





ELECTRICAL SERVICES GUIDE

SuperSTOPPER® Slab-Mount



The SuperSTOPPER® Slab Mount Bambino is a head of wall service penetration system specifically manufactured for individual trades to simplify passive fire by allowing installation of pipe and cable services before the wall construction, providing predictable site costs with the independence from other contractors schedules, and a reliable method of fire stopping.







KEY FEATURES

- Allows for mixed service types (cables and conduits) with no separation required
- Additional services can be installed throughout the life of the building
- Suitable for NBN conduits
- Services can be installed, charged & tested
 without waiting for wall construction to begin
- Suitable for apartment SOU entry, and riser shaft penetrations
- Fully tested and compliant to AS1530.4-2014
- Training and support provided
- Fire, smoke and acoustic seal

APPROVED SERVICES

	Power	Copper core cables Al core cables	
	Data/Comms	Firesence CAT5 & CAT6 RG6	
	Conduits (PVC)	NBN (or other fiber) Power or data	

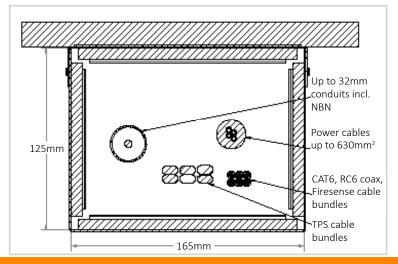




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Why SuperSTOPPER® for Electrical Services?

In residential and commecial constructions, the electrical/data trades are often the first on site to start running temporary and permament cabling systems cables underneath the slab soffit, before the fire compartment walls have been erected. This results in additional work for the sparkies who have to come back to install the passive fire penetration seals, which commonly results in defects where services are left penetrating through the head tracks of the fire wall. Alternatively, the cable rough in needs to wait until the fire walls are installed first, delaying progress.

The innovative Trafalgar SuperSTOPPER® Slab Mount BAMBINO (lower right) addresses these issues by providing a small footprint penetration system that can be installed before the walls are erected, allowing for the power, comms and data cables to be roughed in, commissioned and charged without waiting for the wall contractors. This includes PVC conduits as well!

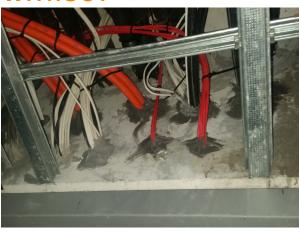
The SuperSTOPPER® systems are tested with all common cable services for residential and commercial projects through one simple penetration system providing FRL's from-/60/60 (wrap free) uo to-/120/120 with TWrap. The SuperSTOPPER® systems have been tested located at the head track/deflection heads in FULL SCALE wall tests to confirm their suitability in these locations.

BENEFITS

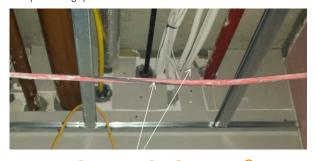
- Install cables before the fire walls
- No need for wraps (in most walls)
- Charge, test and commission services quicker
- · Reduced defects
- Predictable fire stopping costs
- NCC 2022 Ready
- Thoroughly fire tested to AS1530.4-2014
- Visible and reliable compliance
- Space saving gives one penetration point per apartment
- Suitable for SOU and riser shaft penetrations
- Multi-service solution
- · Maintains acoustic rating
- Saves time and labour for builders and service trades



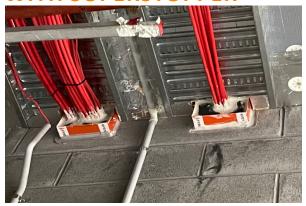
WITHOUT



Traditional sealant penetration systems need the fire walls to be installed first, and often clash with other services causing defects in cramped ceiling spaces.



WITH SUPERSTOPPER®









The SuperSTOPPER® Slab-Mount is a proudly Australian made passive fire penetration system used for multiple and mixed service penetrations which has been designed and tested to be built into residential/commercial apartment walls and riser shafts reducing the space required for service penetrations, providing predictable site costs and a reliable method of fire stopping.

Passive Fire Protection from Trafalgar Fire a Brand you can Trust , with 75 years of Innovation.







TAKE BACK CONTROL OF YOUR PROJECT TIMEFRAMES

Re-think the sequencing of rough in, charging, leak testing and commissioning by pre-installing the penetration systems independently of other site trades.









1	Benefits	Traditional sealant & wrap systems	SuperSTOPPER® BAM- BINO
	Penetration installed before the fire walls?	No	Yes
	Services installed hard against slab soffit?	No	Yes
	Multiple services in one penetration?	No	Yes
	Separation between different servies?	No	Yes
	Allows for future services to be added?	No	Yes
	Doesnt need large fillets of selant for wrap free systems?	No	Yes
	Other service trades can share the same penetration?	No	Yes
	100's of cables in one penetration?	No	Yes























FIRE RESISTANCE LEVEL

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

The SuperSTOPPER® Slab-Mount system will achieve the integrity performance for up to 2 hours physically stopping the direct spread of fire, however the insulation performance of the penetration will be limited to the type of wall being used and conductivity of the services in the penetration.

INSULATION (TEMPERATURE RISE)

Heat transfer via conduction (or heat rise) will occur through the conductive parts of any penetration system. To limit the heat rise through the SuperSTOPPER® Slab-Mount penetration systems, our 25mm thick TWRAP™ foil encased blanket can be wrapped around the services and metal casing of the SuperSTOPPER® 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.





60 Minute Plasterboard Stud Walls WRAP FREE

Minimum of 13mm fire grade plasterboard on each face of steel or timber stud, of minimum 64mm thickness with a stated FRL of -/60/60



Click

			FRL - WRAP FREE		
Service Type	Serv	64mm stud*	92mm studs		
	PVC Pipes	Up to 32mm OD	-/60/30	-/60/60	
		Up to 20mm	-/60/30	-/60/60	
	PEX Pipes	Up to 32mm	-/60/30	-/60/60	
		Up to 32mm with 19mm E-Flex insulation	-/60/30	-/60/60	
Plastic Pipes		Up to 25mm	-/60/30	-/60/60	
	PEX-Al-PEX pipes	Up to 32mm	-/60/-	-/60/-*	
		Up to 32mm with 19mm E-Flex insulation	-/60/30	-/60/60	
	DVO D	Up to 40mm	-/60/-	-/60/-*	
	cPVC Pipes	40mm to 60mm	-/60/30	-/60/60	
Bare Metal Pipes	Copper	pper Up to 50mm		-/60/-*	
	Steel	up to 60mm	-/60/30	-/60/60	
		Up to 50mm OD with PE insulation up to 20mm thick	-/60/30	-/60/30*	
Metal Pipes	Copper	Up to 50mm OD with FR insulation	-/60/30	-/60/60	
Insulated**		Up to 20mm OD with 38mm rockwool-type insulation	-/60/30	-/60/60	
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/60/30	-/60/60	
	TPS	Up to 12x 2.5mm² per bundle	-/60/30	-/60/60	
Power Cables - Copper Core	Rigid or Flexible PVC Conduits	Up to 32mm OD (with any size power or comms cables up to 32mm diameter)	-/60/30	-/60/60	
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/60/30	-/60/30*	
Power Cables - Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/60/30	-/60/30*	
	RG6 coax	Up to 3x per bundle	-/60/30	-/60/60	
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/60/30	-/60/60	
Conduits	Rigid or Flexible PVC Con- duits	Up to 32mm OD (with any size power or comms cables up to 32mm diameter)	-/60/30	-/60/60	

^{*}TWrap required on these specific services to acheieve -/60/60 FRL. Refer to FC10266 for details in specific wall types.

^{**}With or without heat trace cable.





60 Minute AAC Panels WRAP FREE

Hebel, Waslc or other AAC panels 75mm thick when used for-/60/60 applications. Note: 30mm Maxilite board can be laminated on one side of the penetration to increase the insulation performance without the need for TWrap as shown below (WRAP FREE).



		FRL - WRAP FREE	
Service Type		Service Specification	+ 30mm Maxilite
	PVC Pipe	Up to 32mm OD	-/60/60
		Up to 20mm	-/60/60
	PEX Pipes	Up to 32mm	-/60/60
		Up to 32mm with 19mm E-Flex insulation	-/60/60
Plastic Pipes		Up to 20mm	-/60/60
riastic ripes	PEX-Al-PEX pipes	Up to 25mm	-/60/60
	FEA-AI-FEA pipes	Up to 32mm	-/60/-*
		Up to 32mm with 19mm E-Flex insulation	-/60/60
	DIVO D:	Up to 40mm	-/60/-*
	cPVC Pipes	40mm to 60mm	-/60/60
Dove Matel Dines	Copper	Up to 50mm	-/60/-*
Bare Metal Pipes	Steel	up to 60mm	-/60/60
		Up to 50mm OD with PE insulation up to 20mm thick	-/60/60
	Copper	Up to 50mm OD with FR insulation	-/60/60
Metal Pipes Insulated**		Up to 20mm OD with 38mm rockwool-type insulation	-/60/60
	Pair coil	Up to 9.5 & 19mm with 13mm PE insulation	-/60/60
	Pall Coll	Up to 9.5 & 19mm with 20mm FR insulation	-/60/60
	TPS	Up to 12x 2.5mm² per bundle	-/60/60
Power Cables - Copper Core	Rigid or Flexible PVC Conduits	Up to 32mm OD (with any size power or comms cables up to 32mm diameter)	-/60/60
copper core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/60/30*
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/60/30*
	RG6 coax	Up to 3x per bundle	-/60/60
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/60/60
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with any size power or comms cables up to 32mm diameter)	-/60/60

^{*}TWrap required on these specific services to acheieve -/60/60 FRL. Refer to FC10266 for details in specific wall types.

^{**}With or without heat trace cable.





60 Minute Concrete, Masonry and Permanant Formwork Walls: Wrap Free

Walls designed as per AS3600 or AS3700 (or otherwise fire tested to achevied the required FRL with a minimum thickness as per the 90mm) including Dincel, AFS, Logicall etc.



Service Type	Service Specification		FRL (Wrap Free)
	PVC Pipes	Up to 32mm OD	-/60/60
	DEV Dinos	Up to 20mm	-/60/60
	PEX Pipes	Up to 32mm	-/60/60
Plastic Pipes		Up to 20mm	-/60/60
i lustic i ipes	PEX-Al-PEX pipes	Up to 25mm	-/60/60
		Up to 32mm	-/60/-*
	aDVC Dinas	Up to 40mm	-/60/-*
	cPVC Pipes	40mm to 60mm	-/60/60
	Copper	Up to 50mm	-/60/-*
Bare Metal Pipes	Steel	up to 60mm	-/60/60***
		Up to 50mm OD with PE insulation up to 20mm thick	-/60/60
	Copper Pair coil	Up to 50mm OD with FR insulation	-/60/60
Metal Pipes Insulated**		Up to 20mm OD with 38mm rockwool-type insulation	-/60/60
		Up to 9.5 & 19mm with 13mm FR insulation	-/60/60
	Tull Coll	Up to 9.5 & 19mm with 20mm FR insulation	-/60/60
	TPS	Up to 12x 2.5mm² per bundle	-/60/60
Power Cables - Copper Core	Rigid or Flexible PVC Con- duits	Up to 32mm OD (with any size power or comms cables up to 32mm diameter)	-/60/60
	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/60/60
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/60/60
	RG6 coax	Up to 3x per bundle	-/60/60
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/60/60

^{*}TWrap required on these specific services to acheieve -/60/60 FRL. Refer to FC10266 for details in specific wall types.

