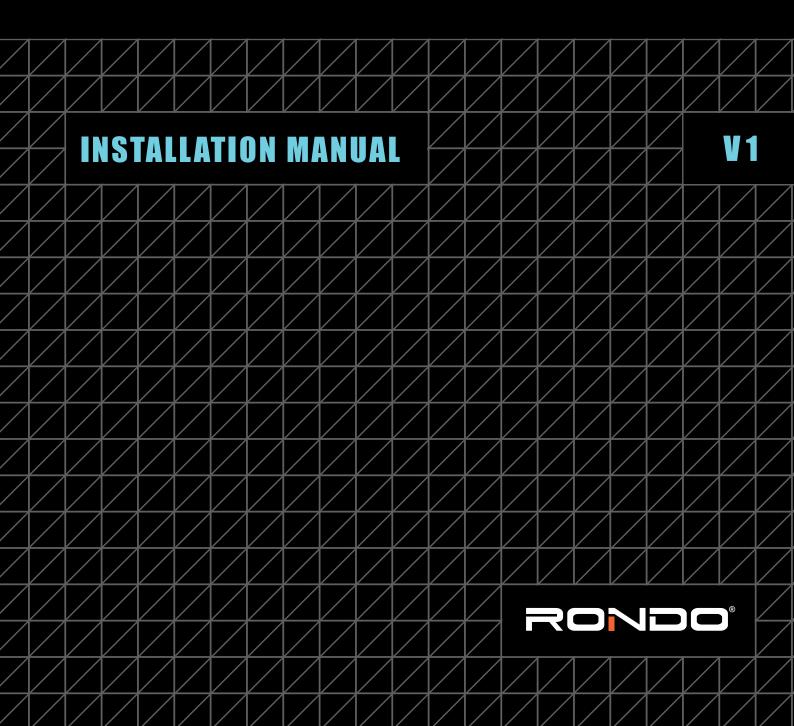
PANTHER® FIRE-RATED ACCESS PANELS



Please note: This technical literature has been produced to be used STRICTLY and SPECIFICALLY with genuine Rondo products. Calculations and recommendations in this literature are based on detailed testing, tolerances, and performance of Rondo Steel products. The use of this guide with non-Rondo products is NOT recommended due to a high risk of non-compliant design and installation outcomes.

Despite our efforts however, products, systems and Building Codes do change over time, and interpretations may also vary, which means we cannot accept any liability for any of the information (or lack of information) in this manual, or any consequences which happen as a result.

We also recommend you check that you are referring to the latest edition. You can do this by comparing your book to the one currently available on our website at www.rondo.com au

Finally, and only because we've invested so much pride and resources into producing this information for you, we kindly ask that you help us protect the quality and exclusivity of this book by not reproducing any of our images or information for commercial purposes without our written agreement, as per the copyright laws which apply.

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FIRE-RATED ACCESS PANELS

E1.1 INTRODUCTION TO ACCESS PANELS

Access Panels are essential components in construction and maintenance, providing convenient entry points to concealed areas within buildings. These panels facilitate easy access to plumbing, electrical, HVAC systems, and other utilities, ensuring efficient maintenance and repairs without causing significant disruption to the structure.

Access Panels come in various types including fire-rated and non-fire-rated, and sound-rated and non-sound-rated. Each type serves specific purposes and adheres to different safety and functionality standards.

PANTHER® FIRE-RATED ACCESS PANELS

Fire-rated access panels are designed to maintain the integrity of fire-resistant barriers, such as walls and ceilings, in case of a fire. These panels are constructed from materials that can withstand high temperatures and prevent the spread of flames and smoke. They are tested and certified to meet specific fire-resistance ratings, typically measured in hours.

