

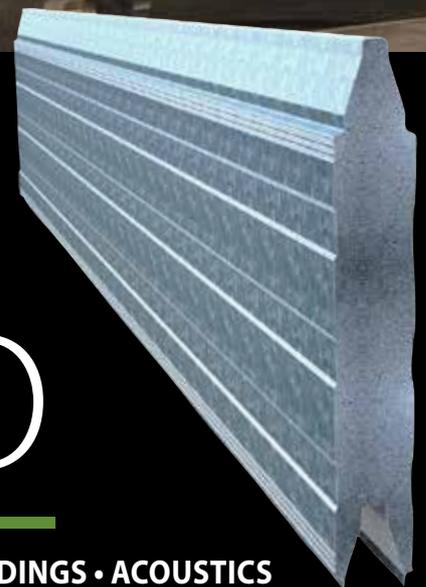
K8



SUPAPANEL®



PROJECT PORTFOLIO



SHAFTS & RISERS • INTERTENANCY WALLS • EXTERNAL & CLADDINGS • ACOUSTICS



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STACK Data Centre

Client: Hickory Group

Budget: \$1.36B AUD

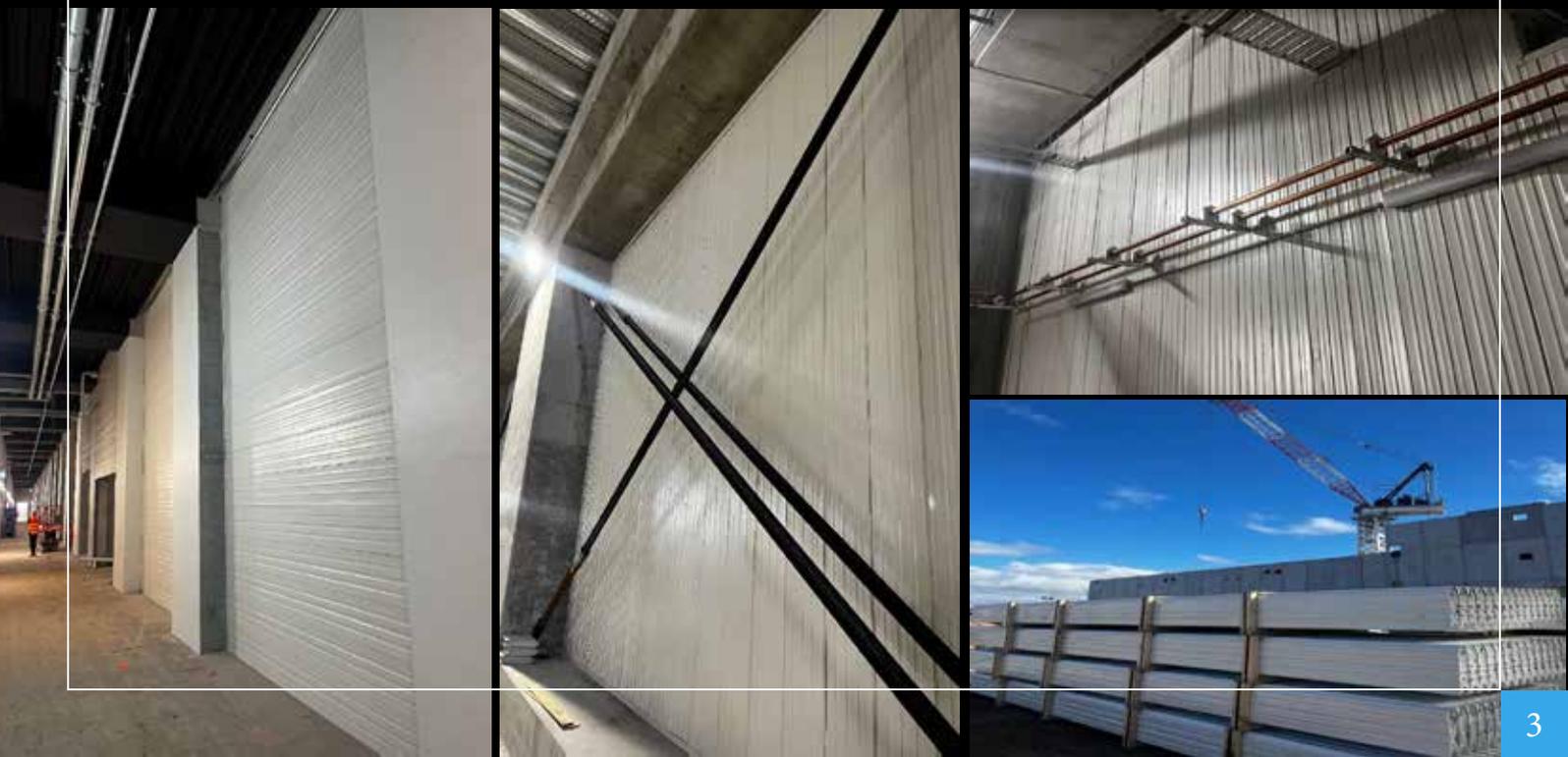
OUR APPLICATIONS:

- 6.2M HIGH FIRE WALLS
- CORRIDOR WALLS
- SHAFTS & RISERS
- FIRE CROSS WALLS

K8 Supapanel's Advantage

While being one of Australia's largest data centres, Hickory Group faced a challenge to run pipes and penetrations through fire walls, as they are unable to be done unless all walls are in place. Our team at K8 Supapanel suggested multiple solutions to cater for all the problems, allowing walls to be built horizontally and eliminating all issues for every scenario.

Being almost 6.4m tall in each level, K8 Supapanel had a huge advantage due to its unrestricted 6.5m span and allowed for walls being built without needing any extra bracing or stiffeners.





Australian Bragg Centre

- Lendlease | Budget: \$500M AUD

OUR APPLICATIONS:

- SHAFT & RISERS
- FIRE PARTITION WALLS

K8 Supapanel provided advantages in many applications such as curved walls and tight corners, our team made sure that all scenarios were covered.





11 Eastern

- Hacer Group | Budget: \$180M AUD

OUR APPLICATIONS:

- SHAFT & RISERS
- FIRE PARTITION WALLS
- STAIR SEPARATION WALLS





Knox Westfield

- Scentre Group | Budget: \$355M AUD

OUR APPLICATIONS:

- SHAFT & RISERS
- FIRE PARTITION WALLS



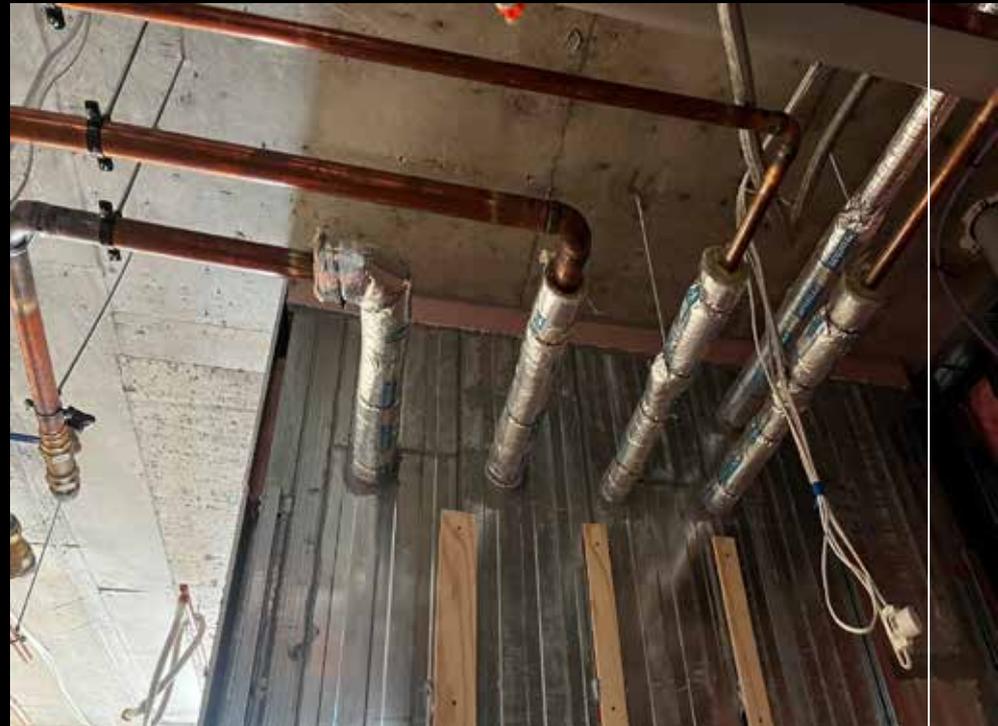


Victoria Place

- ICON | Budget: \$107M AUD

OUR APPLICATIONS:

- SHAFT & RISERS
- FIRE PARTITION WALLS
- PLANT ROOMS





One City Hill

- Morris Group | Budget: \$380M AUD

OUR APPLICATIONS:

- SHAFT & RISERS
- INTERTENANCY FIRE WALLS
- PLANT ROOMS



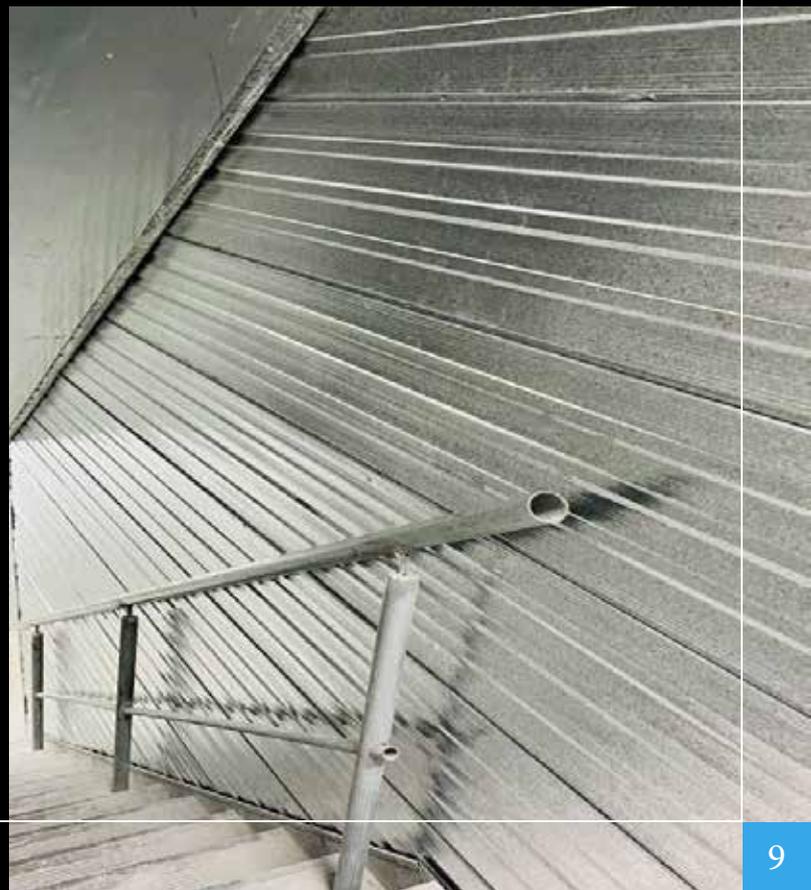


27 Johnston Street

- IRONSIDE | Budget: \$380M AUD

SCISSOR STAIR WALLS:

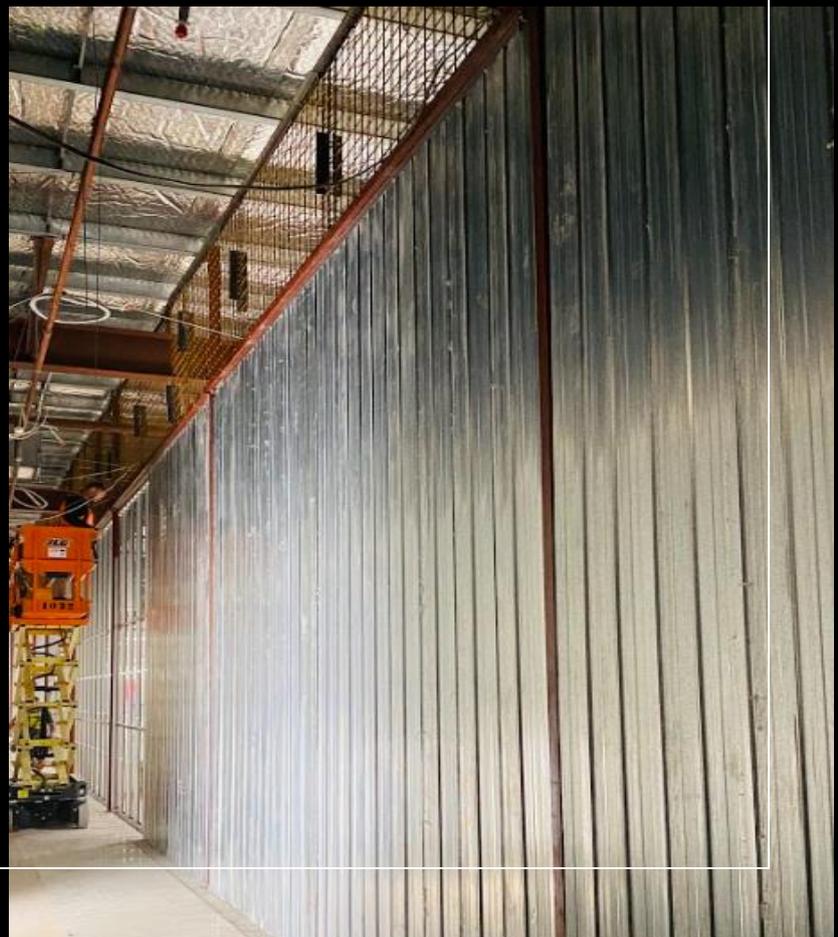
Often building separation walls in stairs can be tricky and challenging. K8 Supapanel's next generation design can eliminate the common problems such as accessibility, fire ratings, along with avoiding the need of heavy angle under the stairs.





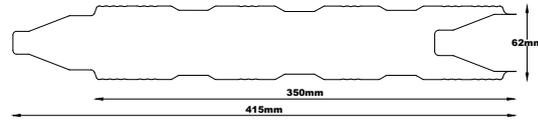
Industrial & Warehouses

K8 Supapanel have a superior advantage with 6.5M Vertical and Horizontal Spans. Industrial and warehouse applications can make great use of K8 Supapanel. Separation walls and boundary walls are another common use of K8 Supapanel, due to its weather-resistance, acoustic and fire performance which provides many benefits to these types of projects.



K8 Supapanel Specifications

62mm K8 Supapanel



FRL : -/180/60
& -/180/90 *



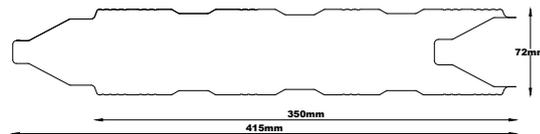
$D_{nT,w}$: 36
 $D_{nT,w} + C_{tr}$: 29



31.32 Kg/M²
10.9 Kg/M

Profile	62mm K8 SUPAPANEL®			
Fire rating (FRL)	-/180/90 with single sided caulked joints		-/180/60 no caulked joints	
Direction of fire	Both directions			
Panel orientation	Vertical	Horizontal	Shaft	Stairs
Max span between structure	4m	4m	4m with 4m cross walls attached.	4.2m Single span with light weight structural steel of 8m. Double spans with light weight structural steel 8.2m
Max wall length (single span)	Unlimited	Unlimited	Unlimited	Unlimited

72mm K8 Supapanel



FRL : -/120/120



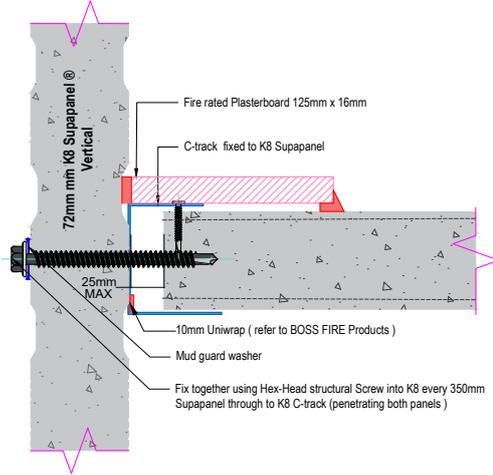
$D_{nT,w}$: 37
 $D_{nT,w} + C_{tr}$: 30



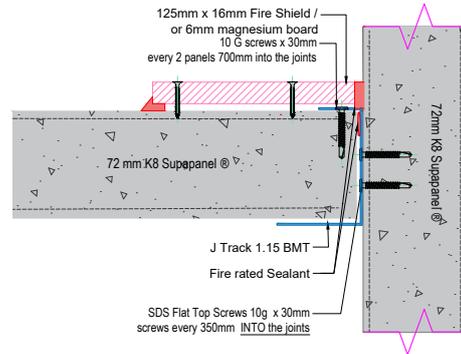
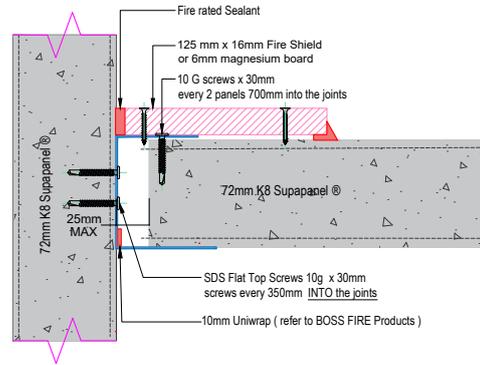
34.63 Kg/M²
12.12 Kg/M

Profile	72mm K8 SUPAPANEL®			
Fire rating (FRL)	-/120/120			
Direction of fire	Both directions			
Panel orientation	Vertical	Horizontal	Shaft	Stairs
Max span between structure	6.5m	6.5m	6.5m	6.5m
Max wall length (single span)	Unlimited	Unlimited	Unlimited	Unlimited

Vertical to Horizontal Typical Details

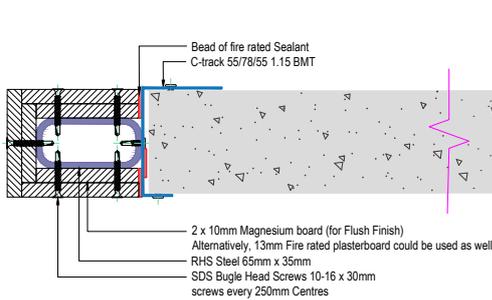


Horizontal to Horizontal Typical Details

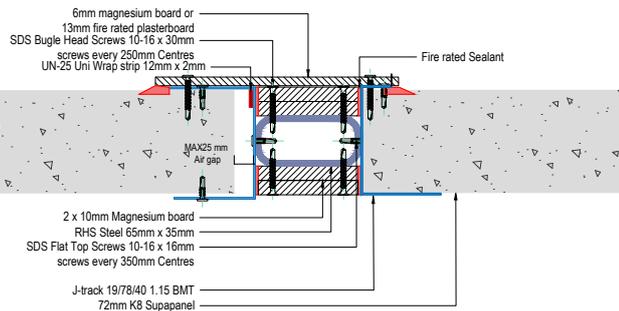


Typical Stair for Steel Details

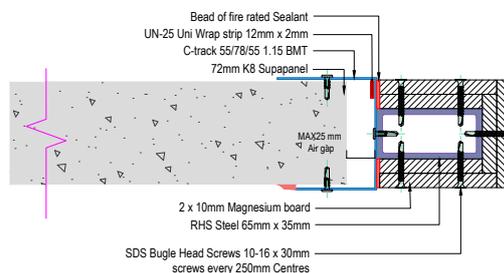
K8 Supapanel® post protection - J Track



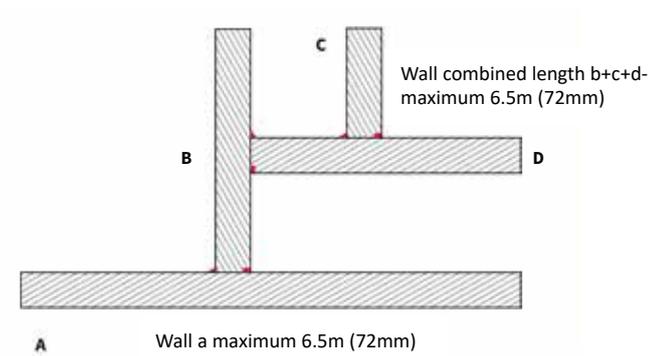
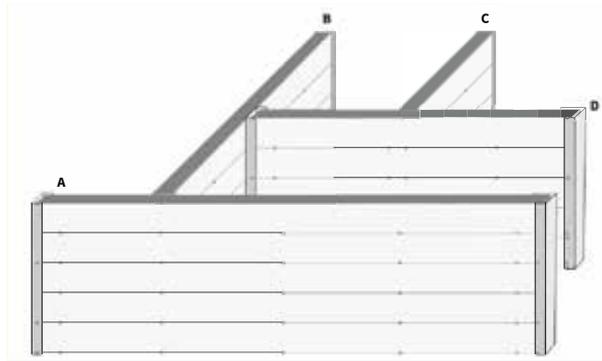
K8 Supapanel® Mid post protection



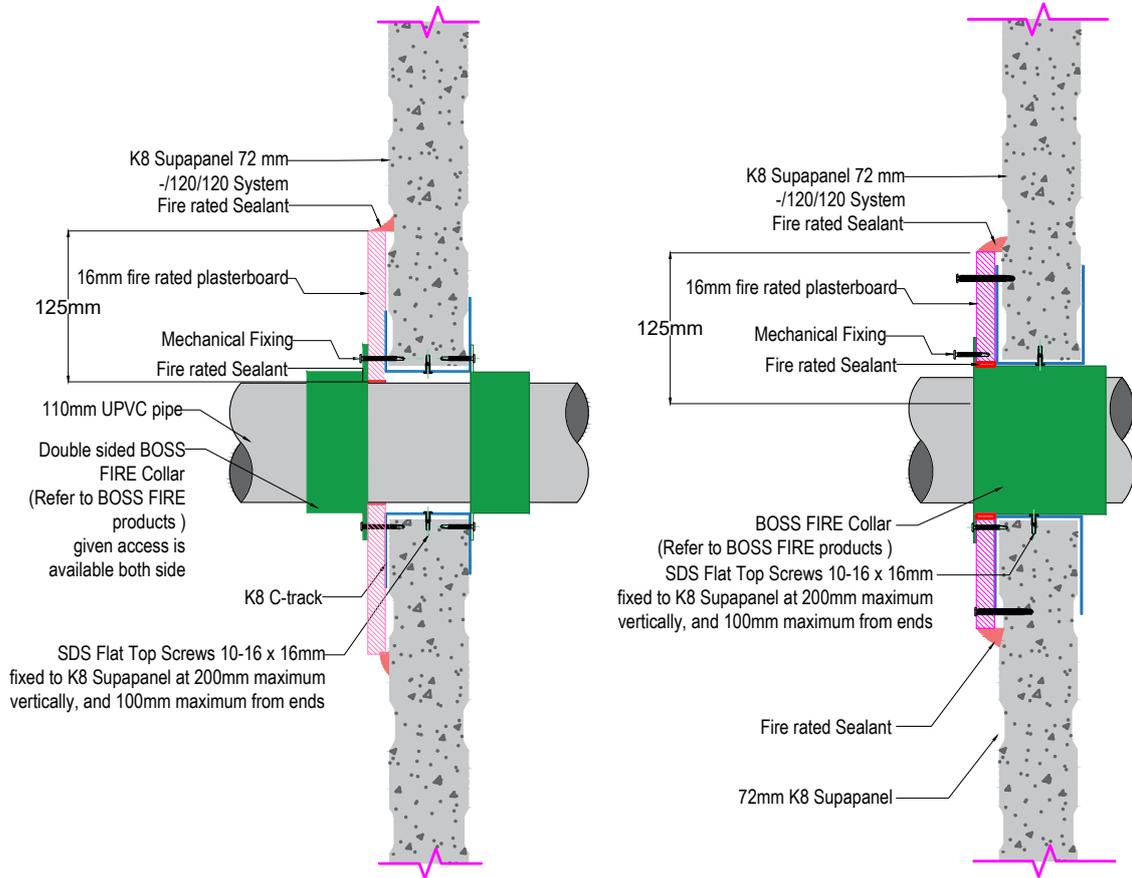
K8 Supapanel® post protection - C Track



Horizontal Shaft Possible Layout



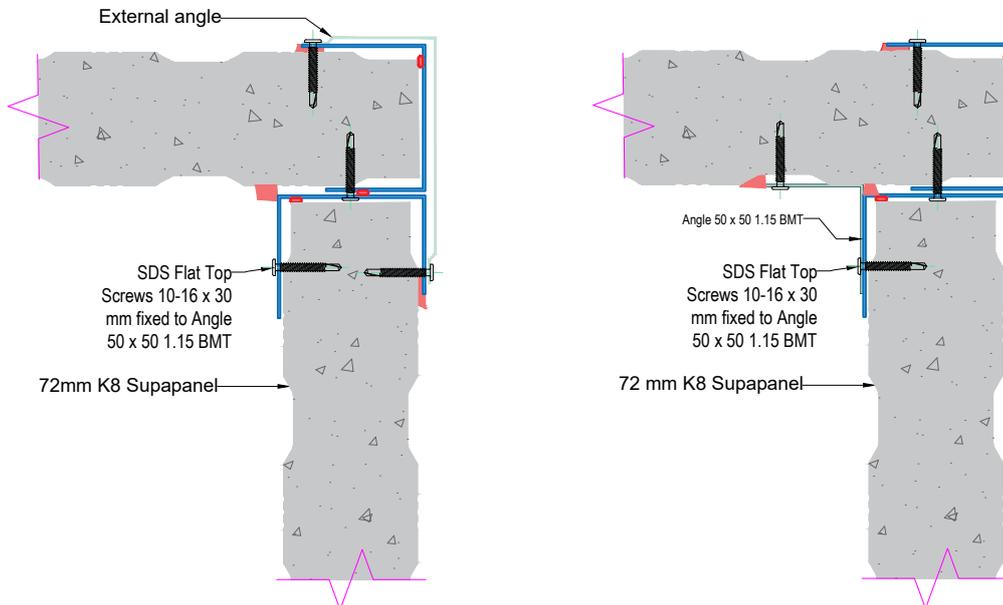
General Pipe Penetration Details



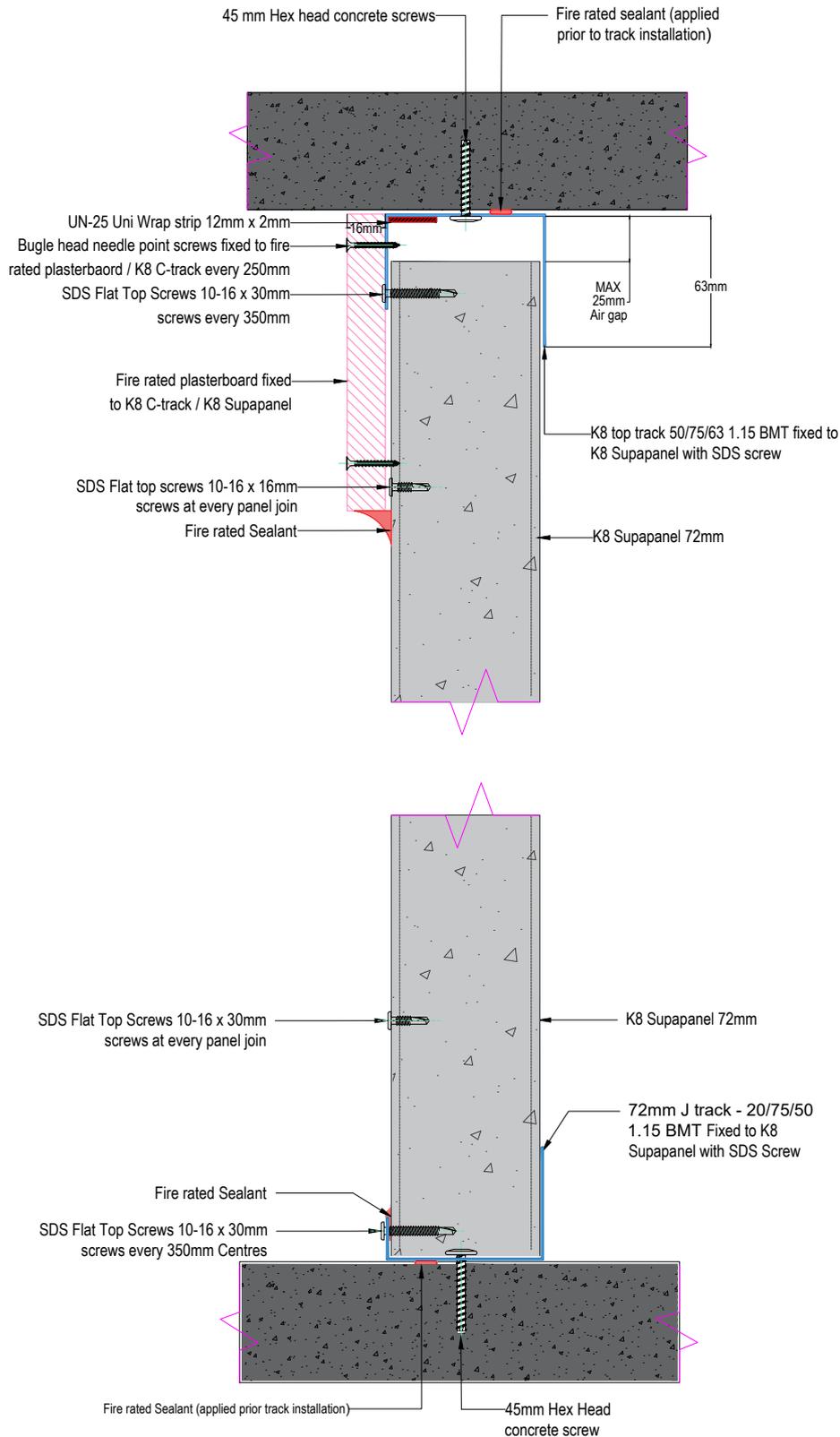
Corner Details

Using internal angle

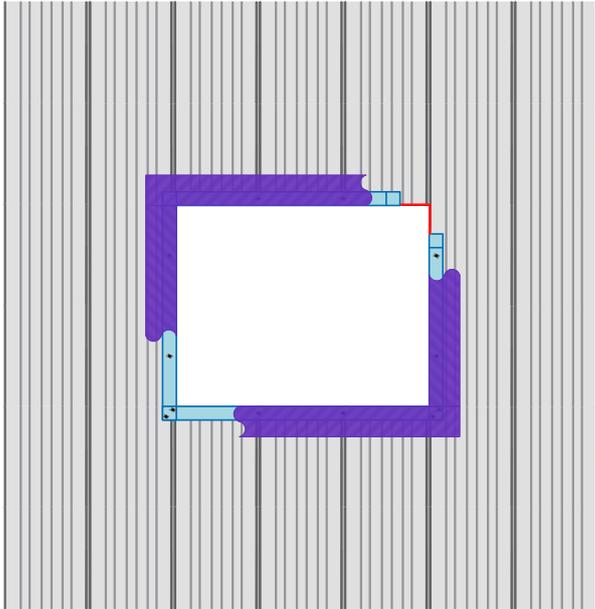
(recommended)



Top and Bottom Track Details



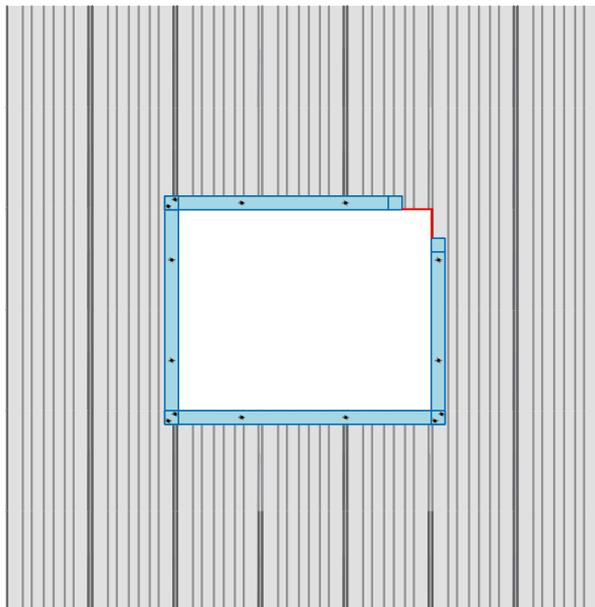
Typical Opening Detail for Dampers for Large Penetration



Notes:

- If opening exceeds 450mm in either length or height then 13mm fire shield or 6mm magnesium board at 125mm is required.
- Additional layers of 125mm strips of fire rated plasterboard may be required to match wall thickness requirements for certified tested dampers.
- Each corner overlapping top ends.
- 72mm K8 SUPAPANEL®.

16mm

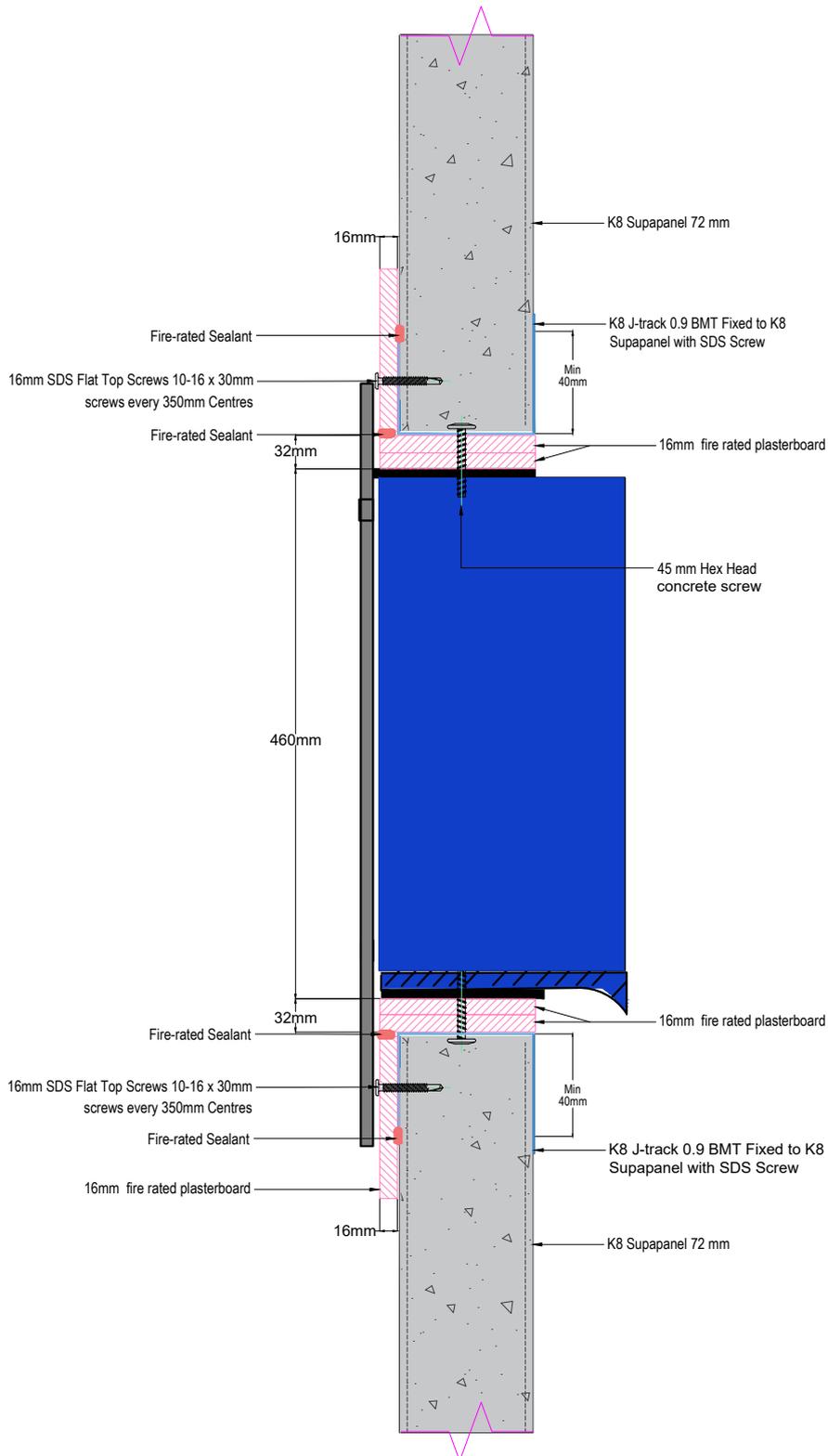


Notes:

- If opening does not exceed 450mm in either length or height then no covering of fire protection is required.
- Additional layers of 125mm strips of fire rated plasterboard may be required to match wall thickness required for certified tested dampers.
- Bead of 2 hour fire rated sealant to seal in between panels and tracks.
- Each corner overlapping top ends.
- 72mm K8 SUPAPANEL®.

16mm :

Access Hatch Details



Typical Wall Systems with Acoustic Performance and Wall Footprints

<p style="font-size: small;">45 mm Hex head concrete screws Fire rated Sealant (applied prior to track installation)</p> <p style="font-size: x-small;">UN-25 Uni Wrap strip 12mm x 2mm SDS Flat Top Screws 10-16 x 30mm screws every 350mm</p> <p style="font-size: x-small;">16mm x125 Fire rated plasterboard fixed to K8 C-track / K8 Supapanel 13mm plasterboard</p> <p style="font-size: x-small;">K8 top track 50/75/63 1.15 BMT fixed to K8 Supapanel with SDS screw</p> <p style="font-size: x-small;">Furring Channel Bugle head needle point screws fixed to fire rated plasterboard / furring channel</p> <p style="font-size: x-small;">425kg CORE K8 Supapanel 72 mm</p> <p style="font-size: x-small;">SDS Flat Top Screws 10-16 x 30mm screws every 350mm Centres</p> <p style="font-size: x-small;">10-15mm GAP BETWEEN SOFFIT & PB FOR SPECIFIED SEALANT. SEALANT BEAD FULL DEPTH OF PB, WITH FOAM BACKING ROD IF REQUIRED. ELASTOMERIC SEALANT TO UNDERSIDE OF SLAB. SEALANTS TO BE FIRE/SMOKE RATED WHERE REQUIRED.</p> <p style="font-size: x-small;">45 mm Hex Head concrete screw Fire rated Sealant (applied prior to track installation)</p> <p style="font-size: x-small;">13mm 72mm 28mm 113mm</p>	<p style="font-size: small;">45 mm Hex head concrete screws Fire rated Sealant (applied prior to track installation)</p> <p style="font-size: x-small;">UN-25 Uni Wrap strip 12mm x 2mm SDS Flat Top Screws 10-16 x 30mm screws every 350mm</p> <p style="font-size: x-small;">16mm x125 Fire rated plasterboard fixed to K8 C-track / K8 Supapanel 13mm plasterboard</p> <p style="font-size: x-small;">K8 top track 50/75/63 1.15 BMT fixed to K8 Supapanel with SDS screw</p> <p style="font-size: x-small;">Furring Channel Bugle head needle point screws fixed to fire rated plasterboard / furring channel 25mm x 18kg/m3 Bradford fibreglass or equivalent</p> <p style="font-size: x-small;">425kg CORE K8 Supapanel 72 mm</p> <p style="font-size: x-small;">SDS Flat Top Screws 10-16 x 30mm screws every 350mm Centres</p> <p style="font-size: x-small;">10-15mm GAP BETWEEN SOFFIT & PB FOR SPECIFIED SEALANT. SEALANT BEAD FULL DEPTH OF PB, WITH FOAM BACKING ROD IF REQUIRED. ELASTOMERIC SEALANT TO UNDERSIDE OF SLAB. SEALANTS TO BE FIRE/SMOKE RATED WHERE REQUIRED.</p> <p style="font-size: x-small;">45 mm Hex Head concrete screw Fire rated Sealant (applied prior to track installation)</p> <p style="font-size: x-small;">13mm 72mm 28mm 115mm</p>
SUPAPANEL / Specialist Wall - FR2	SUPAPANEL / Specialist Wall - FR2
72mm K8 SUPAPANEL	72mm K8 SUPAPANEL
72mm K8 SUPAPANEL / 13mm PLASTERBOARD	72mm K8 SUPAPANEL / 13mm PLASTERBOARD
72MM -/120/120	72MM -/120/120
DwTn 47 + Ctr 37	DwTn 49 + Ctr 40
R0.30	R0.30
WALL WIDTH 115mm	WALL WIDTH 115mm

<p>45 mm Hex head concrete screws</p> <p>Fire rated Sealant (applied prior to track installation)</p> <p>UN-25 Uni Wrap strip 12mm x 2mm</p> <p>SDS Flat Top Screws 10-16 x 30mm screws every 350mm</p> <p>16mm x125 Fire rated plasterboard fixed to K8 C-track / K8 Supapanel</p> <p>K8 top track 50/75/63 1.15 BMT fixed to K8 Supapanel with SDS screw</p> <p>425kg CORE K8 Supapanel 72 mm</p> <p>SDS Flat Top Screws 10-16 x 30mm screws every 350mm Centres</p> <p>45 mm Hex Head concrete screw</p> <p>Fire rated Sealant (applied prior to track installation)</p> <p>72mm</p>	<p>45 mm Hex head concrete screws</p> <p>Fire rated Sealant (applied prior to track installation)</p> <p>UN-25 Uni Wrap strip 12mm x 2mm</p> <p>SDS Flat Top Screws 10-16 x 30mm screws every 350mm</p> <p>K8 top track 50/75/63 1.15 BMT fixed to K8 Supapanel with SDS screw</p> <p>16mm x125 Fire rated plasterboard fixed to K8 C-track / K8 Supapanel</p> <p>20mm</p> <p>13mm plasterboard</p> <p>64mm metal Stud</p> <p>425kg CORE K8 Supapanel 72 mm</p> <p>SDS Flat Top Screws 10-16 x 30mm screws every 350mm Centres</p> <p>Fire rated Sealant (applied prior to track installation)</p> <p>45 mm Hex Head concrete screw</p> <p>72mm</p> <p>64mm</p> <p>20mm</p> <p>13mm</p> <p>169mm</p>
<p>SUPAPANEL / Specialist Wall - FR2</p>	<p>SUPAPANEL / Specialist Wall - FR2</p>
<p>72mm K8 SUPAPANEL</p>	<p>72mm K8 SUPAPANEL</p>
<p>72mm K8 SUPAPANEL</p>	<p>72mm K8 SUPAPANEL / 64mm Metal stud / 13mm PLASTERBOARD</p>
<p>72MM -/120/120</p>	<p>72MM -/120/120</p>
<p>DwTn 35 + Ctr 33</p>	<p>DnTw 56 + Ctr 47</p>
<p>R0.30</p>	<p>R0.30</p>
<p>WALL WIDTH 72mm</p>	<p>WALL WIDTH 169mm</p>

Test Certificates and Documentations





TEST CERTIFICATE

No. C23046

This is to certify that the specimens described below were tested by the FireTS Laboratory - Passive Fire Inspection and Test Services Ltd – Accreditation No 1335 - in accordance with AS 1530.4-2014 – Method for fire tests on building materials, components and structure – Section 3 – Walls. Vertical separating elements, on behalf of:

Wall Technologies Pty Ltd
Kilsyth South, Victoria, 3137, Australia

Separating element description:
Nominal 3m high x 3m wide x 72mm thick prefabricated non-loadbearing wall system made of vertical Supapanel panels with special joints, head and side track details.

Product description:
Steel Shell 0.35mm BMT Supapanel Panel with lightweight aerated concrete core of 425kg/m³ nominal density with custom-made tongue and groove vertical joint. Width of the panel - 410mm (insert fitted coverage - 350mm).

Test results	
Structural adequacy	Not Applicable
Integrity	127 minutes
Insulation	127 minutes
Fire resistance level (FRL)	-/120/120

This certificate is provided for general information only and does not comply with the regulatory requirements for evidence of compliance.

A full description of the test specimen, proposed installation and the complete test results are detailed in the Tests Report PF23046.

Issued by
Alexey Kokorin
Technical Manager

Date: 13th of September 2023

Passive Fire Inspection and Test Services Limited
1/13 Pavilion Drive, Mangere, Auckland 2022, New Zealand
www.pfifs.co.nz




TEST CERTIFICATE

No. 0001

This is to certify that the specimen described below was tested by the Passive Fire Inspection and Test Services Ltd - PFITS Laboratory in accordance with AS 1530.4-2014 - Method for fire tests on building materials, components and structure - Part 4: Fire-resistance tests for elements of construction, Walls - Vertical separating elements, on behalf of:

Wall Technologies P/L, 2 Sunset drive, Kilsyth South, Victoria, Australia, 3137

The tested product:
Supapanel 0.3mm metal clad panels filled with a 320kg/m³ lightweight cementitious core. Panels are 3m long x 350mm cover (420mm wide including tongue) with a custom-made tongue and groove vertical joint.

The tested specimen:
3000mm high x 3000mm wide x 62mm thick prefabricated non-loadbearing wall system made of vertical Supapanel panels with special top sealing section.

The test results:

Actual Integrity	Actual Insulation	FRL
188 NF	62	-/180/60

NF - no failure during the test

THIS CERTIFICATE IS PROVIDED FOR GENERAL INFORMATION ONLY AND DOES NOT COMPLY WITH THE REGULATORY REQUIREMENTS FOR EVIDENCE OF COMPLIANCE.

A full description of the test specimen and the complete test results are detailed in the Tests Report PF19066.

Issued by
Alexey Kokorin
Technical Manager

Date: 5th of February 2020

Passive Fire Inspection & Test Services
1/13 Pavilion Drive Mangere, Auckland, New Zealand | PO Box - 2022
www.pfifs.co.nz

K8 Supapanel Green Sheet

This Document states the green initiatives of K8 Supapanel to achieve Green Star which is an internationally recognized sustainability rating system. As our company works toward Green Star Rating. Our green characteristics demonstrate Innovation, sustainability and recyclability due to:

- ✓ 40% less steel has been used for manufacturing compared to other equivalent system, with 25% of the steel being recyclable.
- ✓ Our panels have a life cycle of minimum 50 years for internal use.
- ✓ For any future renovations or change of planning, our panels can be 100% dismantled and reused.
- ✓ All materials used for production are 100% recyclable.
- ✓ All washing and processed water is recycled and re-purposed in the concrete core.
- ✓ With 425 Density 72mm Panel being the prime product for 2-hour fire-rating (-/120/120). Less materials are used compared to any most conventional systems for the same purpose.
- ✓ Timber used for packaging is encouraged to be sent back for re-purposing and re-using for packaging again.
- ✓ K8 Supapanel uses approximately 60% LESS quarry materials compared to traditional blockworks.



100% reusable



Speedy installation



50 years lifetime



Can be dismantled and re-used

For More Information, feel free to contact us!
K8 Supapanel is the next generation of Aerated panels.




www.k8australia.com.au
david@k8australia.com.au | 0424 207 281
kate@k8australia.com.au | 0437 565 292
ABN: 99 626 071 949 | 51-79 Merrindale Drive, Croydon South, Vic, 3136

Wind local pressure ratings as per Robert Bird Group Report

Note: Full report requires verification before of project application

Pressure (Pa)	Maximum Supapanel Height (m)			
	L/150	L/200	L/250	L/300
250	6.5	6.5	6.5	6.2
375	6.5	6.4	6.1	5.7
500	6.4	5.9	5.4	5.1
625	6.0	5.4	5.0	4.7
750	5.6	5.1	4.7	4.4
875	5.4	4.9	4.5	4.2
1000	4.9	4.4	4.1	3.8
1125	4.7	4.2	3.9	3.7
1250	4.5	4.1	3.8	3.6
1375	4.4	3.9	3.7	3.4
1500	4.2	3.8	3.6	3.3
1625	4.1	3.7	3.5	3.3
1750	4.0	3.6	3.4	3.2
1875	3.9	3.6	3.3	3.1
2000	3.7	3.3	3.1	2.9
2125	3.6	3.3	3.0	2.9
2250	3.5	3.2	3.0	2.8
2375	3.5	3.2	2.9	2.8
2500	3.4	3.1	2.9	2.7
2625	3.4	3.0	2.8	2.7
2800	3.3	3.0	2.8	2.6
2925	3.2	2.9	2.7	2.6
3050	3.2	2.9	2.7	2.5

Authorised Distributors

VIC:

- STUDWORKS

www.studworks.com.au

Ph: 03 8516 1553 | orders@studworks.com.au

- K8 BUILDING TECH

www.k8global.com

Ph: 0433 199 329 | info@k8global.com

NSW:

- REFLEX PANELS

www.reflexpanels.com.au

Ph: 1300 720 185 | info@reflexpanels.com.au

SA:

- K8 GLOBAL SA

www.k8global.com

Ph: 0433 119 329 | info@k8global.com

- REFLEX PANELS

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NT:

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QLD:

- REFLEX PANELS

www.reflexpanels.com.au

Ph: 1300 720 185 | info@reflexpanels.com.au



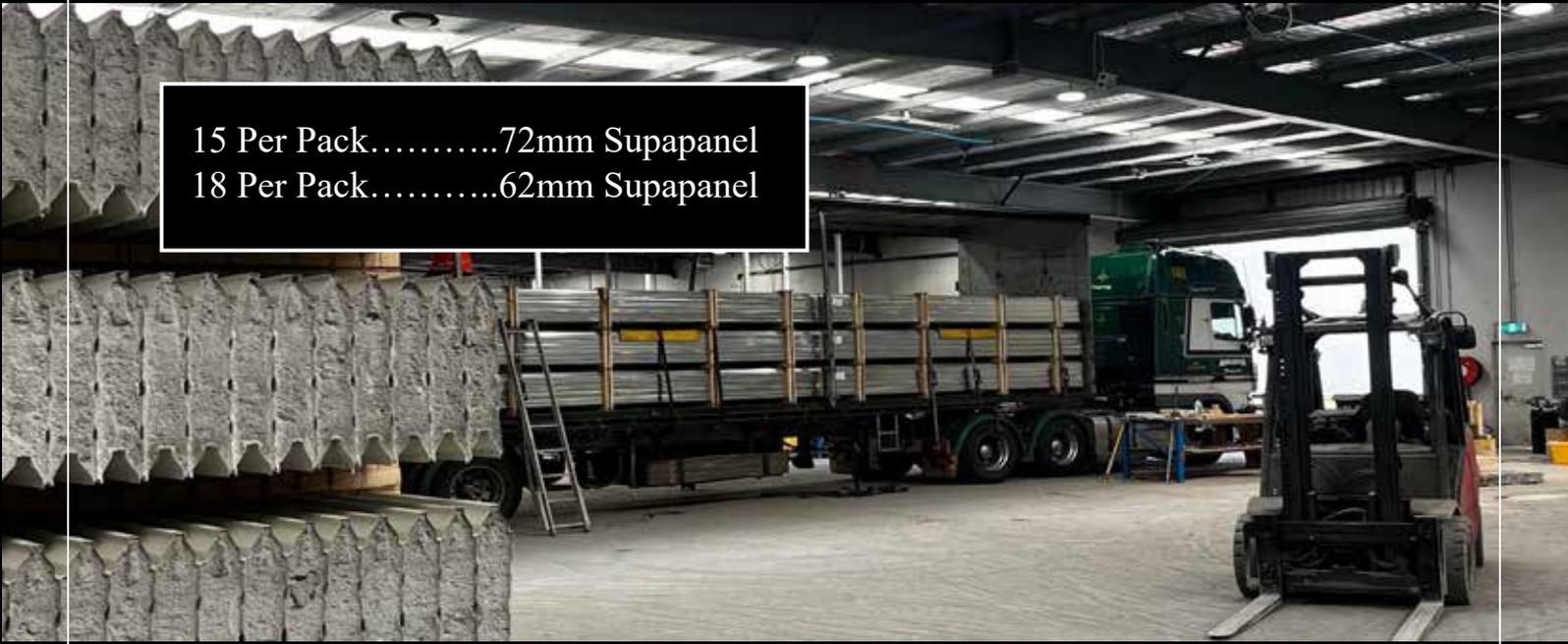
ENQUIRIES

15 LONGFORD COURT, SPRINGVALE, VIC 3171

PO Box 188, Kilsyth, 3137

Technical: Orders/Sales:

David: 0424 207 281



15 Per Pack.....72mm Supapanel
18 Per Pack.....62mm Supapanel

K8 Supapanel tests & reports available upon request:

- 
- Acoustics
 - Full scale fire test
 - Pilot fire test
 - Air Infiltration
 - Wind load
 - Structural
 - Seismic