



PRÎMA

PRÎMA *drywall*

Features

PRIMA^{drywall}

IBS, Fast, Lightweight, Durable, Fire-Rated

PRIMA^{drywall} is a wall system which comprises of **PRIMA^{liner}** fibre cement boards fixed onto galvanised steel stud and track frames that can be erected in a fully (100%) dry condition without the need for cement mortar plastering. **PRIMA^{drywall}** system's acoustic, heat and fire resistant standards can be improved by adding mineral wool as the insulation material; moreover the system is designed to meet the Malaysia Uniform Building By-Laws (UBBL) & BOMBA requirements.

PRIMA^{drywall} system is CIDB Industrialized Building System (IBS) certified and meets the stringent standards of both CONQUAS and QCLASSIC while contributing to the Green Building Index (GBI) ratings. The advantages of **PRIMA^{drywall}** system particularly with the innovative, cost-efficient and hassle-free building system makes it one of the best methods of construction.

PRIMA^{drywall} system can be categorized into 4 groups:

- Category 1: **PRIMA^{drywall}** – General
- Category 2: **PRIMA^{drywall}** – Impact
- Category 3: **PRIMA^{drywall}** – Fire-Rated
- Category 4: **PRIMA^{drywall}** – Acoustic

Product Benefits

- Fire-Rated (BOMBA)
- Cost Effective
- Space Efficient
- CONQUAS & QCLASSIC Standards
- Better Site Management, Low Wastage
- Fast & Lightweight (IBS)
- Simple Construction Method
- Strong & Secured (BS 5234, Part 2)
- High STC & Thermal Resistant (GBI)
- Less Stiffeners Required

** Please refer to HGI Technical Department for further design requirement*

Performance & Robustness

- IBS factor : 1.0
- Severe Duty (BS 5234: Part 2)
- Adhered to CONQUAS & QCLASSIC surface evenness requirements
- Installation speed 5 times faster than brick wall

Recommended Applications

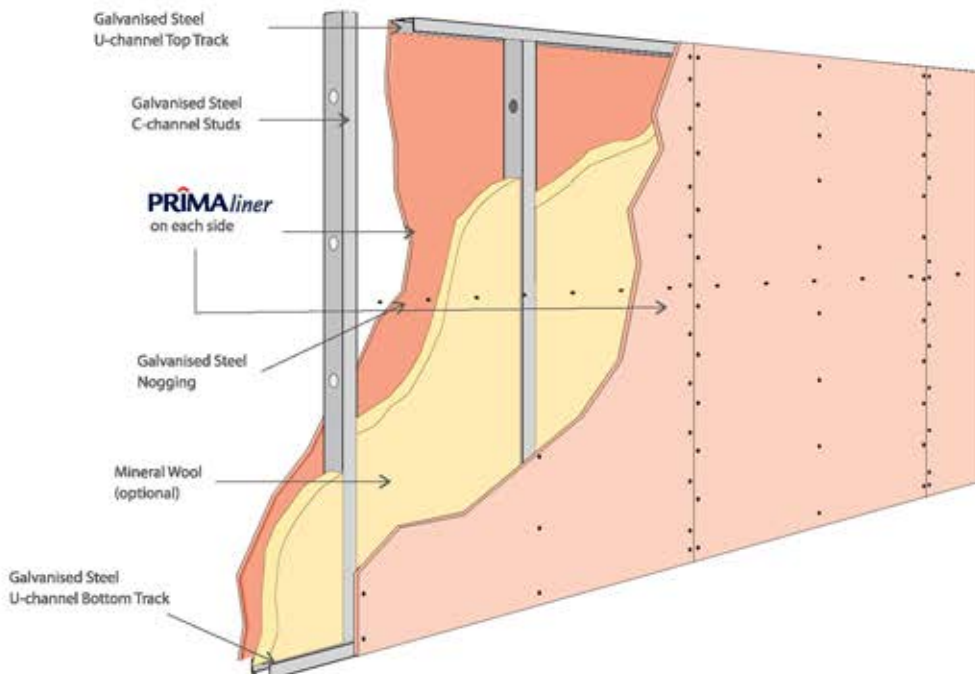
Fire-Rated

- Protecting Corridor for Offices
- Fire-Rated Wall between Office, Hotel/ Hostel Rooms
- General Fire-Rated Wall