KEY FEATURES:

- 1. **Application suitability:** Designed and fire-tested for both walls and ceilings.
- Proven compliance: fire-rated access panels have been tested -/120/120 FRL's plus 60min RISF in accordance with AS1530.4:2014.
- 3. Superior fire performance: 2 and 3-layer ceilings with RISF, 2-way rated ceilings, as well as 2-hour and 2-way fire protection in many wall types including plasterboard, Shaftwall and Hebel.
- 4. **Unique Product Offer:** Hinged panel for 2-hour Ceilings and two-way fire protection for walls.
- 5. No additional fire stopping required: just add Fire Sealant which is provided in the box with every panel.
- 6. **Australian Made**: Powered by Trafalgar, Australian leaders in fire product performance.
- 7. **Versatile:** One FRAP panel can be used for 1&2 hr ceilings and 1hr walls.

APPLICATIONS:

- Commercial buildings
- Hospitals
- Schools
- Industrial facilities
- Multi-story residential buildings

Selecting the appropriate access panel is critical for ensuring safety, compliance, and functionality in any building project. Fire-rated access panels provide essential protection in fire-prone areas. By understanding the specific requirements of your project, you can choose the right type of access panel to meet both regulatory standards and practical needs.

Access panels for fire-rated walls and ceilings must be tested to AS1530.4:2014 to be deemed compliant. Before installing an access panel in a fire-rated wall or ceiling, ask the following?

- Does the panel achieve the required FRL?
- Is the panel 2 way rated, to resist the spread of fire from both sides of the panel?
- Is this panel specifically suited to the application (wall/ceiling/shaft)?
- Does this panel have a fire test report proving its code compliance?

NOTES:

Rondo PANTHER® FIRE-RATED Access Panels have been tested to AS1530.4:2014 and have fire test reports to show evidence of their compliance and application suitability.

To be deemed compliant in Australia, Fire-rated access panels must achieve FRL on both sides for walls. Rondo PANTHER® fire-rated access panels meet this and all other requirements set by the Australian standard.



E1.3.3 FIRE-RATED ACCESS PANELS

Rondo PANTHER® fire-rated Access Panels (FRAPs) are one of the only 2-WAY fire-rated panel on the market, with respective resistance to incipient spread of fire (RSIF) in accordance with AS1530.4 for both ceilings and walls.

Manufactured with a feathered edge or set bead surround, and available in 1-hour and 2-hour fire ratings, Rondo FRAPs have a composite door panel with an intumescent seal around their perimeter to provide a positive fire seal.

Fire testing has been completed by Trafalgar Group at NATA accredited labs. All approved systems are compliant to AS1530.4:2014. A copy of the Fire Test Results and opinions are available **here**.

Rondo PANTHER® fire-rated a ccess p anels a re powered by Trafalgar Fire are available in two types, hinged and screw fixed, depending on the fire-rating and application requirements.

1. Hinged FRAP



2. Screw Fixed FRAP



■ TABLE E1.3.3(A): FIRE-RATED ACCESS PANEL (FRAP) – MODEL NUMBERS

IABLE E1.3.3(A): FIRE-RATED ACCESS PANEL (FRAP) - INODEL NUMBERS						
PART NUMBER	TYPE	SIZE	FINISH	LOCK / FINISH	FIRE RATING / APPLICATION	
FRAPHD30BLFE	HINGED	300 X 300	FEATHERED EDGE	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD45BLFE	HINGED	450 X 450	FEATHERED EDGE	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD53BLFE	HINGED	530 X 530	FEATHERED EDGE	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD60BLFE	HINGED	600 X 600	FEATHERED EDGE	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD30BLSB	HINGED	300 X 300	SET BEAD	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD45BLSB	HINGED	450 X 450	SET BEAD	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD53BLSB	HINGED	530 X 530	SET BEAD	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPHD60BLSB	HINGED	600 X 600	SET BEAD	BUDGET LOCK	1 HR WALLS & 1 AND 2 HRS CEILING	
FRAPSF30FESF	SCREW FIXED	300 X 300	FEATHERED EDGE	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF45FESF	SCREW FIXED	450 X 450	FEATHERED EDGE	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF53FESF	SCREW FIXED	530 X 530	FEATHERED EDGE	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF60FESF	SCREW FIXED	600 X 600	FEATHERED EDGE	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF30SBSF	SCREW FIXED	300 X 300	SET BEAD	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF45SBSF	SCREW FIXED	450 X 450	SET BEAD	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF53SBSF	SCREW FIXED	530 X 530	SET BEAD	SCREW FIXED	1 HR AND 2 HRS WALLS	
FRAPSF60SBSF	SCREW FIXED	600 X 600	SET BEAD	SCREW FIXED	1 HR AND 2 HRS WALLS	

