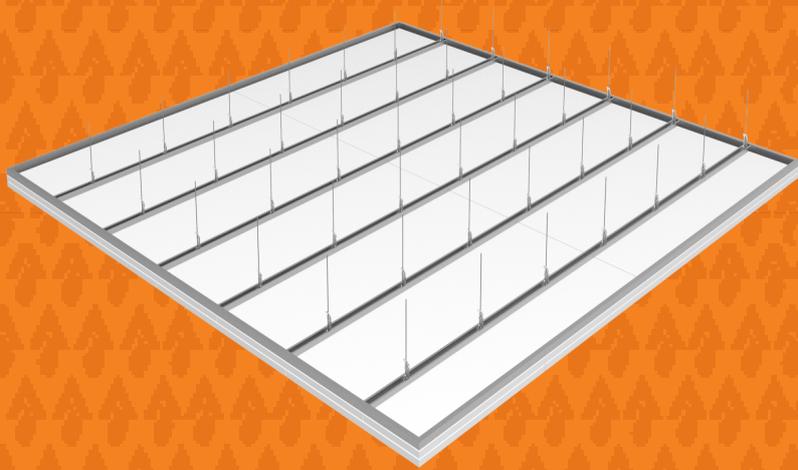


# TRAFALGAR COREX CEILING

Trafalgar Corex board is an impact resistant gypsum board that can be used to construct lightweight fire rated ceiling systems that are fully tested to AS1530.4: 2014.



## KEY FEATURES



- Lightweight boards
- Multiple framing options
- Thin ceiling footprint
- Impact resistant board
- Compliance with AS1530.4-2014 and AS4072.1
- Easy to cut and handle
- Top Cross Rail not required
- Low thermal conductivity
- Non-combustible
- Environmentally friendly/sustainable
- Penetrations tested

## APPLICATIONS



- Lightweight Ceiling systems
- Suspended Ceilings
- Self Supporting Membrane Ceilings
- FRLs from 45, 60 and 120 minutes
- Modular constructions
- Riser shaft ceilings

## TRADES



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# TRAFALGAR COREX

## WHAT IS TRAFALGAR COREX ?

A fire rated ceiling is a horizontal fire separating element which divides a fire compartment and thus prevents the spread of fire from below the ceiling.

Trafalgar Corex boards are suitable for constructing ceilings using lightweight steel furring channels and suspension rods to secure to the floor or structure above it- no top cross rails required! Trafalgar Corex is a lightweight, high performance fire rated board. It has a glass-reinforced gypsum based material, which is environmentally friendly and meets all requirements for asbestos and volatile organic compounds (VOC's) with sustainability certification.

Trafalgar Corex boards are able to withstand high temperatures while remaining stable and crack free, providing an ideal product for fire protection. Trafalgar Corex is approved to the current AS1530.4 – 2014 and AS4072.1 as a fully compliant fire rated ceiling.

## APPLICATIONS: EXPANDED

Trafalgar Corex board systems are tailored to modular construction projects where various types of lightweight fire separating elements are required, such as:

- Lightweight ceilings
- Lightweight shaft walls and solid partitions
- Protection of structural steel beams and columns
- Tested with penetration systems to allow building services
- Riser Shaft Wall Systems
- Vertical Bulkhead Systems
- Modular Construction

And more! Take a look at all [Trafalgar Corex Tested Applications, click here.](#)

# PRODUCT SPECIFICATIONS

## TRAFALGAR COREX BOARD

PROPERTY	12.5mm THICK	15mm THICK	20mm THICK	25mm THICK
Length	2000mm			
Width	1200mm			
Average Weight	11.5kg/m <sup>2</sup>	13.5kg/m <sup>2</sup>	17.6kg/m <sup>2</sup>	21.9kg/m <sup>2</sup>
Weight per sheet	27.6kg	32.4kg	42.24kg	52.6kg
Flexural Strength (vertical)	≥725N	≥870N	≥1160N	≥1450N
Flexural Strength (horizontal)	≥300N	≥360N	≥450N	≥600N
Thermal Conductivity	0.25W/mK			

TRAFALGAR COREX CONSTRUCTION SPECS	Boards	2x12.5mm	2x15mm	2x25mm
	FRL	-/45/45	-/60/60	-/120/120
	Flexural strength (Perpendicular)	≥ 725 N	≥ 870 N	≥ 1450 N
	Flexural strength (Parallel)	≥ 300 N	≥ 360 N	≥ 600 N
	Furring Channel	Min. 28x38x0.6mm		
	Furring Channel Centres	Max. 600mm		
	J Track/U Track	Min. 28x0.5mm BMT		
	Joint sealant	Trafalgar FyreFLEX acrylic sealant		
	Joint tape	Fibreglass joint tape + plaster compound		



# FRL DETAILS

## FIRE RATING – HOW IS FIRE PERFORMANCE MEASURED?

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

### FRL 120/120/120

(example)

 <p><b>Structural Adequacy</b></p> <p>The ability of the building element to support the weight of adjacent building elements.</p> <p>ie: a brick wall supporting a concrete floor slab above.</p>	 <p><b>Integrity</b></p> <p>The ability of an element to prevent the passage of flames and hot gasses.</p> <p>ie: a plasterboard wall remaining intact and not allowing holes to form.</p>	 <p><b>Insulation</b></p> <p>The ability of an element to resist heat transfer from the exposed face to the unexposed face.</p> <p>ie: a bundle of cables remaining below a set temperature limit on the unexposed side of the wall penetration system.</p>
--	--	--

*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 Trafalgar Corex board can achieve the integrity performance for up to 2 hours when used as a ceiling and can stop the direct spread of fire through to the top side of the enclosure.