^{***} Wrap free approval for this service applies to walls minimum 118mm thick, otherwise 300mm TWrap is required on the pipe.



^{**}With or without heat trace cable.

60 Minute IntrWall & Other Party Wall Systems

SuperSTOPPER® can penetrate the core of the wall, which is laminated with at least 1x16mm fire grade plasterboard on one side (or 1x layer of 13mm on both sides of the shaftliner core).



Service Type	Si	FRL Wrap Free*	FRL with TWRAP™	TWrap Length required (mm)	
	PVC Pipes	Up to 32mm OD	-/60/30		300
		Up to 20mm	-/60/30		300
	PEX Pipes	Up to 32mm	-/60/30		450
		Up to 32mm with 19mm E-Flex insulation	-/60/30		300
Plastic Pipes		Up to 25mm	-/60/30		300
	PEX-Al-PEX pipes	Up to 32mm	-/60/-		450
		Up to 32mm with 19mm E-Flex insulation	-/60/30		300
	-DVC Din	Up to 40mm	-/60/-		300
	cPVC Pipes	40mm to 60mm	-/60/30		300
Bare Metal Pipes	Copper	Up to 50mm	-/60/-	-/60/60	300
bare Metal Pipes	Steel	up to 60mm	-/60/30		300
	Copper	Up to 50mm OD with PE insulation up to 20mm thick	-/60/30		300
Metal Pipes		Up to 50mm OD with FR insulation	-/60/30		300
Insulated**		Up to 20mm OD with 38mm rockwool-type insulation	-/60/30		300
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/60/30		300
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/60/30	-/60/30	300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/60/30		300
Power Cables - Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/60/30		300
Communications	RG6 coax	Up to 3x per bundle	-/60/30		300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/60/30		300
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/60/30		300

^{*}If using SuperSTOPPER® without TWrap for FRL's up to -/60/30, the wall must be thickenned with 60mm Maxilite board 100mm strips on one side.

^{**}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration



60 Minute XCEM Alpha Panel walls

Type 1 - 35mm Alpha Panel, framed with stud and lined on the other face with 13mm fire grade plasterboard (88mm minimum thickness)

Type 2 - 35mm Alpha Panel, framed with stud on both sides, lined on both faces with 13mm fire grade plasterboard (200mm minimum thickness)



	Service Specification		FRL - WR	AP FREE	FRL with TWRAP™	
Service Type			Type 1	Type 2	Both walls	Length required (mm)
	PVC Pipes	Up to 32mm OD	-/60/30	-/60/60		300
		Up to 20mm	-/60/30	-/60/60		300
	PEX Pipes	Up to 32mm	-/60/30	-/60/60		450
	·	Up to 32mm with 19mm E-Flex insulation	-/60/30	-/60/60		300
Plastic Pipes		Up to 25mm	-/60/30	-/60/60		300
	PEX-Al-PEX pipes	Up to 32mm	-/60/-	-/60/-		450
		Up to 32mm with 19mm E-Flex insulation	-/60/30	-/60/60		300
	cDVC Dinos	Up to 40mm	-/60/-	-/60/-		300
	cPVC Pipes	40mm to 60mm	-/60/30	-/60/60		300
Rara Matal Pinas	Copper	Up to 50mm	-/60/-	-/60/-		300
Bare Metal Pipes	Steel	up to 60mm	-/60/30	-/60/60		300
		Up to 50mm OD with PE insulation up to 20mm thick	-/60/30	-/60/30	-/60/60	300
Metal Pipes	Copper	Up to 50mm OD with FR insulation	-/60/30	-/60/60		300
Insulated*		Up to 20mm OD with 38mm rockwool-type insulation	-/60/30	-/60/60		300
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/60/30	-/60/60		300
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/60/30	-/60/60		300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power ca- bles and cable trays up to 1000mm wide	-/60/30	-/60/30		300
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/60/30	-/60/30		300
	RG6 coax	Up to 3x per bundle	-/60/30	-/60/60		300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/60/30	-/60/60		300
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/60/30	-/60/60		300

^{*}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration



90 Minute AAC Panels

Hebel, Waslc or other AAC panels 75mm thick with a stated FRL up to -/90/90. Note if this wall is used for a-/60/60 apartment entry, please refer to page 9.



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^{*}With or without heat trace cable



90 Minute Plasterboard Stud Walls

Minimum of 16mm fire grade plasterboard on each face of a steel or timber stud of minimum 64mm thickness, with a stated FRL of -/90/90.



Service Type	Serv	ice Specification	FRL (Wrap Free)	FRL with TWRAP™	TWRAP™ Length required (mm)
	PVC Pipes	Up to 32mm OD	-/90/60		300
		Up to 20mm	-/90/60		300
	PEX Pipes	Up to 32mm	-/90/60		450
		Up to 32mm with 19mm E-Flex insulation	-/90/60		300
Plastic Pipes		Up to 25mm	-/90/60		300
	PEX-Al-PEX pipes	Up to 32mm	-/90/-		450
		Up to 32mm with 19mm E-Flex insulation	-/90/30		300
	DVC Div.	Up to 40mm	-/90/-		300
	cPVC Pipes	40mm to 60mm	-/90/60		300
	Copper	Up to 50mm	-/90/-		300#
Bare Metal Pipes	Steel	up to 60mm	-/90/30		300#
		Up to 50mm OD with PE insulation up to 20mm thick	-/90/30		300
Metal Pipes	Copper	Up to 50mm OD with FR insulation	-/90/30	-/90/90	300
Insulated*		Up to 20mm OD with 38mm rockwool-type insulation	-/90/30		300
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/90/30		300
	TPS	Up to 12x 2.5mm² per bundle	-/90/30		300
Power Cables - Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power ca- bles and cable trays up to 1000mm wide	-/90/30		300
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/90/30		300
	RG6 coax	Up to 3x per bundle	-/90/30		300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/90/30		300
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/90/60		300

^{*}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration #With 300mm of loose TWrap infill packed around any cable tray services within the wrap.



SuperSTOPPER SLAB-MOUNT BAMBINO

90 Minute Laminated Plasterboard **Shaft Walls**

Minimum of 3x fire grade plasterboard on one side of a steel stud with a stated FRL of 90 or 120 minutes. SuperSTOPPER® penetration thicknenned with 60mm Maxilite in 100mm strips on one side of the pene-





Service Type	Service Specification		Plasterboard outside minimum 64mm stud (FRL wrap Free)		FRL with	TWrap Length
Service Type			3x13mm plaster	3x16mm plaster	TWRAP	required (mm)
	PVC Conduits	Up to 32mm OD	-/90/30	-/120/30		300
		Up to 20mm	-/90/30	-/120/30		300
	PEX Pipes	Up to 32mm	-/90/30	-/120/30		450
	. Ext. pes	Up to 32mm with 19mm E-Flex insulation	-/90/30	Not approved		300 (-/ 90/90 only)
Plastic Pipes		Up to 25mm	-/90/30	-/120/30		450
	PEX-Al-PEX pipes	Up to 32mm	-/90/-	-/120/30		450
		Up to 32mm with 19mm E-Flex insulation	-/90/30	Not approved		300 (-/ 90/90 only)
	cPVC Pipes	Up to 40mm	-/90/-	-/120/-		300
	CPVC Pipes	40mm to 60mm	-/90/30	-/120/30		300
Bare Metal Pipes	Copper	Up to 50mm	-/90/-	-/120/-		300
bare Wetai Fipes	Steel	up to 60mm	-/90/30	-/120/30		300
	Copper	Up to 50mm OD with PE insulation up to 20mm thick	-/90/30	-/120/30	-/120/120 (Limited to the FRL of the wall)	300
Metal Pipes		Up to 50mm OD with FR insulation	-/90/30	-/120/30		300
Insulated**		Up to 20mm OD with 38mm rockwool- type insulation	-/90/30	-/120/30		300
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/90/30	-/120/30		300
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/90/30	-/120/30		300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/90/30	-/120/30		600**
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/90/30	-/120/30		300
	RG6 coax	Up to 3x per bundle	-/90/30	-/120/30		300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/90/30	-/120/30		450
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/90/30	-/120/30		300

^{*}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration

^{**}Loose TWrap infill installed onto cable trays for at least 300mm underneath TWrap



90 Minute XCEM Alpha Panel walls

Type 3 - 35mm Alpha Panel, framed with stud and lined on the other face with 16mm fire grade plasterboard (91mm minimum thickness).

Type 4 - 35mm Alpha Panel laminated with 16mm fire grade plasterboard.



			FRL (Wrap Free)**		FRL wit	n TWRAP™
Service Type	Serv	ice Specification	Type 3	Type 4	Both walls	Length required (mm)
	PVC Conduits	Up to 32mm OD	-/90/60	-/90/30		450
		Up to 20mm	-/90/60	-/90/30		450
	PEX Pipes	Up to 32mm	-/90/60	-/90/30		450
		Up to 32mm with 19mm E-Flex insulation	-/90/60	-/90/30		450
Plastic Pipes		Up to 25mm	-/90/60	-/90/30		450
	PEX-Al-PEX pipes	Up to 32mm	-/90/-	-/90/-		450
		Up to 32mm with 19mm E-Flex insulation	-/90/30	-/90/30		450
	cPVC Pipes	Up to 40mm	-/90/-	-/90/-		450
	CFVC Fipes	40mm to 60mm	-/90/60	-/90/30		450
Bare Metal Pipes	Copper	Up to 50mm	-/90/-	-/90/30		450
bare ivietal ripes	Steel	up to 60mm	-/90/30	-/90/30		450
		Up to 50mm OD with PE insulation up to 20mm thick	-/90/30	-/90/30		450
Metal Pipes	Copper	Up to 50mm OD with FR insulation	-/90/30	-/90/30	-/90/90	450
Insulated*		Up to 20mm OD with 38mm rockwool-type insulation	-/90/30	-/90/30		450
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/90/30	-/90/30		450
	TPS	Up to 12x 2.5mm² per bundle	-/90/30	-/90/30		450
Power Cables - Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/90/30	-/90/30		450
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/90/30	-/90/30		450
Communications	RG6 coax	Up to 3x per bundle	-/90/30	-/90/30		450
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/90/30	-/90/30		450
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/90/60	-/90/30		450

^{*}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration **Wrap free FRL's require a patch of 60mm Maxilite board 100mm strips on one side of the wall.



120 Minute Plasterboard Stud Walls

Minimum of 2x13mm fire grade plasterboard on each face of steel or timber stud, of minimum 64mm thickness with a stated FRL of -120/120.



Service Type	Serv	ice Specification	FRL (Wrap Free)	FRL with TWRAP™ (all studs)	TWRAP™ Length required (mm)
	PVC Pipes	Up to 32mm OD	-/120/60		300
	DEV Pinas	Up to 20mm	-/120/60		300
	PEX Pipes	Up to 32mm	-/120/60		450
Plastic Pipes	PEX-Al-PEX pipes	Up to 20mm	-/120/60		300
	PEA-AI-PEA pipes	Up to 32mm	-/120/-		450
	cPVC Pipes	Up to 40mm	-/120/-		300
	CFVC Pipes	40mm to 60mm	-/120/60	-/120/120	300
Bare Metal Pipes	Copper	Up to 50mm	-/120/-		300
bare ivietal Pipes	Steel	up to 60mm	-/120/60		300
		Up to 50mm OD with PE insulation up to 20mm thick	-/120/60		300
Metal Pipes	Copper	Up to 50mm OD with FR insulation	-/120/60		300
Insulated*		Up to 20mm OD with 38mm rockwool-type insulation	-/120/60		300
	Pair coil	Up to 9.5 & 19mm with 20mm FR insulation (or 13mm PE)	-/120/60		300
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/120/60		300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power ca- bles and cable trays up to 1000mm wide	-/120/60		600**
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/120/30		300
Communications	RG6 coax	Up to 3x per bundle	-/120/60		300
Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/120/60		450**
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/120/60		300

^{*}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER® penetration

^{**}Loose TWrap infill installed onto cable trays for at least 300mm underneath TWrap





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120 Minute Concrete, Masonry and Permanant Formwork Walls

Walls designed as per AS3600 or AS3700 (or otherwise fire tested to achevied the required FRL with a minimum thickness as per the 90mm) including Dincel, AFS, Logicall etc.

