



FyreSHIELD™ PLUS For Plasterboard Ceilings



FyreSHIELD™ PLUS is a proudly Australian Made and Owned Access Panel system which has been designed and tested to be built into plasterboard ceilings.

With improved fire and acoustic performance while maintaining the signature Trafalgar Fire quality, FyreSHIELD™ is the only Access Panel worth specifying and installing!



KEY FEATURES



- Fully fire tested -/120/120 FRL's plus 60min RISF in accordance with AS1530.4:2014
- Range of stock sizes with custom sizes available
- No additional fire stopping needed, just sealant for installation
- Australian made quality
- Fully concealed hinges
- Budget lock as standard

APPLICATIONS



- Plasterboard Ceilings:
- 2 and 3 layer ceilings with RISF
 - 2-way rated ceilings
- [Refer to the FyreSHIELD™ for walls Technical Manual](#) for information on installation and approvals in shafts and partitions.

TRADES



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SYSTEM OVERVIEW

WHAT IS FYRESHIELD™ PLUS?

Access Panels have always been an important part of Trafalgar Group, and we are proud to present the next innovation of our FyreSHIELD™ systems with full RISF. Approvals for plasterboard ceiling systems are few and far between across the market, but the FyreSHIELD™ PLUS system provides an easy option for direct compliance.

Innovative and patented advancements have made it possible to achieve simple and compliant fire ratings for concealed-hinge fire rated Access Panels like never before. No cladding, no need for historical test data – just clever, hinged, as-tested design. Manufactured in South Granville using high-quality Australian sourced materials wherever possible, and most importantly, fire tested to AS1530.4:2014, FyreSHIELD™ PLUS makes fire rated access simple and compliant.

APPLICATIONS

FyreSHIELD™ comes in a few varieties, however this manual simply covers plasterboard ceiling installations of the FyreSHIELD™ PLUS for up to 2 hour plasterboard ceilings with 60 minute Resistance to the Incipient Spread of Fire (RISF).

[Refer to the FyreSHIELD™ Wall Technical Manual](#) for the partition and shaft wall applications, including:

- Hebel®
- Speedpanel®
- Pronto Panel
- Plasterboard
- Concrete/Masonry

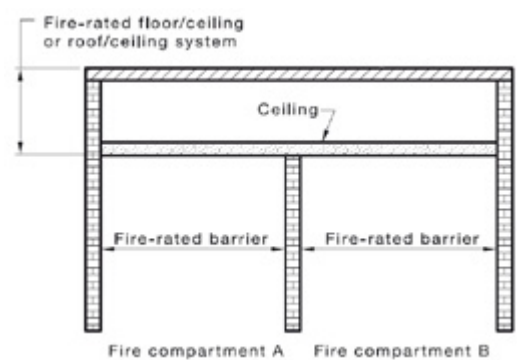


COMPLIANCE FyreSHIELD™ PLUS



RESISTANCE TO THE INCIPIENT SPREAD OF FIRE (RISF)

Ceiling systems are subject to another requirement under AS1530.4 called the resistance to the incipient spread of fire (RISF) which is included to make sure fires do not spread within the ceiling cavities. Where the insulation value of a ceiling Access Panel FRL is calculated based on the average temperature across the face of the floor above, the RISF is based on the highest individual temperature reading inside the ceiling cavity. This requirement does not apply to wall and floor systems.



Resistance to the Incipient Spread of Fire rating required for this floor ceiling system.

To maintain a RISF rating, the maximum temperature measured during a test must remain below 250°C inside the cavity and on the Access Panel. An important factor to achieving this rating is the size of the cavity present in a floor ceiling system.

A larger cavity will keep testing temperatures lower for longer. This is because the addition air gap present assists in cooling the building elements. As such it is considered that testing of this nature should only be applied to floor/ceiling systems of equal or larger cavity sizes that what was tested. Because of this, the FyreSHIELD™ PLUS system has been tested with the smallest cavity size that would practically be present on site (300mm).

Note: NCC requires RISF rating for all floor/ceiling applications.

OTHER MANUFACTURERS CLAIM IT – WE TEST IT. DO THE COMPARISON

System	FIRE	Other Brands
Fire tested to AS1530.4:2014	✓	?
Fire tested up to 600x600mm size (barrier dependent)	✓	?
Fire tested concealed hinged ceiling Access Panels	✓	?
As-tested for full insulation	✓	?
Confirmed acoustic performance (Rw32 + CTr26)	✓	?
Certified Australian Made & Owned	✓	?
No additional cladding required	✓	?
Fire tested with full RISF	✓	?

COMPLIANCE FyreSHIELD™ PLUS



COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE (NCC)

Formerly known as BCA

FyreSHIELD™ has been tested extensively to AS1530.4:2014 and approved in accordance with AS4072.1:2005 for a range of barrier types and applications. Changes to Access Panel requirements now require both the frame and door leaf to achieve insulation performance.

The top side of the floor cavity must not exceed a **maximum temperature rise of more than 180°C** or an average rise of 140°C during the test.

Fire rated floor/ceiling systems also have an additional requirement to measure temperatures inside the ceiling cavity, called Resistance to the Incipient Spread of Fire (or RISF). Where Access Panels are required in these ceilings, an Access Panel must also achieve the required level of RISF rating PLUS the standard FRL as above. See over page for more details.

Improvements in the materials and designs for the FyreSHIELD™ range ensure compliance can be achieved without any additional materials, and that the key requirements for the Access Panels can be easily inspected after installation.