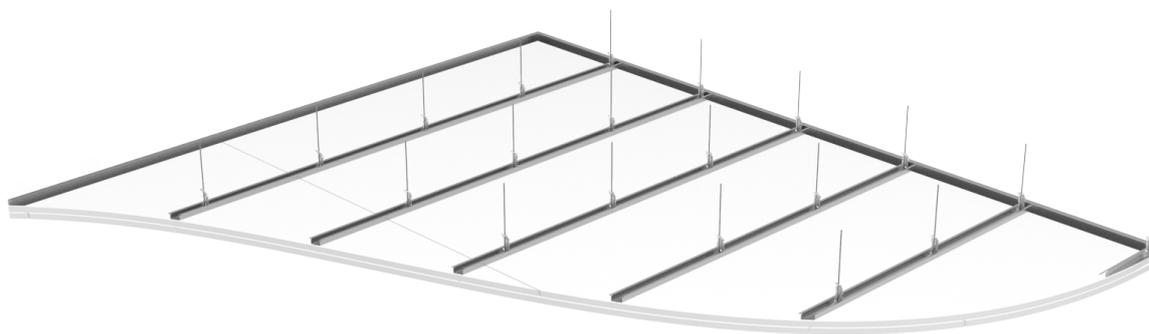
## INSULATION (TEMPERATURE RISE)

Heat transfer (or heat rise) through a Trafalgar Corex ceiling will occur at varying levels depending on the thickness of the board used. Refer to the FRL tables below for more information on the FRL's that can be achieved depending on the thickness of the ceiling.

# FRL TABLES

## COREX SUSPENDED CEILINGS

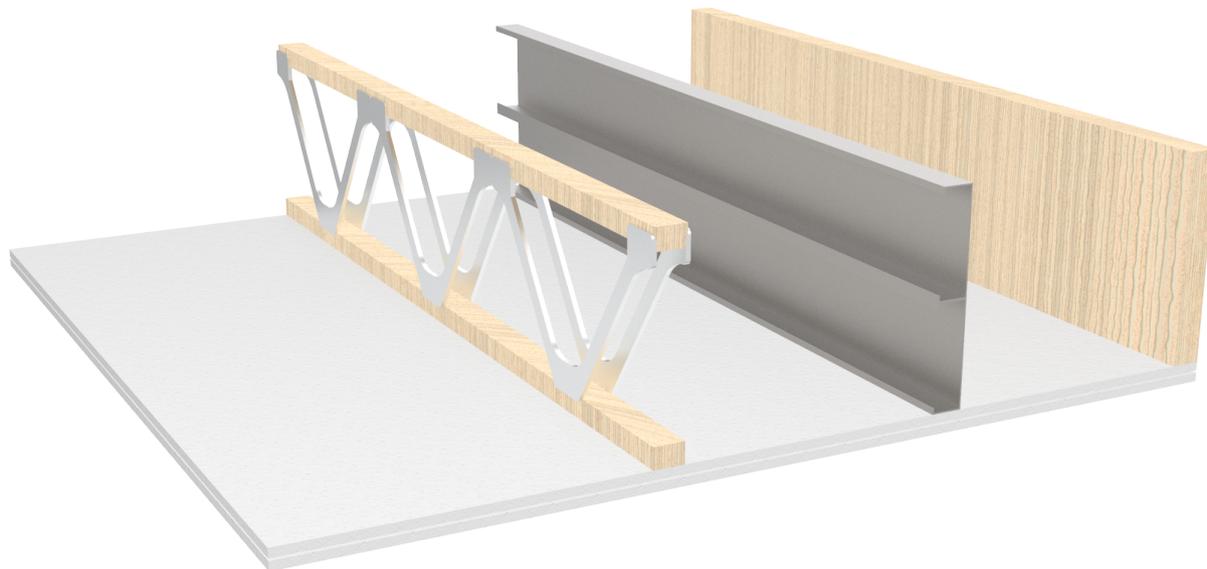
Board Thickness	Furring Channel	Furring Channel Spacing*	FRL	Report Number
2 x 12.5mm	Min. 28x38mm	Max. 600mm	-/45/45	FAS220367
2 x 15mm			-/60/60	
2 x 25mm			-/120/120	



# FRL TABLES

## COREX SELF SUPPORTING MEMBRANE CEILINGS

Board Thickness	Joist Types	Joist Spacing	FRL	Report Number
2 x 12.5mm	Open Web Joists, Steel Purlins Timber Joists	Max. 600mm	-/45/45	FAS220367
2 x 15mm			-/60/60	
2 x 25mm			-/120/120	



# FRL TABLES

## TRAFALGAR COREX CEILING SERVICE PENETRATIONS

The FyreBOX Maxi and Mini systems are tested and approved for use in various ceilings including Corex board and plasterboard ceilings that meet the requirements listed. Penetrations MUST be lined with 60mm Maxilite board as shown in the installation drawings.