, 3	ricei, Ai 5, Logicali etc.				
Service Type	Se	rvice Specification	FRL (Wrap Free)	FRL with TWRAP™ (all studs)	TWRAP™ Length required (mm)
	PVC Pipes	Up to 32mm OD	-/120/60		300
		Up to 20mm	-/120/60		300
	PEX Pipes	Up to 32mm	-/120/60		450
Plastic Pipes		Up to 20mm	-/120/60		300
riastic ripes	PEX-Al-PEX pipes	Up to 25mm	-/120/60		450
		Up to 32mm	-/120/0		450
	DI (C Div.	Up to 40mm	-/120/0		300
	cPVC Pipes	40mm to 60mm	-/120/60		300
Dave Matel Dive	Copper	Up to 50mm	-/120/0	-/120/120	300
Bare Metal Pipes	Steel	up to 60mm	-/120/60		300
		Up to 50mm OD with PE insulation up to 20mm thick	-/120/60		300
Metal Pipes Insulated*	Copper Pair coil	Up to 50mm OD with FR insulation	-/120/60		300
		Up to 20mm OD with 38mm rockwool- type insulation	-/120/60		300
		Up to 9.5 & 19mm with 13mm FR insulation	-/120/60		300
		Up to 9.5 & 19mm with 20mm FR insulation	-/120/60		300
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/120/60		300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide	-/120/60		600#
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/120/30		300
Communications	RG6 coax	Up to 3x per bundle	-/120/60		300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/120/60		450#
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/120/60		300

^{*}With or without heat trace cable.

#With 300mm of loose TWrap infill packed around any cable tray services within the wrap.



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120 Minute AAC Panels

Hebel, Waslc or other AAC panels 75mm thick with a stated FRL up to -/120/120.

PVC pipes						
PEX Pipes Up to 20mm	Service Type		Service Specification			TWRAP™ Length required (mm)
Plastic Pipes		PVC pipes	Up to 32mm OD	-/120/30		300
Plastic Pipes PEX-Al-PEX pipes Up to 20mm -/120/30 450 300 450	Diagric Divers	DEV Div.	Up to 20mm	-/120/30		300
PEX-Al-PEX pipes		PEX Pipes	Up to 32mm	-/120/30		450
PEX-Al-PEX pipes Up to 25mm -/120/30 450 Up to 32mm -/120/0 450 Up to 40mm -/120/0 300 Up to 60mm -/120/30 300 Bare Metal Pipes Up to 50mm OD with PE insulation up to 20mm thick Up to 50mm OD with FR insulation -/120/30 Up to 50mm OD with 38mm rockwool-type insulation -/120/30 -/120/30 Up to 20mm OD with 38mm rockwool-type insulation -/120/30 -/120/30 Up to 9.5 & 19mm with 13mm FR insulation -/120/30 300 Pair coil Up to 9.5 & 19mm with 20mm FR insulation -/120/30 300 Power Cables - TPS Up to 12x 2.5mm² per bundle -/120/30 300			Up to 20mm	-/120/30		300
CPVC Pipes	r lastic r ipes	PEX-Al-PEX pipes	Up to 25mm	-/120/30		450
CPVC Pipes Up to 60mm -/120/30 300			Up to 32mm	-/120/0		450
Copper Up to 50mm -/120/30 300		DVC Div	Up to 40mm	-/120/0		300
Steel Up to 50mm -/120/30 300 300		CPVC Pipes	Up to 60mm	-/120/30		300
Steel	Para Matal Dinas	Copper	Up to 50mm	-/120/0		300
Copper Up to 50mm OD with FR insulation -/120/30 300	Bare Metal Pipes	Steel	up to 60mm	-/120/30		300
Metal Pipes Insulated* Up to 20mm OD with 38mm rockwool-type insulation -/120/30 -/120/120 Pair coil Up to 9.5 & 19mm with 13mm FR insulation -/120/30 300 Up to 9.5 & 19mm with 20mm FR insulation -/120/30 300 Power Cables - TPS Up to 12x 2.5mm² per bundle -/120/30 300				-/120/30	-/120/120	300
Metal Pipes Insulated* Up to 20mm OD with 38mm rockwool-type insulation -/120/30 300 Pair coil Up to 9.5 & 19mm with 13mm FR insulation -/120/30 300 Up to 9.5 & 19mm with 20mm FR insulation -/120/30 300 Power Cables - TPS Up to 12x 2.5mm² per bundle -/120/30 300			Up to 50mm OD with FR insulation	-/120/30		300
Pair coil Up to 9.5 & 19mm with 20mm FR insulation -/120/30 TPS Up to 12x 2.5mm² per bundle -/120/30 300				-/120/30		300
Up to 9.5 & 19mm with 20mm FR insulation -/120/30 300 Power Cables - TPS Up to 12x 2.5mm² per bundle -/120/30 300			Up to 9.5 & 19mm with 13mm FR insulation	-/120/30		300
Power Cables -			Up to 9.5 & 19mm with 20mm FR insulation	-/120/30		300
	Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/120/30		300
Copper Core AS1530.4 Appen- dix D1 cable set Applies to copper core power cables and cable trays up to 1000mm wide -/120/30 600#	Copper Core			-/120/30		600#
Power Cables Aluminium Core Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total) -/120/30 300		Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/120/30		300
RG6 coax		RG6 coax	Up to 3x per bundle	-/120/30		300
Communications Cables AS1530.4 Appendix D2 cable set Applies to copper core comms cables, including cable trays up to 1000mm wide Applies to copper core comms cables, including cables trays up to 1000mm wide 450#				-/120/30		450#
Conduits Rigid or Flexible PVC Conduits Up to 32mm OD (with or without cables) -/120/60 300	Conduits		Up to 32mm OD (with or without cables)	-/120/60		300

^{*}With or without heat trace cable

#With 300mm of loose TWrap infill packed around the services within the wrap.



Speedpanel® Walls

Speedpanel walls of thickness ranging from 51mm (-/60/60), 64mm (-/90/90) and 78mm (-/120/120).

Note 51mm and 64mm Speedpanel walls required additional patch of 30mm Maxilite board on one side of the wall.



Service Type	Si	ervice Specification	51mm Speedpanel + 30mm Maxilite	64mm Speedpanel + 30mm Maxilite	78mm Speedpanel	TWrap Length required (mm)
	PVC pipes	Up to 32mm OD				300
		Up to 20mm				300
	PEX Pipes	Up to 32mm				450
	7 271 , p 00	Up to 32mm with 19mm E-Flex** ****insulation				450
Plastic Pipes		Up to 20mm				300
	PEX-AL-PEX pipes	Up to 32mm				450
		Up to 32mm with 19mm E-Flex** insulation				450
	cPVC Pipes	Up to 40mm				300
	CPVC Pipes	Up to 60mm				300
Para Motal Dinos	Copper	Up to 50mm				300
Bare Metal Pipes	Steel	up to 60mm				300
		Up to 50mm OD with PE insulation up to 20mm thick			-/120/120	300
Metal Pipes Insulated#	Copper	Up to 50mm OD with FR insulation	-/60/60 -/90/90	-/90/90		300
		Up to 20mm OD with 38mm rockwool-type insulation			300	
	Pair coil	Up to 9.5 & 19mm with 13mm PE insulation				300
	raii coii	Up to 9.5 & 19mm with 20mm FR insulation			300	
Power Cables -	TPS	Up to 12x 2.5mm² per bundle				300
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide				600*
Power Cables Aluminium Core	3111gle Core 4 x 120mm ²	Bundles of up to 3×240 mm ² , 4×120 mm ² and 9×70 mm ² per bundle (16x cables total)				300
	RG6 coax	Up to 3x per bundle				300
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide				450*
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)				300

^{*300}mm loose TWrap infill underneath Twrap ** Maximum FRL-/90/90

#With or without heat trace cable. For specific service based FRL's without using TWrap, refer to report FC10266



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Trafalgar COREX Shaft Walls

2x laminated Corex boards fixed to one side of a 64mm steel stud. FRL of the wall is related to thickness of the Corex facings as shown in the table. Click here for the Corex Shaft Wall technical Manual.



Service Type	Se	rvice Specification	Corex Board Specification & SuperSTOPPER® Penetration FRL*		TWrap Length required	
			2x15mm	2x20mm	2x25mm	(mm)
	PVC Pipes	Up to 32mm OD				450
		Up to 20mm				450
	PEX Pipes	Up to 32mm				450
	·	Up to 32mm with 19mm E-Flex insulation				450
Plastic Pipes		Up to 20mm				450
Plastic Pipes		Up to 25mm				450
	PEX-Al-PEX pipes	Up to 32mm				450
		Up to 32mm with 19mm E-Flex insulation				450
	cDVC Dinos	Up to 40mm				450
	cPVC Pipes	40mm to 60mm				450
Bare Metal Pipes	Copper	Up to 50mm				450
bare Wetai Pipes	Steel	up to 60mm				450
		Up to 50mm OD with PE insulation up to 20mm thick		-/90/90 -/1	-/120/120	450
	Copper	Up to 50mm OD with FR insulation	-/60/60			450
Metal Pipes Insulated**		Up to 20mm OD with 38mm rockwool- type insulation				450
	Pair coil	Up to 9.5 & 19mm with 13mm PE insulation				450
	raii coii	Up to 9.5 & 19mm with 20mm FR insulation				450
	TPS	Up to 12x 2.5mm² per bundle				450
Power Cables - Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power cables and cable trays up to 1000mm wide				450
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)				450
	RG6 coax	Up to 3x per bundle				450
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide				450
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables) e thickened on one side with 100mm wide	Manillity CO	an an Albiele e		450

^{**}Heat trace cables may be installed underneath thermal lagging through a SuperSTOPPER $^{\! \circ}$ penetration



^{*}For specific service based FRL's without using TWrap, refer to report FC10266.

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Maxilite Board Bulkheads and Oversized Penetrations

Maxilite FyreBOARD is commonly used to construct fire rated bulkheads or to seal oversized apertures cut into fire walls. Minimum thickness required 60mm. <u>Click here for the Maxilite technical manuals.</u>



Service Type	S	ervice Specification	FRL (Wrap Free)	FRL with TWRAP™ (all studs)	TWRAP™ Length required (mm)	
	PVC Pipes	Up to 32mm OD	-/120/30		300	
	DEV Dinos	Up to 20mm	-/120/30		300	
	PEX Pipes	Up to 32mm	-/120/30		450	
Disastia Disasa		Up to 20mm	-/120/30		300	
Plastic Pipes	PEX-Al-PEX pipes	Up to 25mm	-/120/30		450	
		Up to 32mm	-/120/0		450	
	aDVC Dinas	Up to 40mm	-/120/0		300	
	cPVC Pipes	40mm to 60mm	-/120/30		300	
Bare Metal Pipes	Copper	Up to 50mm	-/120/0	-/120/120	300	
bare Metal Pipes	Steel	up to 60mm	-/120/30			300
		Up to 50mm OD with PE insulation up to 20mm thick	-/120/30		300	
	Copper Pair coil	Up to 50mm OD with FR insulation	-/120/30		300	
Metal Pipes Insulated*		Up to 20mm OD with 38mm rockwool-type insulation	-/120/30		300	
		Up to 9.5 & 19mm with 13mm FR insulation	-/120/30		300	
		Up to 9.5 & 19mm with 20mm FR insulation	-/120/30		300	
Power Cables -	TPS	Up to 12x 2.5mm² per bundle	-/120/30		300	
Copper Core	AS1530.4 Appendix D1 cable set	Applies to copper core power ca- bles and cable trays up to 1000mm wide	-/120/30		600#	
Power Cables Aluminium Core	Single Core cables	Bundles of up to 3 x 240mm², 4 x 120mm² and 9 x 70mm² per bundle (16x cables total)	-/120/30		300	
	RG6 coax	Up to 3x per bundle	-/120/30		300	
Communications Cables	AS1530.4 Appendix D2 cable set	Applies to copper core comms cables, including cable trays up to 1000mm wide	-/120/30		450#	
Conduits	Rigid or Flexible PVC Conduits	Up to 32mm OD (with or without cables)	-/120/30		300	

^{*}With or without heat trace cable #With 300mm of loose TWrap infill packed around the services within the wrap.