■ TABLE E1.3.3(B): FIRE-RATED ACCESS PANEL (FRAP) – HINGED AND SCREW FIXED DOOR COMPLIANT APPLICATIONS

			HINGED FRAP	SCREW FIXED FRAP
	ONE WAY	-/60/60	✓	×
CEILING	ONE WAY	-/120/120	✓ /	×
CEILING	TIA/O NA/AN/	-/60/60	✓	×
	TWO WAY	-/120/120	✓	×
	ONE WAY	-/60/60	/	✓
WALLS	ONE WAT	-/120/120	×	✓
	TWO WAY	-/60/60	✓	✓
		-/120/120	×	✓
	ONE WAY	-/60/30	/	✓
CHAFTE	ONE WAT	-/120/30	✓	✓
SHAFTS	TMO MAN	-/60/30	/	✓
	TWO WAY	-/120/30	✓	✓



E1.3.3.1 FRAPS FOR CEILINGS

Rondo PANTHER® fire-rated access panels for ceilings have been tested to AS1530.4:2014, achieving both FRL & RISF. The panels must be installed to the minimum specification set in the test to achieve the required FRL.

Suitable for:

- 2 and 3-layer ceilings with RISF
- 2-way rated ceilings

The following table can be referenced to meet FRL and RSIF for various plasterboard sizes/layers.

■ TABLE E1.3.3.1(A): CEILING: PLASTERBOARD LAYERS TO MEET FRL AND RISF FOR ONE AND TWO-WAY PANELS

CEILING PLASTERBOARD	FRL	RISF
2 X 13MM FR PLASTERBOARD	-/60/60	45MIN
1 X 13MM & 1 X 16MM FR PLASTERBOARD	-/60/60	60MIN
2 X 16MM FR PLASTERBOARD	-/60/60	60MIN
3 X 16MM FR PLASTERBOARD	-/120/120	60MIN

NOTES:

- 1. Steel or timber framing
- 2. A 300mm minimum Plenum drop
- 3. 1 x 16mm FR plasterboard between FIRE-RATED Access Panel and Supporting Frame
- 4. Screw used to fix FIRE-RATED Access Panel to Supporting Frame is #8G x 65mm Bugle Head

E1.3.3.2 FRAPS FOR SERVICE SHAFTS

The National Building Code (NCC) only requires 30min of insulation for access panels installed into riser shafts. For example, a -/120/120 service riser only needs an access panel that provides a -/120/30 rating.

■ TABLE E1.3.3.2(A): WALL: SHAFTLINER AND PLASTERBOARD LAYERS TO MEET FRL FOR ONE- WAY PANELS

	HINGED AC- CESS PANEL	SCREW FIXED ACCESS PANEL
25MM SHAFT LINER WITH 2 X 13MM FR PLASTERBOARD	-/90/60	-/90/90
25MM SHAFT LINER WITH 2 X 16MM FR PLASTERBOARD	-/120/60	-/120/120

NOTES:

- 1. CH-Stud width to be a minimum of 64mm
- 2. Maximum size of Panel 600mm x 600mm

E1.3.3.3 FRAPS FOR WALLS

Rondo PANTHER® fire-rated access panels for walls have been tested to AS1530.4:2014, and are both 1hr (- /60/60) and 2hr (- /120/120) rated.