### Steel Framed Corex Ceiling Construction

Ceiling facing thickness	FRL	RISF
Min. 2x 12.5mm	-/45/45	-
Min. 2x 15mm	-/60/60	-
Min. 2x 25mm	-/120/120	-

The FRL's listed below against service penetrations are limited to the FRL and RISF rating of the ceiling system they are installed into.



Service Type	Service Specification		FRL *	TWrap Length (mm)
<b>Plastic Pipes</b>	PEX pipes	Up to 32mm OD	-/120/120	300
	PEX-Al-PEX pipes	Up to 32mm OD	-/120/120	300
	PVC pipes	Up to 80mm OD	-/120/120	300
<b>Bare Metal Pipes</b>	Copper pipes	Up to 42mm OD	-/120/120	300
		Up to 100mm OD	-/120/120	600
	Steel pipes	up to 50mm OD	-/120/120	300
		Up to 100mm OD	-/120/120	600
<b>Metal Pipes Insulated**</b>	Copper pipes	Up to 50mm OD with FR insulation	-/120/120	300
	Stainless Steel pipes	Up to 50mm OD with EPS of PE insulation and rockwool	-/120/120	300
	Pair Coils	Up to 9.5 & 19mm with 20mm FR insulation (OR 13mm PE) with 10mm OD cable	-/120/120	300
<b>Power Cables - Aluminium Core***</b>	4x Core AL cables	Up to 4x 240mm <sup>2</sup> + optional 90mm <sup>2</sup>	-/90/90	300
	Single core AL cables	Up to 1x 400mm <sup>2</sup>	-/90/90	300
<b>Power Cables - Copper Core</b>	TPS cables	Up to 10x per bundle	-/120/120	300
	3x Core cables	19mm OD 3C + E	-/120/120	300
	AS1530.4 Appendix D cable sets on cable trays	Applies to all copper core power cables and cable trays up to 1000mm wide	-/120/120	600
<b>Comms Cables</b>	AS1530.4 Appendix D cable sets on cable trays	Copper core comms cables and cable trays up to 1000mm wide	-/120/120	450
	Fibre Optic cables	NBN grade cable	-/120/120	300
	CAT6	Up to 150x per bundle	-/120/120	300
<b>Conduits</b>	uPVC Conduits Rigid or Flexible	Up to 32mm OD (with or without cables)	-/120/120	300

\*Applies only when installed underneath a load bearing non combustible floor

\*\*With or without heat trace cable

\*\*\*Aluminium cable bundles spaced 50mm apart when installed on cable tray

# FRL TABLES

## FYREFLOOR SERVICE PENETRATIONS

Please refer to the full [FyreFLOOR technical manual](#) for construction details of the floor and ceiling system. This table refers to service penetrations. Contact us at [technical@tgroup.com.au](mailto:technical@tgroup.com.au) or call us at 1800 888 714 for more information



### Floor Boards:

2x19mm Trafalgar Inex Board



### Ceiling Lining:

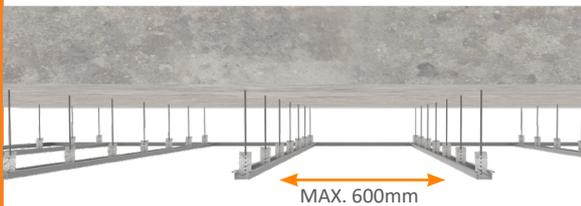
Minimum 2x15mm Trafalgar Corex Board

Application		Service Specification	System	FRL	Test Report
PVC Floor Waste		100mm PVC	<a href="#">BladeRUNNER</a>	-/120/90 +60 RISF	FT1883
Threaded Rod		M10 Steel Rod	<a href="#">FyreFLEX Sealant</a> and <a href="#">TWrap</a> (150mm above ceiling)	-/120/120 +60 RISF	
Paircoil with associated cable		Pair coils up to 3/8" and 5/8" with FR insulation up to 19mm & 25mm PVC drain	<a href="#">FyreBOARD Maxilite</a> & <a href="#">FyreCOLLAR Premium Retrofit Collar</a>	-/120/120 +60 RISF	
Communications & Data cables		300mm Cable Tray with up to 20 x CAT6, 10 x TPS, 7 x 3C+E (19mm OD)	<a href="#">FyreBOARD Maxilite</a> and <a href="#">TWrap</a>	-/120/120 +60 RISF	
		Up to 10x fire TPS cables		-/120/120 +60 RISF	
Conduits		PVC 25mm rigid conduit	<a href="#">FyreBOARD Maxilite</a> & <a href="#">FyreCOLLAR Premium Retrofit Collar</a>	-/120/120 +60 RISF	
Sprinkler Head		NB15 Steel Pipe with Commercial grade sprinkler	<a href="#">FyreFLEX Sealant</a> and 300mm <a href="#">TWrap</a>	-/120/120 +45 RISF	

# INSTALLATION

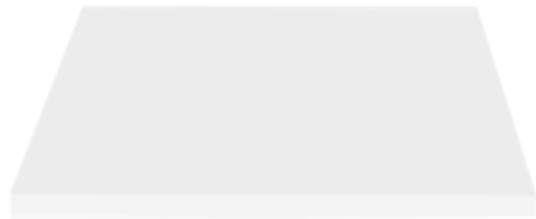
## TRAFALGAR COREX CEILING

### FRAME



Frame the ceiling using min. 28x38mm Furring Channels at max. 600mm centres. Alternative framing options available, refer to [Page 14](#)

