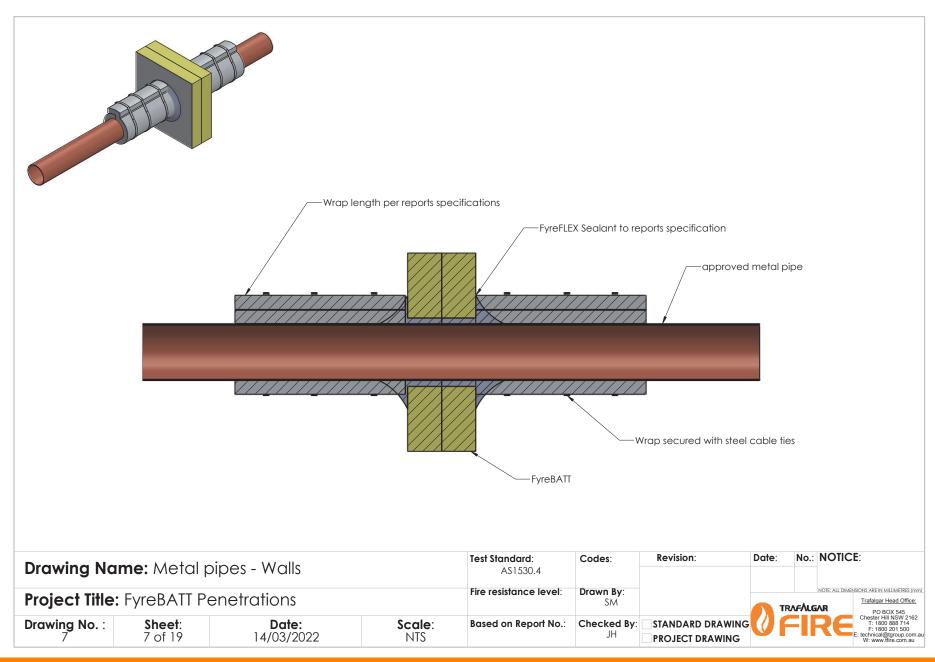








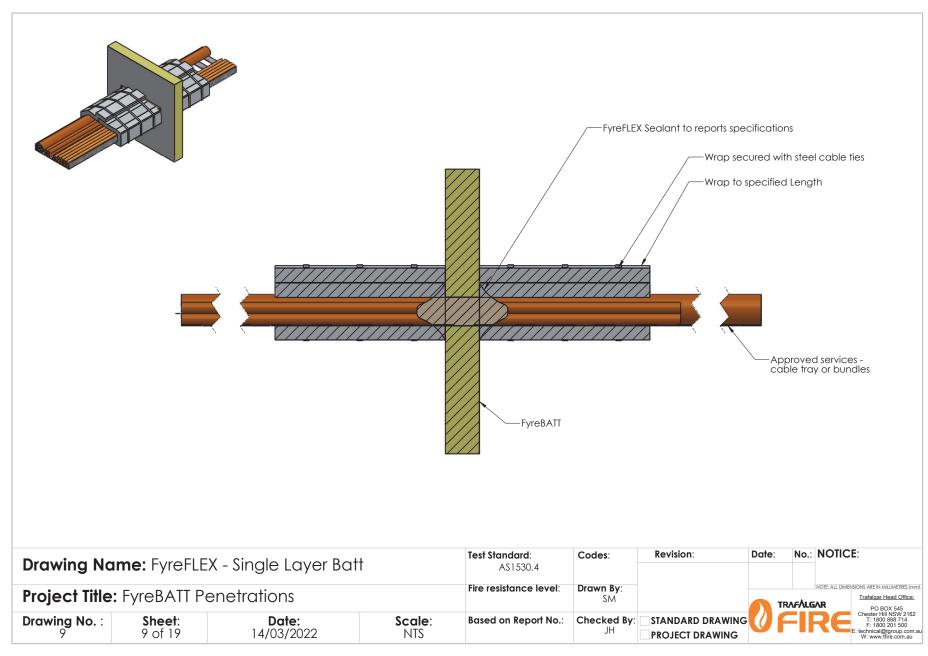








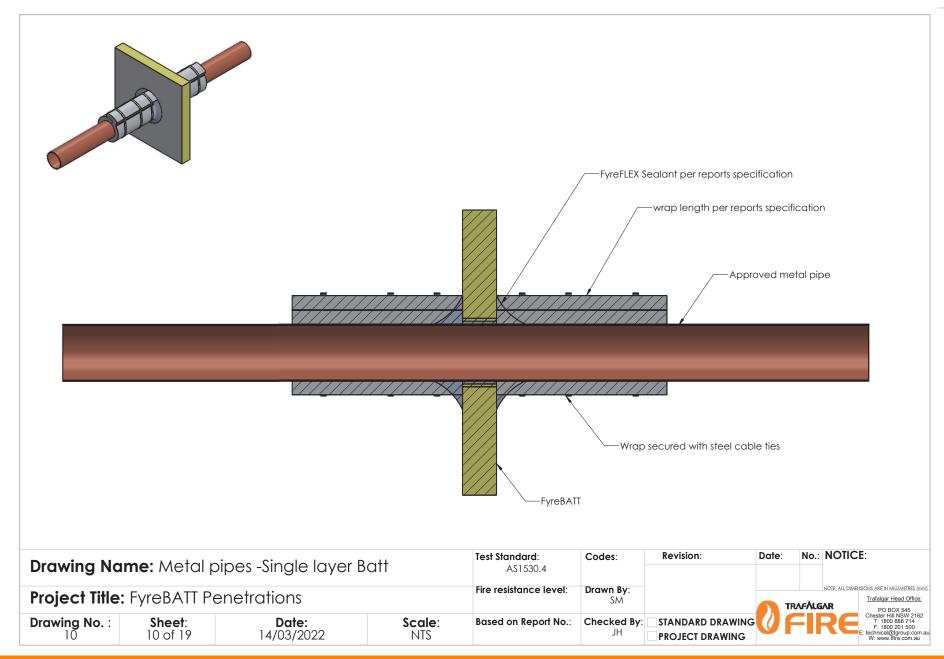








