



Fire resistant Access Panels

Building & construction solutions

Technical manual

Singapore version



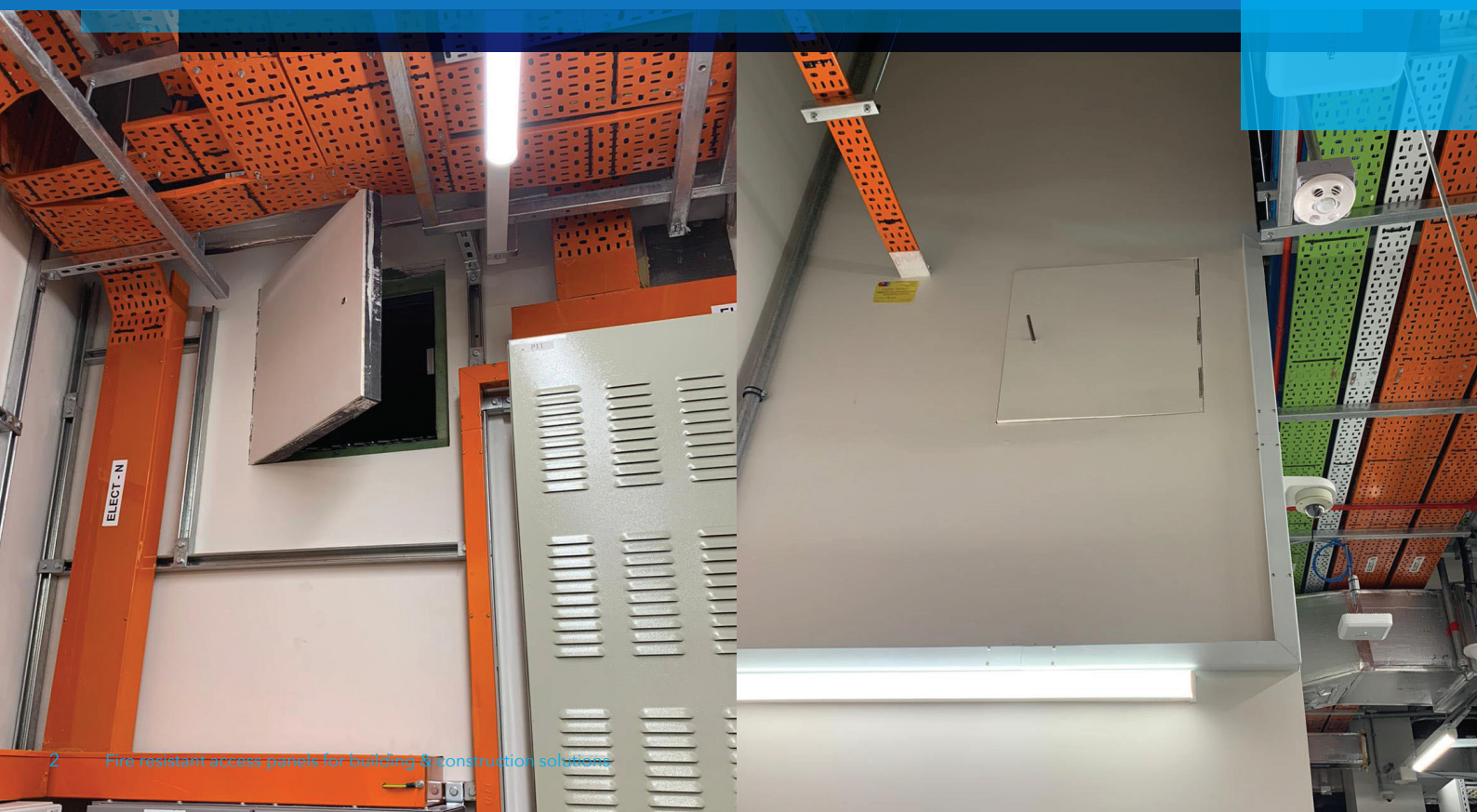
Promat



Promat Fire Resistant Access Panels

Permits openable access to spaces in fire compartments without compromising on fire performance.