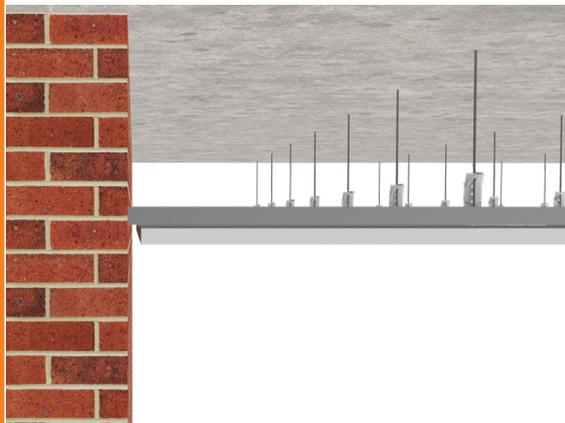
### PREPARE TRAFALGAR COREX



Score the Trafalgar Corex board to the required size with a Stanley knife and snap (similarly to plasterboard).

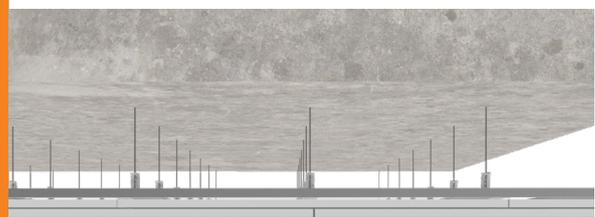
For assistance contact Trafalgar Fire's technical team at [technical@tgroup.com.au](mailto:technical@tgroup.com.au)

### FIX 1ST LAYER



Fix the 1st layer of Trafalgar Corex board. Allow for 10-15mm gap between Corex and the adjacent wall. Refer to [page 15](#) for fixing details.

### FIX 2ND LAYER



Fix the 2nd layer of Corex to the furring channel and ensure the layers are staggered. Refer to [page 16](#) & [page 17](#) for stagger and board joint details.

# INSTALLATION

## TRAFALGAR COREX CEILING



### SEAL JOINTS



Seal joint upto 15mm between Corex and adjacent wall with FyreFLEX Sealant. Refer to [page 15](#) for more detail



### FINISH



Apply the fiberglass joint tape and plaster filler, sanding as required to leave a neat flush finish before painting.

For assistance contact Trafalgar Fire's technical team at [technical@tgroup.com.au](mailto:technical@tgroup.com.au)

## PRODUCT RANGE



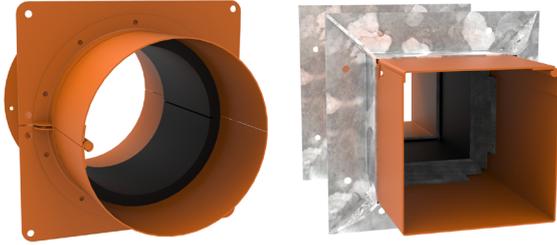
Item Number	Thickness	Board Size	Pallet QTY	Weight per Board
COREX-12.5	12.5mm	2000mm x 1200mm	40	27.6kg
COREX-15	15mm	2000mm x 1200mm	32	32.4kg
COREX-20	20mm	2000mm x 1200mm	24	42.24kg
COREX-25	25mm	2000mm x 1200mm	18	52.6kg

## PRODUCT SYSTEM RANGE



Item Number	Description	Min Order Qty	Pallet QTY
FyreFLEX 300W FyreFLEX 300G	FyreFLEX® Sealant Cartridge 300ml White or Grey	20	1440
FyreFLEX 600W FyreFLEX 600G	FyreFLEX® Sealant Sausage 600ml White or Grey	18	810
FyreFLEX 10W FyreFLEX 10G	FyreFLEX® Sealant Pail 10L White or Grey	1	110

## FyreBOX MINI SYSTEMS



## FyreBOX MINI & FyreFLANGE



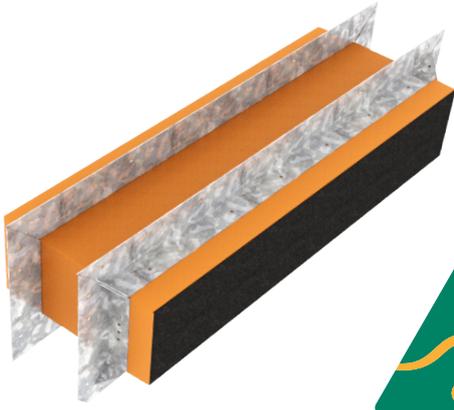
Type	Item Number	Dimensions W x H x D or Diam	Dimensions
Square	FYREBOX-MS-65	65 x 65 x 250mm	
	FYREBOX-MS-100	100 x 100 x 250mm	
	FYREBOX-MINI-FLANGES-S-100mm	to suit FYREBOX-MS-100	
Round	FYREBOX-MR-50	50 x 250mm	
	FYREBOX-MINI-FLANGE-R-50mm	to suit FYREBOX-MR-50	
	FYREBOX-MR-100	100 x 250mm	
	FYREBOX-MINI-FLANGE-R-100mm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