INSTALLATION STAGE 1:

Slab-Mount the SuperSTOPPER®

ALL WALLS





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

Ensure that the SuperSTOPPER® will be located centrally to the thickness of the wall.



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



Fix the top section of the SuperSTOPPER® to the floor slab using **M6 masonry anchors, 4mmx20mm gas or powder actuated anchors** or any other **all-steel anchor** of equal pull out rating through the pre-formed mounting holes at two per side, or 300mm centres.

SERVICES



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









INSTALLATION STAGE 2: WALL INSTALLATION

PLASTERBOARD AND COREX





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

FRAME



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

There is no need to line the opening around a SuperSTOPPER® with plasterboard for 60 minute applications.

Corex Walls require the opening to be lined with the same thickness of Corex board as is used to build the wall.

PLASTER



Plasterboard is applied around the SuperSTOPPER® Slab-Mount, forming annular gaps maximum 20mm.For Corex walls, the wall must be thickened on one side with 100mm wide Maxilite, 60mm thick around the

FINISHING

Complete the installation by following the Stages 3-4 steps outlined on pages 28-29









INSTALLATION STAGE 2: WALL INSTALLATION

AAC PANEL WALL



Install the Hebel® wall's fixing angles on either side of the SuperSTOPPER®



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

Please note: FyreBOARD Maxilite® collar is not needed if you are planning to use the 3 – sided TWRAP $^{\text{m}}$ detail which covers the casing of the SuperSTOPPER $^{\text{m}}$ for 90-minute insulation ratings – refer to table on page 13.





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



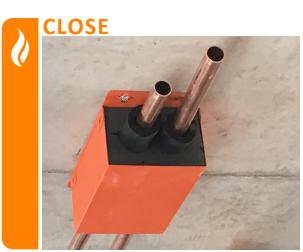






INSTALLATION STAGE 2: WALL INSTALLATION

ALPHA PANEL



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



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

Framing only required for AlphaPanel walls that are sheeted with plasterboard on one or both sides, however even walls with just AlphaPanel require plasterboard lining, refer to the drawings at the end of the manual for specifics.



The opening is lined with FR plasterboard to assist with he performance of the SuperSTOPPER® Slab Mount system. Some Alpha Panel Walls need to be thickened with Maxilite. Depending on applications and FRL required, refer to the approvals on page-12 (60 mins) and page-16 (90mins).



Complete the installation by following the Stages 3-4 steps outlined on

pages 28-29









INSTALLATION STAGE 2: WALL INSTALLATION

SPEEDPANEL®



ANGLES



Install the Speedpanel® C-Channel to the full perimeter of the SuperSTOPPER® ensuring the annular gaps between the SuperSTOPPER® and wall opening are within 5-20mm.

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





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





Complete the installation by following the Stages 3-4 steps outlined on

pages 28-29

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









INSTALLATION STAGE 3: FOAM INSTALLATION

ALL WALLS

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



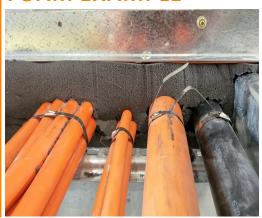
Fill all annular gaps between the SuperSTOPPER® and wall opening with FyreFLEX® Sealant to a depth of 20mm and finish with a 30x30mm fillet on each side of the penetratio (fillet not needed if penetration is wrapped with TWrap).



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

Please note: 30x30mm FyreFLEX® fillet is not needed if you are planning to use the 3 – sided TWRAP[™] detail as shown on page 29.

FOAM EXAMPLE





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









INSTALLATION STAGE 4: WRAPPING

ALL WALLS

If TWRAP $^{\text{m}}$ is required for the services to achieve the insulation rating as described in the tables on pages8-22, install as follows.

WRAP- SERVICES ONLY



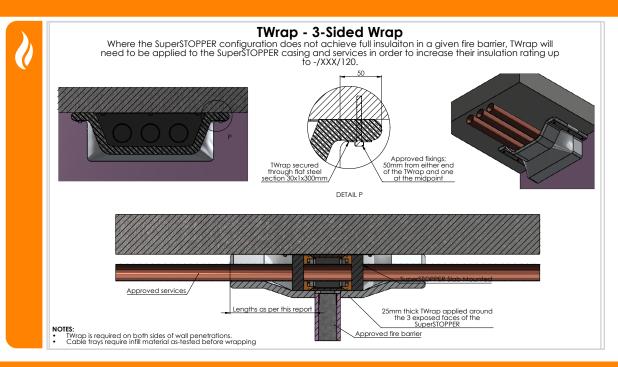
In some instances, it is appropriate to For a 60 minutes insulation, simply wrap TWRAP™ around the required (or all services), ensuring each end overlaps itself by 50mm, and butt it up against the SuperSTOPPER®'s foam end plugs. Secure the TWRAP™ in three locations with reinforced aluminium tape or stainless-steel cable ties around the entire circumference. Contact_technical@tgroup.com.au_to see if this is appropriate on your site.

WRAP UP TO 120MIN



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

Some instances don't need any TWrap at all, check the FRL tables or contact technical@taroup.com.au to confirm.







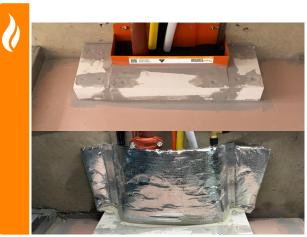




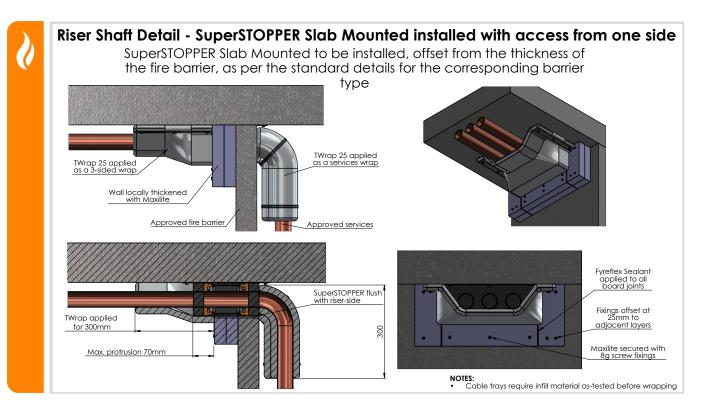
RISER SHAFT



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



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











& OVERSIZED OPENINGS

Stepped Slabs

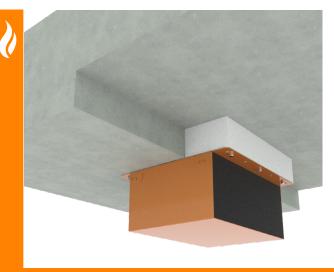
FyreBOARD Maxilite can be used to pack out the gap to the SuperSTOPPER® Slab-

Mount. Suitable for steps up to 60mm, with min 100mm long fixings used to secure the SuperSTOPPER® Slab-Mount to the con-

crete through the Maxilite Board. Refer to

page 52 for Technical Drawing.

Where a step up in the slab is present,



Oversized Openings

For openings cut too large, up to 60mm FyreBOARD Maxilite can be used to pack out the opening and reduce the annular gap. This can also be done on he sides of the SuperSTOPPER® to reduce the width of the penetration. Refer to page 53 for Technical Drawing.



Wall Junctions

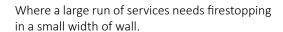
For SuperSTOPPER® Slab-Mount systems installed against adjacent barriers, FyreFLEX Sealant is applied to the perimeter (20mm depth) of the box so daylight cant be seen through, and TWrap can be installed 2-sided to the soffit and the wall. **Refer to page** 54 for Technical Drawing.



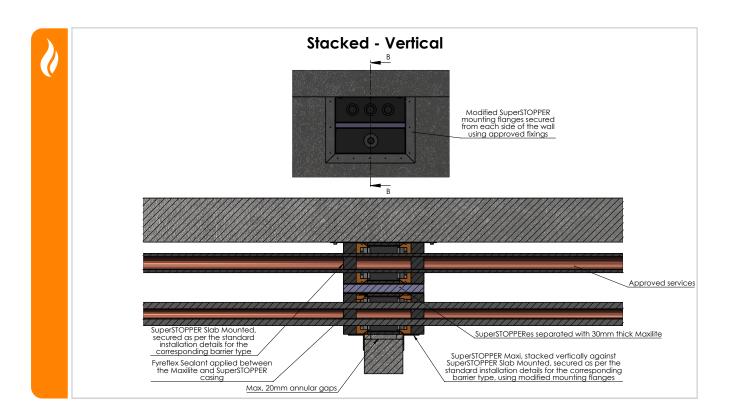


SUPERSTOPPER® DOUBLE VERTICAL

SUPERSTOPPER® DOUBLE















SUPERSTOPPER® DOUBLE HORIZONTAL

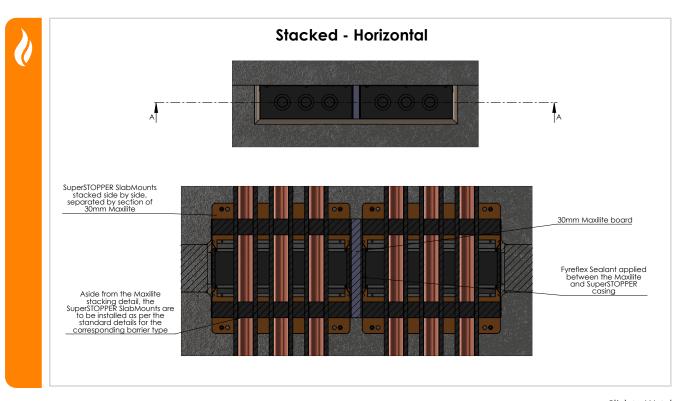
DOUBLE HORIZONTAL



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



Double vertical SuperSTOPPER® installed above a doorway to allow for the provision of large amounts of services in a small space.











INTRWALL / PARTY WALLS

If TWRAP $^{\text{m}}$ is required for the services to achieve the insulation rating as described in the tables on pages 6-15, install as follows.