Suitable wall types include:

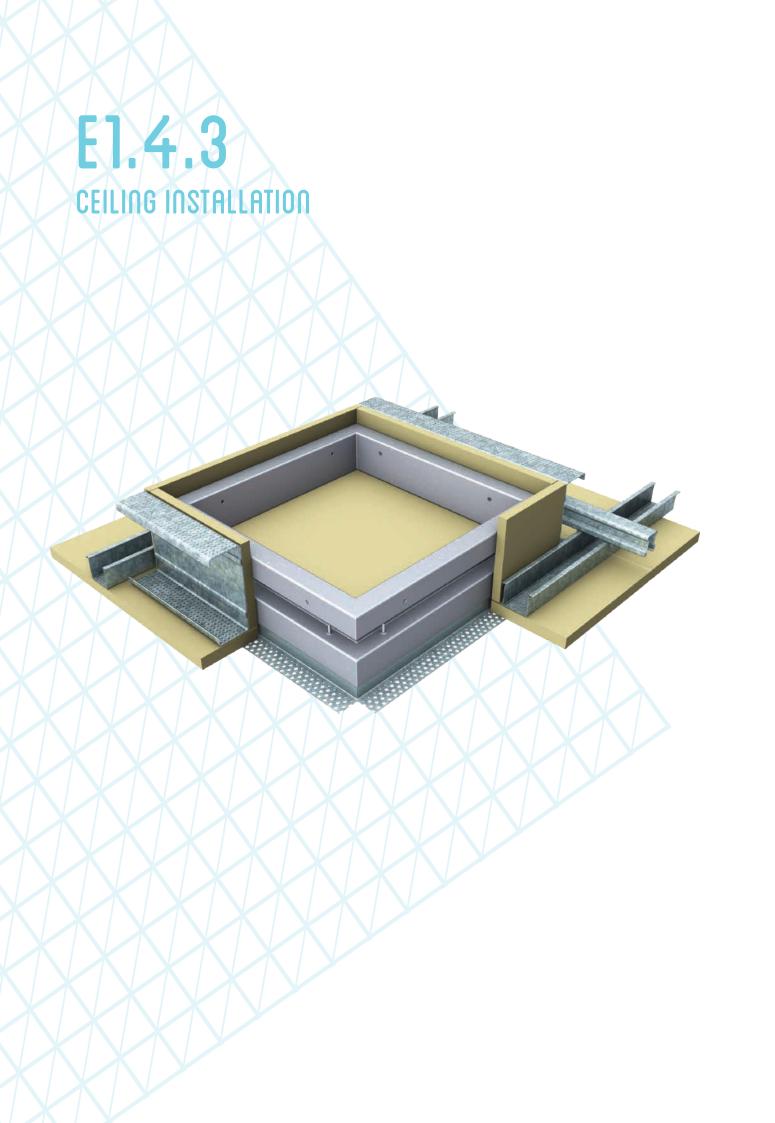
- Plasterboard
- Shaftliner
- Pronto Panel®
- Concrete/Masonry
- AlphaPanel®
- Trafalgar COREX
- Hebel®
- WALSC AAC Panel
- Speedpanel®

■ TABLE E1.3.3.3(A): WALLS LAYERS TO MEET FRL AND RISF

WALL PLASTERBOARD	HINGED AC- CESS PANEL	SCREW FIXED ACCESS PANEL
1 X 13MM FR PLASTERBOARD	-/60/60	-/60/60
1 X 16MM FR PLASTERBOARD	-/90/60	-/90/90
2 X 13MM FR PLASTERBOARD	-/120/60	-/120/120
75MM HEBEL PANEL	-/90/60	-/90/90
CONCRETE/MASONRY WALL MINIMUM 116MM THICK	-/120/60	-/120/120
CONCRETE/MASONRY WALL MINIMUM 230MM THICK*2	-	-/120/120
TRAFLAGER COREX 2X15MM (LINED ONE SIDE)	-/60/60	-/60/60
TRAFLAGER COREX 2X20MM (LINED ONE SIDE)	-/90/60	-/90/90
TRAFLAGER COREX 2X25MM (LINED ONE SIDE)	-/120/60	-/120/120