As with all passive fire installations, the fire stopping system used must be installed as per the manufacturer's instructions and test/assessment reports otherwise the end result will not be compliant. Please refer to each individual system manual for specific installation instructions which reflect how the systems have been tested and approved.

TEST AND ASSESSMENT REPORTS

FyreSHIELD™ is a new system and is therefore subject to ongoing development. This document may not reflect all testing to date on the systems. Please contact the Trafalgar Fire technical team for any applications that are not covered by this document. For a copy of the fire test and assessment reports for FyreSHIELD™ systems, please email the below test reference and your details to technical@tgroup.com.au or call our technical team on 1800 888 714.

- FyreSHIELD™ Access Panels (including FyreSHIELD™ PLUS)- FAS200221

Compliance will only be achieved when the installation on site mirrors the approved system and all elements are correct. Please refer to the barrier system manuals and reports as well as the FyreSHIELD™ system to ensure all aspects are correct.

FIRE RESISTANCE LEVEL

FyreSHIELD™ PLUS

FIRE RATING – HOW IS FIRE PERFORMANCE MEASURED?

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

FRL 120/120/120

(example)



Structural Adequacy

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

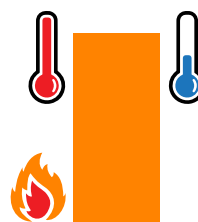
ie: a brick wall supporting a concrete floor slab above.



Integrity

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

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



Insulation

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

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

Penetrations and Access Panels are not required to have a Structural Adequacy rating and is usually expressed as a dash. For example, a penetration through a 4-hour load bearing wall would be written as -/240/240.

INTEGRITY

The FyreSHIELD™ PLUS system will achieve integrity performance for up to 2 hours physically stopping the direct spread of fire.

INSULATION (TEMPERATURE RISE)

To prevent the spread of fire via heat transfer, the unexposed face of the floor-ceiling system must remain under a maximum temperature rise of 180°C, and under an average temperature rise of 140°C.

RESISTANCE TO THE INCIPIENT SPREAD OF FIRE (RISF)

To measure performance inside the floor-ceiling cavity space, the test method in AS1530.4 places thermocouples within the ceiling cavity located across the Access Panel and ceiling membrane. The temperatures of the Access Panel and cavity must remain below 250°C.

Refer to the compliance [page 5](#).

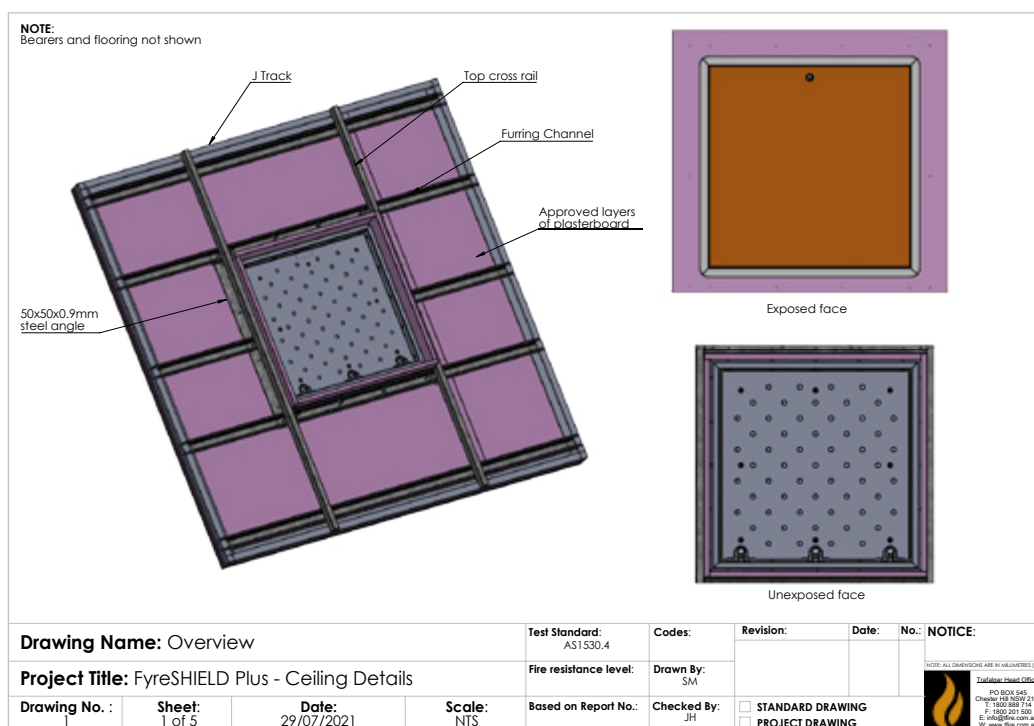
PLASTERBOARD CEILINGS

FyreSHIELD™ PLUS APPROVED CEILING CONSTRUCTION



Construction Aspect	Minimum construction specification
Sheeting	1 x 13mm & 1 x 16mm FR Plasterboard for -/60/60 with 45min RISF
	3 x 16mm FR Plasterboard for -/120/120 with 60min RISF
	2-way rated ceilings, contact technical@tgroup.com.au for details.
Ceiling cavity	Min 300mm high
Additional supports	50 x 50 x 0.9mm used to frame and line opening
Aperture lining	1 x 16mm plasterboard to the perimeter
Fixings (Access Panel frame to support angles)	Min 8g x 65mm Bugle Head Screws through all available fixing holes

Note: refer to drawings and installation steps on the following pages.