The Promat Fire Resistant Access Panels comes as a complete unit, a panel of plain surface finish on both faces, set into a galvanised steel rebated frame, surrounded with perimeter bead. Available either hinged with a flush locking mechanism or screw fixed, Promat Fire Resistant Access Panels are designed so as to blend well aesthetically with the fire resistant element to give a elegant look, providing access and ensuring the fire resistance performance of the compartment element remains intact.





Installation guide

The Basic supporting fire resistant element

Promat Fire Resistant Access Panels are fire tested to the most onerous conditions. The Promat Fire Resistant Access Panel unit is set within a dry constructed element including PROMATECT® fire resistant ceiling and PROMATECT® E&M enclosure construction. It is also suited if set in a masonry construction or other dry construction such as fire resistant plasterboard ceilings provided the structural framework of the ceiling is appropriately designed to support the weight and fixing details of the Promat Access Panel unit.

The opening prepared to receive the Promat Fire Resistant Access Panel unit shall be adequately framed and structured so as to be capable to support the Promat Fire Resistant Access Panels.

Where openings are made post construction to receive the Access Panel unit, care shall be taken to ensure the perimeter of the opening is made structurally sound, reinforced and duly supported.

Appropriate fire resistance

The Promat Fire Resistant Access Panel shall have equal or higher fire resistance performance than the fire resistant element.

Installation

1. The opening formed within the fire resistant element shall be duly structured & reinforced such as to be able to hold the weight of the Promat Access Panel.
2. Preferably the dimensions of the opening shall provide a tight fit for the Promat Access Panel unit, and/or a tolerance gap of not more than 5mm.
3. With the panel opened secure the galvanised steel frame from the inside of the frame to the perimeter steel structure of the opening, using minimum M8 self-tapping screws through preformed screw holes in the galvanised steel frame. Minimum 2 screws on each of the 4 sides of the frame.
4. Seal the perimeter gaps with a bead of PROMASEAL®-A sealant.
5. The surface of the Promat Fire Resistant Access Panel can be left plain or finished with any desired architectural finish provided it complies with the surface spread of flame requirements of the local regulations.

Fire test standards

Fire test standards tests define fire performance in terms of

A material's REACTION to Fire

Such tests define the specimen's property in terms of its level of non-combustible behaviour, its surface spread of flame, is smoke behaviours.

A full construction's RESISTANCE to fire

Unlike the property of a singular material specimen, fire resistance is a measure of the performance of a complete system construction when exposed to the standard heating conditions of either one of the international time temperature fire curves. The criteria of assessment are:

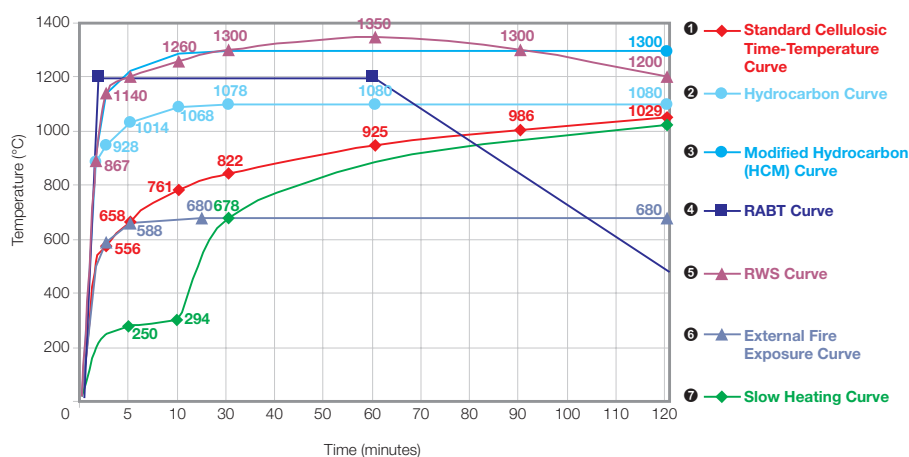
Load bearing capacity - The ability of a loadbearing specimen construction to support the test load without exceeding specific criteria with respect to its rate and extent of deformation.