NOTES:

- 1. Maximum opening size 600x600mm
- 2. 230mm Concrete/Masonry wall maximum opening 740x740mm



E1.4.3.1 CEILING INSTALLATION

STEP ONE

Mark location of access in ceiling. The size of the hole to be cut is the size of the panel, plus the plasterboard being used in the ceiling. See table **E1.4.3.1(A)** for common sizes. No extra tolerance is required as this is designed in the panel.

■ TABLE E1.4.3.1(A): HOLE CUT SIZE

LENGTH OF PANEL SIDE	PLASTERBOARD THICKNESS	HOLE CUT SIZE
600MM	13MM	626MM
530MM	13MM	556MM
450MM	13MM	476MM
300MM	13MM	326MM
600MM	16MM	632MM
530MM	16MM	562MM
450MM	16MM	482MM
300MM	16MM	332MM

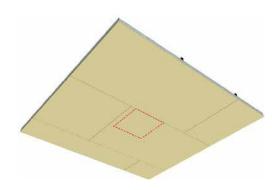


FIGURE E1.4.3.1(B): MARK OUT HOLE LOCATION

STEP TWO

Cut out hole

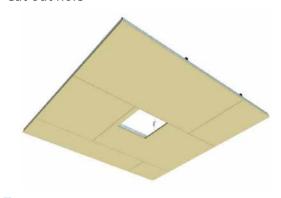


FIGURE E1.4.3.1(C): CUT OUT HOLE

STEP THREE

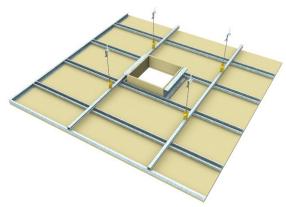
Create the supporting frame around the plasterboard cut-out:

For Panels **smaller/same size** than the furring channel spacing:

 Screw fix 64mm steel studs to plasterboard around the perimeter to form the supporting structure.

For Panels **larger in size** than the furring channel spacing:

- a. Cut furring channel already in ceiling to recommended opening size. Box out an area where the furring channels are not located.
- b. Screw fix the Studs to the plasterboard.



■ FIGURE E1.4.3.1(D): CONSTRUCT SUPPORTING STRUCTURE

STEP FOUR

Screw plasterboard, same as the ceiling lining to the supporting frame from step 3.

STEP FIVE

Apply FyreFLEX (All around) sealant to the inside flange of the Access Panel.

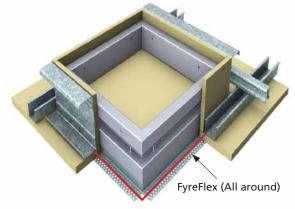


FIGURE E1.4.3.1(E): APPLY FYREFLEX SEALANT

STEP EIGHT

Apply FyreFLEX sealant to the top of the access panel where it meets the supporting structure.

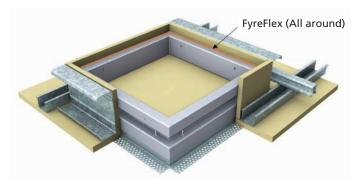


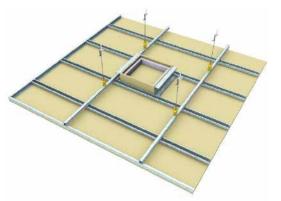
FIGURE E1.4.3.1(G) ADD FYREFLEX SEALANT STEP EIGHT

STEP SIX

Lift panel up and into position.

STEP SEVEN

Screw fix the panel through the side of the panel into the stud frame using 8-15x60 self tapping screws at not more than 150mm centres.