INSTALLATION

ALL CEILINGS

STEP 1 - FRAME



Frame the ceiling per plasterboard manufacturers instruction with an appropriate size opening framed out for the FyreSHIELD™ PLUS.

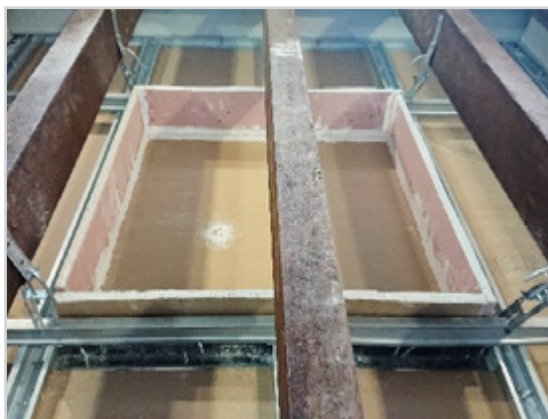
STEP 2 - ADDITIONAL FRAMING



50 x 50 x 0.9 steel angle is required on the perimeter around the penetration to add additional support for the panel. This assists with fixing the frame of the Access Panel into the ceiling construction.

For 2-way rated ceiling constructions, additional plastering is required in the cavity of the ceiling. Please refer to the drawing on page X.

STEP 3 - LINE AND SHEET

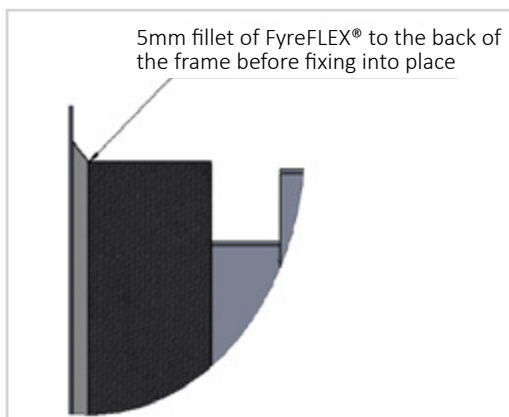


Line the opening with a single layer of FR 16mm thick plasterboard and sheet the ceiling to the minimum specification specified on [page 8](#).

INSTALLATION

ALL CEILINGS

STEP 4 - SEAL



Before inserting the panel, apply a nominal bead of FyreFLEX® Sealant to the back of the flanges to provide a fire, smoke and acoustic seal.

STEP 5 - FIX



Fix the panel into the frame using min 8g x 65mm bugle head screws at 150mm centers.

STEP 6 - STICKER



FyreSHIELDPLUS
Scan the QR Code for more information including technical manuals and installation instructions.

FRL: Ceilings: ■ -/120/120 with 60 RISF
Walls: ■ -/120/60 ■ -/90/60 ■ -/60/60

Dependent on the shaft wall

Batch: _____

Size: _____

Installed By: _____

Install Date: _____

Site Ref #: _____

TRAFFALGAR FIRE
tfire.com.au | 1800 888 714

Complete the installation sticker in the FyreSHIELD™ PLUS.

Frame Type

FLANGED EDGE (FEATHERED EDGE)

Picture Frame

Architrave / Picture Frame



Frame detail








Panel installed

(TLM Shown)

CLICKABLE
CODES

STANDARD STOCK

Model	Panel FE (MDF Panel + picture frame primed white)	Lock Option	Item Number	Dimensions	Frame Profile 87mm
 		Budget Lock (as standard) 	FYRESHIELD-Plus-300-FE	300 x 300mm	✓
			FYRESHIELD-Plus-400-FE	400 x 400mm	✓
			FYRESHIELD-Plus-450-FE	450 x 450mm	✓
		Kaba Nightlatch (optional) 	FYRESHIELD-Plus-550-FE	550 x 550mm	✓
			FYRESHIELD-Plus-600-FE	600 x 600mm	✓
			FYRESHIELD-Plus-CUSTOM-FE	Any size up to 600 x 600mm and Kaba Nightlatch also available	✓

Note: Suitable for 1 and 2 hour fire rated ceilings, with fire attack from both directions. Also suitable for shaft walls and partitions.

Frame Type

WET WALL

(SET BEAD)

Concealed Frame




Frame detail

Panel installed
(TLM Shown)

CLICKABLE CODES

STANDARD STOCK



Model	Panel WW (MDF Panel + picture frame primed white)	Lock Option	Item Number	Dimensions	Frame Profile 87mm
  		Budget Lock (as standard) 	FYRESHIELD-Plus-300-WW	300 x 300mm	✓
			FYRESHIELD-Plus-400-WW	400 x 400mm	✓
		Kaba Nightlatch (optional) 	FYRESHIELD-Plus-450-WW	450 x 450mm	✓
			FYRESHIELD-Plus-550-WW	550 x 550mm	✓
			FYRESHIELD-Plus-600-WW	600 x 600mm	✓
			FYRESHIELD-Plus-CUSTOM-WW	Any size up to 600 x 600mm and Kaba Nightlatch also available	✓

Note: Suitable for 1 and 2 hour fire rated ceilings, with fire attack from both directions. Also suitable for shaft walls and partitions.