## FyreBOX MINI SYSTEMS COMPONENTS

Item Number	Description	Min Order Qty	Pallet Qty
FYREFLEX 300W/G	300ml White/Grey Cartridge	20	1440
FYREFLEX 600W/G	600ml White/Grey Sausage	18	810
TWRAP 300	300mm wide, 25mm thick blanket	7620mm long roll	24
TWRAP 450	450mm wide, 25mm thick blanket	7620mm long roll	12
TWRAP 600	600mm wide, 25mm thick blanket	7620mm long roll	12
Maxilite White 60	Maxilite board 1525x1000x60 mm (white)	1	12
Maxilite Blue 60	Maxilite board 2040x1220x60 mm (blue)	1	17
Maxilite Half White 60	Maxilite board 1018x1220x60 mm (white)	1	29
Maxilite Half Blue 60	Maxilite board 1018x1220x60 mm (blue)	1	34

# FyreBOX MAXI SYSTEMS



## FyreBOX MAXI & FyreFLANGE



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



# FyreBOX MAXI SYSTEMS COMPONENTS

Item Number	Description	Min Order Qty	Pallet Qty
FYREFLEX 300W/G	300ml White/Grey Cartridge	1	1920
FYREFLEX 600W/G	600ml White/Grey Sausage	1	1040
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
Maxilite White 60	Maxilite board 1525x1000x60 mm (white)	1	12
Maxilite Blue 60	Maxilite board 2040x1220x60 mm (blue)	1	17
Maxilite Half White 60	Maxilite board 1018x1220x60 mm (white)	1	29
Maxilite Half Blue 60	Maxilite board 1018x1220x60 mm (blue)	1	34

## FAQ

**Q I have tight space requirements, can I use 1 layer of Trafalgar Corex board for ceilings?**

**A** Trafalgar Corex has approvals for ceilings constructed with 2-layers of board only.

**Q Do the fixings require FyreFLEX sealant where the Trafalgar Corex board is penetrated?**

**A** FyreFLEX sealant is not required over fixings.

**Q Is corex tested to AS1530.4 - 2014?**

**A** Yes, Corex has been tested in full scale to AS1530.4- 2014. Refer to FAS 220367

**Q Can I paint over Trafalgar Corex board?**

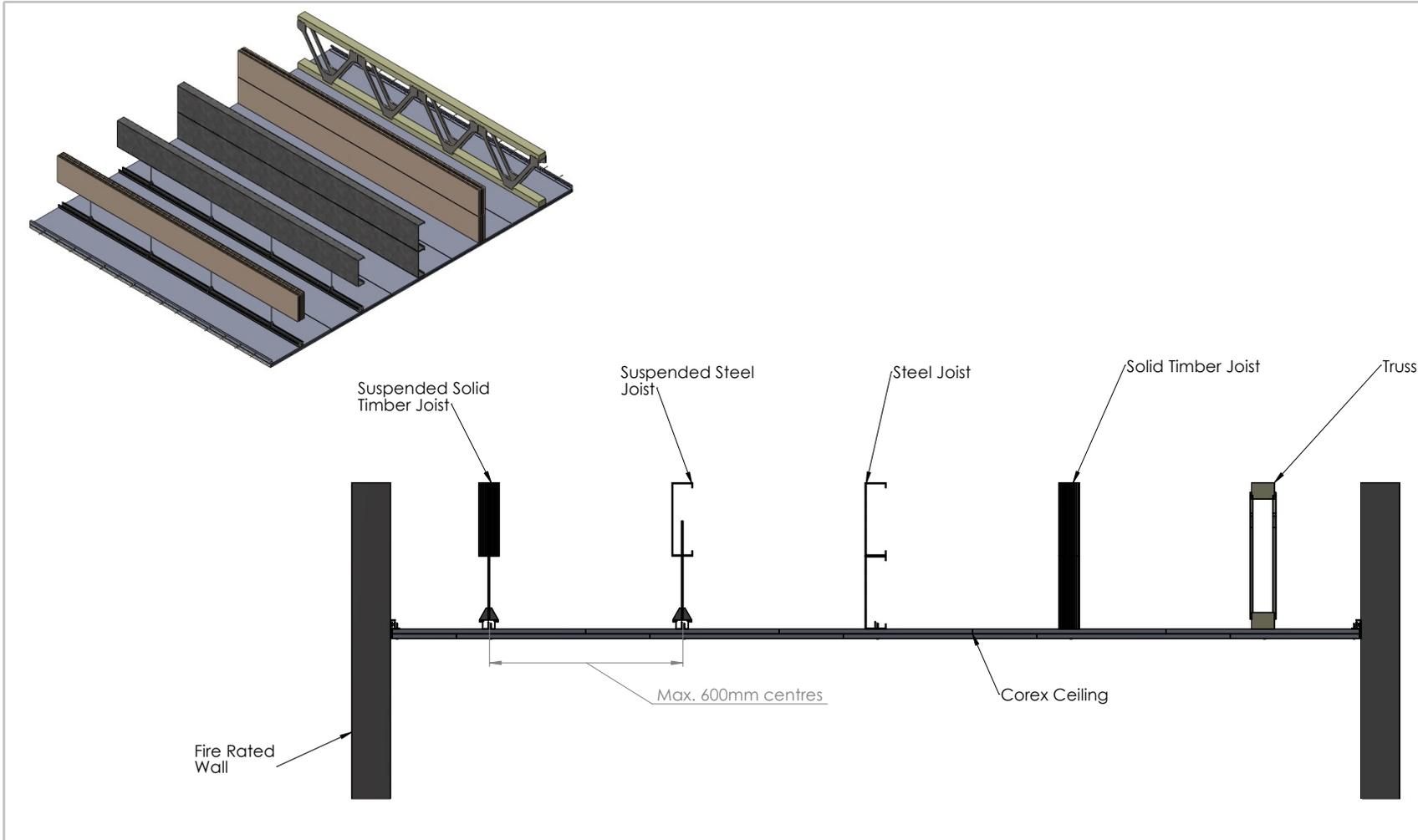
**A** Yes, it can be painted like any plasterboard ceiling.