STANDARD SUPERSTOPPER®



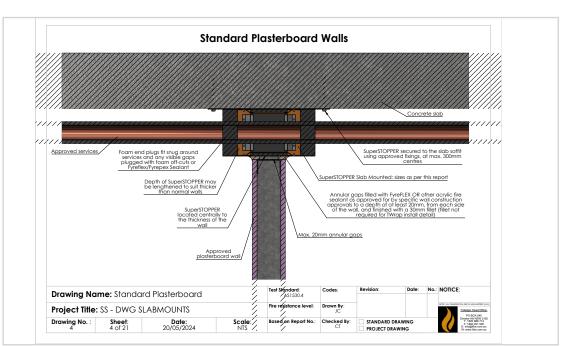
SuperSTOPPER® top plate, body and approved services all installed as standard to the soffit, with foam end plugs installed around the services.

INSTALL WALL



Install the wall as per the manufacturer's instruction.

FINISH



If the wall does not already require it, install a layer of FR plasterboard at the head of the wall.

Install the FyreFLEX Sealant to the full depth of the plasterboard & TWrap to the required length.



Click to Watch







INSTALLATION CHECKLIST

PLASTERBOARD

SuperSTOPPER® Label/Identifier		
No.		
Installer Name:		
Company:		
Site:		

Ins	tallation Checklist	Satisfactory	Action Required
1	Is the SuperSTOPPER® located centrally to the thickness of the wall?		
2	Are correct fixings (M6 masonry Anchors, 4mm gas or powder actuated anchors, or any other steel anchor of equal pull out rating) used to fix the top side of SuperSTOPPER® onto the floor slab?		
3	Are there 2 fixings per side, or maximum gap between the anchors at 300mm?		
4	Does the size of the wall opening allow for annular gap between the opening and SuperSTOPPER® within 5 to 20 mm?		
5	Are the services running through the SuperSTOPPER® as per the approved services list on the technical manual?		
6	Is the stud framing around the perimeter of the box installed as per the wall manufacturer's instructions?		
7	Is the sealant applied to correct depth of 20 mm on each side with a (fillet size of approximately 30x30mm) Note: If 3-sided wrap is used, fillet not required		
8	Is the foam snugly fit around the services and any visible gaps covered with foam off-cuts or FyreFLEX® sealant?		
Sei	vices only wrap (if applicable)		
1	Does the TWRAP™ wrap around the services and overlaps itself by 50mm?		
2	Is the TWRAP™ butted against the SuperSTOPPER® foam and end plugs?		
3	Is the TWRAP™ secured in three locations with reinforced aluminium tape or stainless-steel cable ties around the entire circumference?		
3-s	ided wrap (if applicable)		
1	Does the TWRAP™ cover the services including the SuperSTOPPER® and flaring at least 50mm at edges and against the slab?		
2	Is the correct steel tab (30x1x300mm) used to hold the TWRAP™ in place on both sides of the SuperSTOPPER®?		
3	Are correct fixings M6 masonry Anchors used to fix the steel tab and TWRAP™ onto the floor slab, 3x per side?		
4	Is the TWRAP™ butted up against the wall, around the box?		
F	CHILL COLUMN COL	250001111	

For a full list of installation instructions, refer to the installation $\underline{pages~23-34}$ of this SuperSTOPPER® Slab-Mount Technical Man-







INSTALLATION CHECKLIST

AAC PANEL WALL

SuperSTOPPER® Label/Identifier	
No.	
Installer Name:	
Company:	
Site:	

Ins	tallation Checklist	Satisfactory	Action Required
1	Is the SuperSTOPPER® located centrally to the thickness of the wall?		
2	Are correct fixings (M6 masonry Anchors, 4mm gas or powder actuated anchors, or any other steel anchor of equal pull out rating) used to fix the top side of SuperSTOPPER® onto the Floor slab?		
3	Are there 2 fixings per side, or maximum gap between the anchors at 300mm?		
4	Does the size of the wall opening allow for annular gap between the opening and SuperSTOPPER® within 5 to 20 mm?		
5	Are the services running through the SuperSTOPPER® as per the approved services list on the technical manual?		
6	Are the Hebel® wall's head track angles installed as per the wall manufacturer's instructions on both sides?		
7	Is the sealant applied to correct depth of 20 mm on each side with a (fillet size of approximately 30x30mm) Note: If 3-sided wrap is used, fillet not required		
8	Is the foam snugly fit around the services and any visible gaps covered with foam off-cuts or FyreFLEX® sealant?		
Se	rvices only wrap (if applicable)		
1	Is the FyreBOARD Maxilite® wall collar constructed correctly? (One side of the penetration using three 30mm thick x 100 mm FyreBOARD Maxilite® strips) *(FyreBOARD Maxilite® collar not needed if planning to use 3-sided TWRAP™)		
2	Are the boards fixed using 10gx60mm plasterboard screws at 150mm centres and flush with the wall opening?		
3	Is the resulting gap sealed with FyreFLEX® Sealant (full depth and fillet size of 30x30mm)?		
4	Does the TWRAP™ wrap around the services and overlaps itself by 50mm? (TWRAP™ only needs to be applied on conductive services)		
5	Is the TWRAP™ butted against the SuperSTOPPER® foam and end plugs?		
6	Is the TWRAP™ secured in three locations with reinforced aluminium tape or stainless- steel cable ties around the entire circumference?		
3-9	ided wrap (if applicable)		
1	Does the TWRAP™ cover the services including the SuperSTOPPER® and flaring at least 50mm at edges and against the slab?		
2	Is the correct steel tab (30x1x300mm) used to hold the TWRAP™ in place on both sides of the SuperSTOPPER®?		
3	Are correct fixings M6 masonry Anchors used to fix the steel tab and TWRAP™ onto the Floor slab, 3x per side?		
4	Is the TWRAP™ butted up against the wall, around the box?		

For a full list of installation instructions, refer to the installation pages 23-34 of this SuperSTOPPER® Slab-Mount Technical







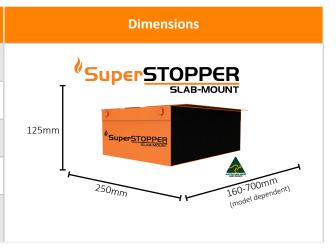
SYSTEM RANGE







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



SYSTEM COMPONENTS

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





COMPLIANCE



COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE (NCC)

Formerly known as BCA

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

Trafalgar Fire SuperSTOPPER® 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®, concrete floors, plasterboard ceilings, corex walls etc
- Services: Bare and insulated metal pipes, cable trays and cable bundles, aluminium cables, 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
- SuperSTOPPER® Variants: Slab-Mount, Slab-Mount Bambino, Cast-in, Maxi & Mini (retrofit)

When choosing a multiple service transit penetration system like SuperSTOPPER®, 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

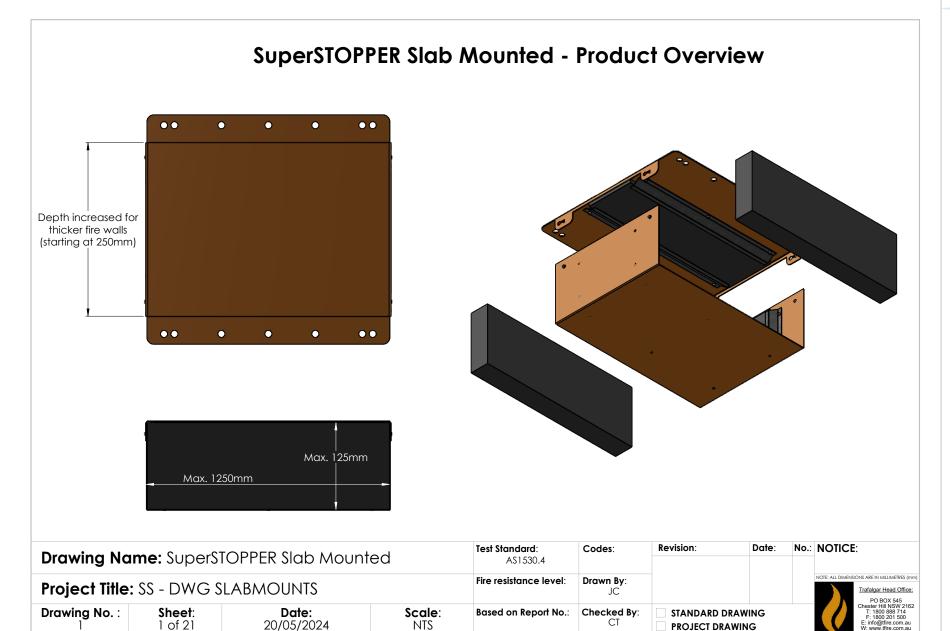
The above-mentioned fire testing reports have all been conveniently summarised into **BRANZ** assessment report **FC10266** (available on www.tfire.com.au) which neatly tabulates the approved services in a range of fire barriers, for all SuperSTOPPER® variants and applications, and covers only minor 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.











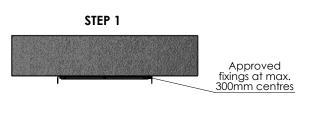
PROJECT DRAWING

NTS

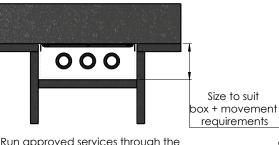
20/05/2024



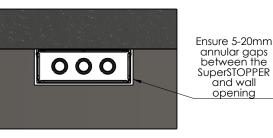




STEP 2



STEP 3



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

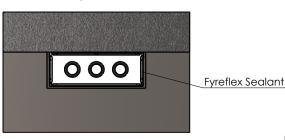
Run approved services through the SuperSTOPPER, ensuring they will be located within the completed SuperSTOPPER opening.

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

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

NOTE: The SuperSTOPPER Slab Mounted can also be retrofit into existing wall systems

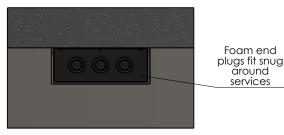
STEP 4



STEP 5



STEP 6



Fill annular gaps with Fyreflex Sealant to a depth of at least 20mm, from each side of the wall Retrieve foam end plugs and form openings to match the services within the SuperSTOPPER. Cutting a slit through these openings will allow for the plug to be opened and inserted around the existing Fit foam end plugs tightly around the services, from each side of the SuperSTOPPER, and plug any gaps with foam off cuts or Fyreflex/Fyrepex Sealant. Continue to TWrap drawings if wrapping will be required for full insulation.