CUSTOM ORDER FORM



FyreSHIELD PLUS™ Access Panels are the perfect choice for interior design, ideal for painting, veneering, wallpapering or laminating. Please complete this form for each size panel you require and submit for quotation. All panels will be manufactured 5mm smaller than the opening size in wall or ceiling to a tolerance of +/-2mm.

Frame Type	Custom Dimensions (mm) Frame Profile 87	Application	Lock
<p>WET WALL (SET BEAD)</p> <p>Code: FYRESHIELD-PLUS-CUSTOM-WW</p> <div></div> <p>Set Bead for Plastering</p> <div></div> <p>Panel installed</p>	<p>Height</p> <p>Width</p> <p>Common Sizes (mm)</p>	<div></div> <p>Ceilings</p>	<div></div> <p>Budget</p>
<p>FLANGED EDGE (FEATHERED EDGE)</p> <p>Code: FYRESHIELD-PLUS-CUSTOM-FE</p> <div></div> <p>Picture Frame</p> <div></div> <p>Panel installed</p>	<p>300 x 300</p> <p>400 x 400</p> <p>450 x 450</p> <p>550 x 550</p> <p>600 x 600</p>	<div></div> <p>Walls</p>	<div></div> <p>Kaba Nightlatch</p>

CUSTOMER DETAILS

Please complete this form for each size panel you require and submit for quotation to **sales@tgroup.com.au**

By accepting this custom product quote, you are agreeing to the manufacture of a custom product which is subject to **Trafalgar's Terms and Conditions.**

Company Name

Contact Name

Quantity | Date

E-mail | Phone

Signature

FAQ

Q What is different between the previous FRC/FRW and FyreSHIELD™ range?

A FyreSHIELD™ incorporates polymeric flange to ensure the frame will maintain the maximum temperature rise requirements in accordance with AS1530.4:2014. Previous systems required additional architraves for full insulation performance whereas the FyreSHIELD™ is a “complete” system.

Q Do I need to buy other products?

A No, the FyreSHIELD™ systems are bundled with a cartridge of FyreFLEX® sealant for your convenience and to ensure compliance of the system when installed. No additional cladding is required for FyreSHIELD™.

Q I need a two-way fire-rated Access Panel – can I use FyreSHIELD™?

A In a wall construction, FyreSHIELD has been tested in both directions. For Ceiling constructions there is no-defined test method for exposure on the top side, however despite this the FyreSHIELD Plus has been assessed for a 2-way rating in a ceiling.

Q Can I install the FyreSHIELD™ PLUS in a wall as well or is a different panel required?

A Yes! Refer the FyreSHIELD™ for walls technical manual for details.

Q What is the difference between the FyreSHIELD™ and the FyreSHIELD™ PLUS?

A The standard FyreSHIELD™ is used for wall installations only. The FyreSHIELD™ PLUS includes the patented RAKBACK to improve both fire and acoustic performance. These innovations allow Trafalgar to sell a hinged fire-rated Access Panel that can achieve the full insulation performance required by the NCC.

Q Do I need to add a door closer and a door tag?

A No, Access Panels are not considered fire doors under the NCC, and AS1905.1 does not apply.

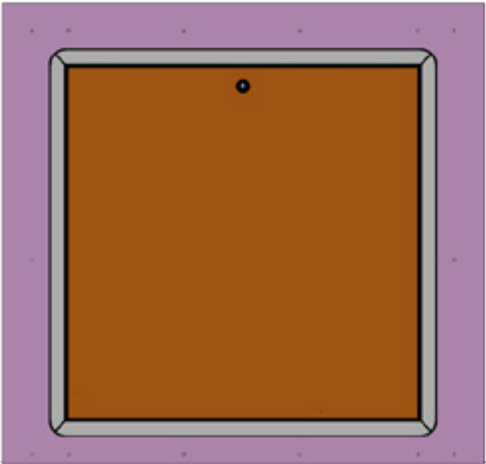
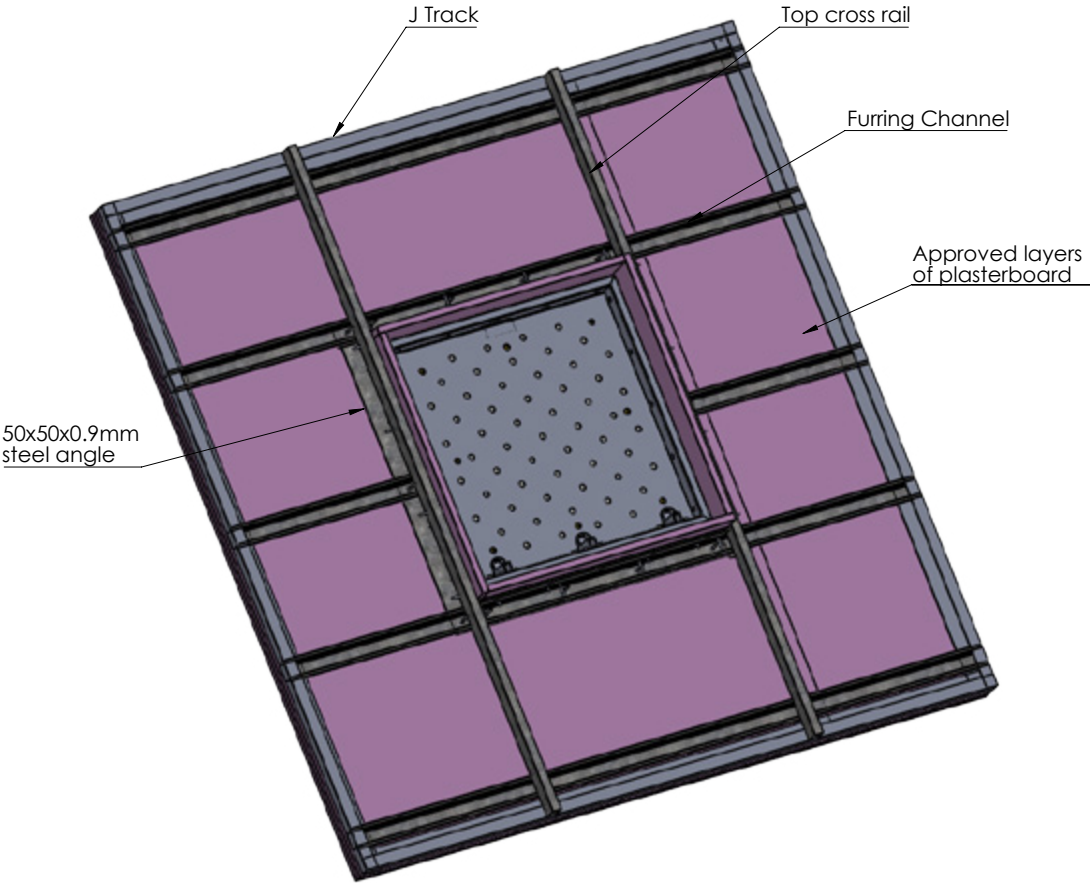
SOCIAL MEDIA