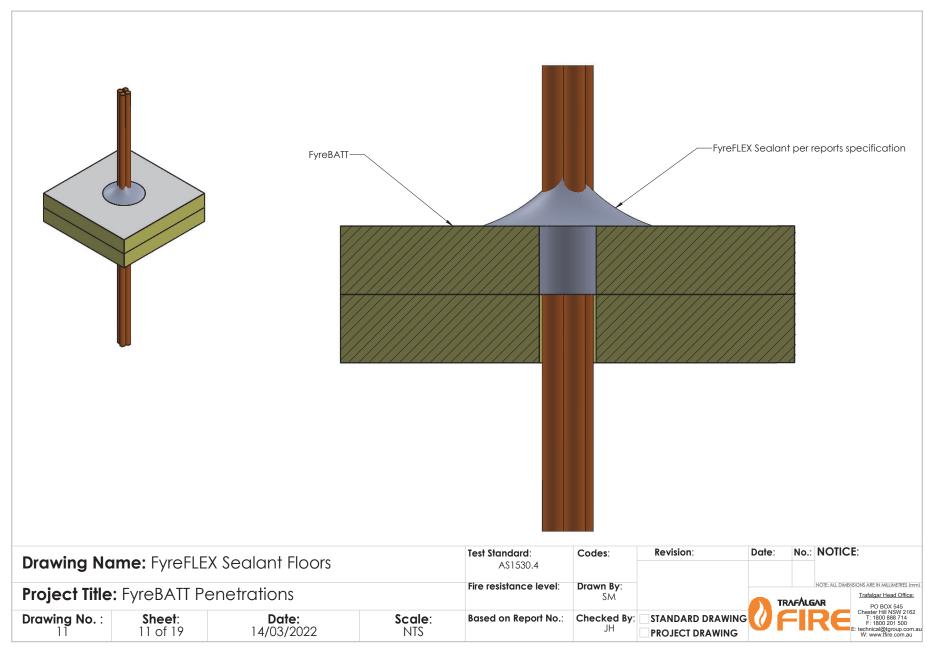








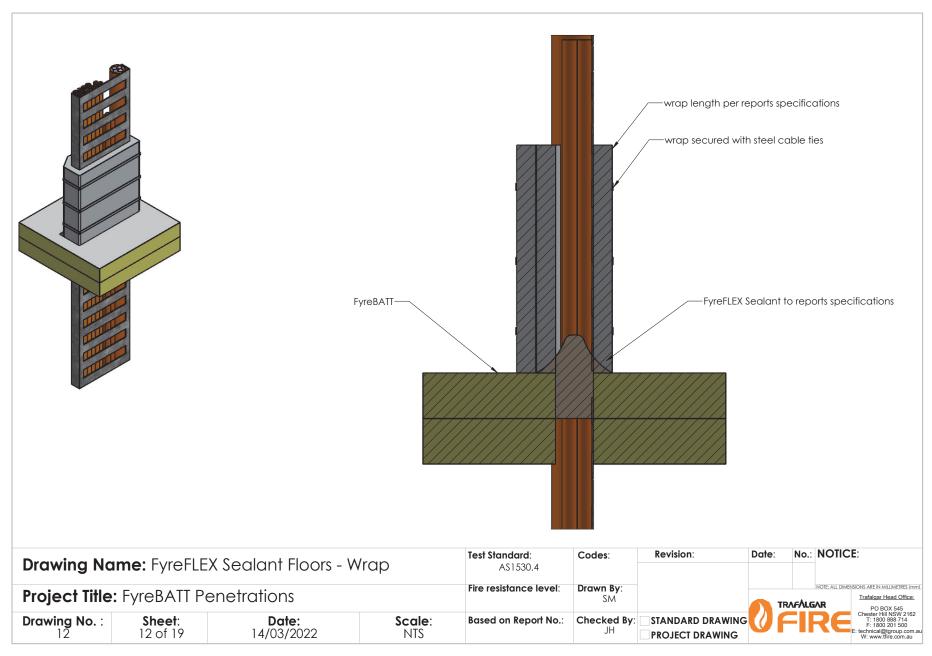








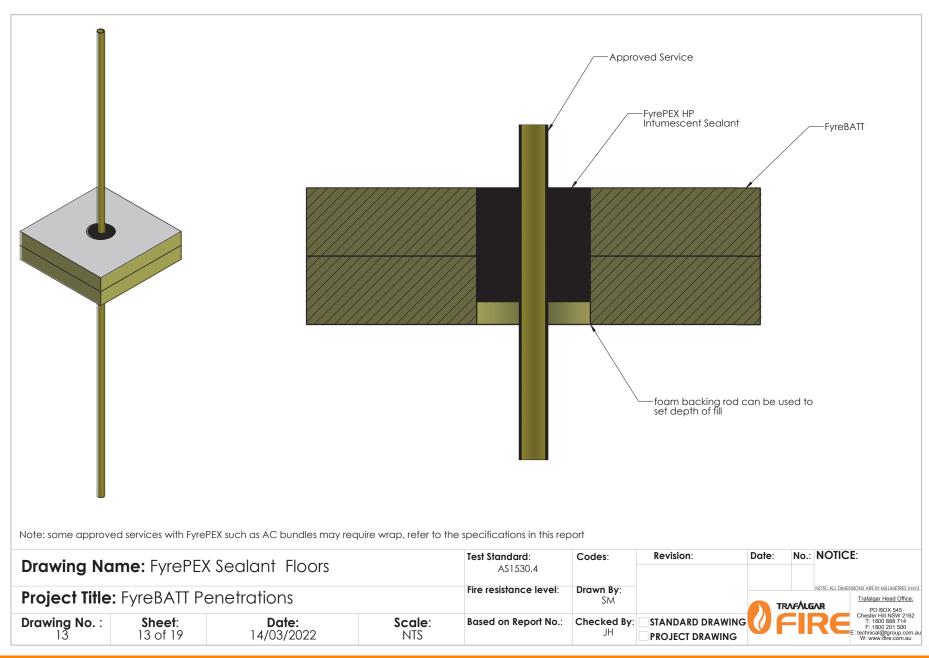








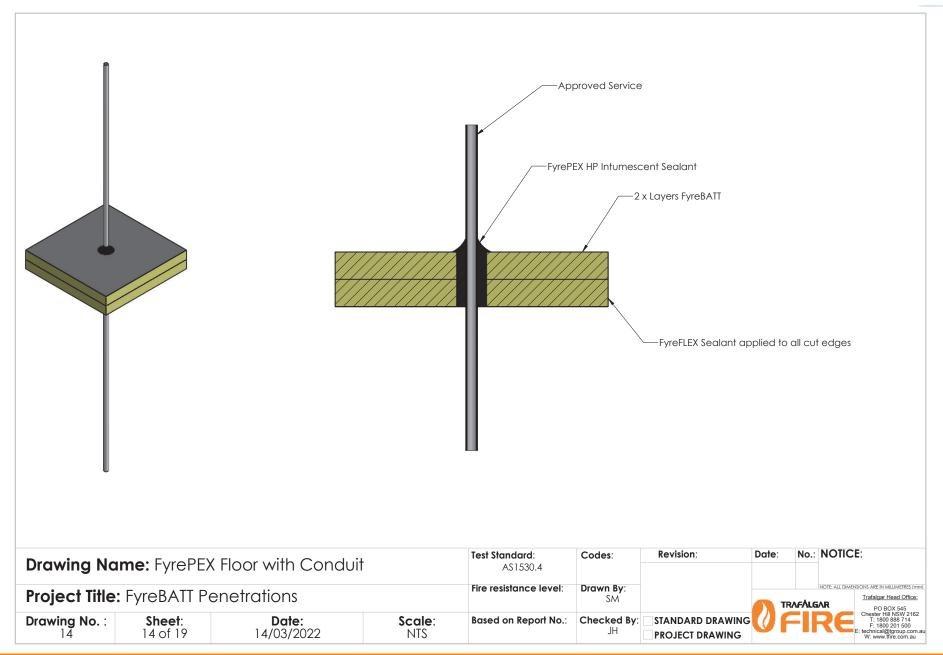








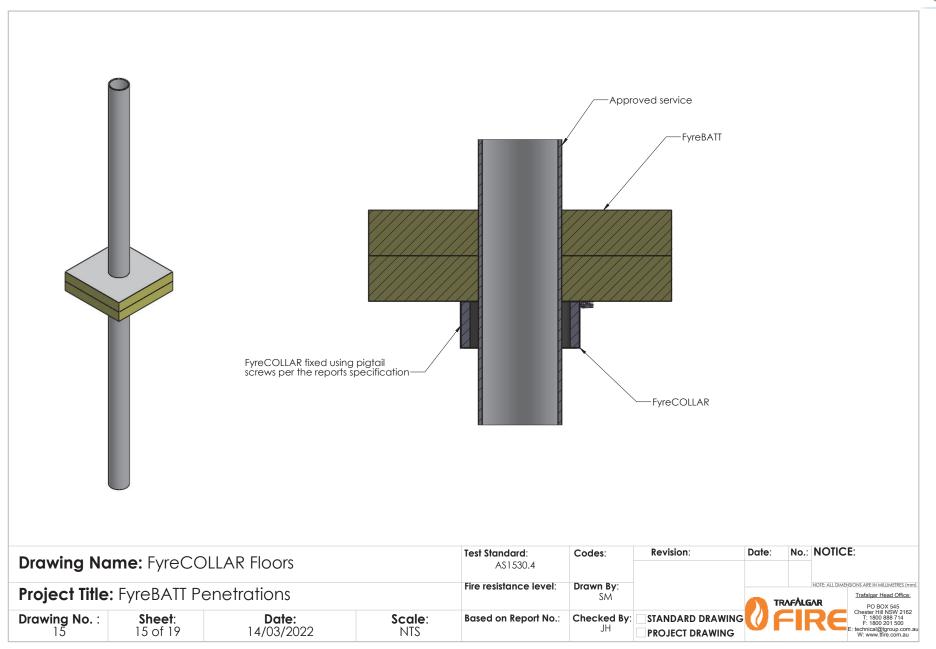








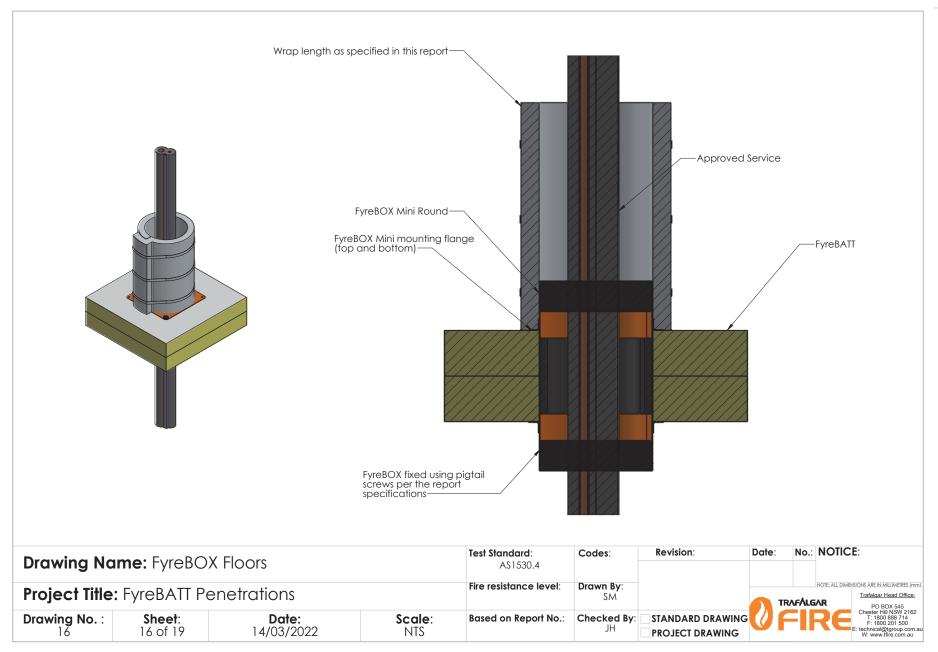










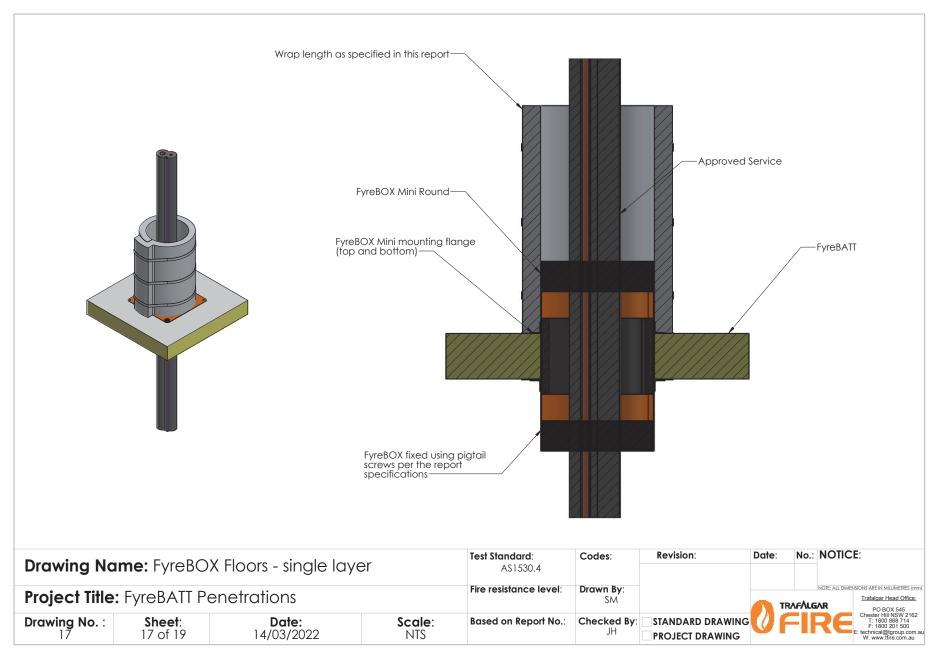


Trafalgar Fire reserves the right to change specifications without notice. Please check with your supplier at the time of order. The information contained in this brochure was correct at the time of publication.





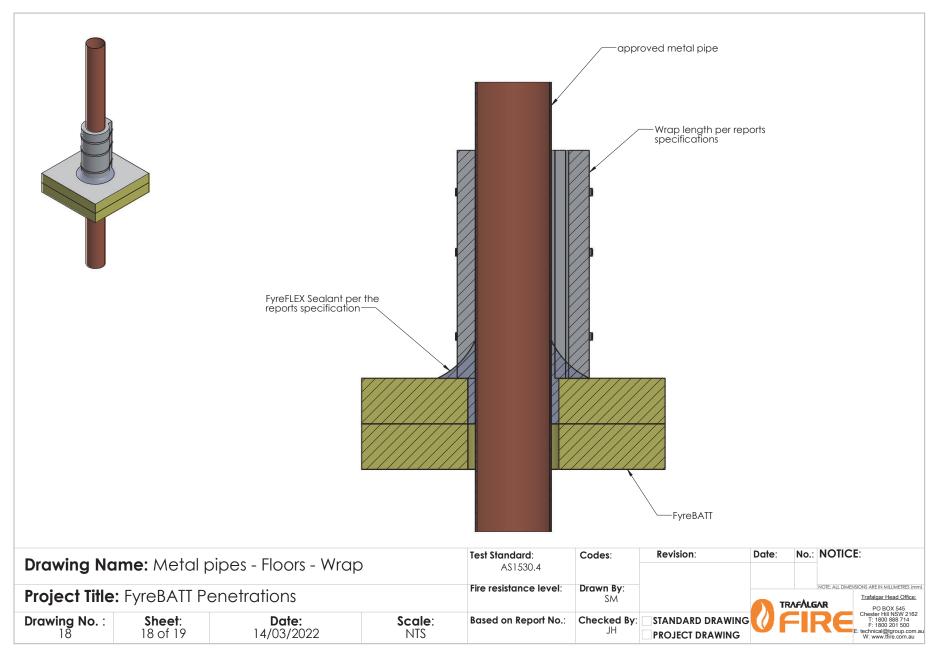








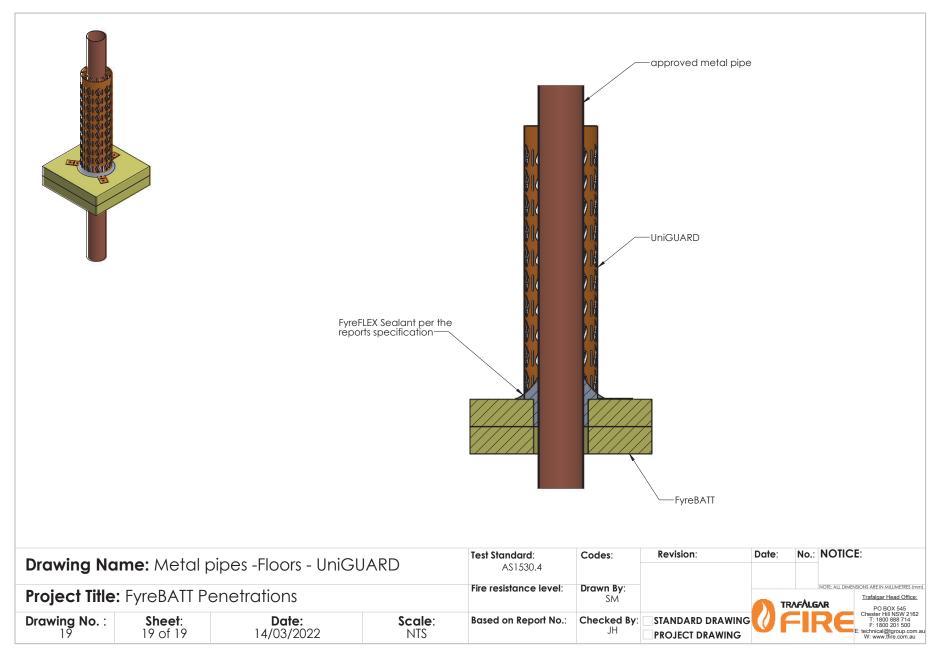








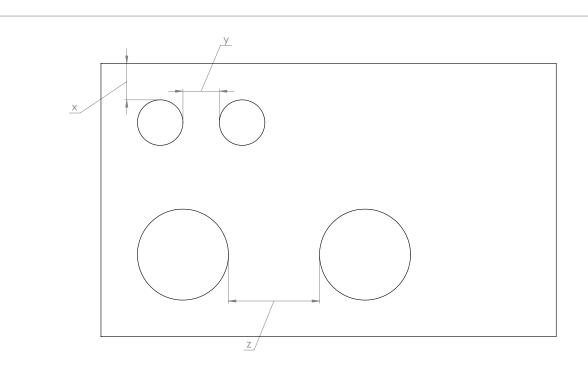












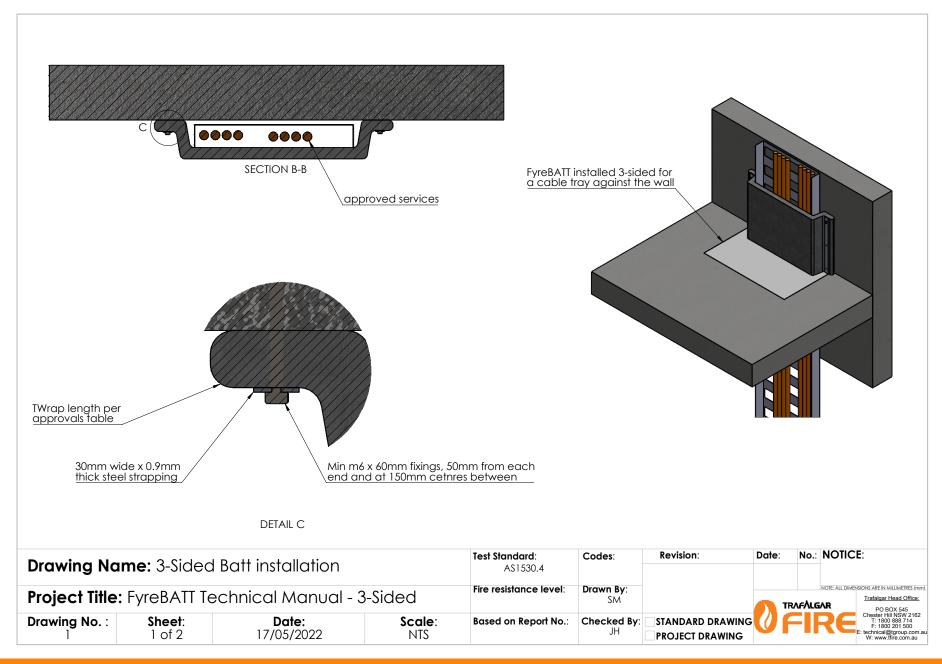
Item	Spacing	Description				
X	40mm	Penetration to edge of FyreBATT				
У	40mm	Penetration to penetration				
Z	100mm	FyreBOX to FyreBOX				