■ FIGURE E1.4.3.1(F): SCREW THROUGH WALL OF ACCESS PANEL TO SUPPORTING STRUCTURE

STEP NINE

Complete the installation sticker in the FRAP.

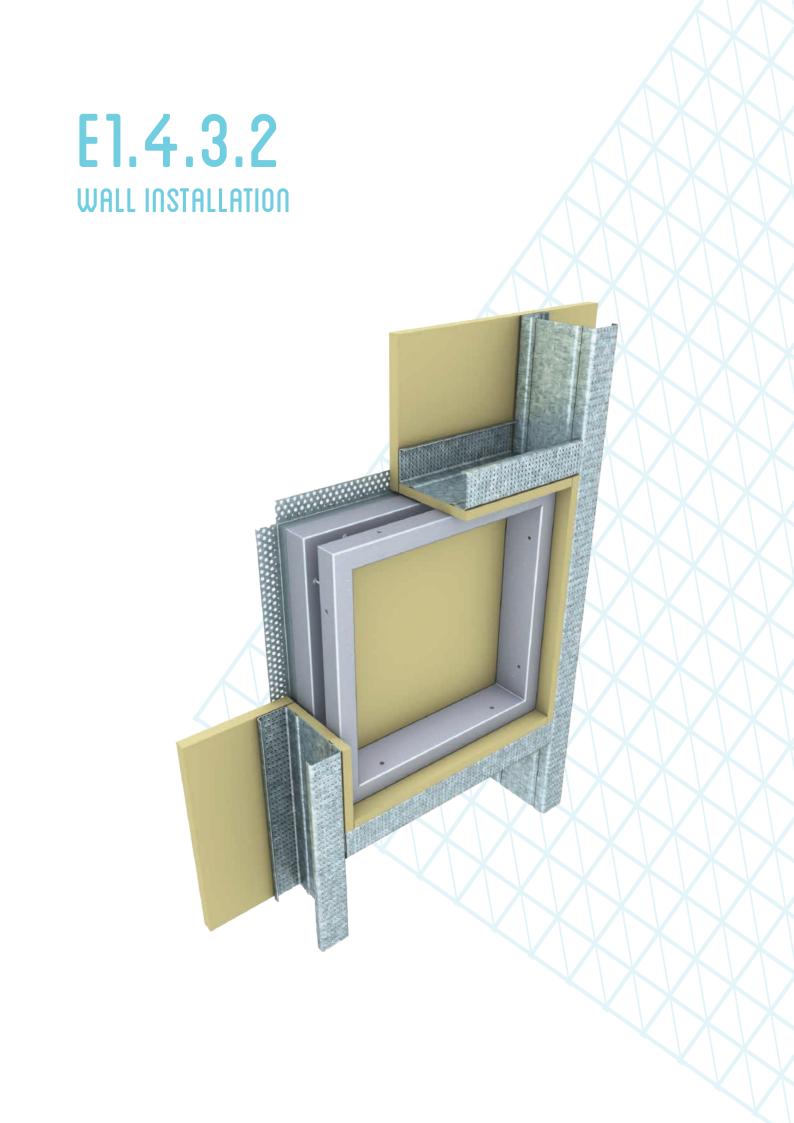
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	-/120/60 -/90/60 -/60/60	Walls:	-/120/120 -/90/90 -/60/60	instructions and the Professional Serie
• _	Up to -/120/120 with 60 mins RISF			AUSTRALIAN MADE
Batch:				
Size:				
Installed by:				
Install Date:				
Site Ref #:				

■ FIGURE E1.4.3.1(H): FILL IN INSTALLATION STICKER

STEP TEN

Finish panel installation.

- a. For set bead apply compound.
- b. For feather edge place cover over the screw heads before painting.





E1.4.3.2 WALL INSTALLATION

STEP ONE

For Access Panels at the **same or smaller width** of standard wall stud spacing:

- a. Set out wall stud spacing width to accommodate access panel size.
- b. Between these studs, install a horizontal stud both above and below the location of the access panel, to create a box frame that accommodate the access panel.