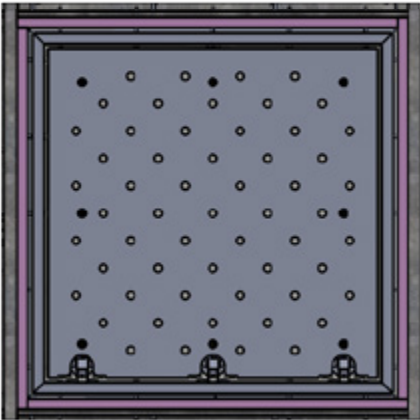
Linked 

 YouTube


NOTE:
Bearers and flooring not shown



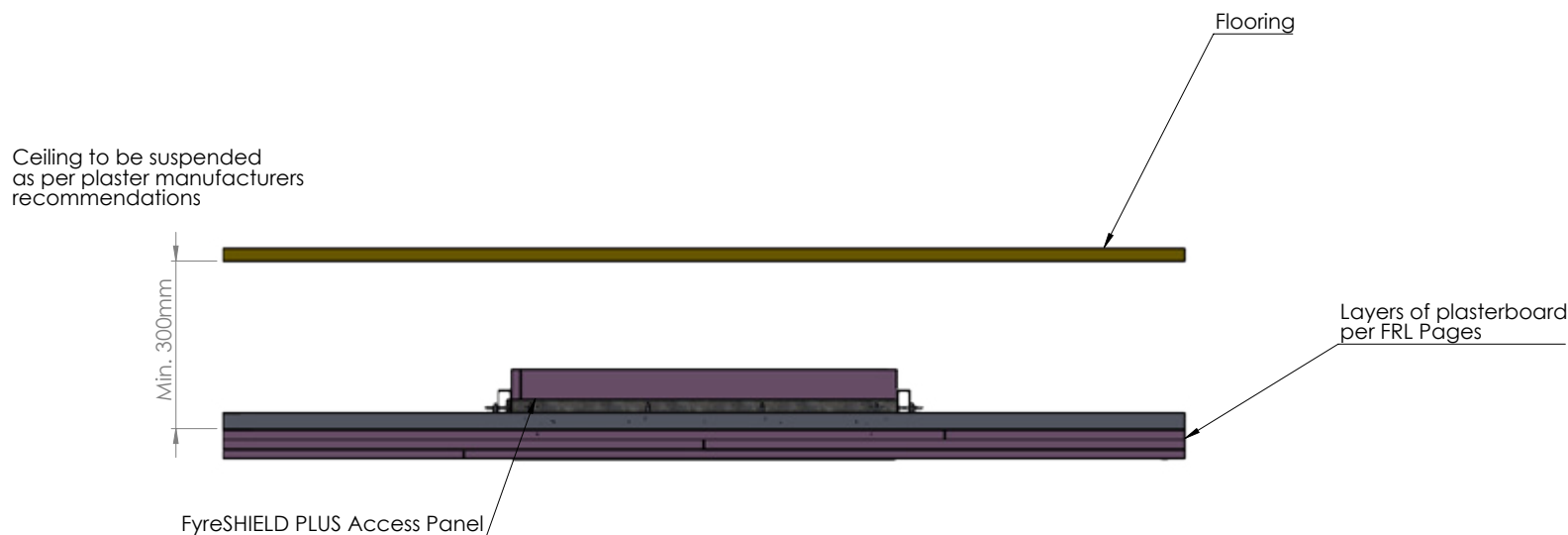
Exposed face




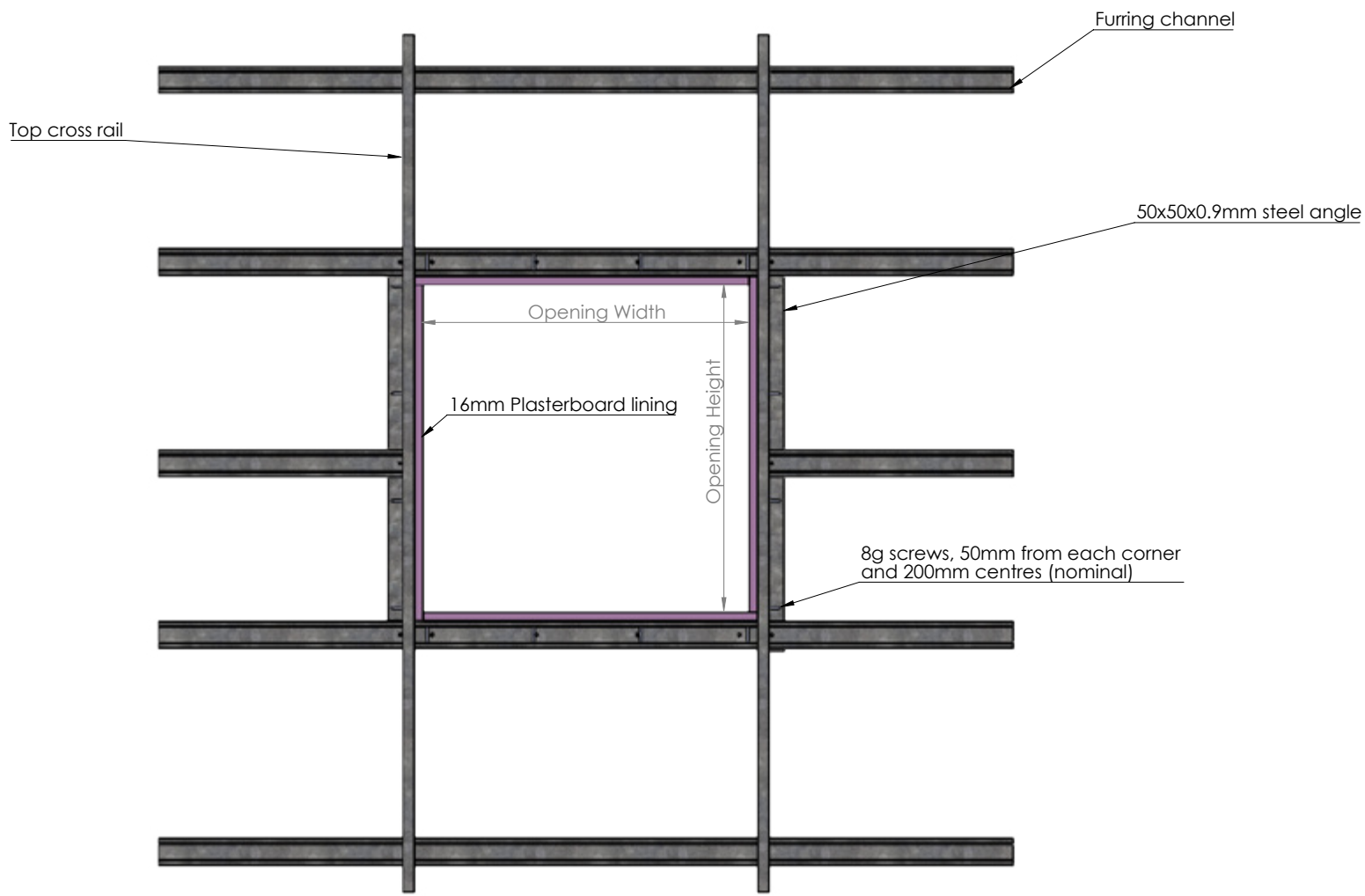
Unexposed face


Drawing Name: Overview				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreSHIELD Plus - Ceiling Details				Fire resistance level:	Drawn By: SM	<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>  Trafalgar Head Office: 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			
Drawing No. : 1	Sheet: 1 of 5	Date: 29/07/2021	Scale: NTS	Based on Report No.:	Checked By: JH				
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NOTE:
Hangers not shown for clarity