Drawing Name: Penetration Spacing			Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:		
Project Title: FyreBATT Technical manual			Fire resistance level:	Drawn By: SM	■ TR			NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office: PO BOX 545		
Drawing No. :	Sheet: 1 of 1	Date: 29/04/2022	Scale : NTS	Based on Report No.:	Checked By:	STANDARD DRAWING PROJECT DRAWING	Uf	-	Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au	





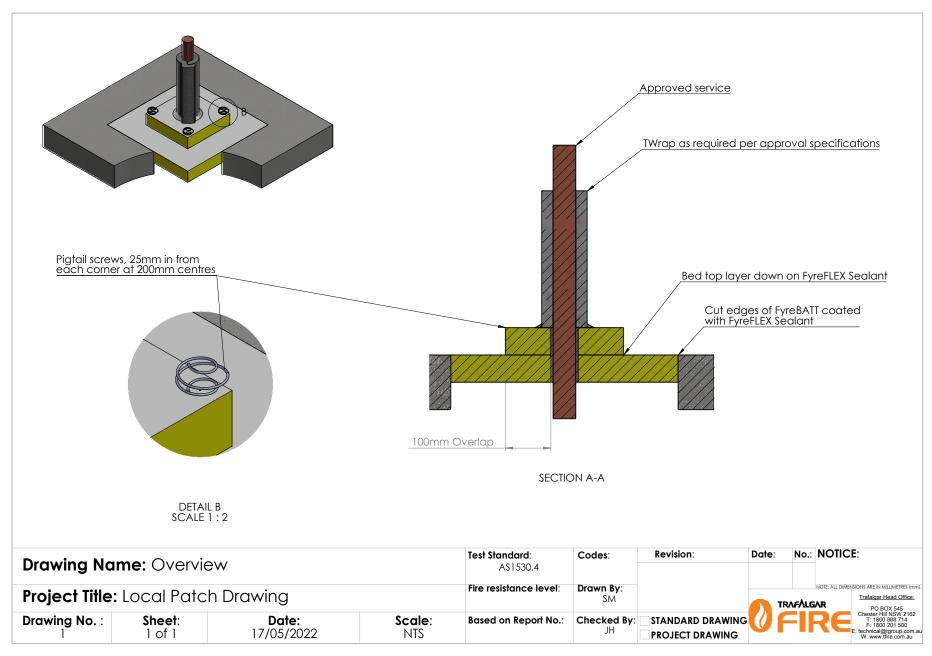








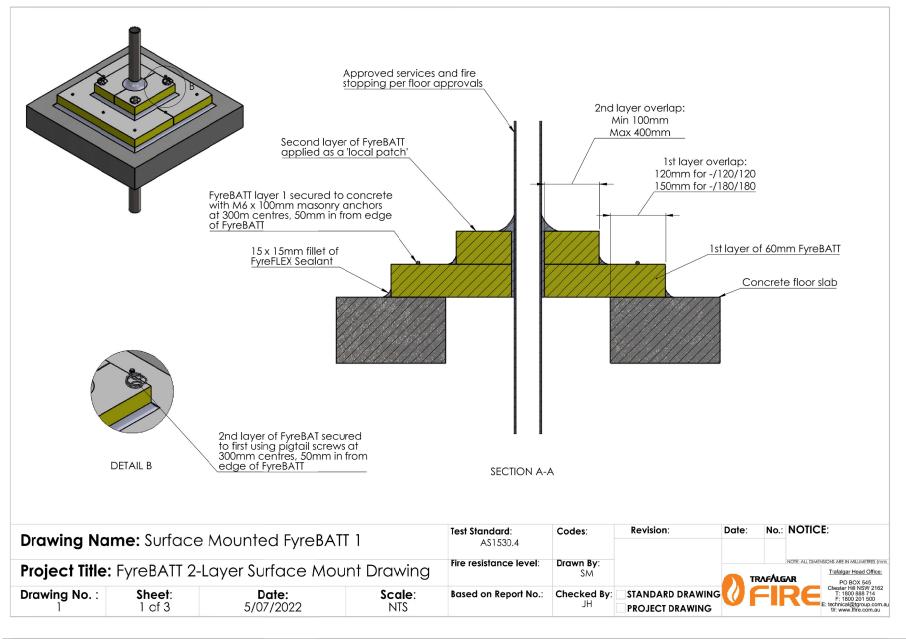








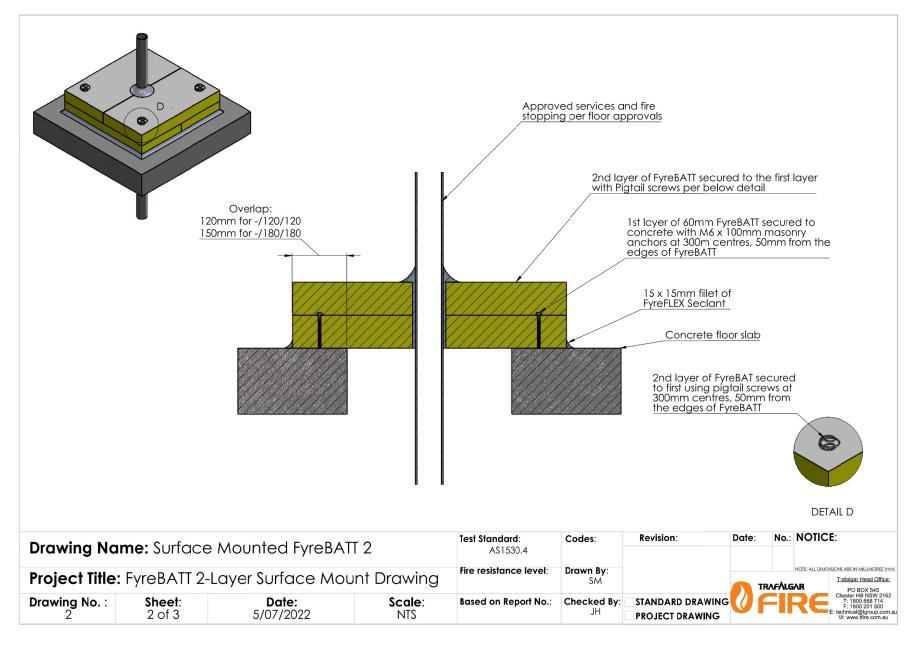








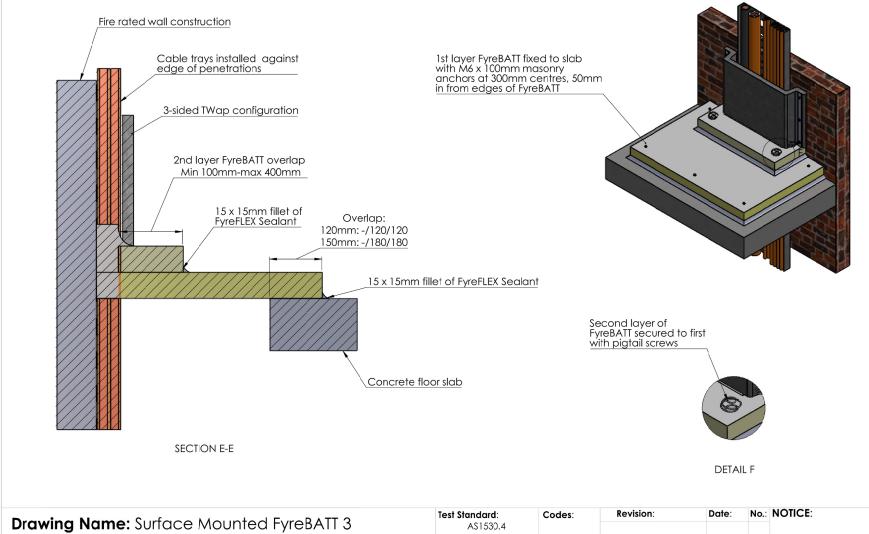












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