For access Panels with a **larger width** than standard wall stud spacing:

- a. Set out wall stud spacing width to accommodate access panel size.
- b. Between these studs, install a horizontal stud both above and below the location of the access panel, to create a box frame that accommodate the access panel.
- c. Install an additional vertical stud above and below the location of the access panel.

STEP TWO

When plasterboard is installed, mark out hole location.

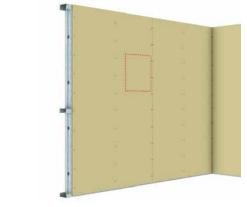
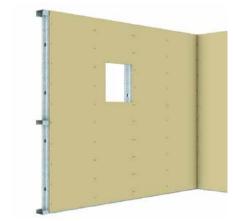


FIGURE E1.4.3.1(A): MARK OUT HOLE LOCATION

STEP THREE

Cut out a hole for the access panel at the previously marked location.



- FIGURE E1.4.3.1(B): CUT OUT HOLE
- TABLE E1.4.3.1(C): HOLE CUT SIZE

LENGTH OF PANEL SIDE	PLASTERBOARD THICKNESS	HOLE CUT SIZE
600MM	13MM	626MM
530MM	13MM	556MM
450MM	13MM	476MM
300MM	13MM	326MM
600MM	16MM	632MM
530MM	16MM	562MM
450MM	16MM	482MM
300MM	16MM	332MM

STEP FOUR

With the steel stud box frame now exposed, Line the box frame with fire-rated plasterboard and screw securely into place.



■ FIGURE E1.4.3.1(D): CONSTRUCT SUPPORTING STRUCTURE

STEP FIVE

Apply FyreFLEX sealant around the inside flange of the access panel.

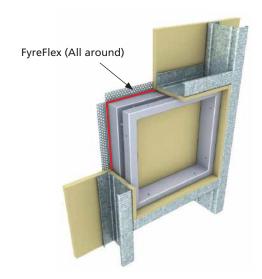


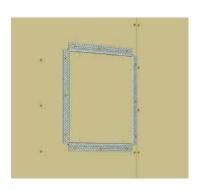
FIGURE E1.4.3.1(E): ADD FYREFLEX SEALANT

STEP SIX

Lift panel into position.

STEP SEVEN

Fix the panel through the sides of the panel into the stud box frame using 8-15x60 self-tapping screws at not more than 150mm centres.



■ FIGURE E1.4.3.1(F): SCREW THROUGH WALL OF ACCESS PANEL TO SUPPORTING STRUCTURE

■ TABLE E1.4.3.2(A): FIXING TYPES

PLASTERBOARD	10G X 100MM PLASTERBOARD SCREWS	200MM
Hebel®/WALSC AAC Panel	8g x 100mm screws	300mm
Concrete/Masonry	Cert-R-Fix Anchor	150mm
Trafalgar Corex	10g x 100mm plasterboard screws	150mm
Speedpanel®	10g x 40mm self-tapping screws	200mm
Pronto Panel®	10g x 100mm screws	200mm
AlphaPanel	11x50 Bugle Head Tek Screw	200mm

STEP EIGHT

Apply FyreFLEX to the back of the Access Panel where it meets the plasterboard inside the wall.

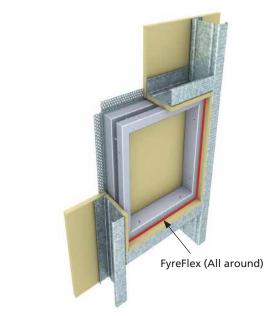


FIGURE E1.4.3.1(G): ADD FYREFLEX SEALANT



STEP NINE

Complete the installation sticker included with the FRAP.



FIGURE E1.4.3.1(H): FILL IN INSTALLATION STICKER

STEP TEN

Finish panel installation.

- c. For set bead apply compound.
- d. For feather edge place cover over the screw heads before painting.





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