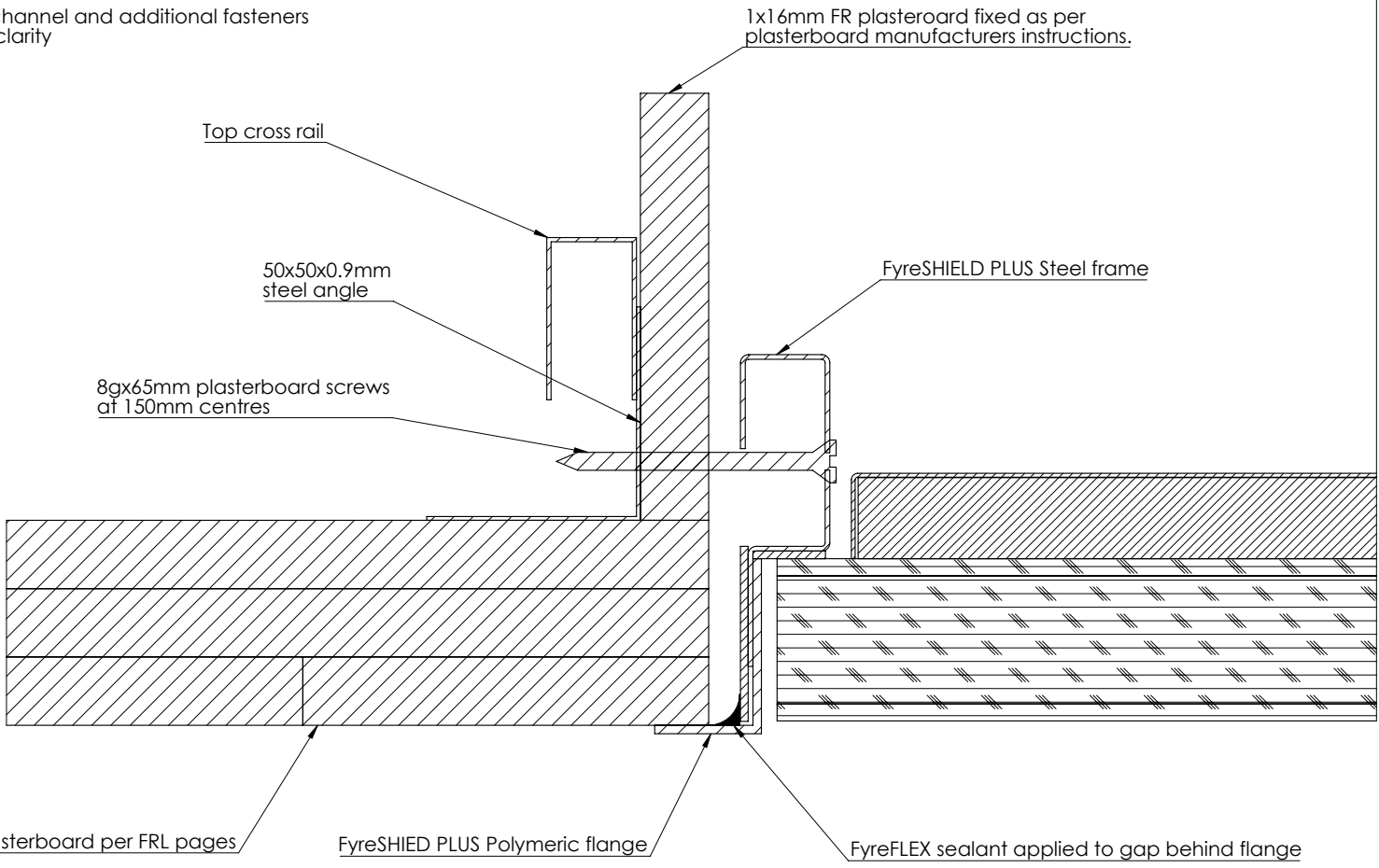



Drawing Name: Cavity Height				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreSHIELD Plus - Ceiling Details				Fire resistance level:	Drawn By: SM				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>
Drawing No. : 2	Sheet: 2 of 5	Date: 29/07/2021	Scale: NTS	Based on Report No.:	Checked By: JH	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			
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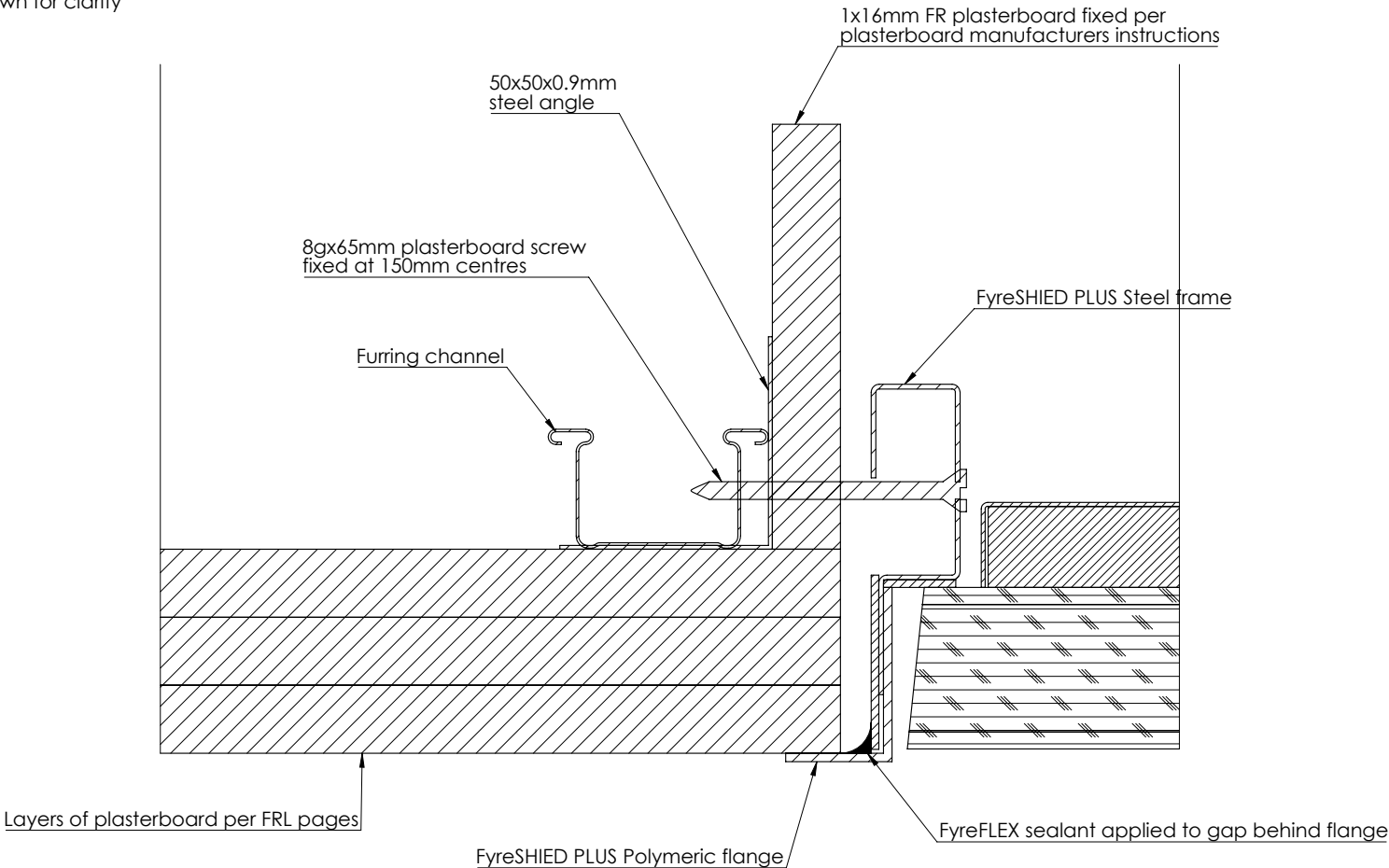
Drawing Name: Framing				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreSHIELD Plus - Ceiling Details				Fire resistance level:	Drawn By: SM	<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>  Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: info@tfire.com.au W: www.tfire.com.au			
Drawing No. : 3	Sheet: 3 of 5	Date: 29/07/2021	Scale: NTS	Based on Report No.:	Checked By: JH				
						<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