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

Drawina Na	me: Installa	tion Overview		Test Standard: AS 1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
•		SLABMOUNTS		Fire resistance level:	Drawn By:				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office;
Drawing No.:	Sheet : 2 of 21	Date: 20/05/2024	Based on Report No.:	Checked By:	STANDARD DRA			PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au	



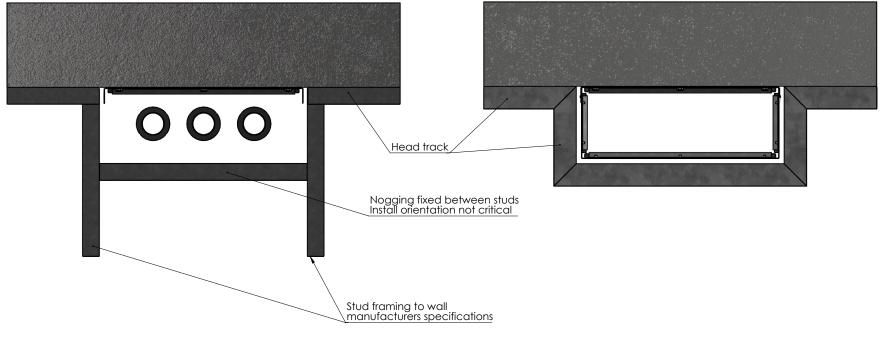




Plasterboard framing details

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

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



Notes:

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

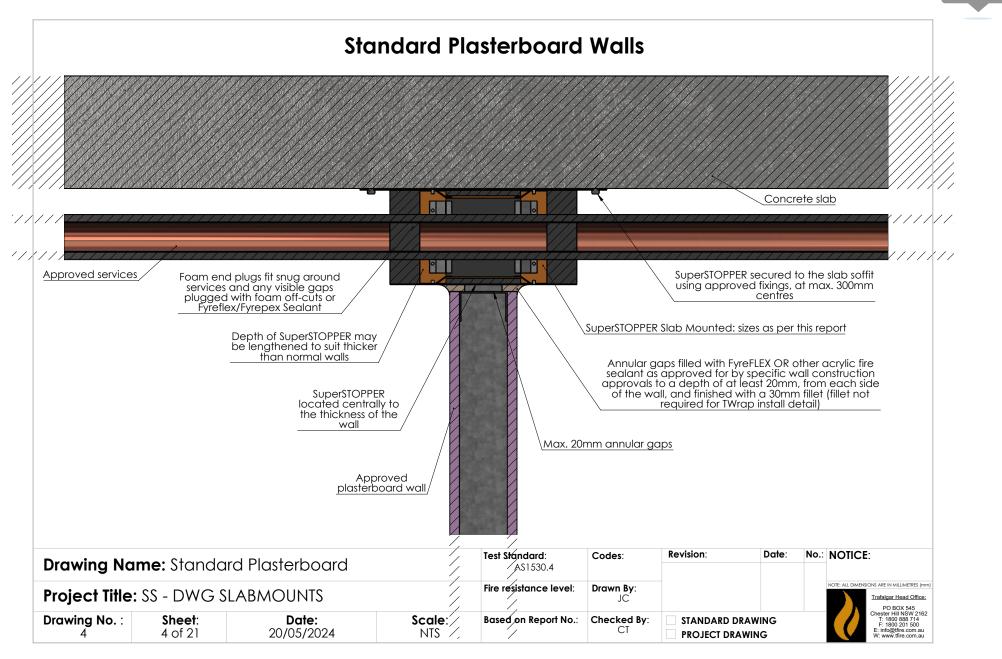
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Drawing No	ime: Plaster	framing details		AS1530.4					
Project Title	: SS - DWG S	LABMOUNTS		Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office: PO BOX 545
Drawing No. :	Sheet : 3 of 21	Date: 20/05/2024	Scale: NTS	Based on Report No.:	Checked By:	STANDARD DRAW			PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au



Click

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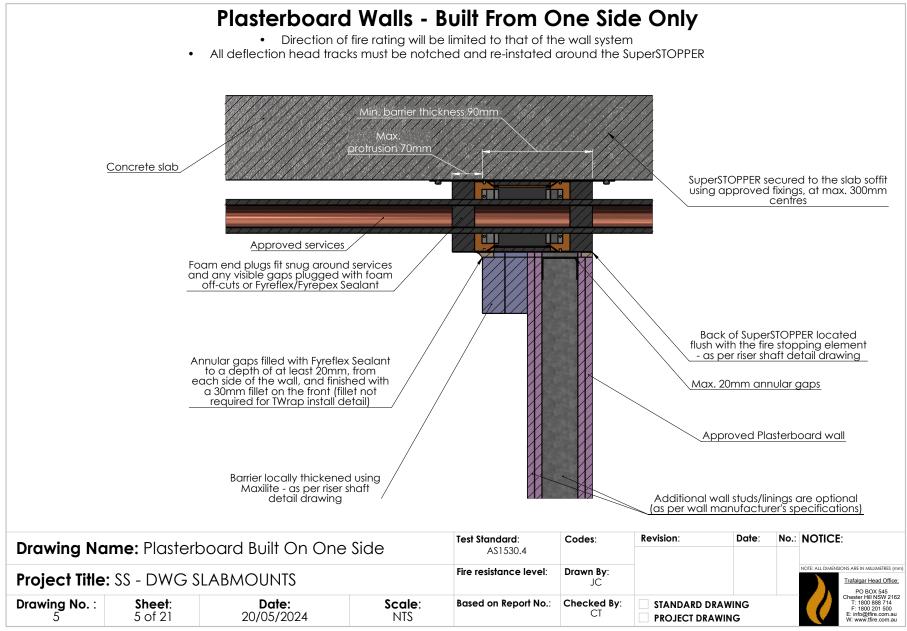






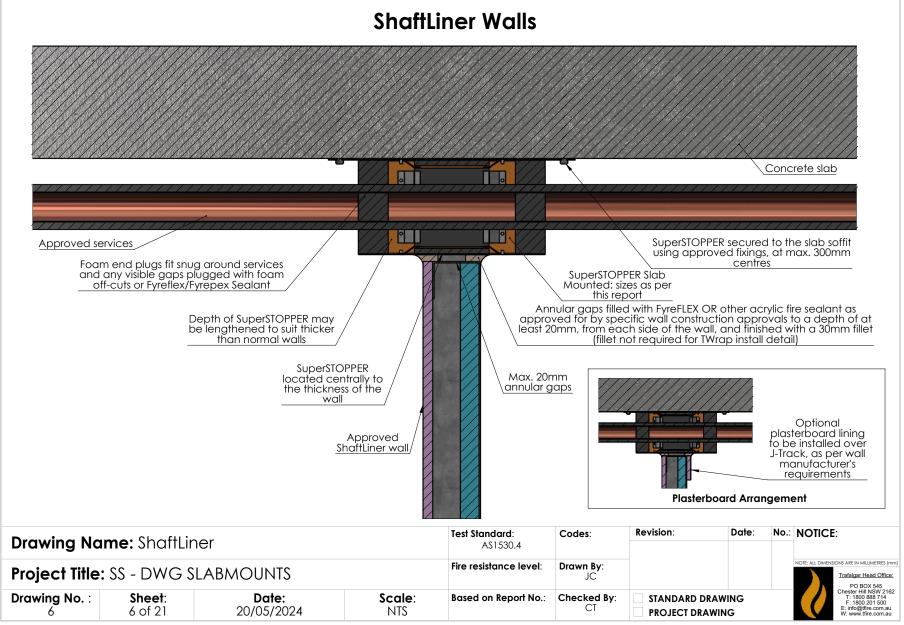








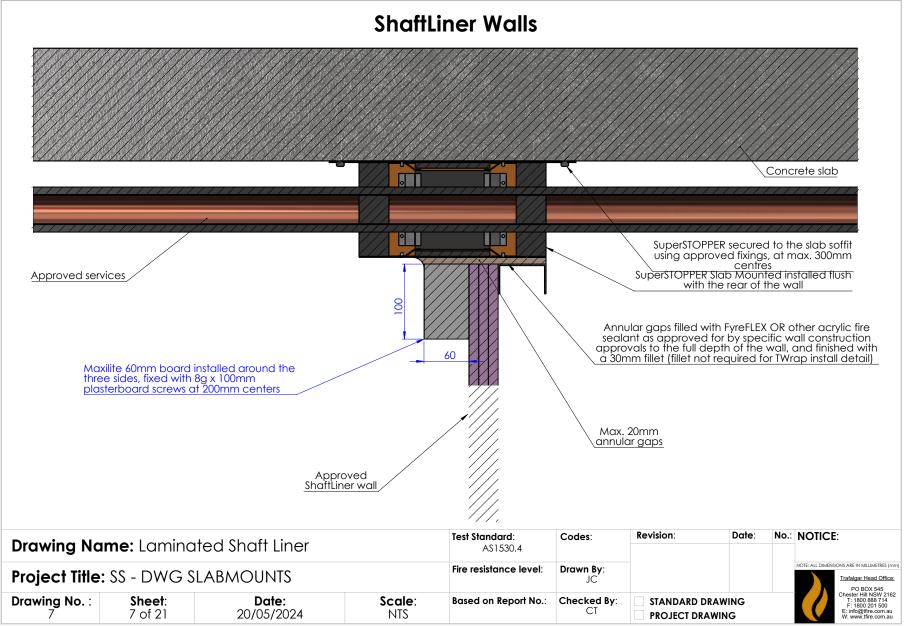








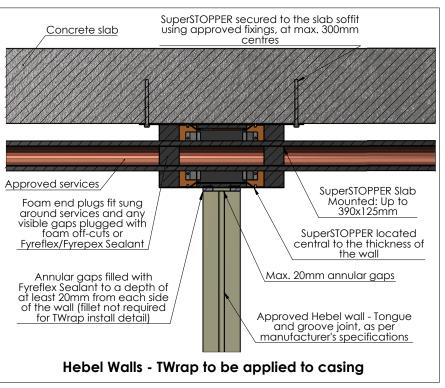


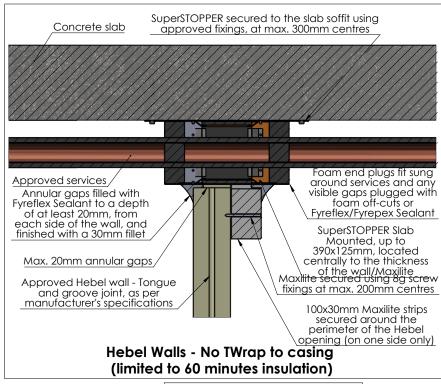


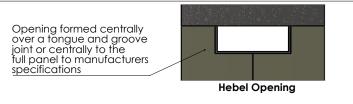


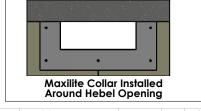


Hebel/Walsc AAC Walls - Openings up to 400x170mm









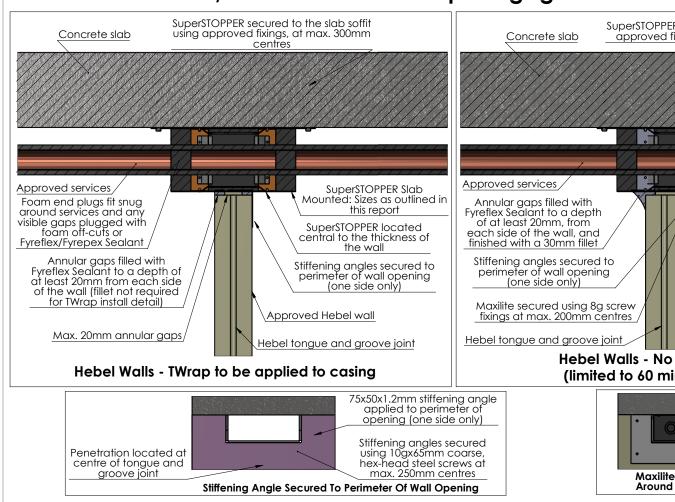
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Project Title	: SS - DWG S	LABMOUNTS		Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office: PO BOX 545
Drawing No.:	Sheet : 8 of 21	Date: 20/05/2024	Scale : NTS	Based on Report No.:	Checked By:	STANDARD DRAW			PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au