**Q What penetrations are approved through Trafalgar Corex ceilings?**

**A** Penetrations are coming soon- Contact Trafalgar for updated penetration system testing

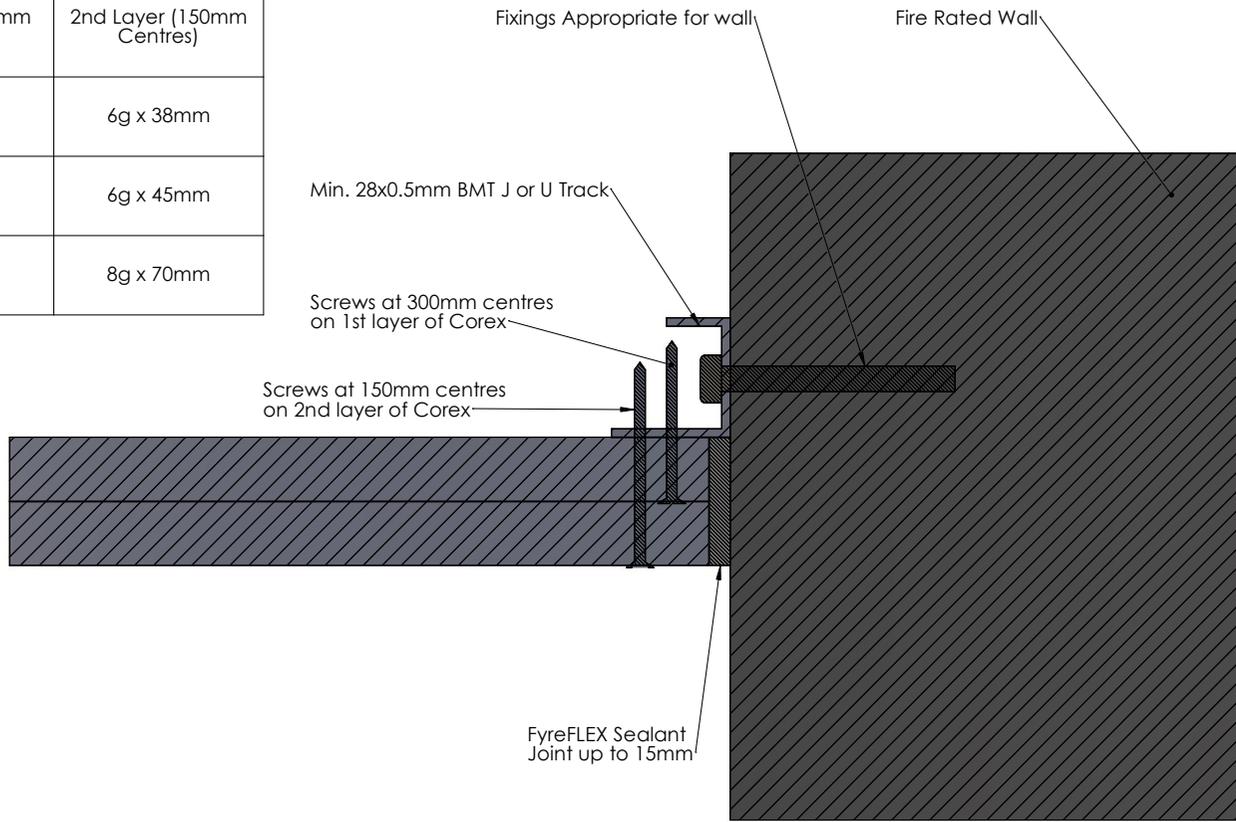
**Q Do i need top cross rails AND furring channels?**