Integrity - The ability of a fire separating element to contain a fire in terms of no collapse, no development of fissures, cracks or holes and no sustaining flames on the unexposed face of the specimen.

Insulation - The ability of a fire separating element to restrict thermal heat transfer to the unexposed face to below specific limits; ie 140°C mean rise in temperature, 180°C maximum rise in temperature on the unexposed face.

Below are some widely adopted fire testing standards:

Reaction to fire		Resistance to fire	
BS 476: Part 4	EN 1182	BS 476: Part 20	EN 1363 series
BS 476: Part 5	EN 1716&	BS 476: Part 21	EN 1364 series
BS 476: Part 6	EN 13823	BS 476: Part 22	EN 1365 series
BS 476: Part 7	EN 11925	BS 476: Part 24	EN 1366 series



Fire curves

Hinged access panels

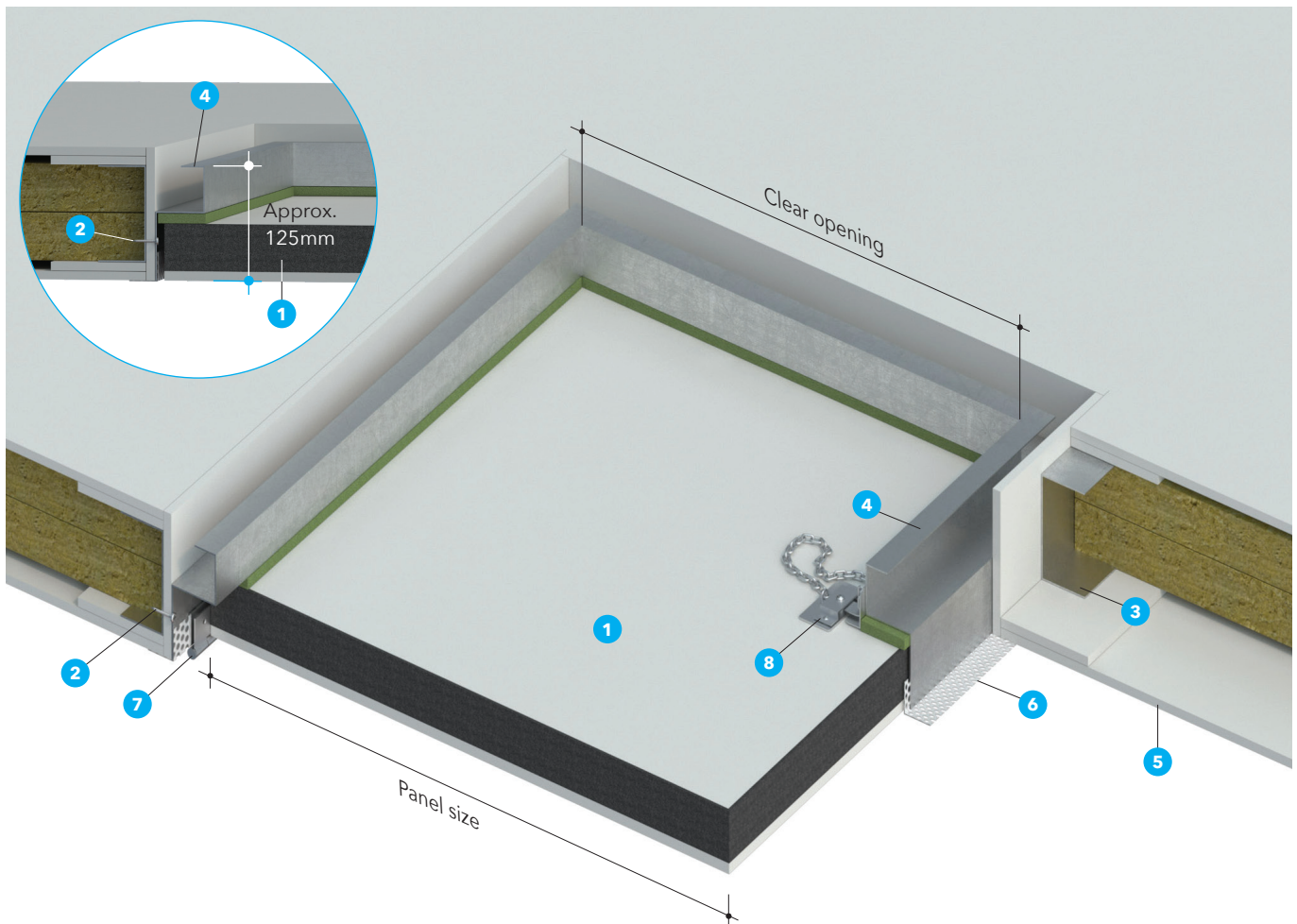
Access panels type	System code	Fire resistance performance	Test/Approval no.	Panel size (mm)	Clear opening (mm)	Page no.
 <p>PROMATECT®-L 500 2-hour fire rated hinged access panel (Self-supporting membrane ceiling)</p>	PE.17.12	-/120/120	BS 476: Part 20: 1987	600 x 600	500 x 500	6
 <p>PROMATECT®-L 500 2-hour fire rated hinged access panel (Suspended ceiling)</p>	PE.17.12	-/120/120	BS 476: Part 20: 1987	600 x 600	500 x 500	7
 <p>PROMATECT®-L 500 2-hour fire rated hinged access panel (Masonry wall/Partition)</p>	PE.17.12	-/120/120	BS 476: Part 20: 1987	600 x 600	500 x 500	8

Promat Fire Resistant Access Panels are tested to BS 476: Part 20 to fulfil Integrity and Insulation Performance Criteria.

PROMATECT®-L 500 2-hour fire rated hinged access panels (Self-supporting membrane ceiling)

The diagram illustrates the installation of an access panel into a ceiling. A rectangular panel (1) is shown being lowered into a ceiling opening (5). The panel is suspended by a chain (8) attached to a locking mechanism. The panel is held in place by hinges (7) on the sides. The ceiling is labeled 5, the panel 1, the hinges 7, and the lock 8. The panel size and clear opening are indicated by dimension lines at the top.

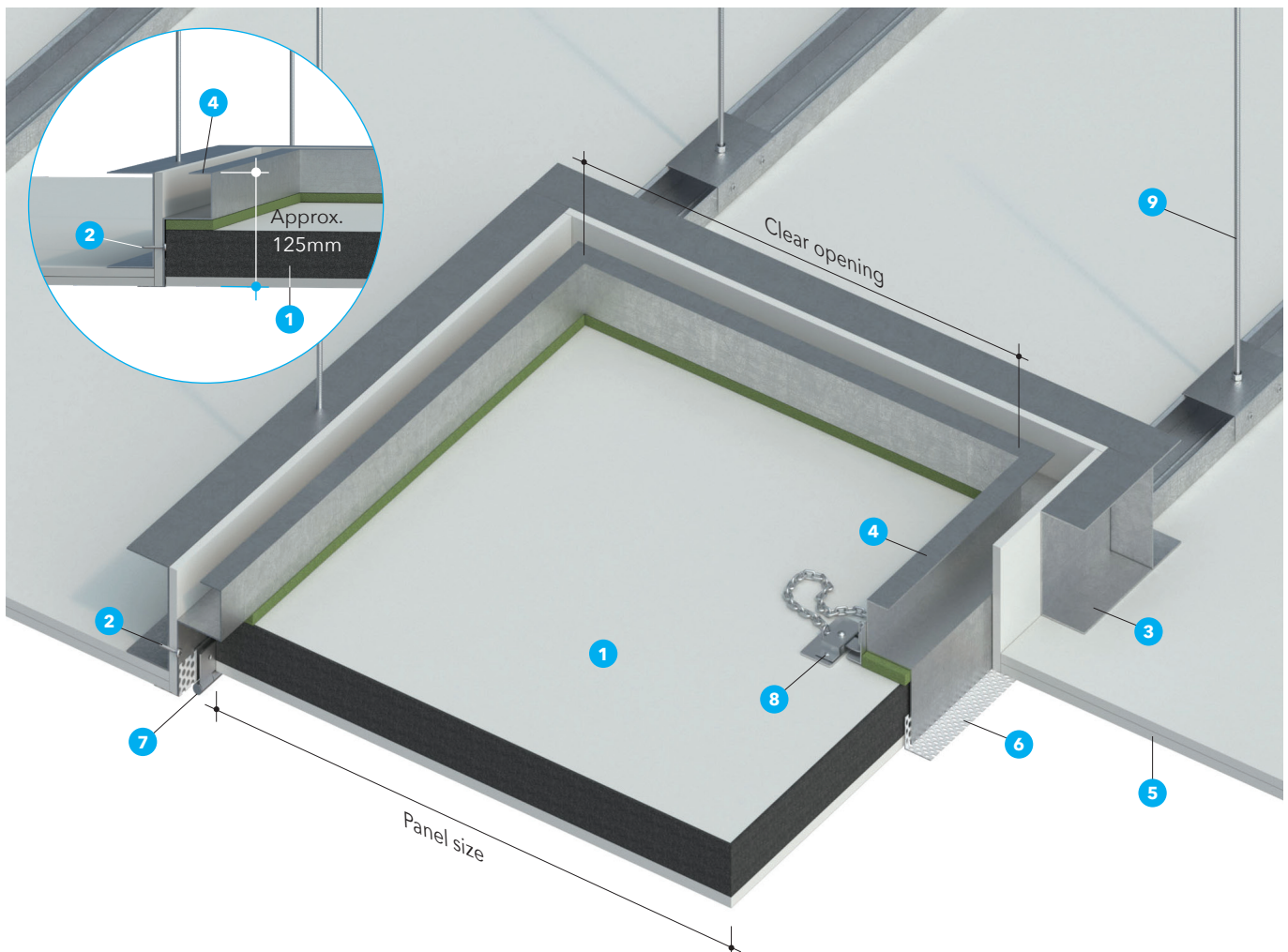
Fire Resistance	FRL	-/120/120	System code: PE.17.12		
	Standard	BS 476: Part 20: 1987			
Construction	Panel size (mm)	Clear opening (mm)	Approx. height (mm)	Approx. weight (kg)	
	600 x 600	500 x 500	125	20 ±10%	



1. Promat Access Panel 59mm thick
2. No. 4 pan head to secure access panel to reinforced framework.
3. Steel channel U-100 x 50 x 1.5mm additional reinforced framework around access panel to be provided by others.
4. Access panel framing.
5. Fire resistant ceiling.
6. Perimeter corner bead.
7. Access panel hinges.
8. Budget lock.

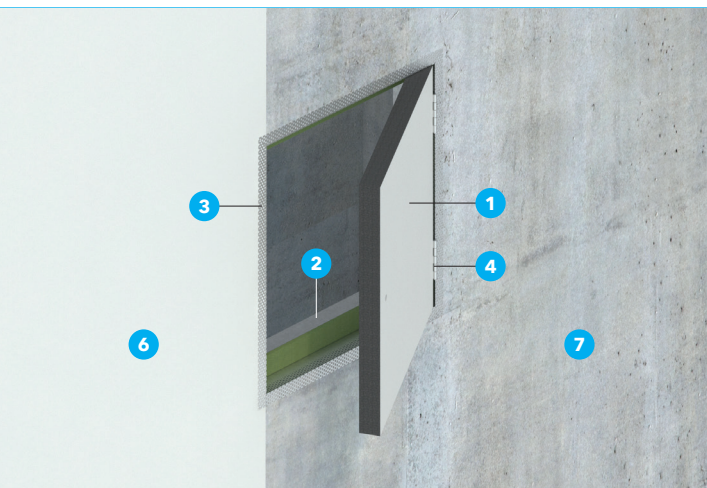
PROMATECT®-L 500 2-hour fire rated hinged access panels (Suspended ceiling)

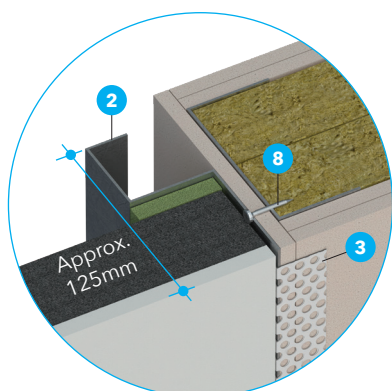
Fire Resistance	FRL	-/120/120	System code: PE.17.12	
	Standard	BS 476: Part 20: 1987		
Construction	Panel size (mm)	Clear opening (mm)	Approx. height (mm)	Approx. weight (kg)
	600 x 600	500 x 500	125	20 ±10%



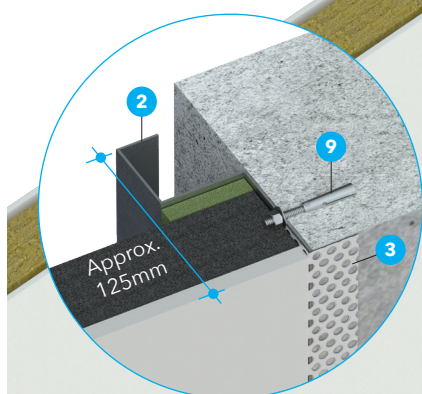
- Promat Access Panel 59mm thick
- No. 4 pan head to secure access panel to reinforced framework.
- Steel channel U-100 x 50 x 1.5mm additional reinforced framework around access panel to be provided by others.
- Access panel framing.
- Fire resistant ceiling.
- Perimeter corner bead.
- Access panel hinges.
- Budget lock.
- Ceiling suspension.
- Suitable steel rod hanger to be provided by others.

PROMATECT®-L 500 2-hour fire rated hinged access panels (Masonry wall/Partition)

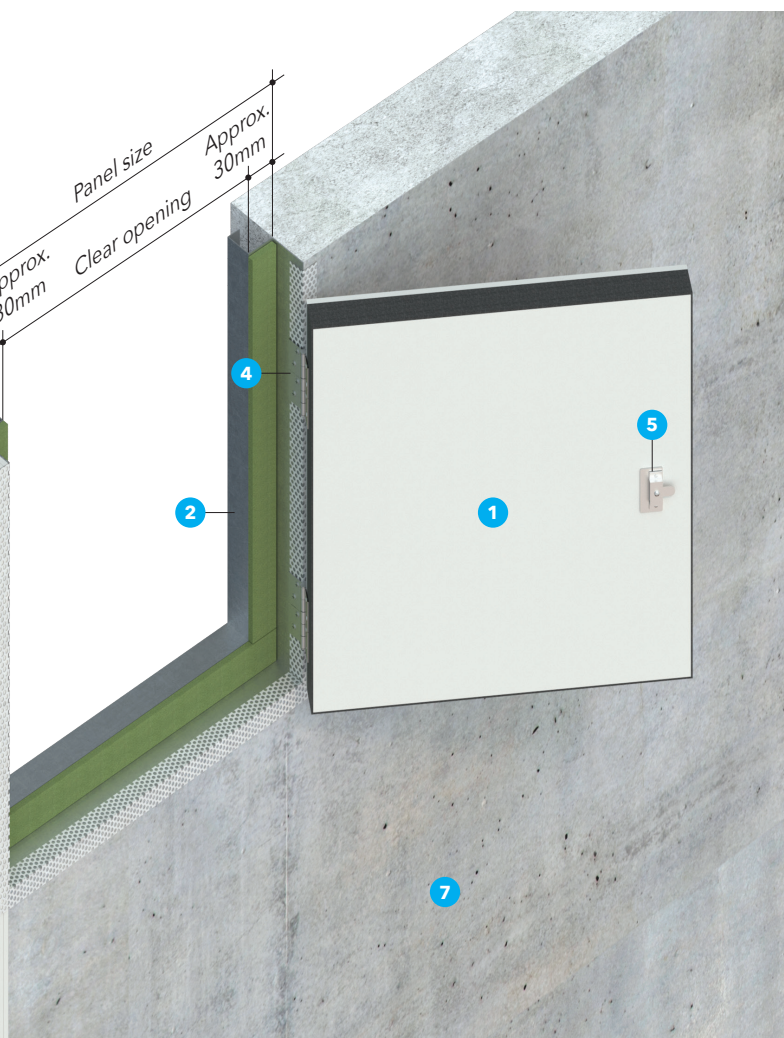
	Fire Resistance	FRL	-/120/120	System code: PE.17.12		
		Standard	BS 476: Part 20 & 22: 1987			
	Construction	Panel size (mm)	Clear opening (mm)	Approx. height (mm)	Approx. weight (kg)	
		600 x 600	500 x 500	125	20 ±10%	



Fixing detail - Partition



Fixing detail - Masonry wall



1. Promat Access Panel 59mm thick
2. Access panel framing.
3. Perimeter corner bead.
4. Access panel hinges.
5. Budget lock.
6. Fire resistant partition.

7. Masonry wall.
8. No. 4 pan head to secure access panel to reinforced framework.
9. M6 all steel anchor bolt at nominal 500mm centres.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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www.promat.com



Promat Asia Pacific

Australia

Promat Australia Pty Ltd

South Australia office

1 Scotland Road
SA 5031 Mile End South
☎ 1800 Promat (776 628)
✉ +61 8 8352 1014
✉ PAPL.mail@etexgroup.com

New South Wales office

Unit 1, 175 Briens Road
Northmead, NSW 2152
☎ 1800 Promat (776 628)
✉ +61 2 9630 0258
✉ PAPL.mail@etexgroup.com

Victoria office

Unit 1, 355 Grieve Parade
Altona North, VIC 3025
☎ 1800 Promat (776 628)
✉ 1800 334 598
✉ PAPL.mail@etexgroup.com

Queensland office

80 Stradbroke St
Heathwood QLD 4110
☎ 1800 011 376
✉ 1800 334 598
✉ PAPL.mail@etexgroup.com

China

Promat Shanghai Ltd

No.2, Tai Hua Street
Yonghe Economic District
Guangzhou City
Guangdong Province 511356
☎ +86 20 8136 1167
✉ promat.cn@etexgroup.com

Hong Kong

Promat International (Asia Pacific) Ltd

Room 1010, C.C. Wu Building
302-308 Hennessy Road
Wanchai
☎ +852 2836 3692
✉ promat.hk@etexgroup.com

Malaysia

Etex Malaysia Sdn Bhd

Unit 19-02-01, Level 2, Wisma Tune
19 Lorong Dungun, Damansara Heights
50490 Kuala Lumpur
☎ +60 3 2095 8555
✉ promat.my@etexgroup.com

Singapore

Promat Building System Pte Ltd

10 Science Park Road, #03-02 The Alpha
Singapore Science Park II
117684 Singapore
☎ +65 6776 7635
✉ promat.sg@etexgroup.com

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About Etex

Etex is a global building material manufacturer and pioneer in lightweight construction. Etex wants to inspire people around the world to build living spaces that are ever more safe, sustainable, smart and beautiful.

Founded in 1905, headquartered in Zaventem, Belgium, Etex is a family-owned company with more than 13,500 employees globally. It operates more than 160 sites in 45 countries and recorded a revenue of EUR 3.7 billion in 2022. Etex fosters a collaborative and caring culture, a pioneering spirit and a passion to always do better for its customers.

Etex has five R&D centres supporting five global divisions:

- Building Performance: dry construction solutions including plasterboards and fibre cement boards, plasters and formulated products, passive fire protection and associated products.
- Exteriors: a range of aesthetic fibre cement materials for use in agriculture, architectural and residential exteriors.
- Industry: fire protection and high-performance insulation products for the construction and OEM (Original Equipment Manufacturer) industries.
- Insulation: glass mineral wool and extruded polystyrene (XPS) for thermal and acoustic insulation.
- New Ways: high-tech offsite modular solutions based on wood and steel framing.

Etex's global portfolio includes leading commercial brands such as Promat, Kalsi, Siniat, Equitone, Eternit, Cedral, Durlock, Gyplac, Pladur, Superboard and URSA.

Etex is Inspiring Ways of Living, for more information, please visit our website: www.etexgroup.com