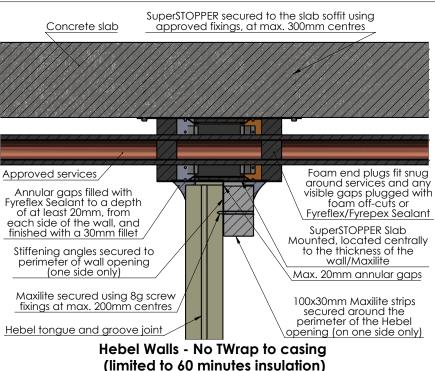






Hebel/Walsc AAC Walls - Openings greater than 400x170mm





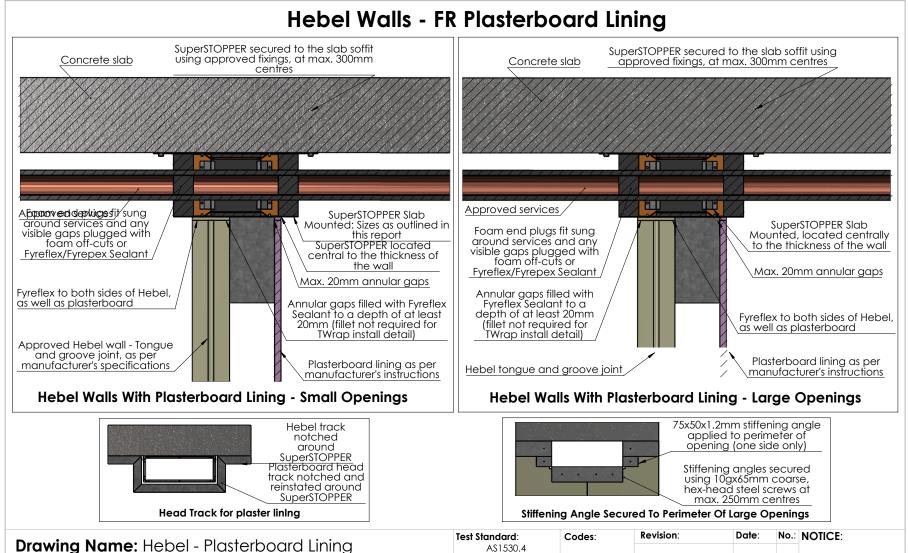


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Drawing No	ime: nebel/v	vaisc - Large Ope	nings	AS1530.4					
Project Title	: SS - DWG SL	_ABMOUNTS		Fire resistance level:	10				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office: PO POY 545
Drawing No.:	Sheet : 9 of 21	Date: 20/05/2024	Scale : NTS	Based on Report No.:	Checked By:	STANDARD DRAV			Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au











Drawing No.:

Project Title: SS - DWG SLABMOUNTS

Sheet:

10 of 21

Date:

20/05/2024

Trafalgar Head Office:

PO BOX 545
Chester Hill NSW 2162
T: 1800 888 714
F: 1800 201 500

AS1530.4 Fire resistance level:

Based on Report No.:

Scale:

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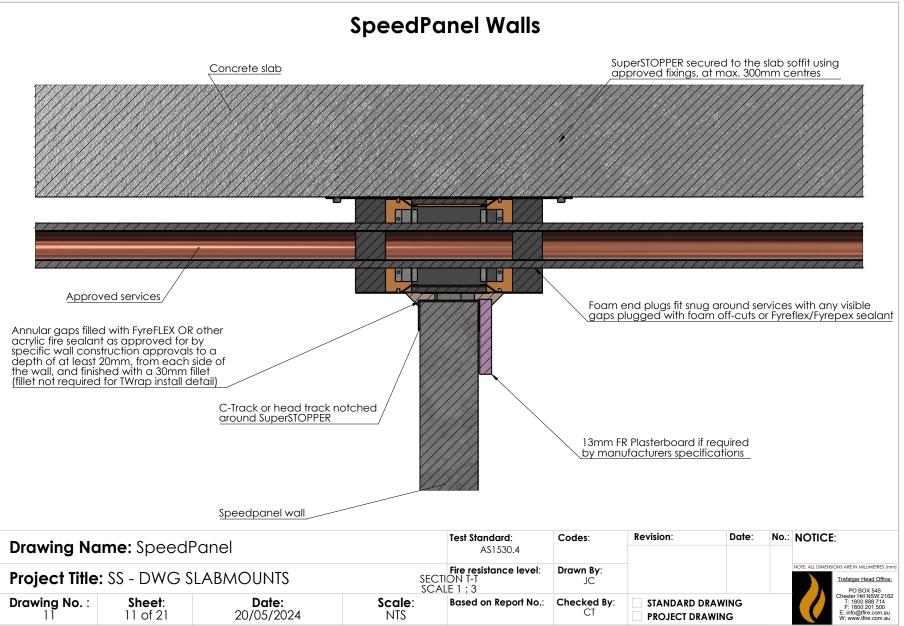
Drawn By:

Checked By:

STANDARD DRAWING

PROJECT DRAWING

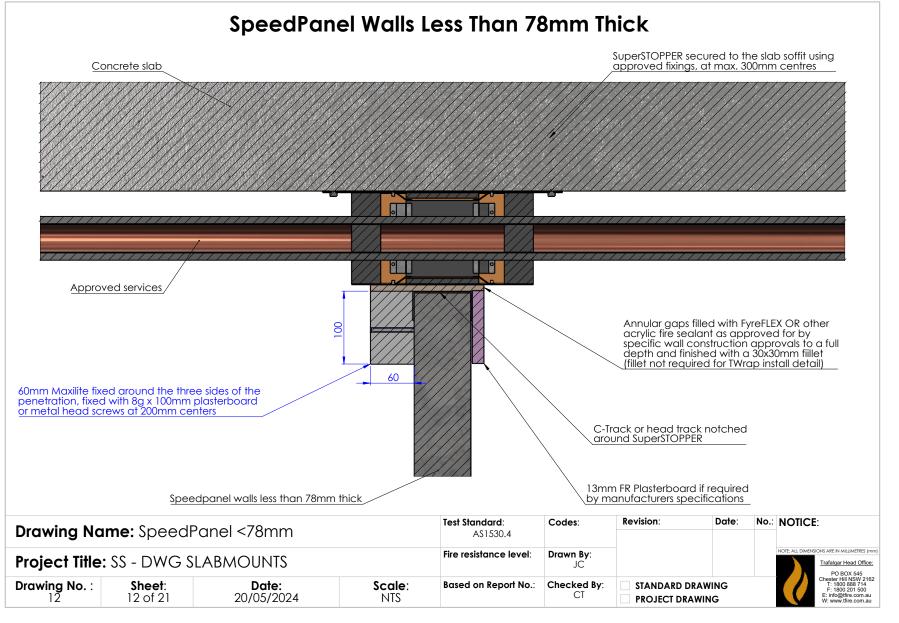








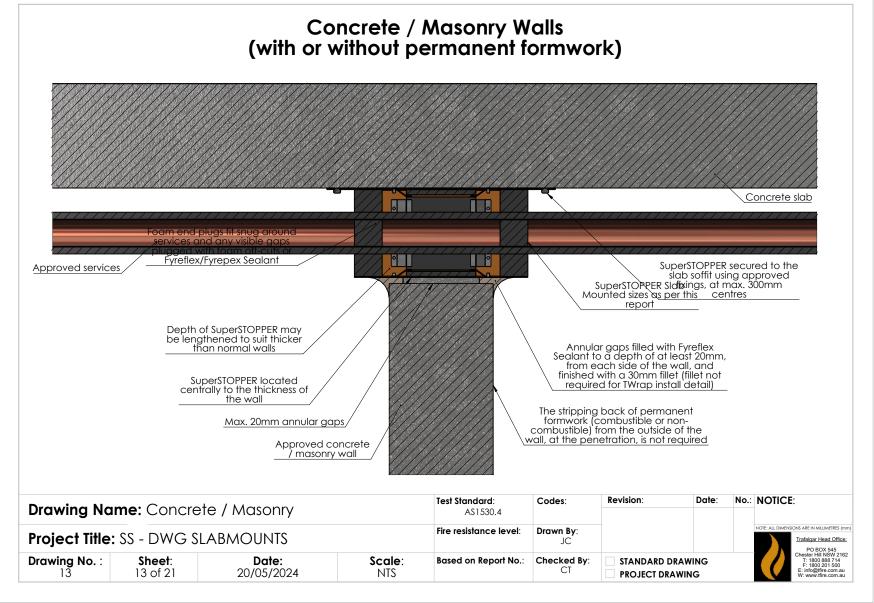








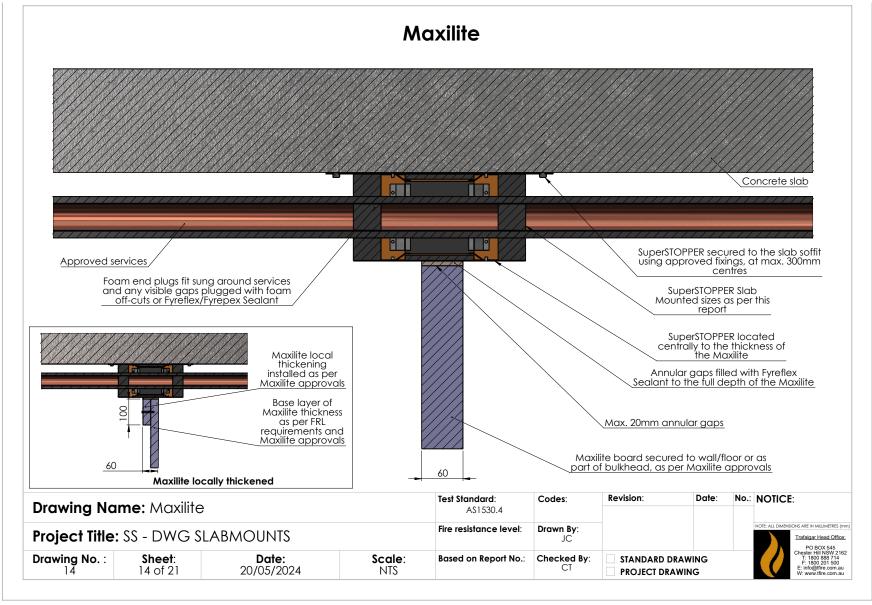








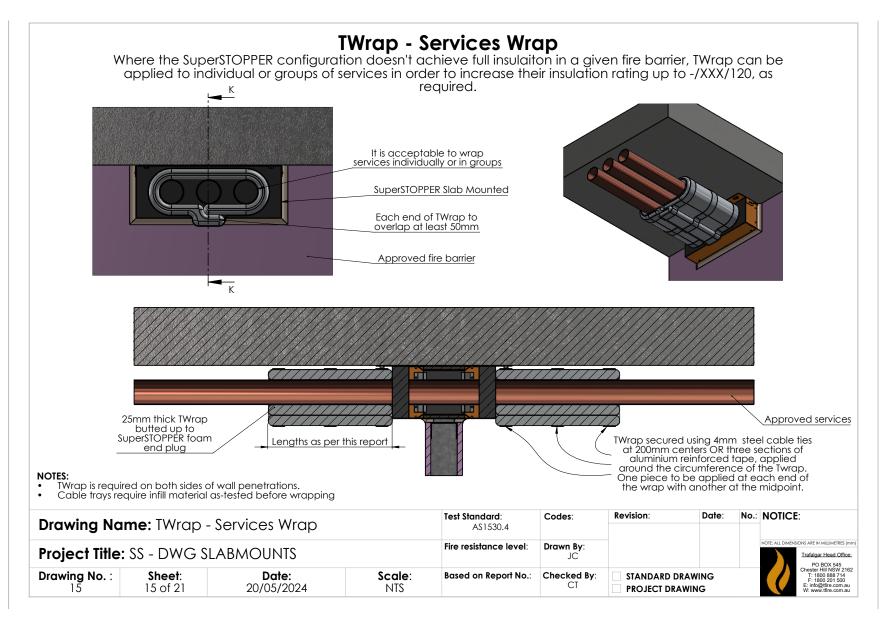








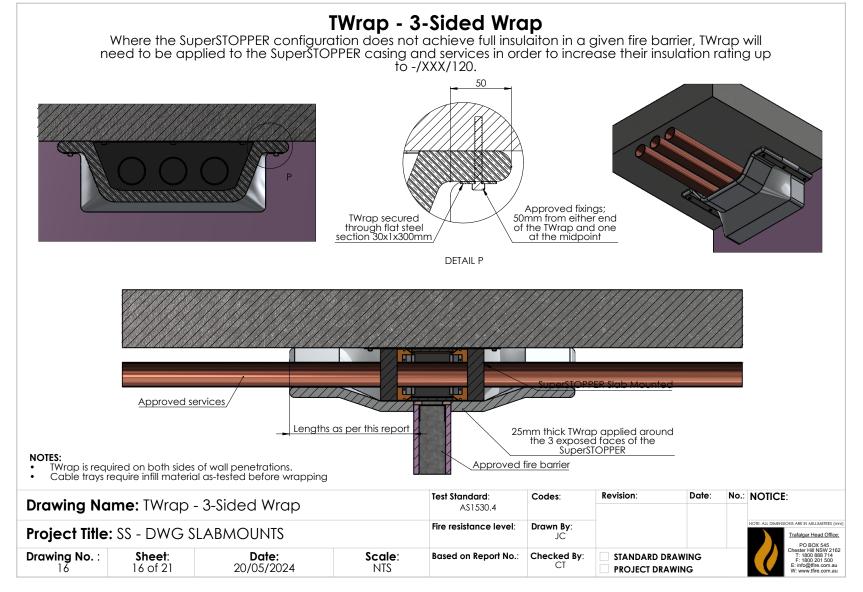








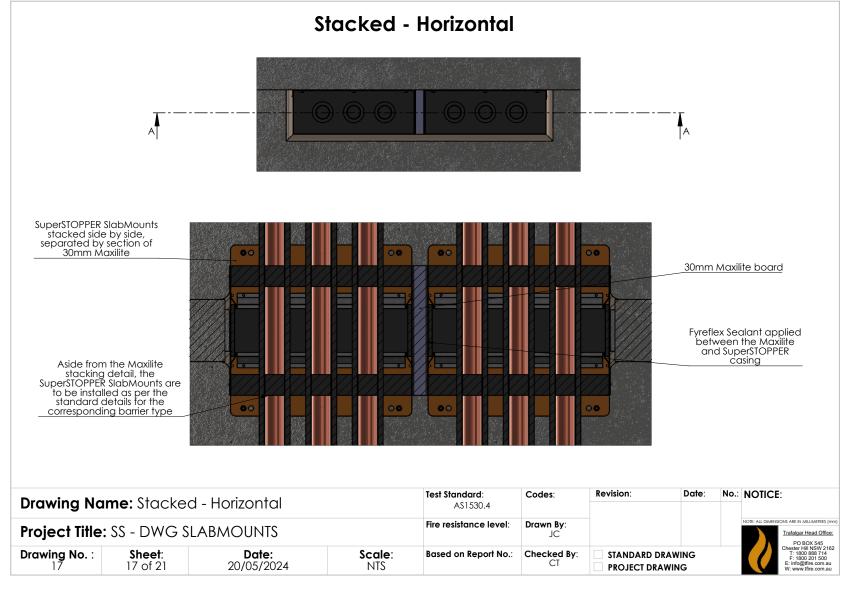








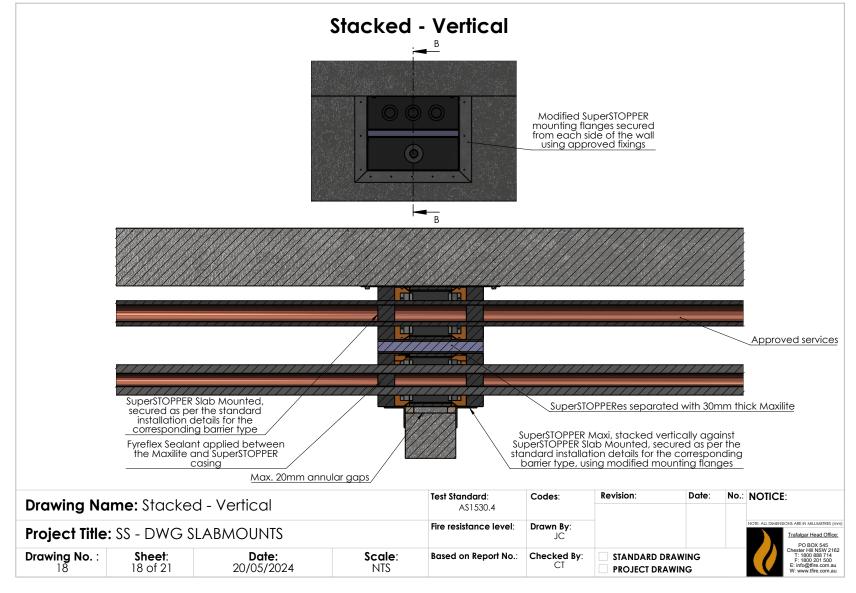








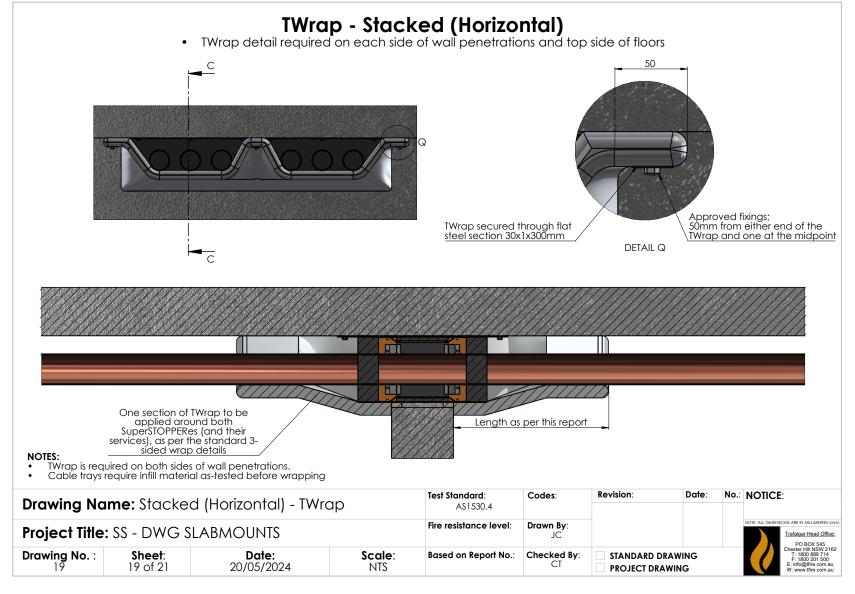








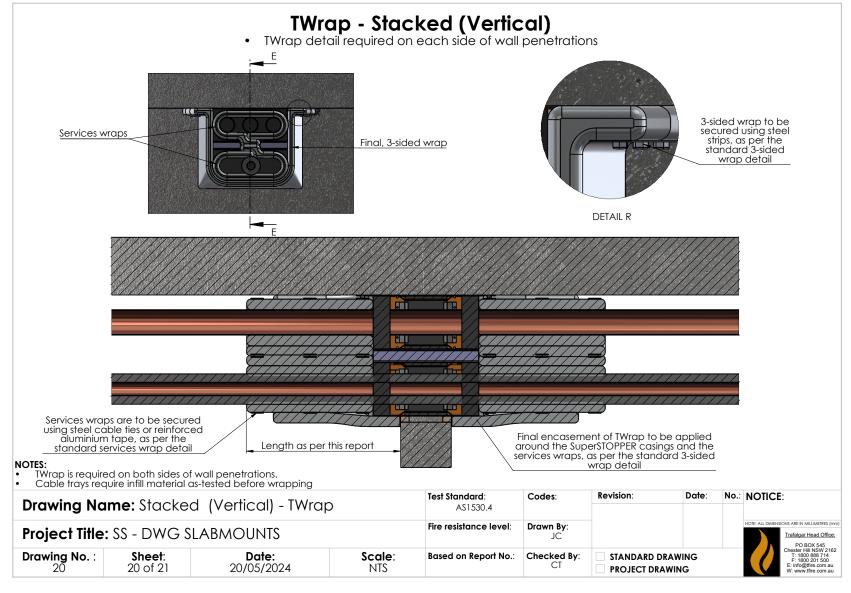








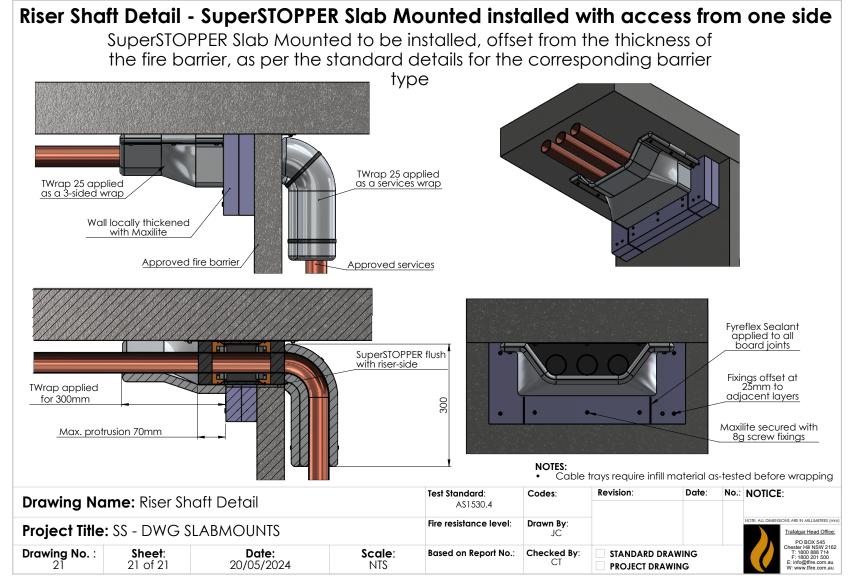










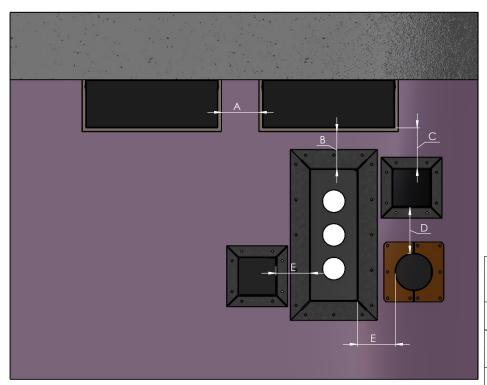


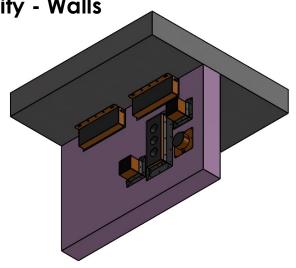












Key	SuperSTOPPER Configuration	Minimum Separation Requirment (between holes in wall)
Α	SlabMount to SlabMount	200mm of barrier between openings
В	SlabMount to Maxi	100mm of barrier between openings
С	SlabMount to Mini	100mm of barrier between openings
D	Mini to Mini OR Maxi to Maxi	100mm of barrier between openings
Е	Mini to Maxi	100mm of barrier between openings

NOTES:

- Barrier must be designed or approved for the openings/spacing required.
- Double-Stacking Maxi/Slab-Mount boxes allows closer penetrations.
- For separtion distances between non-Superstopper penetrations contact Trafalgar PRIOR to installation.

Duran vila ar Na	Da.a.d.		Test Standard:	Codes:	Revision:	Date:	No.:	NOTICE:	
Drawing Name: Penetration Separation - Walls			A\$1530.4						
Project Title	:: SuperSTOP	PER Install Variation	Fire resistance level:	Drawn By: JC				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm) Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162	
Drawing No.:	Sheet : 3 of 9	Date: 14/05/2024	Scale : NTS	Based on Report No.:	Checked By: CT	STANDARD DRA			Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au