**A** Corex ceilings can be installed with only furring channels for faster install

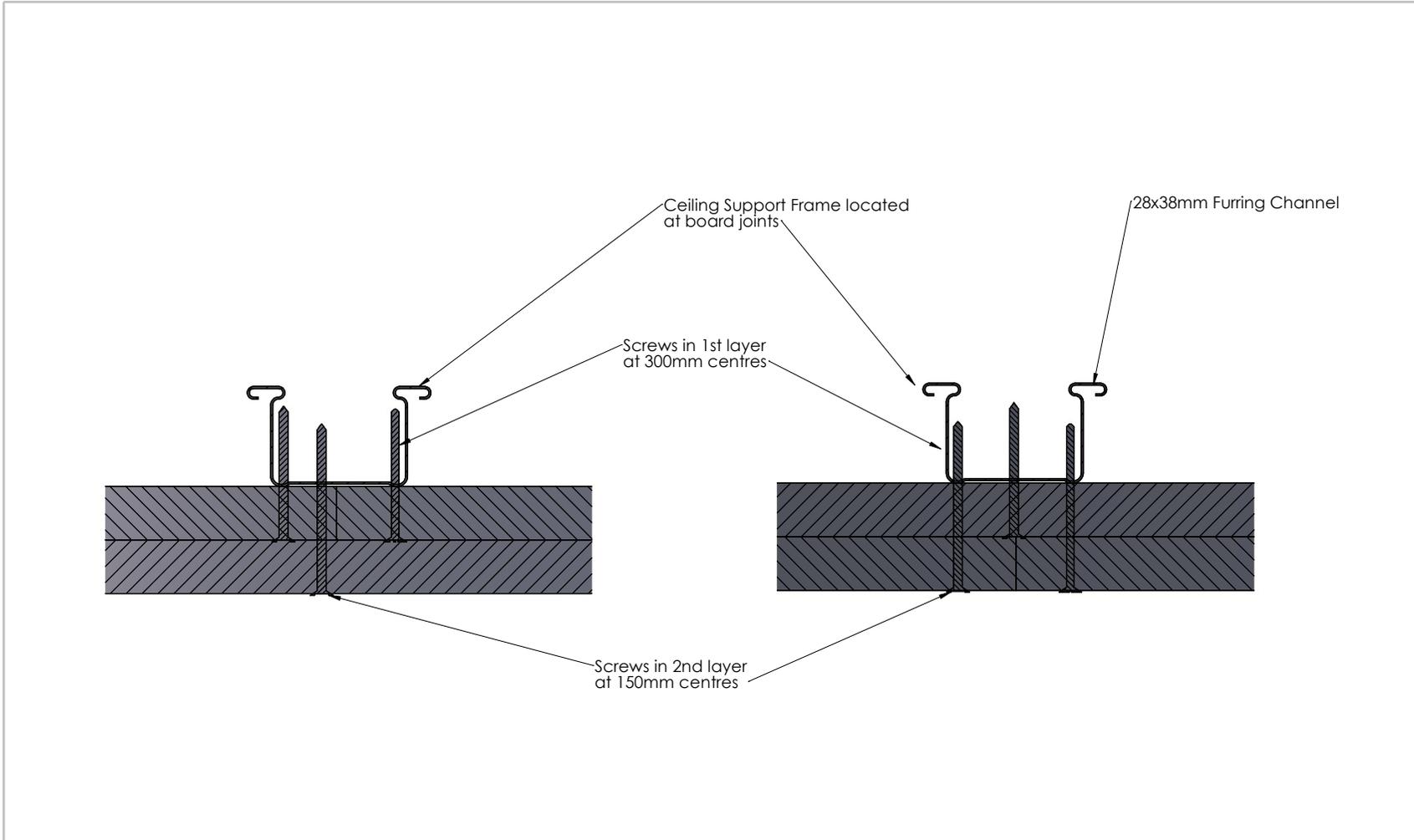


<b>Drawing Name:</b> Framing Options				<b>Test Standard:</b> AS1530.4	<b>Codes:</b>	<b>Revision:</b>	<b>Date:</b>	<b>No.:</b>	<b>NOTICE:</b>
<b>Project Title:</b> Ceiling Systems				<b>Fire resistance level:</b>	<b>Drawn By:</b> DP	NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm).			
<b>Drawing No. :</b> 3	<b>Sheet:</b> 3 of 6	<b>Date:</b> 12/13/2022	<b>Scale:</b> NTS	<b>Based on Report No.:</b>	<b>Checked By:</b> JH	<input type="checkbox"/> STANDARD DRAWING	 <p style="font-size: x-small;">Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@group.com.au W: www.tfire.com.au</p>		
						<input type="checkbox"/> PROJECT DRAWING			