NOTE: Furring channel and additional fasteners not shown for clarity



Drawing Name: Fixing detail - Side 1				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreSHIELD Plus - Ceiling Details				Fire resistance level:	Drawn By: SM	<div>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</div> <div>Trafalgar Head Office: 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</div>			
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						<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			

NOTE: Additional fasteners not shown for clarity



Drawing Name: Fixing detail - Side 2

Project Title: FyreSHIELD Plus - Ceiling Details

Drawing No. : 5

Sheet: 5 of 5

Date: 29/07/2021

Scale: NTS

Test Standard: AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By: SM

Checked By: JH

Revision:

Date:

No.:

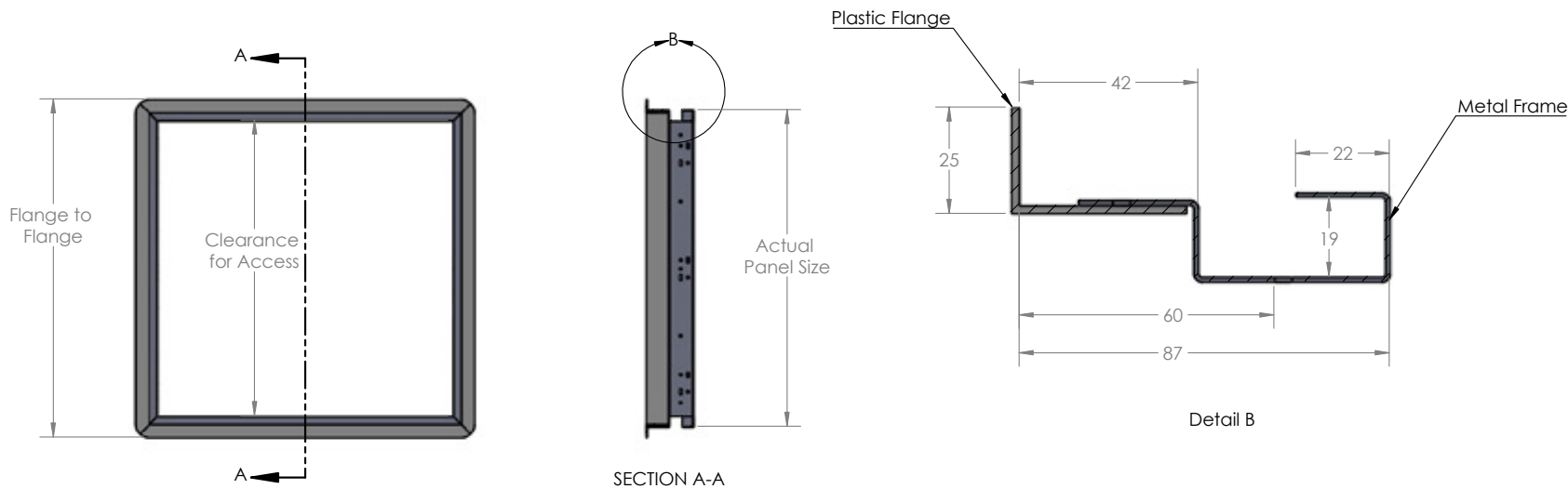
NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)




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☐ STANDARD DRAWING
☐ PROJECT DRAWING



Opening in wall/ceiling	Actual Panel size	Depth	Flange to Flange	Clearance opening for access
600 x 600	595 x 595	87mm	635 x 635	555 x 555
550 x 550	545 x 545	87mm	585 x 585	505 x 505
450 x 450	445 x 445	87mm	485 x 485	405 x 405
400 x 400	395 x 395	87mm	435 x 435	455 x 455
300 x 300	295 x 295	87mm	335 x 335	255 x 255

Drawing Name: FyreSHIELD Range				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: FyreSHIELD - Clear Openings				Fire resistance level:	Drawn By: RK	<div>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</div> <div>TRAFALGAR FIRE</div> <div>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</div>			
Drawing No. : 1	Sheet: 1 of 1	Date: 29/07/2021	Scale: NTS	Based on Report No.:	Checked By: JH	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING			