

**GYPROCK™**

Everything else is just plasterboard



**GYPROCK STRATAWALL™**  
**INTER-TENANCY WALL SYSTEMS**  
**INSTALLATION GUIDE**

PROFESSIONAL  
SOLUTIONS

**CSR**

# CONTENTS

Introduction	2
Applications	2
System Features	2
Components	3 – 5
Design Considerations	6 – 8
System Selection	9 – 13
Installation Details	14 – 17
Junction Details	18 – 20
Penetration Details	21 – 23
Health, Safety & Guarantee	24
Contact Information	24

## INTRODUCTION

The Gyprock StrataWall™ Systems are designed to provide separating walls between units in high rise buildings.

Gyprock StrataWall™ is a range of systems characterised by a fire barrier between the finishing linings. To accommodate services, cavities are formed by separate framing on one or both sides. The finishing linings are fixed to the separate framing, or directly applied to one side of the fire barrier. The fire barrier allows the finishing linings to be installed as per normal decorative linings, and to incorporate services and penetrations.

The basis of the fire performance is the fire barrier which consists of one or two layers of 25mm Gyprock™ Shaft Liner Panel between purpose designed H-studs. The H-studs are installed between a unique folding track (patent pending) at top and bottom. The folding tracks allow the Shaft Liner Panels to be installed rapidly and with little lifting.

The basis of the acoustic performance is the insulated single or double cavity. This provides discontinuous construction for impact isolation.

Additional systems are available for:

- Higher acoustic performance.
- Security rating.
- Impact damage rating.

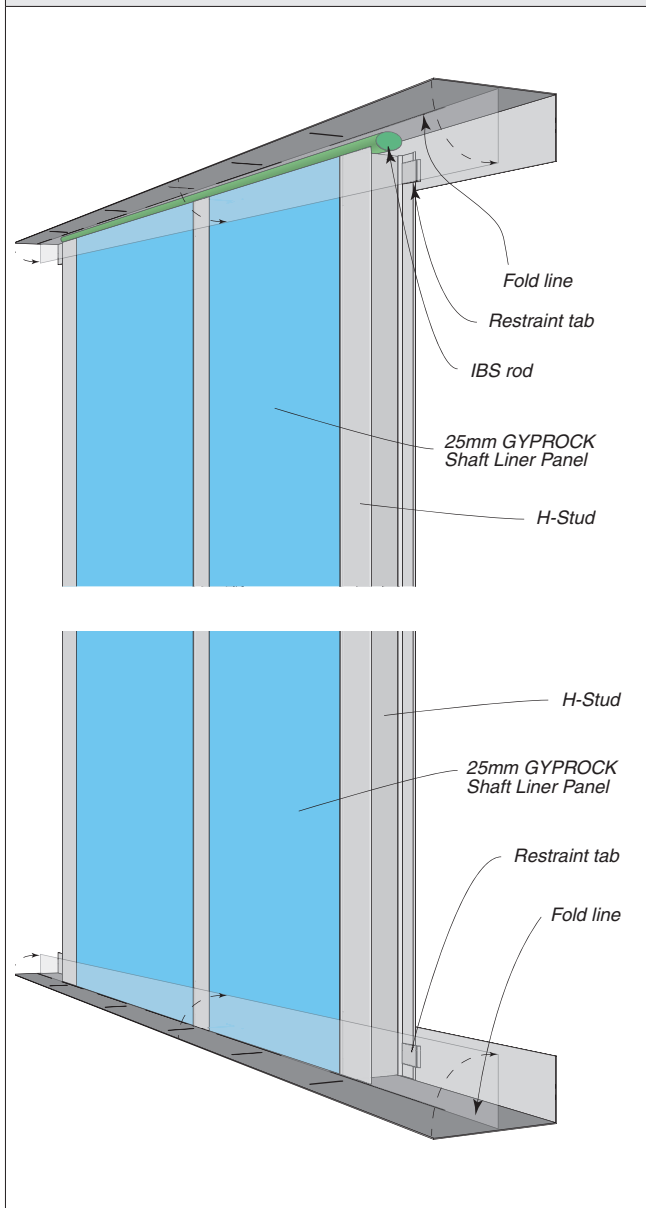
## APPLICATIONS

CSR Gyprock StrataWall™ systems are designed as non-loadbearing separating walls for Class 2 & 3 buildings that have concrete floors. Systems are available with FRL –/60/60 to FRL –/120/120 and sound ratings to meet BCA requirements.

## System Features


- Fire Barrier is created with one or two layers of GYPROCK SHAFT LINER PANEL in H-studs and tracks.
- Tested fire, acoustic and structural performance.
- Unique folding wall track (patent pending), enables fast installation of fire barrier with little lifting of Shaft Liner Panels.
- Light weight system installed by a single trade.
- Systems available for wet areas.
- Services may be included in wall cavities.

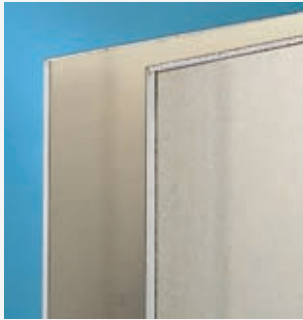
FIG 1: STRATAWALL™ FOLDING TRACK AND H-STUDS





# COMPONENTS


## Linings

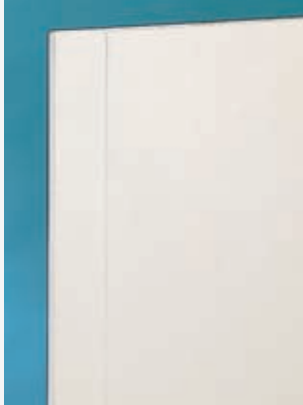
Gyprock™ Shaft Liner Panel	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>Machine made sheet composed of a glass fibre reinforced gypsum core encased in a heavy duty liner board.</li> <li>25mm thick with a mass of approximately 19.8kg/m<sup>2</sup></li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Fire rated separating walls and service shafts.</li> </ul>	

Gyprock™ Plasterboard CD – Recessed Edge	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>1.5mm recess on face side allows formation of shallow channel for joint reinforcement.</li> <li>Provides smooth, even and continuous surface once jointed.</li> <li>10mm and 13mm thickness.</li> <li>Manufactured to the requirements specified in AS2588 : 1998 – Gypsum Plasterboard.</li> <li>Manufactured with CD technology.</li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Internal walls and ceilings.</li> </ul>	

Gyprock Aquachek™	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>Specially processed plasterboard.</li> <li>Both the core and linerboard facing are treated in manufacture to withstand the effects of moisture and high humidity.</li> <li>Manufactured to the requirements specified in American Society for Testing and Materials C630.</li> <li>For use as a wall and ceiling lining in 'wet areas' and high moisture areas in residential and commercial applications.</li> <li>Recessed edges allow flush jointing to Recessed Edge Plasterboard.</li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Gyprock Aquachek™ is a suitable substrate for ceramic tiles.</li> <li>Usage areas include bathrooms, kitchens, laundries, garages and ceiling applications such as walkways and verandahs.</li> <li>The Gyprock Aquachek™ Wet Area Lining System is suitable for walls in high, medium and low risk level wet areas as defined in AS3740.</li> </ul>	

Gyprock Soundchek™	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>Designed to provide enhanced acoustic resistance in wall and ceiling systems.</li> <li>A machine made sheet composed of a high density gypsum core encased in a heavy duty linerboard.</li> <li>Long edges are recessed to assist in producing a smooth, even and continuous surface once jointed.</li> <li>13mm thickness.</li> <li>Manufactured to the requirements specified in AS2588 : 1998 – Gypsum Plasterboard.</li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Internal walls where a higher sound rating is required.</li> </ul>	

Gyprock Fyrchek™	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>Suitable for wall and ceiling systems where a fire rating is to be achieved, or where acoustic performance is required.</li> <li>Composed of a specially processed glass fibre reinforced gypsum core encased in a heavy duty pink liner board.</li> <li>Long edges are recessed for flush jointing.</li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Fire rated walls and ceilings.</li> <li>High performance acoustic rated walls and ceilings.</li> </ul>	

CeminSeal™ Wallboard	
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>CeminSeal™ Wallboard Sheet conforms to the requirements of AS2908.2 : 1992 'Cellulose-cement products Part 2: Flat sheets'. Type B, Category 3.</li> <li>Features an embedded micro waterblock technology that prevents water penetrating into the sheet, repelling water and providing a more stable sheet.</li> <li>Long edges are recessed to enable seamless jointing.</li> <li>In accordance with the Building Code of Australia, Part 3.7.1.2, Cemintel™ fibre cement sheets can be used wherever non-combustible material is required by the code.</li> </ul>	
<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>Wet area such as bathrooms, laundries and semi-exposed ceilings and soffits.</li> <li>Impact resistant walls.</li> </ul>	

**TABLE 1: GYPROCK™ PRODUCT WEIGHTS**

Colour shading behind each product approximates the colour of the product face liner sheets. For detailed sheet sizes and availability, contact the CSR Gyprock Sales Centre in your region or refer to [www.gyprock.com.au](http://www.gyprock.com.au)

Gyprock™ Lining Products	Thickness mm	Mass kg/m <sup>2</sup>
CD RECESSED EDGE	10	6.5
	13	8.5
CD SQUARE EDGE	10	6.5
	13	8.5
CD RECESSED EDGE/SQUARE EDGE	10	6.5
SUPACEIL™	10	7.2
SOUNDCEK™	13	13.0
AQUACHEK™	10	8.0
	13	10.4
IMPACTCEK™	13	10.3
SUPERCHEK™	10	10.4
EC08™ PARTITION	13	9.3
EC08™ FIRE	13	10.5
EC08™ IMPACT	13	12.1
FLEXIBLE	6.5	4.25
FYRCHEK™	13	10.5
	16	12.5
FYRCHEK™ MR	13	10.7
	16	13.5
PERFORATED SHEET	13	10.0
SHAFT LINER PANEL	25	19.8

Cemintel™ Fibre Cement Product	Thickness mm	Mass kg/m <sup>2</sup>
CeminSeal™ Wallboard	9	14.3

## Fire Barrier

- **Gyprock™ Shaft Liner Panel**

One or two layers in H-studs and tracks.

## Fasteners

- **Gyprock™ Plasterboard Laminating Screw:**

40mm x N°10. for fixing plasterboard to Shaft Liner Panels.

Order N°	Pack Qty
12215	1000

- **Drill-point wafer-head screw:**

10g x 16mm, for fixing H Stud to tracks.

Order N°	Pack Qty
39367	1000
40914	100

- **Needle-point screw:**

6g – 18 x 25mm for fixing 13mm plasterboard to steel studs.

Order N°	Pack Qty
10606	1000

- **Track fasteners:**

Must be steel e.g. power actuated concrete nails, flat or round head expansion anchors.

## Sealants

- **Gyprock™ Wet Area Acrylic Sealant:**

Order N°	Pack Qty
10902	450g tube

- **Gyprock™ Fire Mastic:**

Order N°	Pack Qty
10924	600ml tube

## Promat™ IBS Rod

Used at the top of the fire barrier.

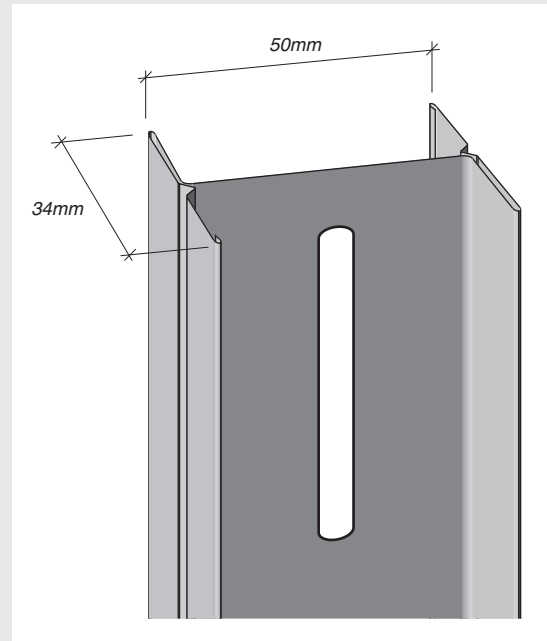
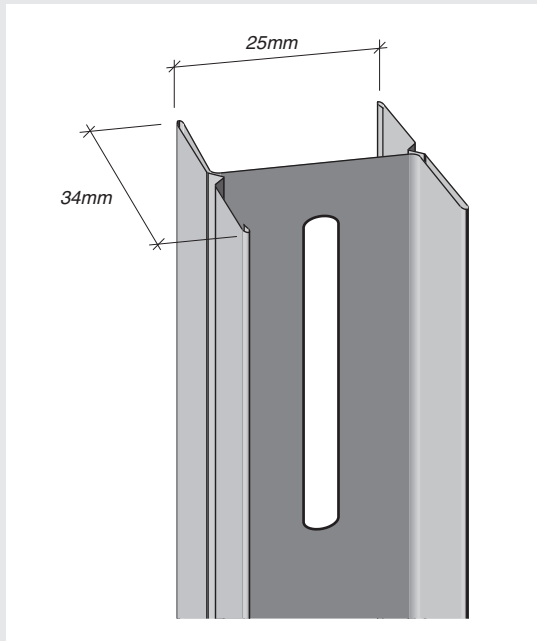
Nom. Size	Order N°	Length
22mmø	51632	100m
29mmø	29243	60m

NOTE: Use 22mmø rod for gaps up to 19mm.  
Use 29mmø rod for gaps up to 26mm.

## Steel H-stud

Gyprock StrataWall™ systems incorporate 25mm or 50mm H-studs to support the SHAFT LINER PANELS at vertical joints. They are made from 0.55mm BMT G275 galvanised steel.

Nom. Size	Order N°	Length
25mm	39156	3000mm
50mm	74016	3000mm

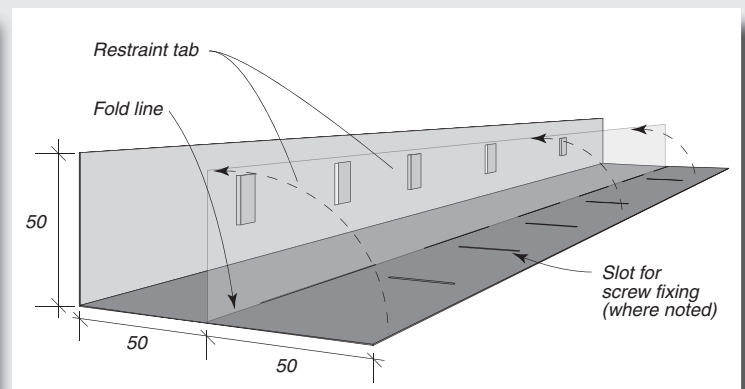
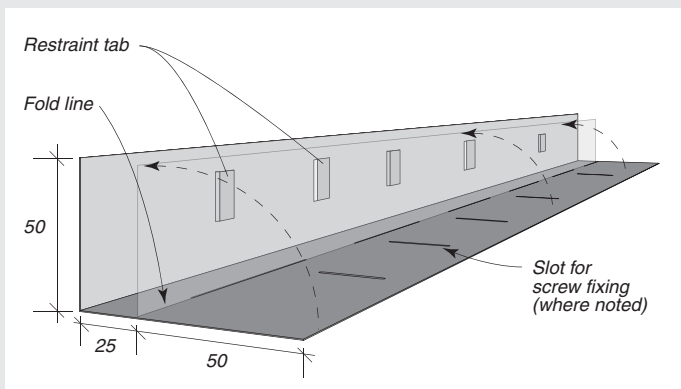


## Folding Wall Track

Folding Wall Track is used in the following applications:

- To locate and support H-studs and SHAFT LINER PANELS at the top and the bottom of wall.
- Support of SHAFT LINER PANELS at the ends of wall.

Nom. Size	Order N°	Length
25mm	74014	3000mm
50mm	74015	3000mm



## Insulation

Insulation Product	Abbreviation used in system tables
50mm Bradford Glasswool Partition batts, 450 or 600mm – 11kg/m <sup>3</sup>	50 GW Partition 11kg
75mm Bradford Glasswool Partition batts, 450 or 600mm – 11kg/m <sup>3</sup>	75 GW Partition 11kg
50mm Bradford Glasswool Partition batts, 450 or 600mm – 14kg/m <sup>3</sup>	50 GW Partition 14kg
75mm Bradford Glasswool Partition batts, 450 or 600mm – 14kg/m <sup>3</sup>	75 GW Partition 14kg
100mm Bradford Glasswool Partition batts, 450 or 600mm – 14kg/m <sup>3</sup>	100 GW Partition 14kg
110mm Bradford Glasswool Partition batts, 600mm – 11kg/m <sup>3</sup>	110 GW Partition 11kg
88mm Bradford SoundScreen R2.5 Wall batts – 30kg/m <sup>3</sup>	88mm RW SoundScreen R2.5
Tontine TSB 2 (50mm) Polyester Insulation	TSB2 Polyester batts
Tontine TSB 3 (65mm) Polyester Insulation	TSB3 Polyester batts
Tontine TSB 5 (85mm) Polyester Insulation	TSB5 Polyester batts

# DESIGN CONSIDERATIONS

## Structural Design

Gyprock StrataWall™ systems are non-loadbearing. The walls are designed to BCA Specification C1.8 Clause 3.4 Walls Generally, including pressure of 0.25kPa.

Shelf loads and internal wind pressures must be determined by the project structural engineer and the studs must be designed to suit. H-studs are not suitable for shelf loading.

Wall tracks are to be fixed to the structure at 600mm maximum centres. Each fixing is to be designed for a minimum shear load of 0.75kN and to suit the design pressure.

## Fire Resistance

The Gyprock StrataWall™ systems in this manual have been tested and assessed by Warrington Fire Research in accordance with the principles of AS1530.4. They are suitable for the stated FRL when designed in accordance with the structural considerations above. Report N°21241.

## Acoustic Performance

The acoustic performance of wall systems is expressed in terms of  $R_w$  and  $R_w+C_{tr}$ . They have been assessed by Norman Disney Young (Report N°RP 02267S), and the ratings refer to expected laboratory performance. Laboratory testing to AS/NZS1276.1 has been performed by National Acoustic Laboratories. Reports ATF-1910, ATF-1912, ATF-1932.

Some systems rely on cavities that are completely filled with insulation. Contact CSR Gyprock for performance values where there is any change to the system specification. The site performance of the systems may be affected by sound flanking, the effectiveness of workmanship, and the inclusion of structural elements and bridging items. The building designer must pay special attention to airborne and structural flanking paths to minimise the difference between laboratory and field performance.

## Substitution

Plasterboard linings and barriers, and fibre cement linings, must be as specified in the system and be supplied by CSR Gyprock and Fibre Cement. No statement of performance will be provided by CSR when other product brands are used.

## Wallboard & Plasterboard Fixing

Walls may be built to achieve a particular 'Level of Finish' as defined in AS/NZS2589.1. The Level of Finish specified can have requirements for frame alignment, jointing, back-blocking methods and sheet orientation. Cemintel™ Wallboard and Gyprock™ plasterboard may be installed vertically or horizontally, although for some Levels of Finish, horizontal sheeting must be used.

In wet areas, Gyprock Aquachek™ of the same thickness shall be used in lieu of Gyprock™ Plasterboard CD. Walls lined with Gyprock™ plasterboard or Cemintel™ Wallboard may be finished with tiles. For tiles greater than 32kg/m<sup>2</sup> or over 6.5mm thickness, specific installation details apply. Refer to the appropriate installation manual.

## Control Joints

Control joints must be installed to allow for structural movement. Allowance for movement must be made through the frame, lining and any tiles. Refer to construction details in this guide.

Control joints must be installed at the following locations:

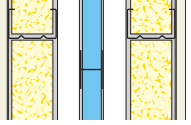
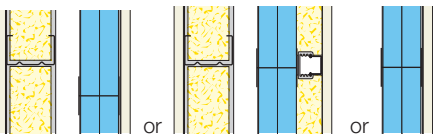
- At all construction joints in the building.
- At changes of the structural support system.
- At junctions with other building elements.
- At changes of the lining material.
- For walls with plasterboard outer layer – at 12m maximum centres.
- For non-tiled internal walls with fibre cement outer layer – at 7.2m maximum centres.
- For tiled internal walls with fibre cement outer layer – at 4.2m maximum centres.

## Fixing & Jointing

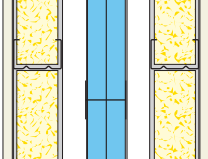
Refer to publication GYP544 Gyprock™ Steel Frame Wall Systems Installation Guide for details on sheet fixing and jointing.

Refer to publication GYP546 Gyprock™ Shaft Systems for laminated service systems fixing details.

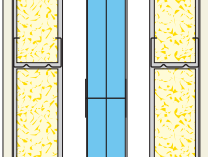
**TABLE 1: MAXIMUM WALL HEIGHT WITH H-STUDS AT 600mm CENTRES**

Wall Type	Wind Loading P <sub>service</sub> kPa	Maximum Wall Height (m)	
		25H55 H-studs at 600mm ctrs	50H55 H-studs at 600mm ctrs
	0.25	3.0	–
	0.25	–	3.0

**TABLE 2: MAXIMUM WALL HEIGHT WITH C-STUDS AT 600mm CENTRES – WALL SYSTEM FRL –/60/60**

Wall Type FRL–/60/60	Wind Loading P <sub>service</sub> kPa	Wall Lining (both sides)	Maximum Wall Height (m) with Rondo C-Studs at 600mm centres							
			Stud – C64			Stud – C76		Stud – C92		
			0.50	0.75	1.15	0.55	0.75	0.55	0.75	
	0.25	13mm GYPROCK plasterboards	2.72	3.13	3.53	3.20	3.30*	3.30*	3.30*	
		13mm FYRCHEK	2.72	3.13	3.53	3.20	3.58	3.60*	3.60*	
		6 or 9mm Cemintel™ Wallboard	2.72	3.00*	3.00*	3.00*	3.00*	3.00*	3.00*	
	0.35	13mm GYPROCK plasterboards	2.34	2.80	3.15	2.76	3.20	3.06	3.30*	
		13mm FYRCHEK	2.34	2.80	3.15	2.76	3.20	3.06	3.60*	
		6 or 9mm Cemintel™ Wallboard	2.34	2.80	3.00*	2.76	3.00*	3.00*	3.00*	
	0.50	13mm GYPROCK plasterboards	1.95	2.47	2.80	2.32	2.73	2.56	2.96	
		13mm FYRCHEK	1.95	2.47	2.80	2.32	2.73	2.56	2.96	
		6 or 9mm Cemintel™ Wallboard	1.95	2.47	2.80	2.32	2.73	2.56	2.96	

**TABLE 3: MAXIMUM WALL HEIGHT WITH C-STUDS AT 600mm CENTRES – WALL SYSTEM FRL –/90/90 (FRL –/120/120 SYSTEMS MUST USE 13mm FYRCHEK™ BOTH SIDES AND HEIGHTS MARKED \* ARE LIMITED TO 3.20m)**

Wall Type FRL –/90/90	Wind Loading P <sub>service</sub> kPa	Wall Lining (both sides)	Maximum Wall Height (m) with Rondo C-Studs at 600mm centres							
			Stud – C64			Stud – C76		Stud – C92		
			0.50	0.75	1.15	0.55	0.75	0.55	0.75	
	0.25	13mm GYPROCK plasterboards	2.72	3.13	3.20*	3.20	3.20*	3.20*	3.20*	
		13mm FYRCHEK	2.72	3.13	3.30*	3.20	3.30*	3.30*	3.30*	
		6 or 9mm Cemintel™ Wallboard	2.72	3.00*	3.00*	3.00*	3.00*	3.00*	3.00*	
	0.35	13mm GYPROCK plasterboards	2.34	2.80	3.15	2.76	3.20	3.06	3.20*	
		13mm FYRCHEK	2.34	2.80	3.15	2.76	3.20	3.06	3.30*	
		6 or 9mm Cemintel™ Wallboard	2.34	2.80	3.00*	2.76	3.00*	3.00*	3.00*	
	0.50	13mm GYPROCK plasterboards	–	2.47	2.80	2.32	2.73	2.56	2.96	
		13mm FYRCHEK	–	2.47	2.80	2.32	2.73	2.56	2.96	
		6 or 9mm Cemintel™ Wallboard	–	2.47	2.80	2.32	2.73	2.56	2.96	

NOTES for Tables 1, 2 and 3:

- Height marked with \* are limited by the 50mm H-stud.
- Deflection limit is Span/240 to a maximum of 30mm, in accordance with BCA Specification C1.8.
- Refer to table 5 for noggings requirements.
- Tabulated heights do not include axial loads (except self weight) or shelf loading.

- Loadings: P<sub>ultimate</sub> = 0.375 kPa, P<sub>service</sub> = 0.25 kPa.  
P<sub>ultimate</sub> = 0.525 kPa, P<sub>service</sub> = 0.35 kPa.  
P<sub>ultimate</sub> = 0.750 kPa, P<sub>service</sub> = 0.50 kPa.
- Walls are not for external applications.
- All loadings in accordance with AS1170:2002.
- Walls analysed in accordance with AS4600:1996.

**TABLE 4: MAXIMUM PERMITTED WALL HEIGHT/WIDTH FOR LAMINATED SERVICES SYSTEMS. (LOAD UDL = 0.35 kPa).**

System N°	Wall Height (maximum)			
	2400	3000	3600	7200
	Wall Width (maximum)			
CSR967-S	1200	1200	1200	NA
CSR968-S	1200	1200	1200	1200
CSR967-SA	2200	2100	2000	NA
CSR968-SA	3100	2700	2600	1200
CSR969-SA	4200	3200	3000	NA

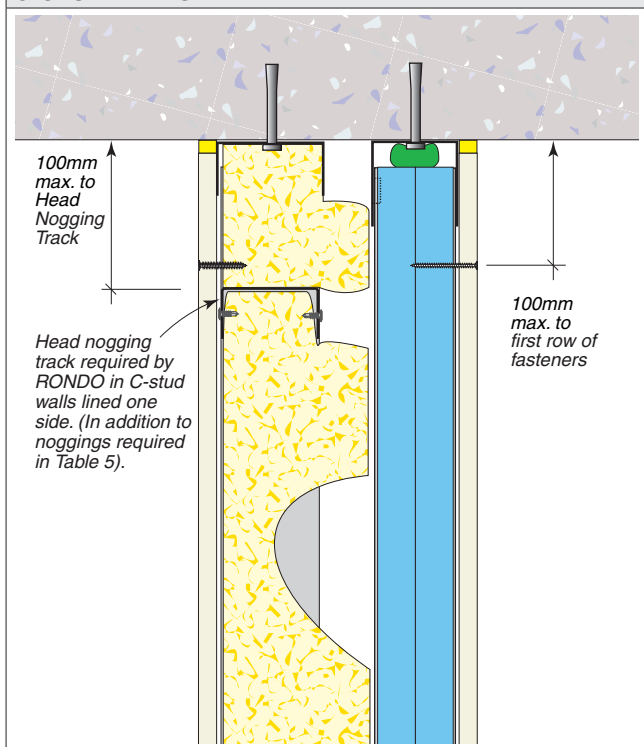
-S = Screw ONLY plasterboard fixing  
 -SA = Screw and Adhesive plasterboard fixing  
 NA = Not Applicable

**TABLE 5: MINIMUM NUMBER OF NOGGINGS**

Lining Configuration	Wall Height (m)	Rows of Noggings
Lined One Side	0.0 – 3.0	1
	3.0 – 6.0	2

NOTE: Noggings in accordance with Table 5, are in addition to head nogging track required in Rondo stud wall systems, and are to be equally spread over the wall.

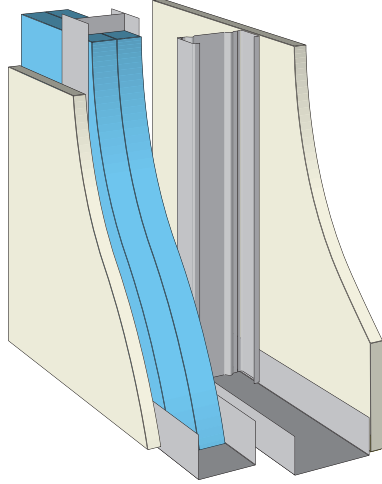
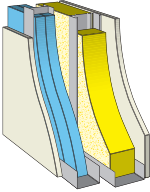
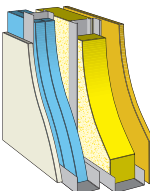
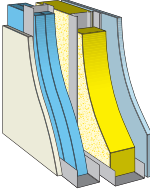
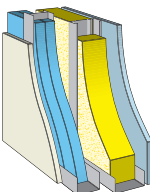
**FIG 2: HEAD NOGGING DETAIL FOR RONDO C-STUD WALLS**





# SYSTEM SELECTION

## StrataWall™ – Single Cavity

• Intertency Walls • Corridors • Wet Area Options • Narrow Footprint					
SYSTEM SPECIFICATION			TYPICAL LAYOUT (CSR 222a shown)		ACOUSTIC OPINION or TEST
<ul style="list-style-type: none"> <li>Lining material as per system table laminated to Shaft Liner Panel.</li> <li>2 x 25mm GYPROCK Shaft Liner Panel in H-studs at 600mm maximum centres.</li> <li>Minimum 12mm gap.</li> <li>Steel studs at 600mm maximum centres.</li> <li>Cavity insulation as per system table.</li> <li>Lining material as per system table, fixed to studs.</li> </ul>					
FRL Report/Opinion	SYSTEM N°	WALL LININGS	GAP + STUD DEPTH mm	76	100
			CAVITY INFILL (Refer to Components)	R <sub>w</sub> / R <sub>w</sub> +C <sub>tr</sub>	
- /120/120 WFRA 21241	<b>CSR 222</b> 	<i>SHAFT LINER PANEL SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul> <i>STUD SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul>	(a) Nil	52/44	53/45
			(b) 75 GW Partition 11kg	56/48 <sup>①</sup>	-
			(c) 100 GW Partition 14kg	-	59/51 <sup>②</sup>
			(d) TSB5 Polyester batts	56/48	-
			WALL THICKNESS mm	153	177
- /120/120 WFRA 21241	<b>CSR 223</b> 	<i>SHAFT LINER PANEL SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul> <i>STUD SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK SOUNDCEK.</li> </ul>	(a) Nil	53/45	54/46
			(b) 75 GW Partition 11kg	58/50	-
			(c) 100 GW Partition 14kg	-	59/51
			(d) TSB5 Polyester batts	58/50	-
			WALL THICKNESS mm	153	177
WET AREA SYSTEMS					
- /120/90 WFRA 21241	<b>CSR 225</b> 	<i>SHAFT LINER PANEL SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul> <i>STUD SIDE</i> <ul style="list-style-type: none"> <li>1 x 6mm CeminSeal™ Wallboard.</li> </ul>	(a) Nil	53/45	53/45
			(b) 75 GW Partition 11kg	58/50	-
			(c) 100 GW Partition 14kg	-	58/50
			(d) TSB5 Polyester batts	58/50	-
			WALL THICKNESS mm	146	170
- /120/90 WFRA 21241	<b>CSR 226</b> 	<i>SHAFT LINER PANEL SIDE</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul> <i>STUD SIDE</i> <ul style="list-style-type: none"> <li>1 x 9mm CeminSeal™ Wallboard.</li> </ul>	(a) Nil	54/46	55/47
			(b) 75 GW Partition 11kg	59/51	-
			(c) 100 GW Partition 14kg	-	60/52
			(d) TSB5 Polyester batts	59/51	-
			WALL THICKNESS mm	149	173

# StrataWall™ – Services Cavity

• Intertenancy Walls • Additional Services Cavity • Medium Footprint

SYSTEM SPECIFICATION	TYPICAL LAYOUT (CSR 230 shown)	ACOUSTIC OPINION or TEST
<ul style="list-style-type: none"> <li>Lining material as per system table fixed to furring channels.</li> <li>Cavity insulation as per system table.</li> <li>Furring channel fixed to all H-studs with Rondo Beta Fix Clips at 600mm max. vertical centres, in 50mm cavity.</li> <li>2 x 25mm GYPROCK Shaft Liner Panel in H-studs at 600mm maximum centres.</li> <li>20mm gap.</li> <li>Steel studs at 600mm maximum centres.</li> <li>Cavity insulation as per system table.</li> <li>Lining material as per system table, fixed to studs.</li> </ul>		<p><b>Opinion RP 02267S</b></p> <p>Discontinuous Construction</p>

FRL Report/Opinion	SYSTEM N°	WALL LININGS	STUD DEPTH mm		64	92
			CAVITY INFILL (Refer to Components)		R <sub>w</sub> / R <sub>w</sub> +C <sub>tr</sub>	
			STUD CAVITY	FURRING CAVITY		
-/120/120 WFRA 21241	<b>CSR 230</b> 	<i>STUD SIDE</i> • 1 x 13mm GYPROCK plasterboard CD.  <i>FURRING CHANNEL SIDE</i> • 1 x 13mm GYPROCK plasterboard CD.	(a) 75 GW Partition 11kg	50 GW Partition 11kg	60/50	60/50
			(b) 100 GW Partition 14kg	50 GW Partition 11kg	61/51	61/51
			(c) TSB5 Polyester batts	TSB2 Polyester batts	60/50	60/50
			MINIMUM WALL THICKNESS mm		211	239
-/120/120 WFRA 21241	<b>CSR 231</b> 	<i>STUD SIDE</i> • 1 x 13mm GYPROCK SOUNDCEK.  <i>FURRING CHANNEL SIDE</i> • 1 x 13mm GYPROCK SOUNDCEK.	(a) 75 GW Partition 11kg	50 GW Partition 11kg	62/53	62/53
			(b) 100 GW Partition 14kg	50 GW Partition 11kg	62/53	62/53
			(c) TSB5 Polyester batts	TSB2 Polyester batts	61/52	62/53
			MINIMUM WALL THICKNESS mm		211	239

**WET AREA SYSTEMS**

-/120/120 WFRA 21241	<b>CSR 235</b> 	<i>STUD SIDE</i> • 1 x 13mm GYPROCK AQUACHEK.  <i>FURRING CHANNEL SIDE</i> • 1 x 13mm GYPROCK AQUACHEK.	(a) 75 GW Partition 11kg	50 GW Partition 11kg	60/50	60/50
			(b) 100 GW Partition 14kg	50 GW Partition 11kg	61/51	61/51
			(c) TSB5 Tontine Polyester	TSB2 Tontine Polyester	60/50	60/50
			MINIMUM WALL THICKNESS mm		211	239

# StrataWall™ – Double Cavity

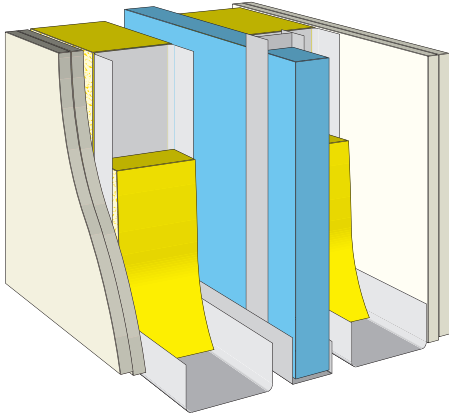
• Intertency Walls • Services Both Sides • Wet Area Options • High Acoustic Performance

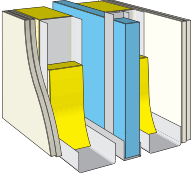
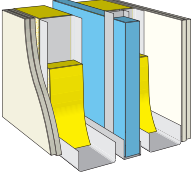
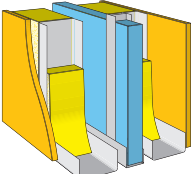
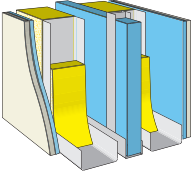
SYSTEM SPECIFICATION	TYPICAL LAYOUT (CSR 240a shown)	ACOUSTIC OPINION or TEST
<ul style="list-style-type: none"> <li>Lining material as per system table fixed to studs – Side 1.</li> <li>Steel studs at 600mm maximum centres.</li> <li>Cavity insulation as per system table.</li> <li>20mm gap.</li> <li>2 x 25mm GYPROCK Shaft Liner Panel in H-studs at 600mm maximum centres.</li> <li>20mm gap.</li> <li>Cavity insulation as per system table.</li> <li>Steel studs at 600mm maximum centres</li> <li>Lining material as per system table fixed to studs – Side 2.</li> </ul>		<p><b>Opinion RP 02267S</b></p> <p>Discontinuous Construction</p>

FRL Report/Opinion	SYSTEM N°	WALL LININGS	STUD DEPTH mm		
			64	76	
			CAVITY INFILL (Refer to Components)		
			R <sub>w</sub> / R <sub>w</sub> +C <sub>tr</sub>		
- /120/120  WFRA 21241	<b>CSR 240</b> 	<i>SIDE 1 AND 2</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK plasterboard CD.</li> </ul>	(a) Nil	58/47	58/47
			(b) 75 GW Partition 11kg - both sides	62/ <b>53</b>	62/ <b>53</b>
			(c) 100 GW Partition 14kg - both sides	-	63/ <b>54</b>
			(d) TSB5 Polyester - both sides	62/ <b>53</b>	62/ <b>53</b>
			MINIMUM WALL THICKNESS mm	245	269
- /120/120  WFRA 21241	<b>CSR 241</b> 	<i>SIDE 1 AND 2</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK SOUNDCEK.</li> </ul>	(a) Nil	59/48	60/49
			(b) 75 GW Partition 11kg - both sides	64/ <b>55</b>	65/ <b>56</b>
			(c) 100 GW Partition 14kg - both sides	63/ <b>54</b>	63/ <b>54</b>
			(d) TSB5 Polyester - both sides	63/ <b>54</b>	63/ <b>54</b>
			MINIMUM WALL THICKNESS mm	245	269
WET AREA SYSTEMS					
- /120/120  WFRA 21241	<b>CSR 243</b> 	<i>SIDE 1 AND 2</i> <ul style="list-style-type: none"> <li>1 x 13mm GYPROCK AQUACHEK.</li> </ul>	(a) Nil	58/47	58/47
			(b) 75 GW Partition 11kg - both sides	62/ <b>53</b>	63/ <b>54</b>
			(c) 100 GW Partition 14kg - both sides	-	63/ <b>54</b>
			(d) TSB5 Polyester - both sides	62/ <b>53</b>	63/ <b>54</b>
			MINIMUM WALL THICKNESS mm	245	269
- /60/60  SF 45743	<b>CSR 244</b> 	<i>SIDE 1 AND 2</i> <ul style="list-style-type: none"> <li>1 x 9mm CeminSeal™ Wallboard.</li> </ul>	(b) 75 GW Partition 11kg - both sides	62/ <b>53</b>	62/ <b>53</b>
			(c) 100 GW Partition 14kg - both sides	-	63/ <b>54</b>

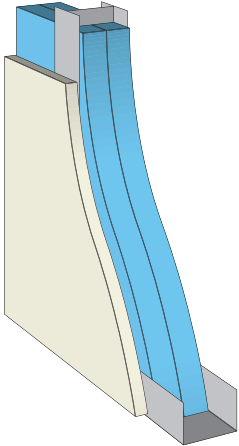
# StrataWall™ – Double Cavity (25mm Fire Barrier)

• Intertency Walls • Low Cost • Double Cavity • 3.0m Maximum Wall Height

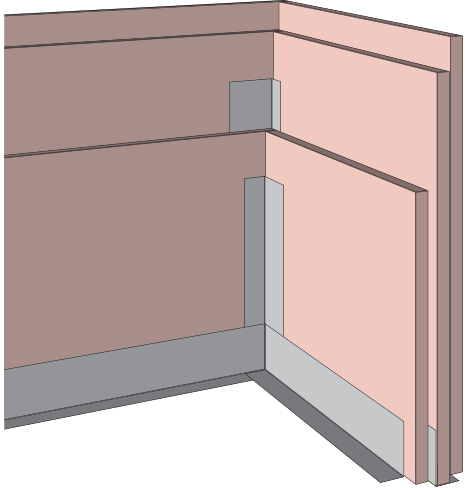
SYSTEM SPECIFICATION	TYPICAL LAYOUT (CSR 100 shown)	ACOUSTIC OPINION
<ul style="list-style-type: none"> <li>Lining material as per system table.</li> <li>Steel studs at 600mm maximum centres.</li> <li>Cavity insulation as per system table.</li> <li>20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.</li> <li>25mm GYPROCK SHAFT LINER PANEL between steel H-studs at 600mm maximum centres.</li> <li>20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.</li> <li>Cavity insulation as per system table.</li> <li>Steel studs at 600mm maximum centres.</li> <li>Lining material as per system table.</li> </ul>		<p><b>PKA-052</b></p> <p>Discontinuous Construction</p>

FRL Report/Opinion	SYSTEM N°	WALL LININGS	STUD DEPTH mm		
			64	76	
			CAVITY INFILL (Both Sides) <small>(Refer to Components)</small>	R <sub>w</sub> / R <sub>w</sub> +C <sub>tr</sub>	
60/60/60 EWFA 45743	<b>CSR 100</b> 	<i>BOTH SIDES</i> • 2 x 10mm GYPROCK Plasterboard CD.	(a) 75 GW Partition 14kg	60/48	61/49
			(b) 110 GW Partition 11kg	62/ <b>50</b>	62/ <b>50</b>
			(c) 88 RW Soundscreen R2.5	61/49	62/ <b>50</b>
			MINIMUM WALL THICKNESS mm	257	289
60/60/60 EWFA 45743	<b>CSR 101</b> 	<i>BOTH SIDES</i> • 2 x 13mm GYPROCK Plasterboard CD.	(a) 75 GW Partition 14kg	62/ <b>50</b>	62/ <b>51</b>
			(b) 110 GW Partition 11kg	63/ <b>52</b>	63/ <b>52</b>
			(c) 88 RW Soundscreen R2.5	63/ <b>51</b>	63/ <b>52</b>
			MINIMUM WALL THICKNESS mm	269	301
60/60/60 EWFA 45743	<b>CSR 102</b> 	<i>BOTH SIDES</i> • 1 x 13mm GYPROCK SOUNDCEK.	(a) 75 GW Partition 14kg	60/48	61/49
			(b) 110 GW Partition 11kg	62/ <b>50</b>	62/ <b>50</b>
			(c) 88 RW Soundscreen R2.5	61/49	62/ <b>50</b>
			MINIMUM WALL THICKNESS mm	243	275
WET AREA SYSTEMS					
60/60/60 EWFA 45743	<b>CSR 103</b> 	<i>BOTH SIDES</i> • 1 x 6mm CeminSeal™ Wallboard. • 1 x 10mm GYPROCK AQUACHEK.	(a) 75 GW Partition 11kg	61/49	61/ <b>50</b>
			(b) 75 GW Partition 14kg	62/ <b>50</b>	62/ <b>51</b>
			(c) 88 RW Soundscreen R2.5	63/ <b>51</b>	63/ <b>52</b>
			MINIMUM WALL THICKNESS mm	249	281

# StrataWall™ – Services Systems

• Services Systems				
SYSTEM SPECIFICATION			TYPICAL LAYOUT	ACOUSTIC OPINION or TEST
<ul style="list-style-type: none"> <li>2 x 25mm GYPROCK SHAFT LINER PANEL between steel H-studs at 600mm maximum centres.</li> <li>Lining material as per system table laminated to Shaft Liner Panel.</li> </ul>				RP 02267S
FRL Report/Opinion	SYSTEM N°	WALL LININGS	CAVITY INFILL	R <sub>w</sub> /R <sub>w</sub> + C <sub>tr</sub>
-/90/30 WFRA 21241	CSR 248	FACE SIDE	(a) Nil	36/33
		<ul style="list-style-type: none"> <li>1 x 13mm GYPROCK Plasterboard CD.</li> </ul>	WALL THICKNESS mm	64
-/120/90 WFRA 21241	CSR 249	FACE SIDE	(a) Nil	36/33
		<ul style="list-style-type: none"> <li>1 x 13mm GYPROCK FYRCHEK.</li> </ul>	WALL THICKNESS mm	64

## Steel Frame Laminated Services Systems

SYSTEM SPECIFICATION			TYPICAL LAYOUT	ACOUSTIC OPINION or TEST
<ul style="list-style-type: none"> <li>Perimeter framing 25/50 x 50 x 0.7mm BMT steel angle.</li> <li>3 x GYPROCK FYRCHEK laminated with screws and/or adhesive.</li> </ul>				PKA-A025
FRL Report/Opinion	SYSTEM N°	WALL LININGS	CAVITY INFILL	R <sub>w</sub>
-/90/90 RIR 21898	CSR 967S	<ul style="list-style-type: none"> <li>3 x 13mm GYPROCK FYRCHEK plasterboard.</li> </ul>	(a) Nil	35
			WALL THICKNESS mm	39
-/120/120 RIR 21898	CSR 968S	<ul style="list-style-type: none"> <li>3 x 16mm GYPROCK FYRCHEK plasterboard.</li> </ul>	(a) Nil	36
			WALL THICKNESS mm	48

# INSTALLATION DETAILS

FIG 3: STRATAWALL™ INSTALLATION STEPS 1, 2, 3

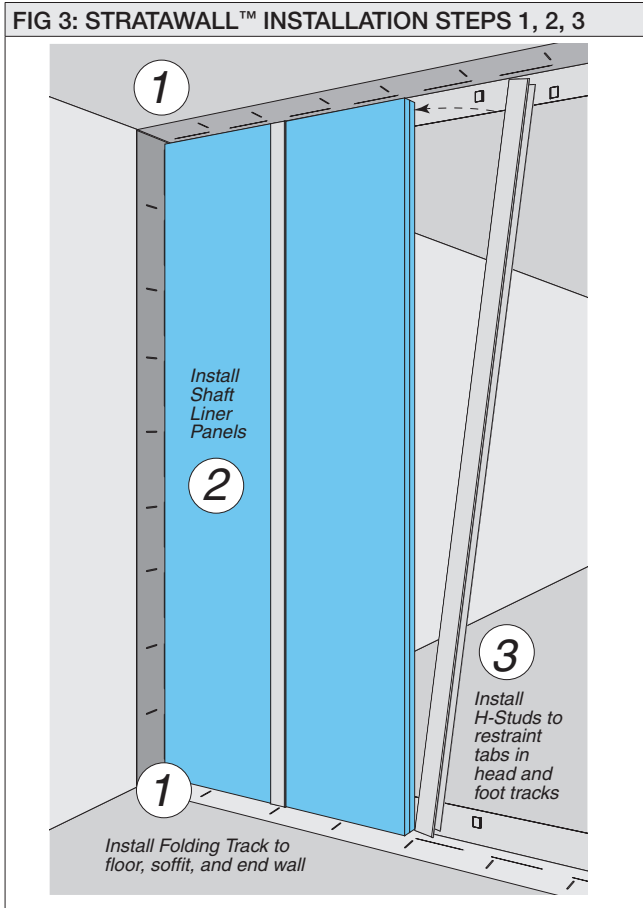


FIG 5: STRATAWALL™ INSTALLATION STEPS 6, 7, 8

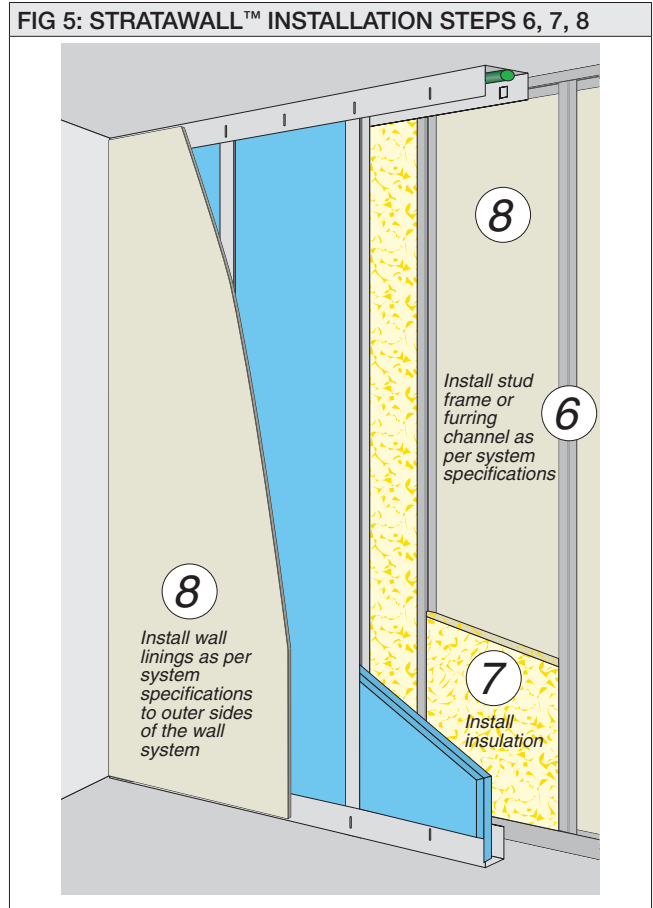


FIG 4: STRATAWALL™ INSTALLATION STEPS 4, 5

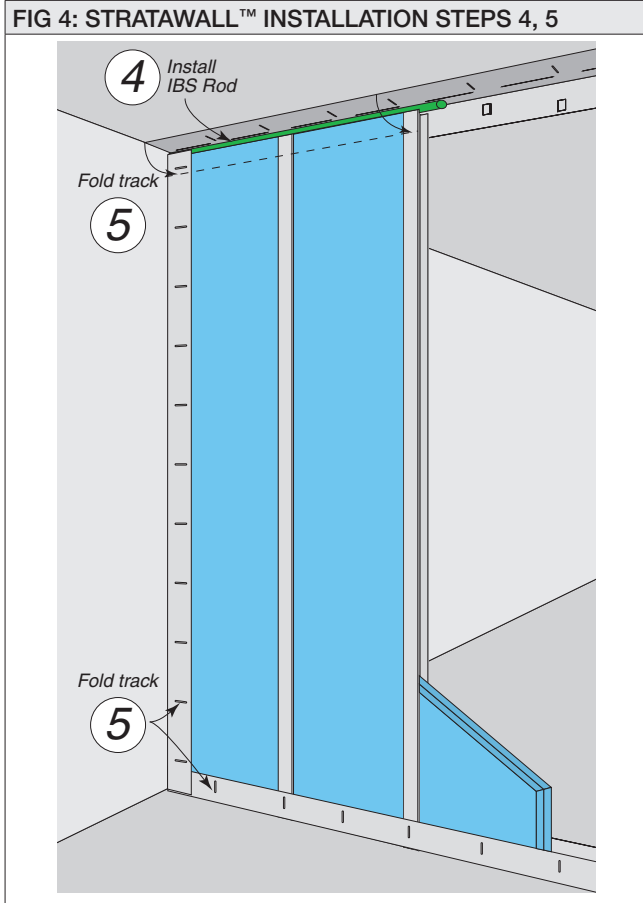
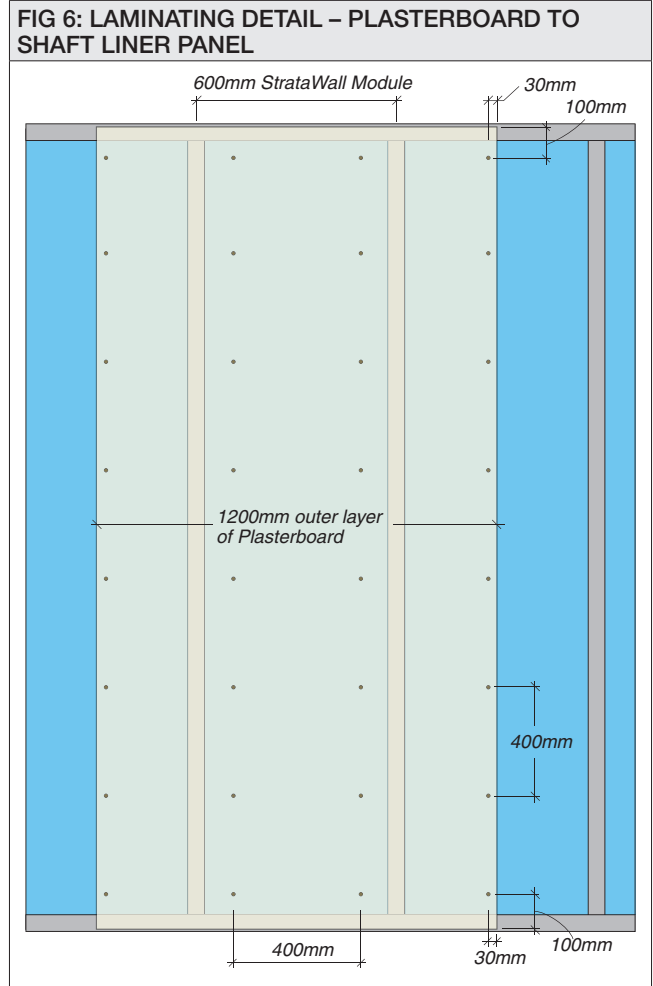
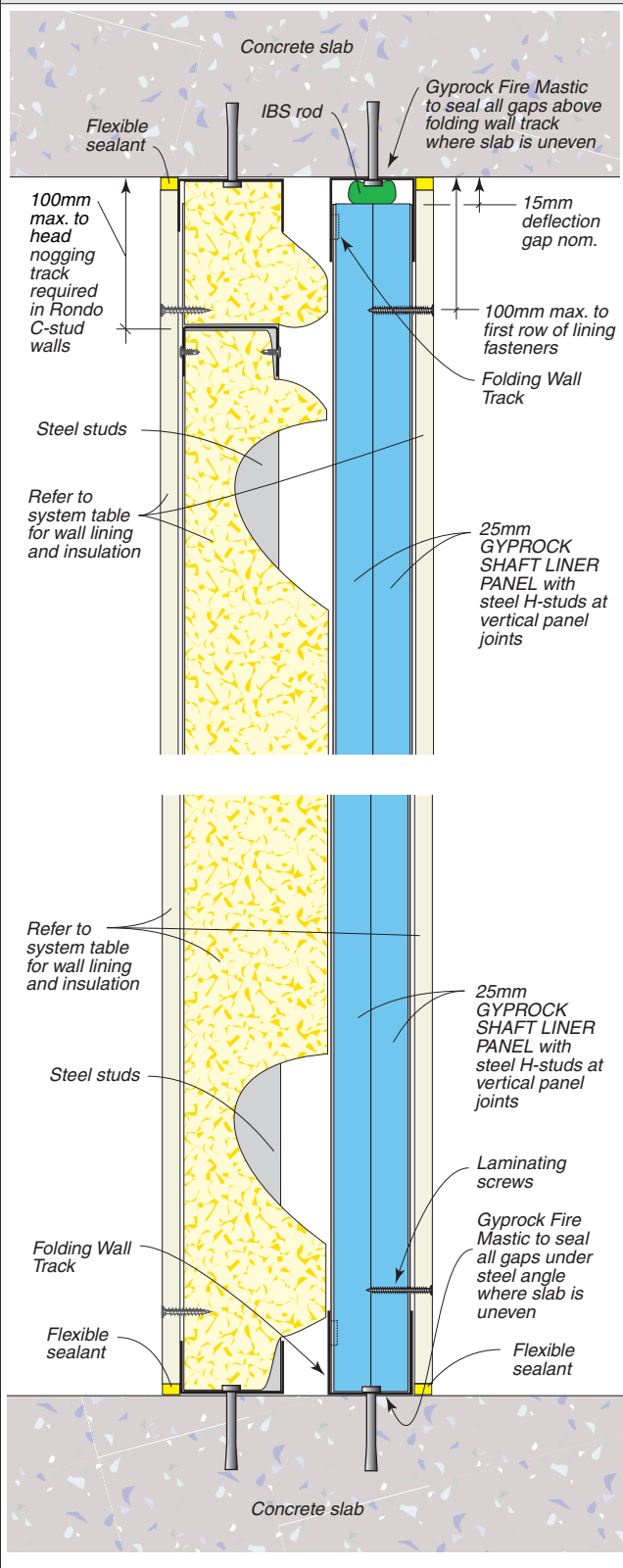


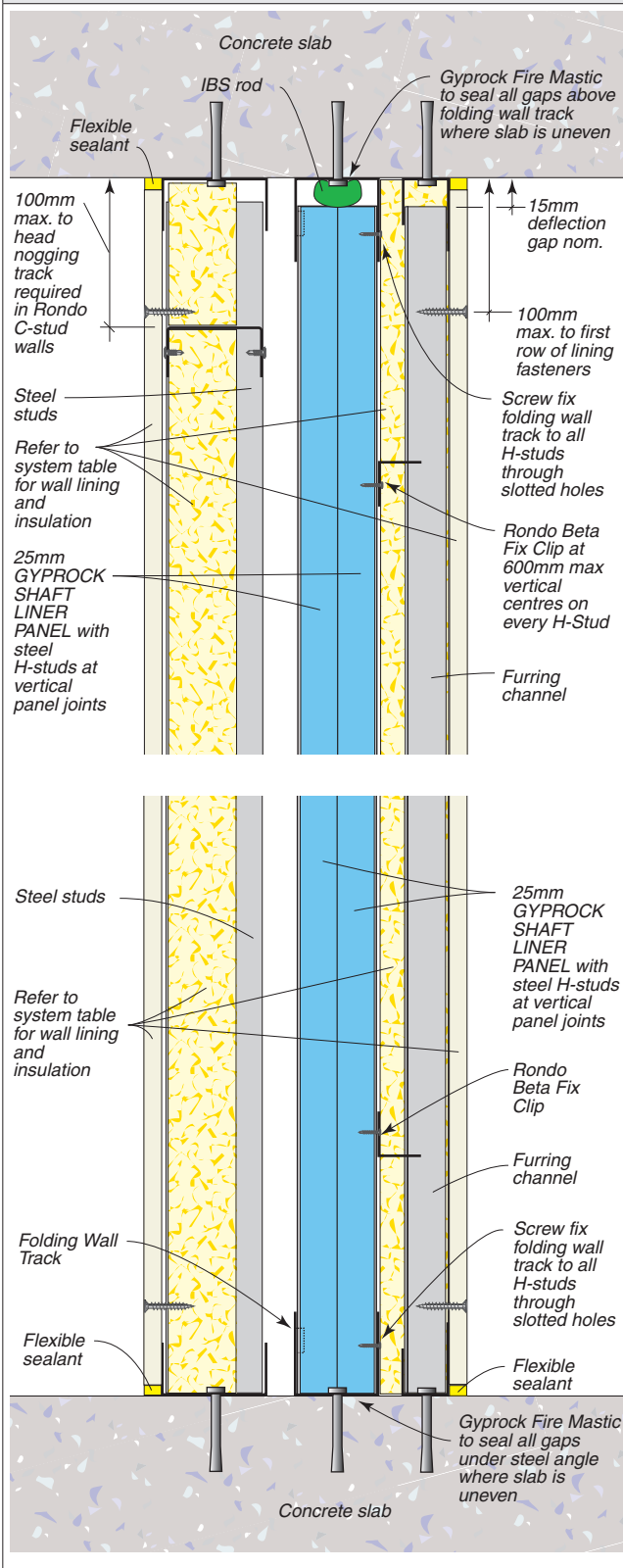
FIG 6: LAMINATING DETAIL – PLASTERBOARD TO SHAFT LINER PANEL



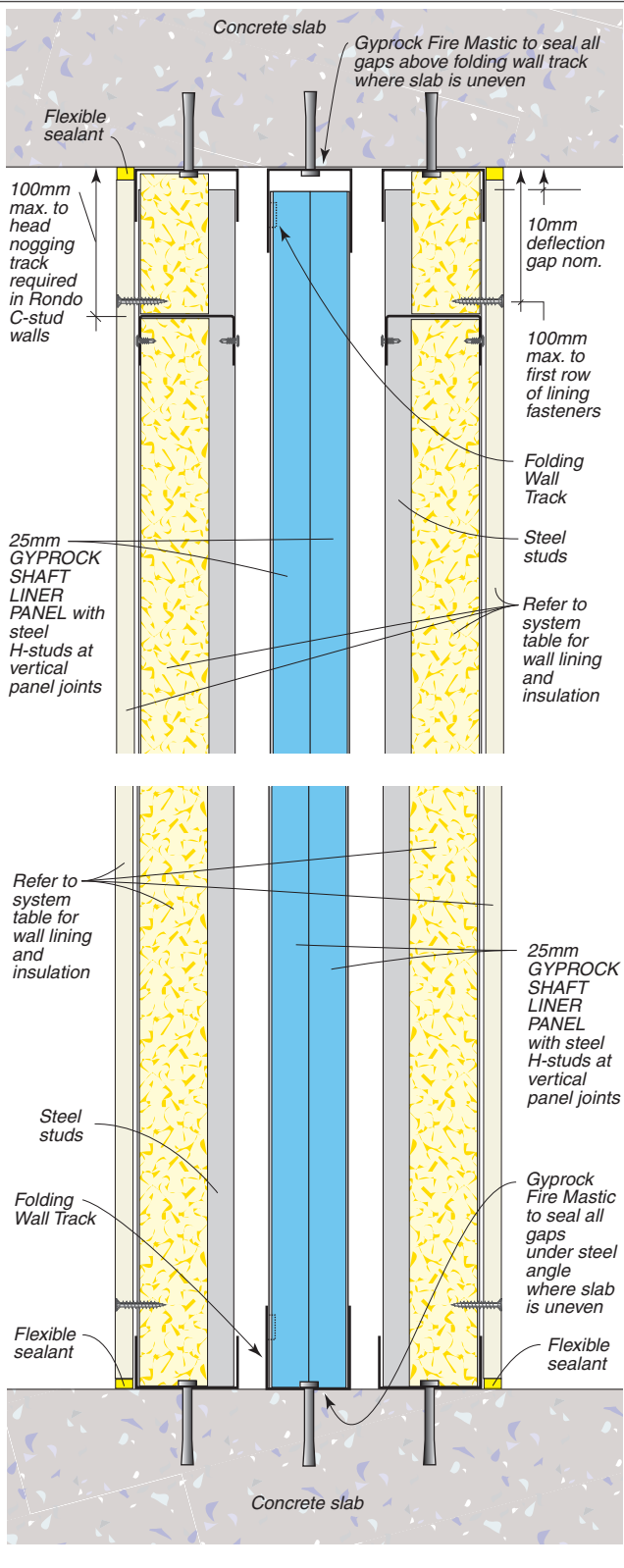
**FIG 7: HEAD & BASE DETAIL – SINGLE CAVITY – C-STUDS ONE SIDE**



**FIG 8: HEAD & BASE DETAIL – SERVICES CAVITY – C-STUDS ONE SIDE, FURRING CHANNEL ONE SIDE**



**FIG 9: HEAD & BASE DETAIL – DOUBLE CAVITY – C-STUDS TWO SIDES**



**FIG 10: HEAD & BASE DETAIL – SINGLE LAYER FIRE BARRIER – C-STUDS TWO SIDES**

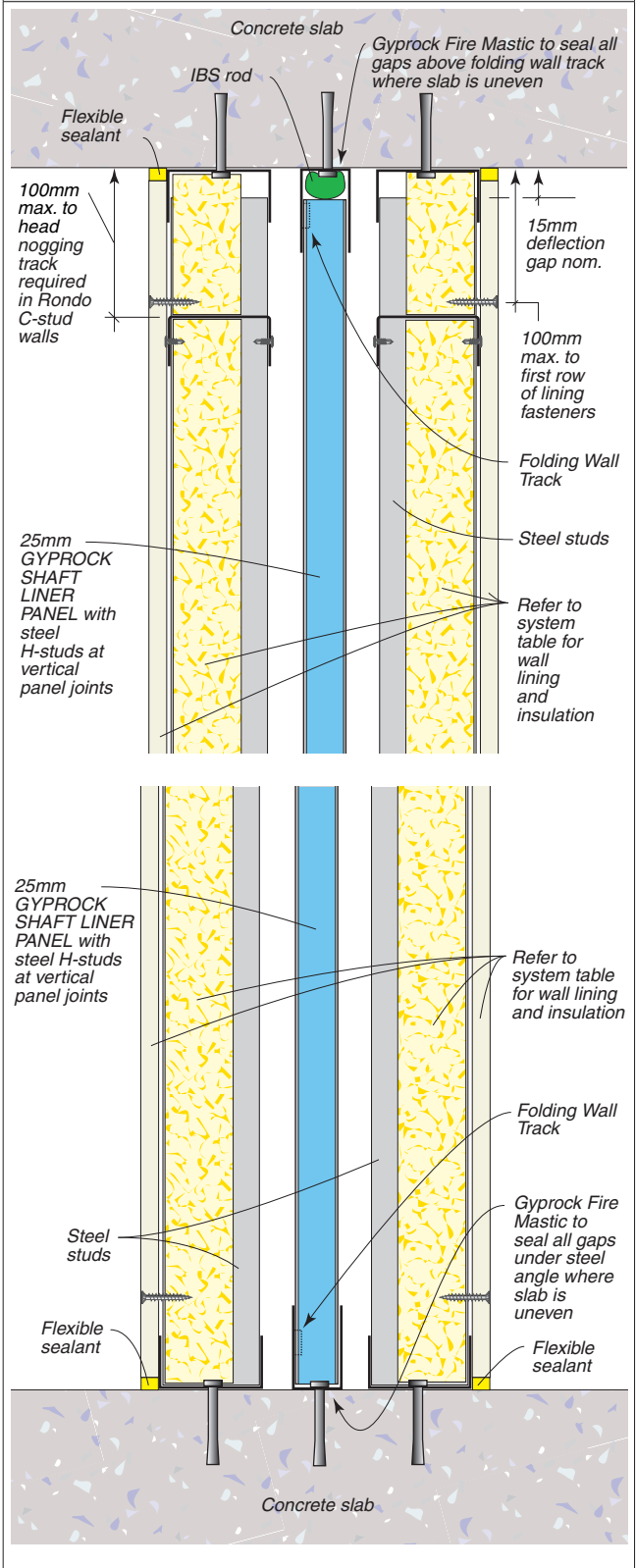
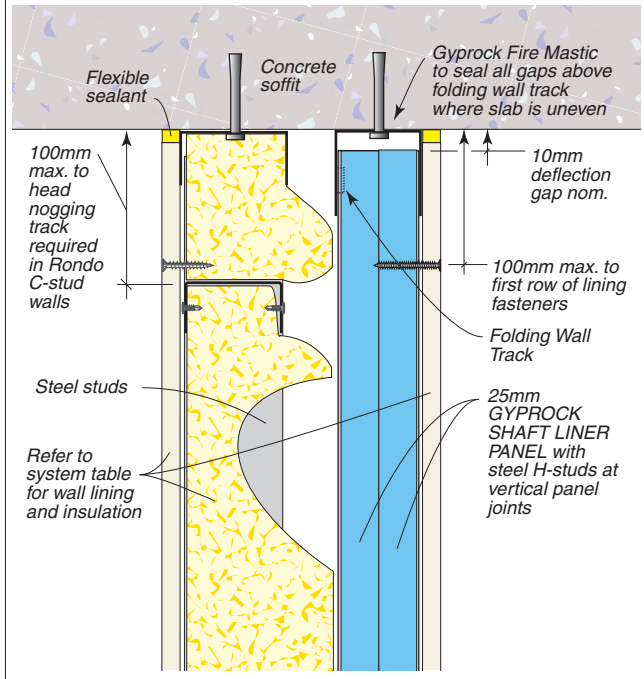


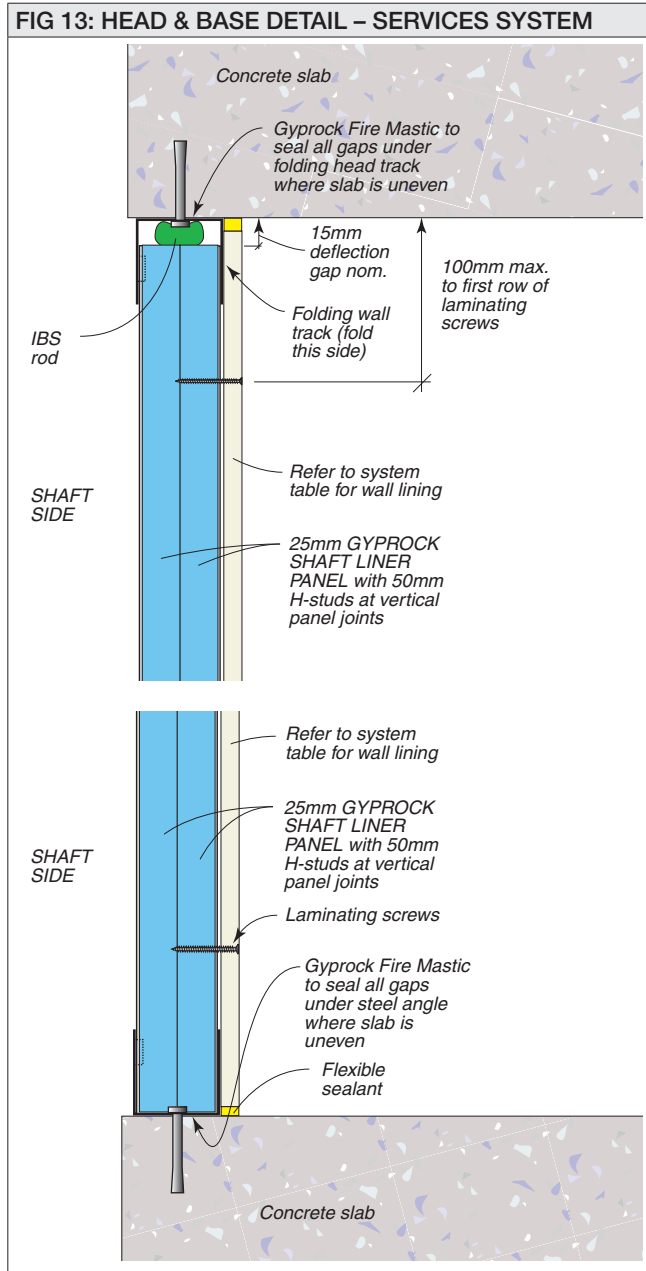
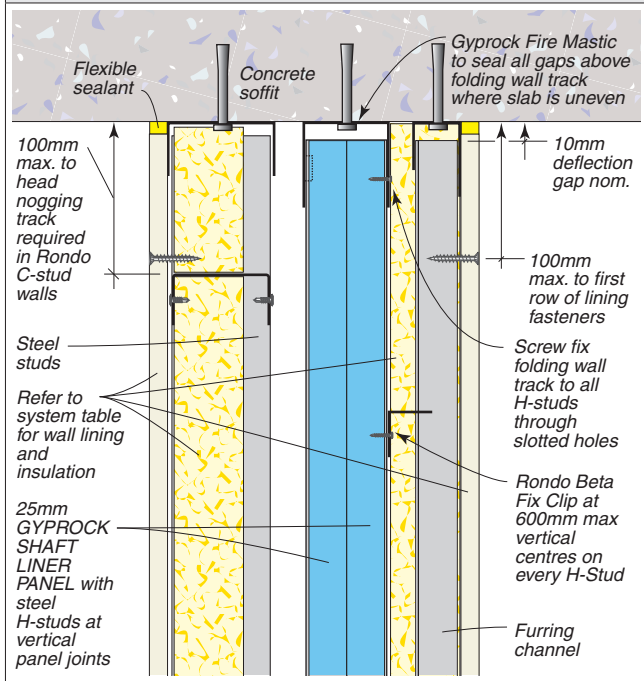


TABLE 6: REDUCED FRL FOR HEAD DETAILS FIG 11 & 12 (I.E. WITHOUT IBS ROD)		
System Number	Head Detail	FRL
CSR 225 CSR 226	FIG 11	-/60/60
CSR 222 CSR 223	FIG 11	-/90/90
CSR 230 CSR 231 CSR 235	FIG 12	-/90/90

**FIG 11: ALTERNATIVE HEAD DETAIL – SINGLE CAVITY – C-STUDS ONE SIDE (REDUCED FRL)**

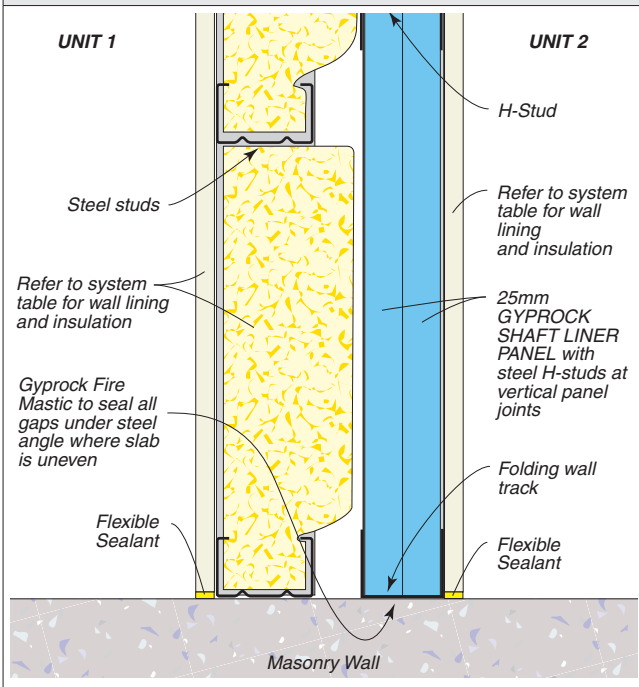


**FIG 12: ALTERNATIVE HEAD DETAIL – SERVICES CAVITY – C-STUDS ONE SIDE, FURRING CHANNEL ONE SIDE (REDUCED FRL)**

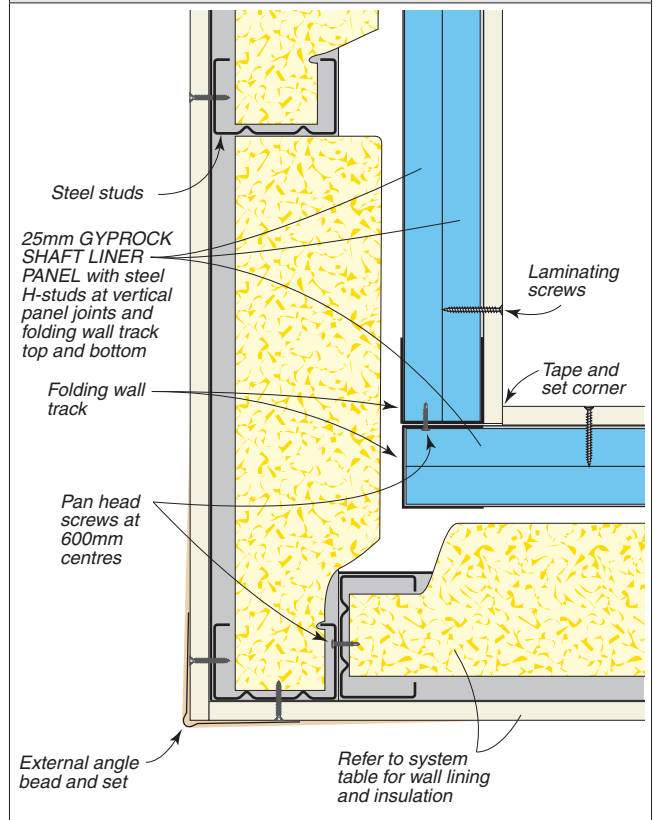


# JUNCTION DETAILS

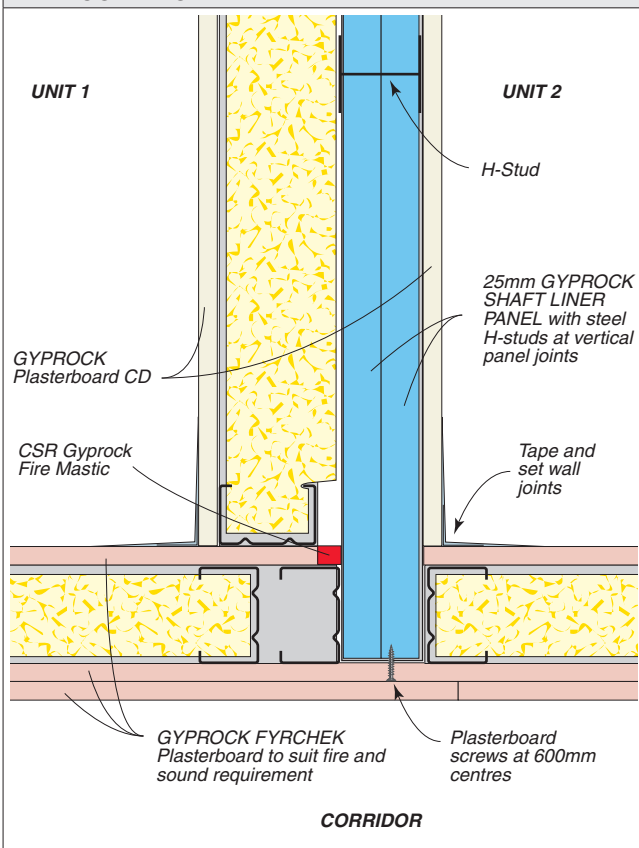
**FIG 14: TYPICAL JUNCTION OF STRATAWALL™ WITH MASONRY WALL**



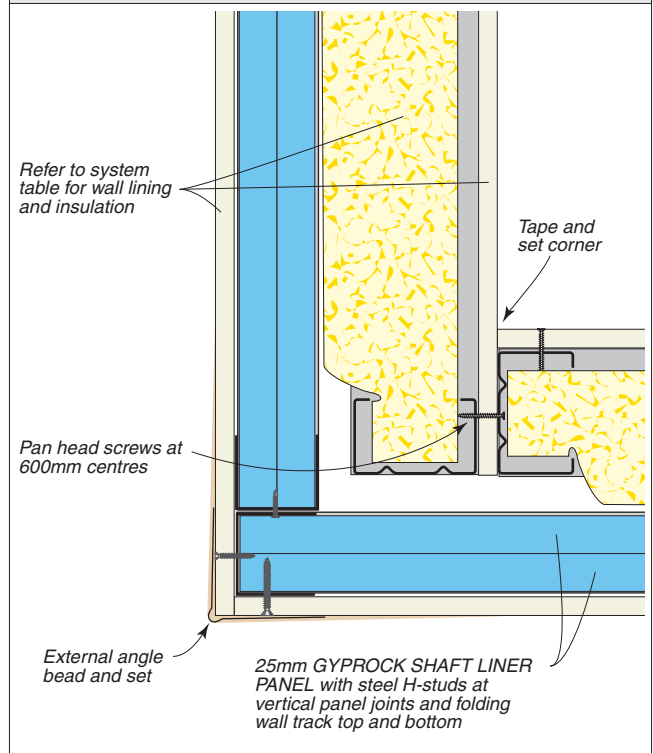
**FIG 16: CORNER DETAIL FOR STRATAWALL™**



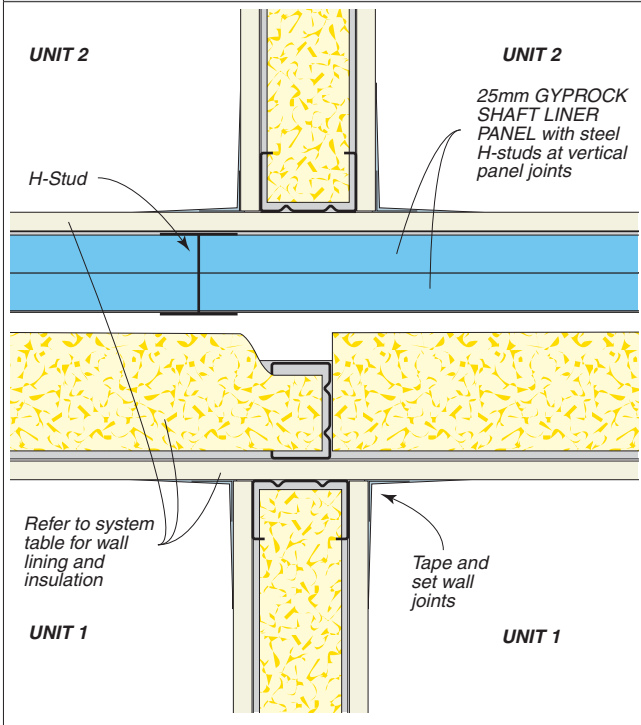
**FIG 15: TYPICAL JUNCTION OF STRATAWALL™ WITH CORRIDOR WALL**



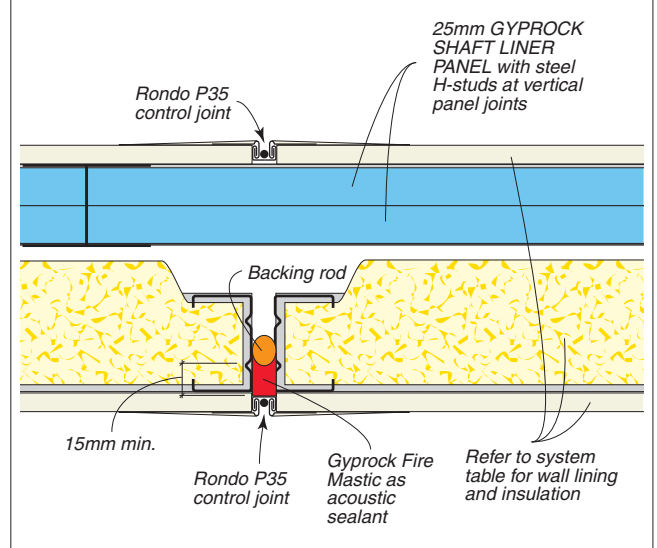
**FIG 17: CORNER DETAIL FOR STRATAWALL™**



**FIG 18: JUNCTION OF STRATAWALL WITH NON-FIRE RATED WALLS**



**FIG 19: CONTROL JOINT DETAIL (FRL -/120/120)**



**FIG 20: HEAD AND JAMB DETAIL FOR TRAFALGAR E-CORE DOOR INSTALLATION (-/120/30 FRL)**

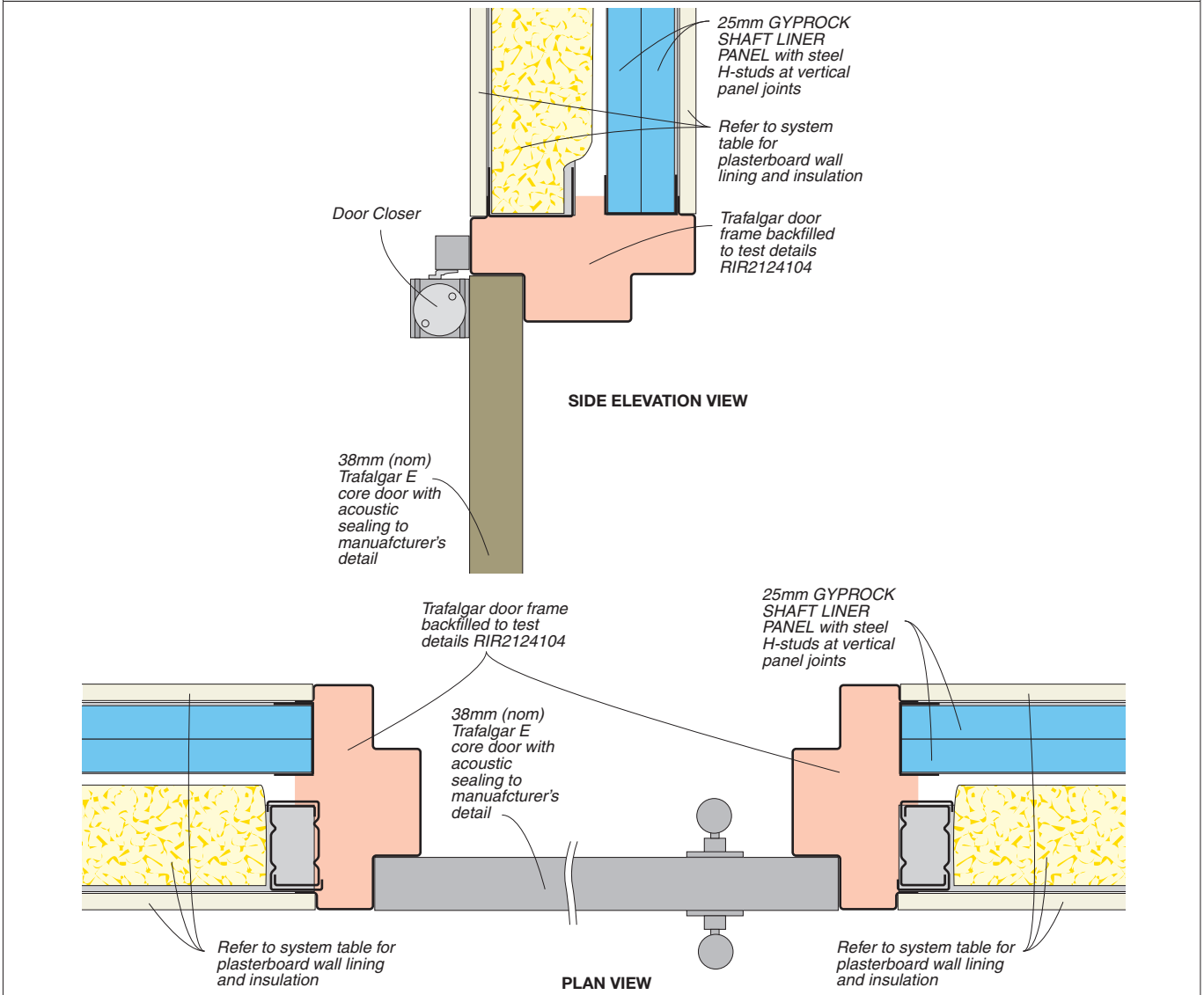


FIG 21: TYPICAL DETAIL AT JUNCTION OF STRATAWALL™ AND ROOF

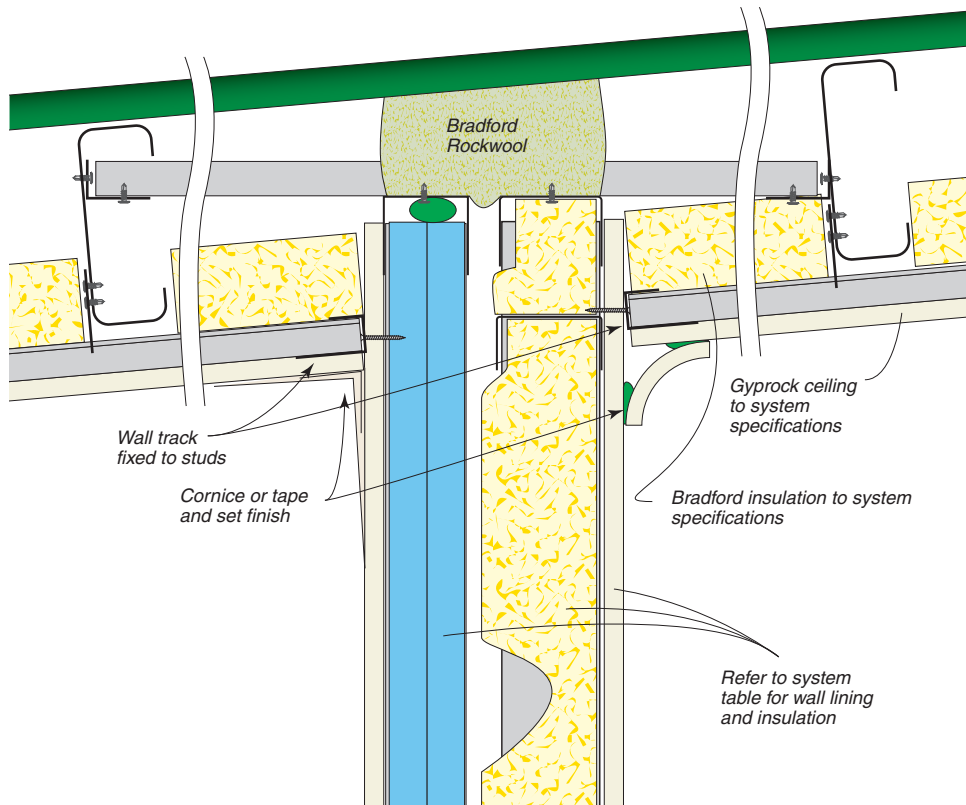
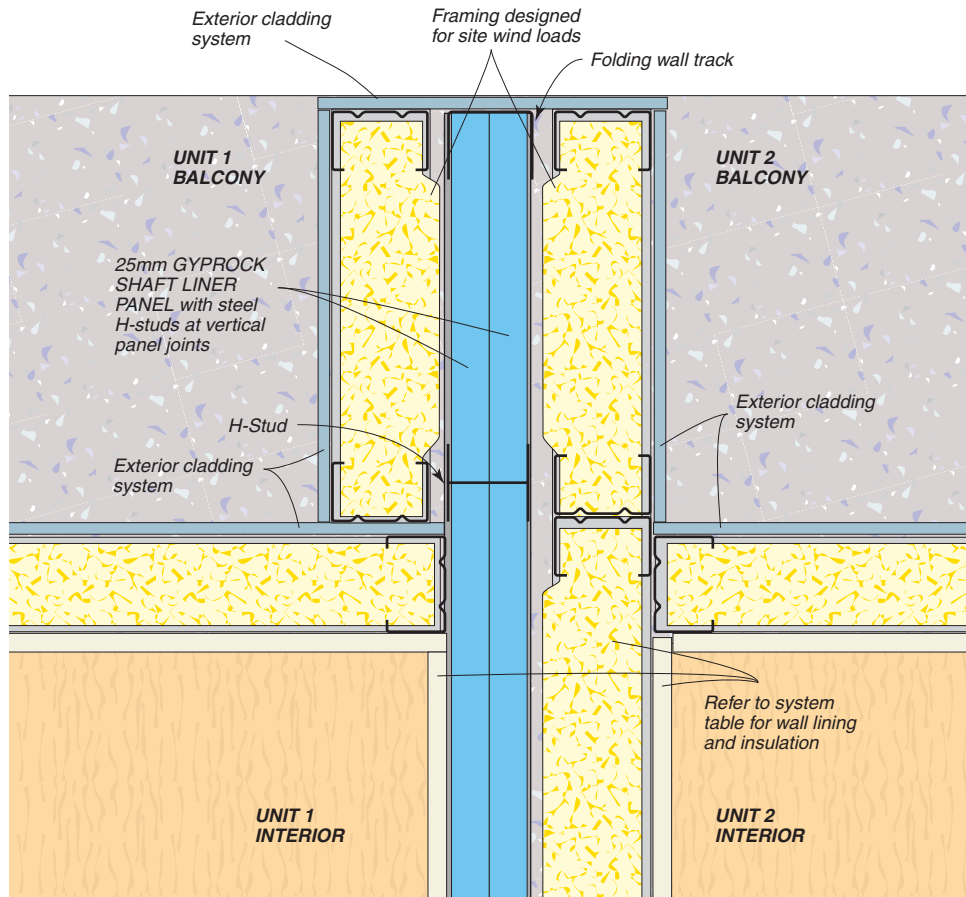
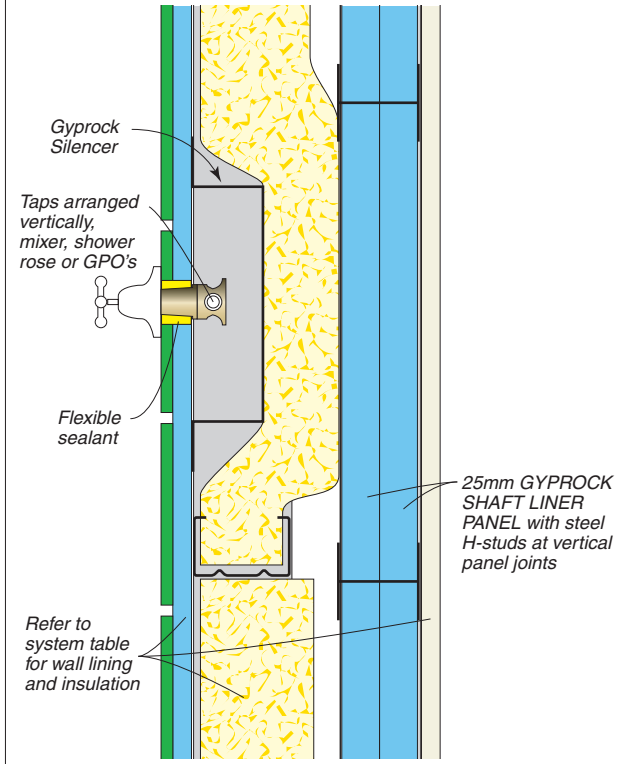


FIG 22: TYPICAL DETAIL FOR BALCONY DIVIDING WALL – PLAN VIEW

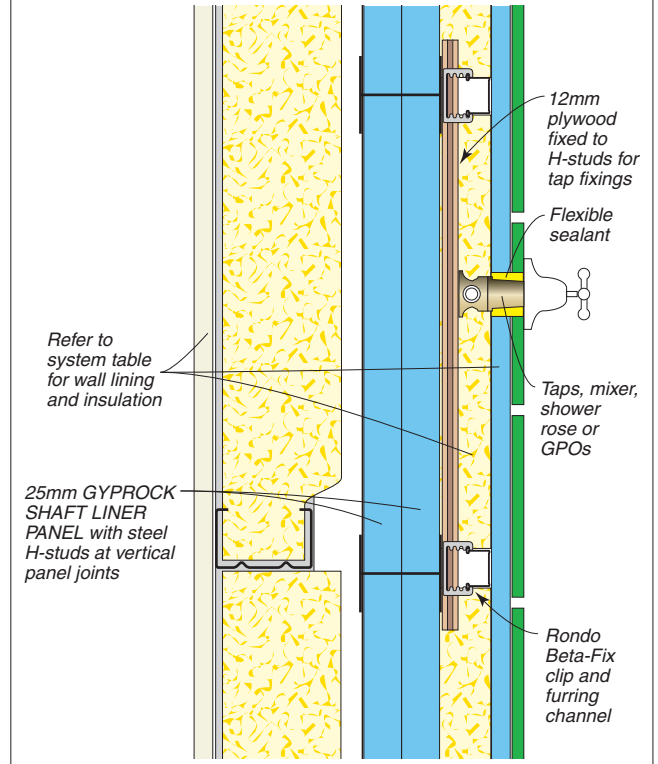


# PENETRATION DETAILS

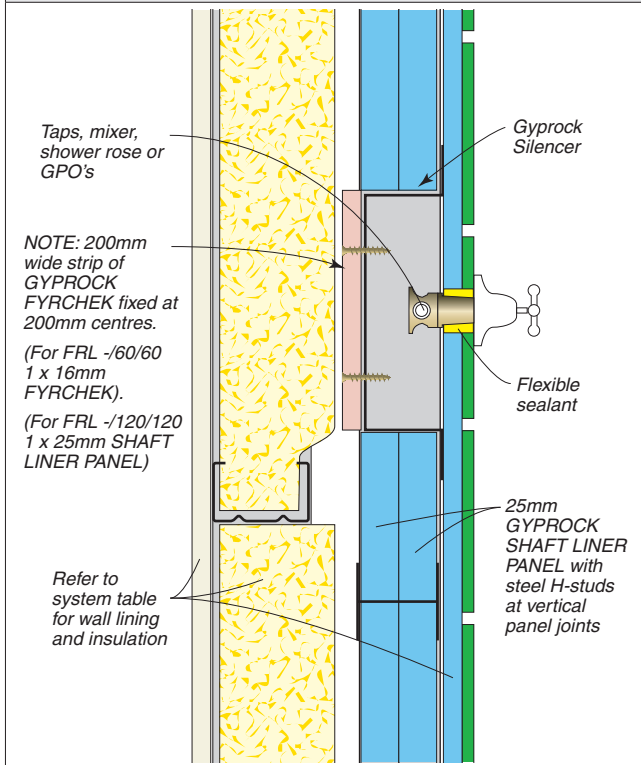
**FIG 23: PLUMBING SERVICES IN STUD WALL ONE SIDE (FRL -/120/120)**



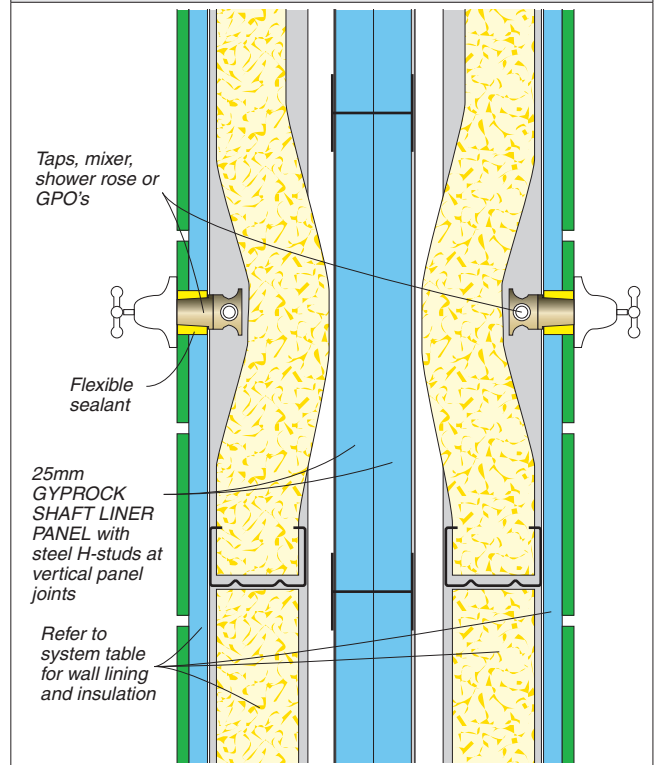
**FIG 25: PLUMBING SERVICES IN FURRING CHANNEL CAVITY (FRL -/60/60)**



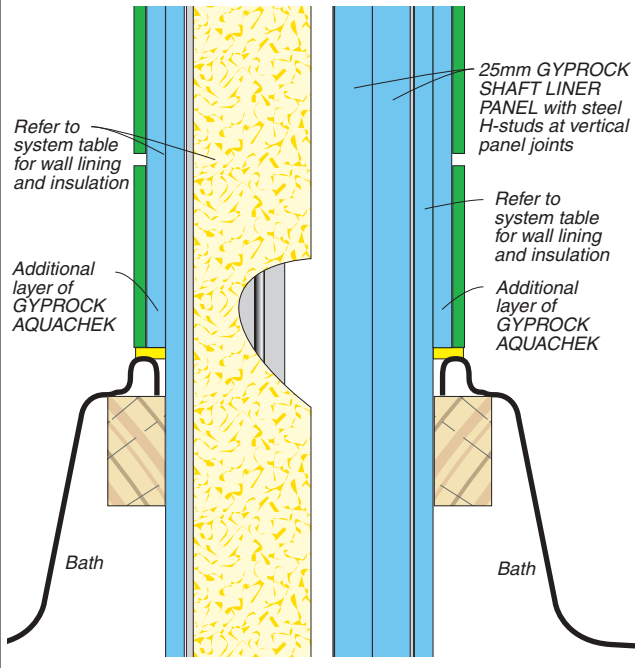
**FIG 24: PLUMBING SERVICES IN FIRE BARRIER SIDE (FRL AS NOTED)**



**FIG 26: PLUMBING OR ELECTRICAL SERVICES IN STUD WALL TWO SIDES (FRL -/90/90)**

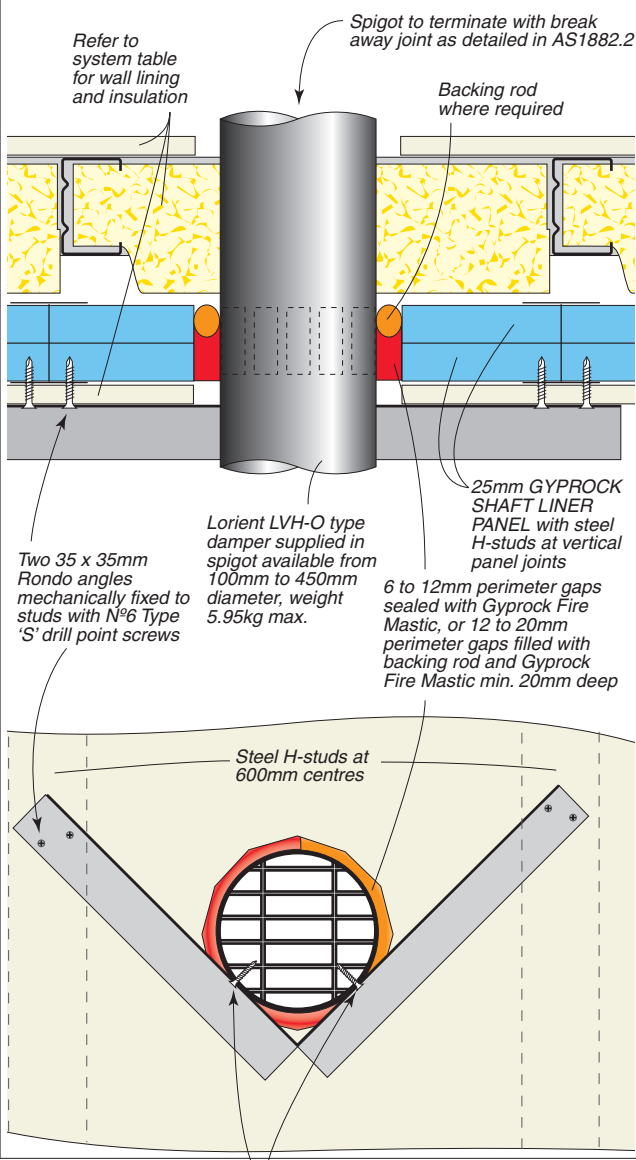


**FIG 27: BATHS BACK-TO-BACK IN STUD WALL ONE SIDE (FRL -/90/90)**



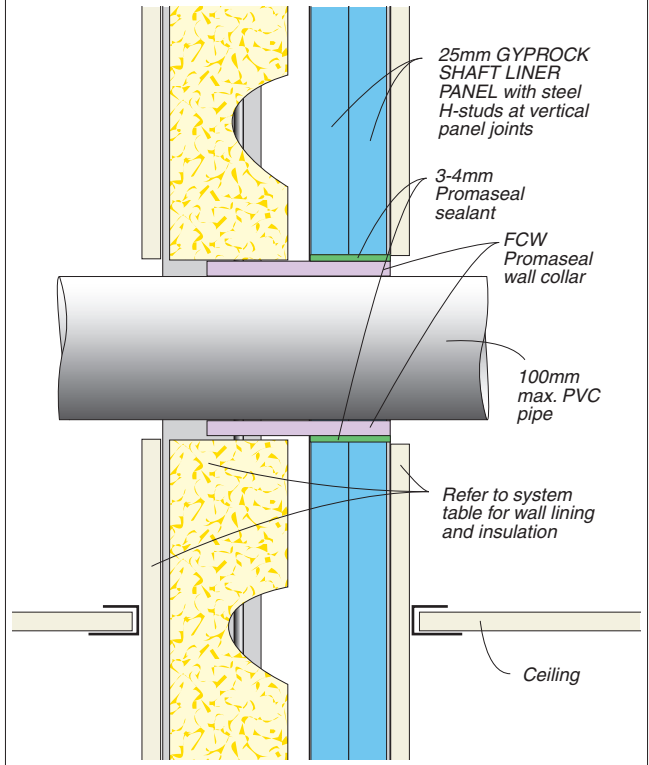
**FIG 28: INSTALLATION OF LORIENT LVH-O FIRE DAMPER (FRL -/120/-)**

NOTE: System acoustic performance may be reduced.



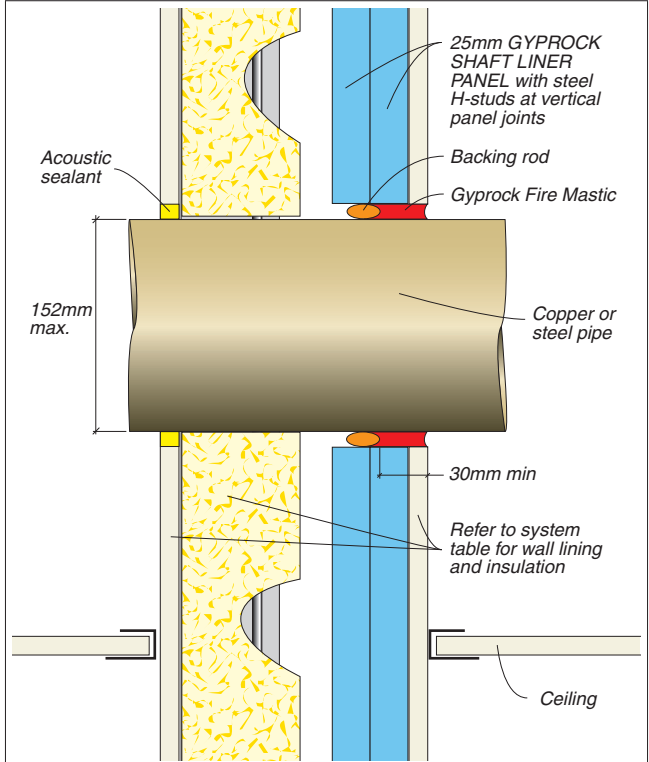
**FIG 29: PVC PIPE THROUGH STRATAWALL™ (FRL -/120/30)**

NOTE: System acoustic performance may be reduced.

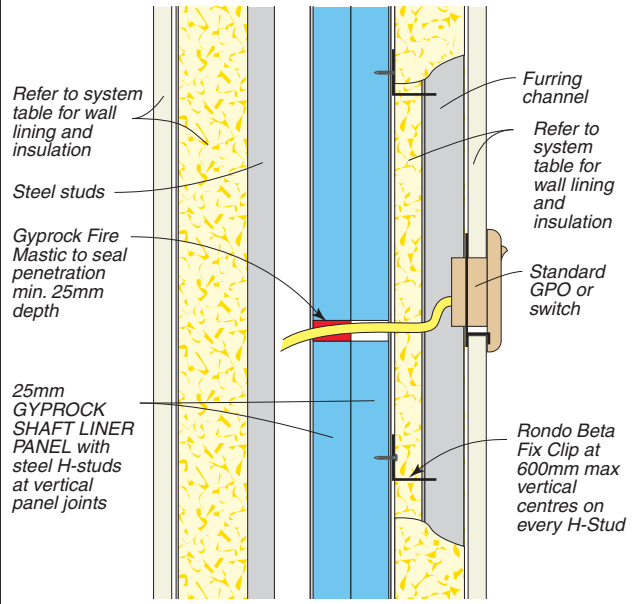


**FIG 30: COPPER OR STEEL PIPE THROUGH STRATAWALL™ (FRL - REFER TO BCA SPEC C3.15)**

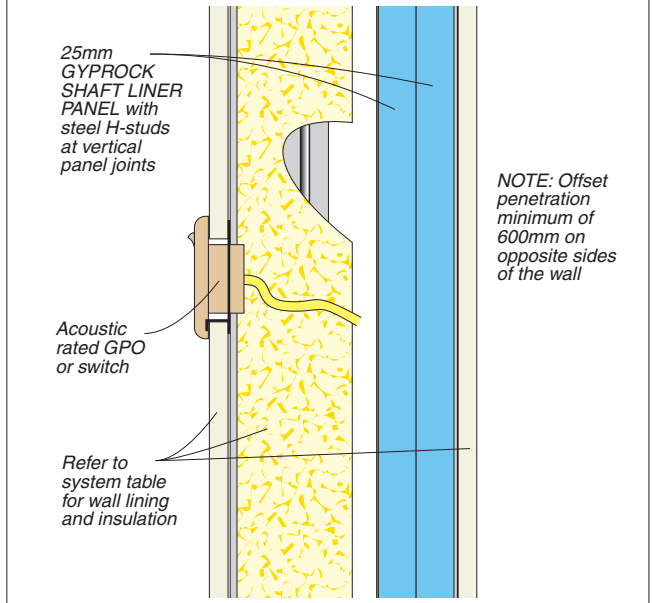
NOTE: System acoustic performance may be reduced.



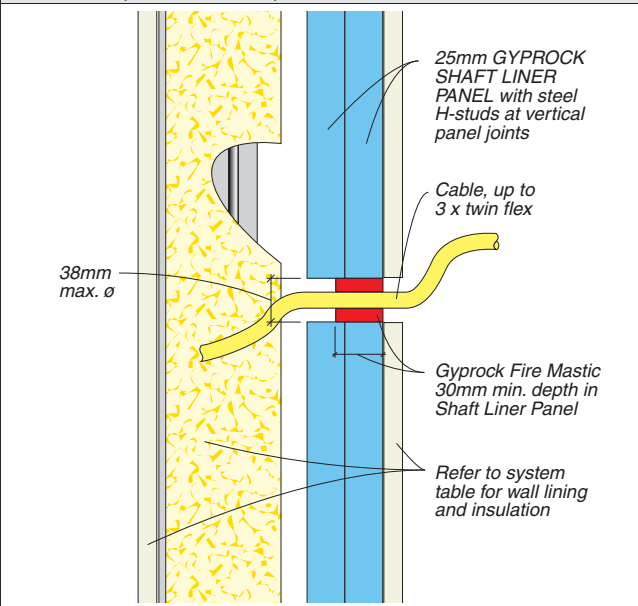
**FIG 31: GPO/SWITCH INSTALLATION IN FURRING CHANNEL SIDE WITH PENETRATION THROUGH FIRE WALL (FRL -/120/90)**



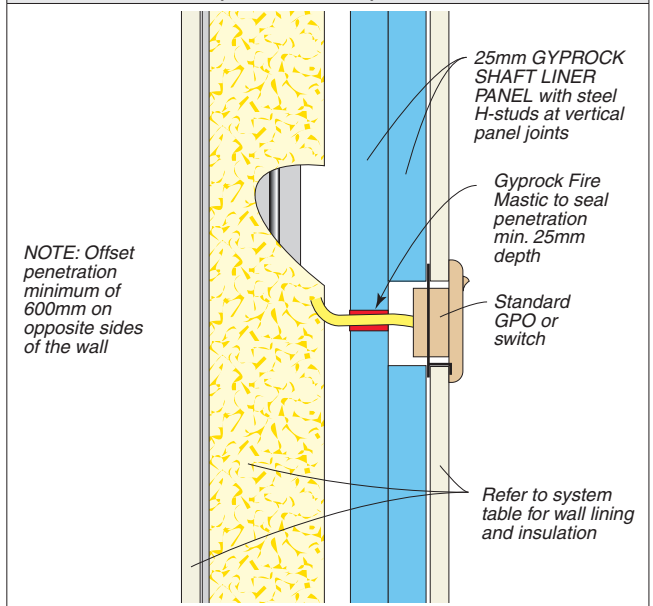
**FIG 33: GPO/SWITCH INSTALLATION IN STUD WALL (FRL -/120/90)**



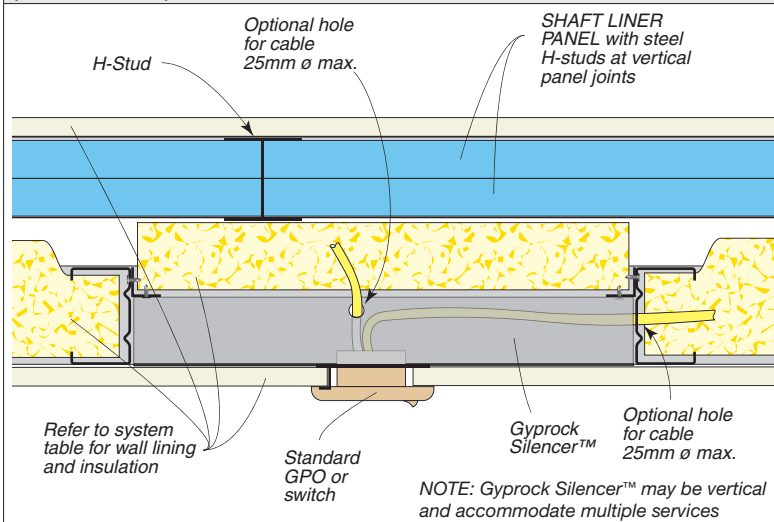
**FIG 32: CABLE PENETRATION THROUGH FIRE BARRIER (FRL -/120/30)**



**FIG 34: GPO/SWITCH AND PENETRATION IN FIRE BARRIER (FRL -/120/90)**



**FIG 35: GPO/SWITCH INSTALLATION IN GYPROCK SILENCER™ (FRL -/120/90)**





Everything else is just plasterboard



## Health & Safety

Information on any known health risks of our products and how to handle them safely is on their package and/or the documentation accompanying them.

Additional information is listed in the Material Safety Data sheet. To obtain a copy, telephone **1800 807 668**.

## Warranty

Gyprock™ products are manufactured for life, with all CSR products designed to achieve optimal performance when part of a CSR integrated system.

Gyprock™ continues to lead the market with premium quality products which are the preferred choice of plastering professionals.

Gyprock™ plasterboard products are manufactured to the Australian Standard AS2588 providing confidence in quality of product and support. For details on our product warranty, please log onto [www.gyprock.com.au](http://www.gyprock.com.au), or contact us on 1300 306 556.



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