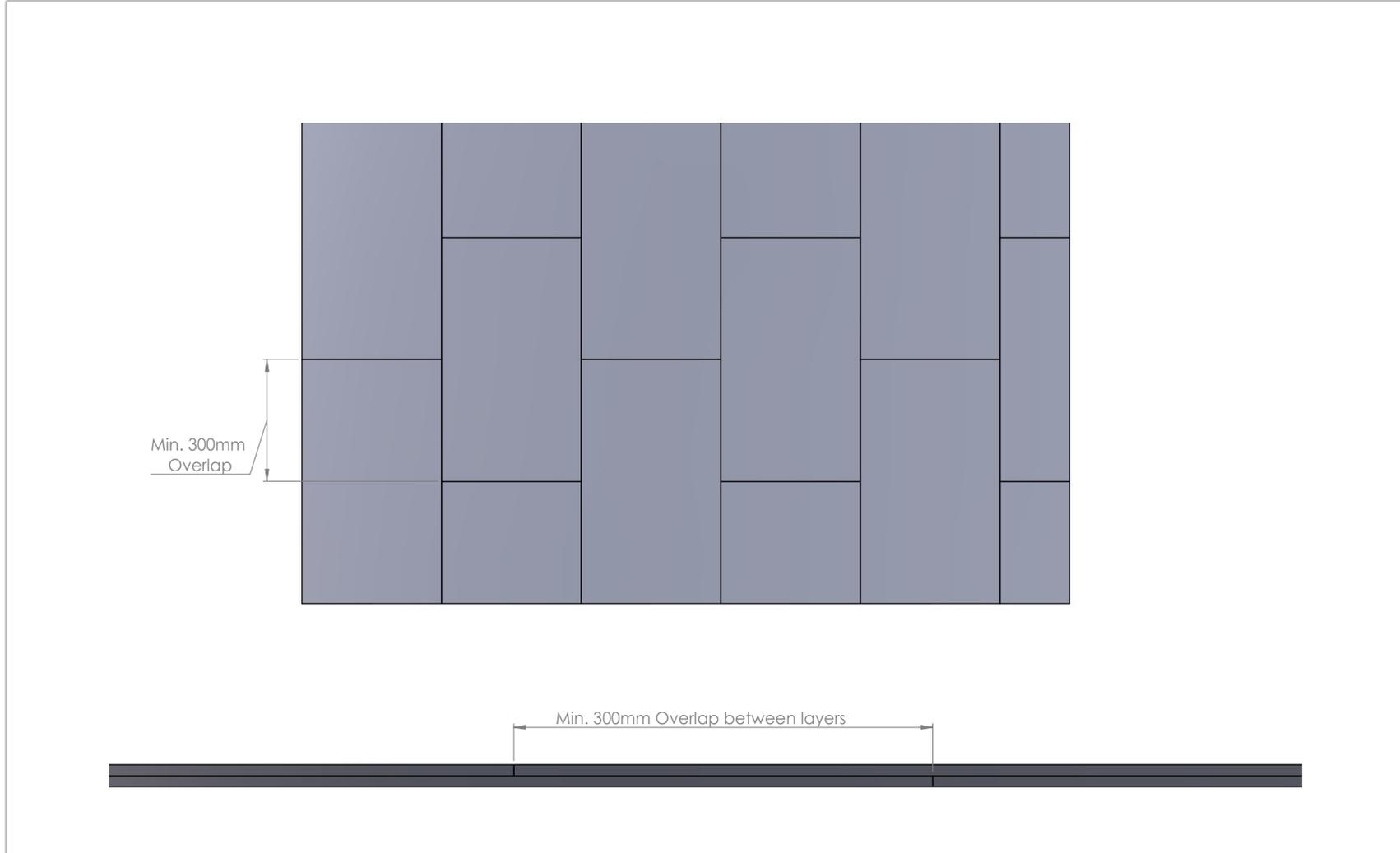
Fixing Screws		
Corex Thickness	1st Layer (300mm Centres)	2nd Layer (150mm Centres)
2x12.5mm	6g x 25mm	6g x 38mm
2x15mm	6g x 38mm	6g x 45mm
2x25mm	6g x 45mm	8g x 70mm



<b>Drawing Name:</b> Edge Details				<b>Test Standard:</b> AS1530.4	<b>Codes:</b>	<b>Revision:</b>	<b>Date:</b>	<b>No.:</b>	<b>NOTICE:</b>
<b>Project Title:</b> Ceiling Systems				<b>Fire resistance level:</b>	<b>Drawn By:</b> DP	NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm).			
<b>Drawing No. :</b> 4	<b>Sheet:</b> 4 of 6	<b>Date:</b> 12/13/2022	<b>Scale:</b> NTS	<b>Based on Report No.:</b>	<b>Checked By:</b> JH	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			
				Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au					



<b>Drawing Name:</b> Board Joints				<b>Test Standard:</b> AS1530.4	<b>Codes:</b>	<b>Revision:</b>	<b>Date:</b>	<b>No.:</b>	<b>NOTICE:</b>
<b>Project Title:</b> Ceiling Systems				<b>Fire resistance level:</b>	<b>Drawn By:</b> DP	NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)			
<b>Drawing No. :</b> 5	<b>Sheet:</b> 5 of 6	<b>Date:</b> 12/13/2022	<b>Scale:</b> NTS	<b>Based on Report No.:</b>	<b>Checked By:</b> JH	<input type="checkbox"/> STANDARD DRAWING	 <p style="font-size: x-small;"><b>Trafalgar Head Office:</b> PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au</p>		
						<input type="checkbox"/> PROJECT DRAWING			



<b>Drawing Name:</b> Board Overlaps				<b>Test Standard:</b> AS1530.4	<b>Codes:</b>	<b>Revision:</b>	<b>Date:</b>	<b>No.:</b>	<b>NOTICE:</b>
<b>Project Title:</b> Ceiling Systems				<b>Fire resistance level:</b>	<b>Drawn By:</b> DP	<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>			
<b>Drawing No. :</b> 6	<b>Sheet:</b> 6 of 6	<b>Date:</b> 12/13/2022	<b>Scale:</b> NTS	<b>Based on Report No.:</b>	<b>Checked By:</b> JH	<input type="checkbox"/> STANDARD DRAWING	 <small>           Trafalgar Head Office:            PO BOX 545            Chester Hill NSW 2162            T: 1800 888 714            F: 1800 201 500            E: technical@tgroup.com.au            W: www.tfire.com.au         </small>		
						<input type="checkbox"/> PROJECT DRAWING			