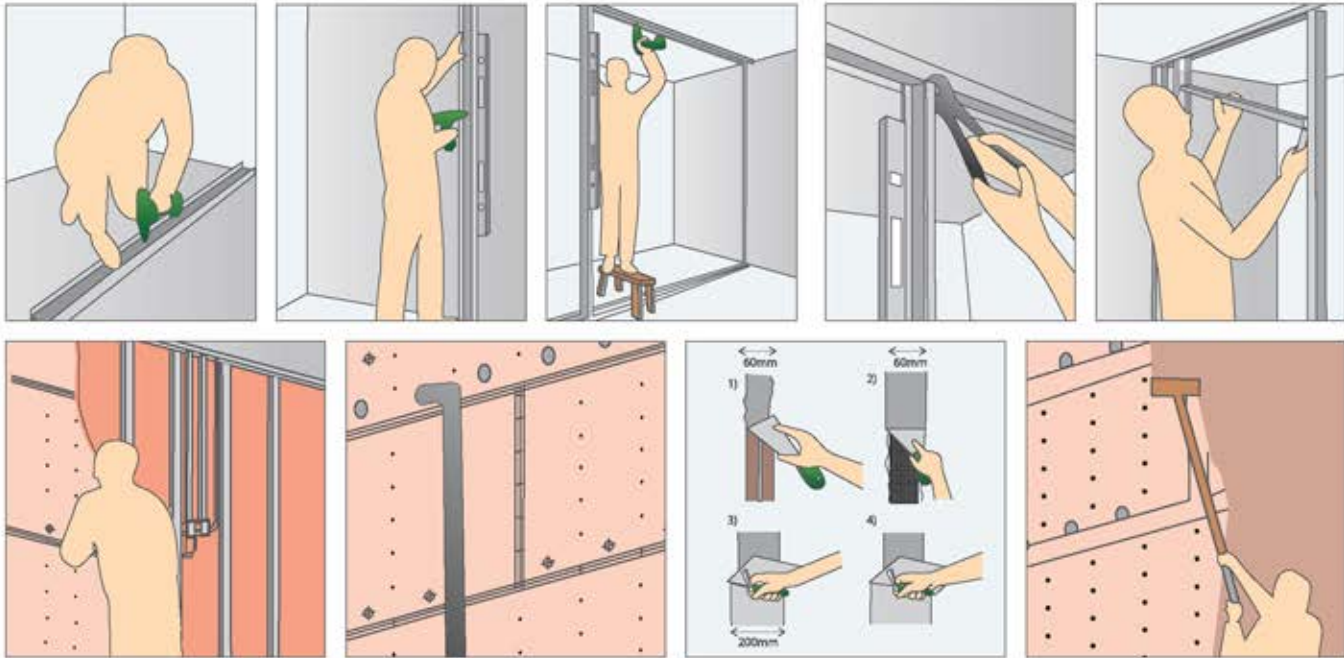
Non Fire-Rated

- General Area
- Wet Area
- Internal & External Walls

PRIMA^{drywall} System Overview



How to install PRIMAdrywall?



1. Set the wall position, fix the ceiling & floor tracks (U tracks).
2. Fix the intermediate wall studs (C stud) and nogging.
3. Fix door frame & window frame.
4. Install the 1st layer of **PRIMAliner** board.
5. Fix M&E services.
6. Insert mineral wool (optional).
7. Cover with the 2nd layer of **PRIMAliner** board.
8. Flush jointing & patching of fastener.
9. Finishes.

The wall is complete and ready for painting, texture coating, wall paper or even tiling application.



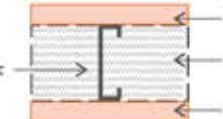
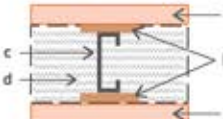
PRIMA[®]drywall - General

System Configuration	System ID	System Components	Nominal Wall Thickness	Nominal Weight	Sound Transmission Class (STC)	Fire Resistance Period
	G76 L6	a) 6mm thick PRIMA.liner b) 64mm x 0.50mm BMT light gauge galvanised steel frame or equivalent	76mm	21kg/m ²	36dB	•
	G82 L9	a) 9mm thick PRIMA.liner b) 64mm x 0.50mm BMT light gauge galvanised steel frame or equivalent	82mm	30kg/m ²	41dB	•

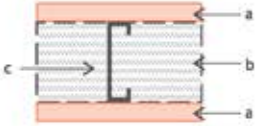
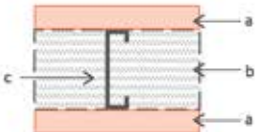
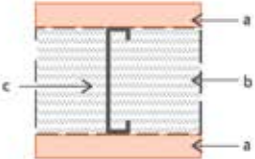
PRIMA[®]drywall - Impact

System Configuration	System ID	System Components	Nominal Wall Thickness	Nominal Weight	Sound Transmission Class (STC)	Fire Resistance Period
	I88 L12	a) 12mm thick PRIMA.liner b) 64mm x 0.50mm BMT light gauge galvanised steel frame or equivalent	88mm	40kg/m ²	43dB	•

PRIMA[®]drywall - Fire-Rated

System Configuration	System ID	System Components	Nominal Wall Thickness	Nominal Weight	Sound Transmission Class (STC)	Fire Resistance Period
One Hour FRP (SIRIM) 	F94 L9	a) 9mm thick PRIMA.liner b) 75mm thick rockwool @ 60kg/m ³ c) 76mm x 0.55mm BMT light gauge galvanised steel frame or equivalent	94mm	34kg/m ²	51dB	1 hour
Two Hours FRP (SIRIM) 	F136 L12	a) 12mm thick PRIMA.liner b) 6mm x 100mm PRIMA.flex strip c) 100mm thick rockwool insulation @ 80kg/m ³ d) 100mm x 0.55mm BMT light gauge galvanised steel frame or equivalent	136mm	50kg/m ²	55dB	2 hours

PRIMA^{drywall} - Acoustic

System Configuration	System ID	System Components	Nominal Wall Thickness	Nominal Weight	Sound Transmission Class (STC)	Fire Resistance Period
	A76L6	a) 6mm thick PRIMA liner b) 50mm thick mineral wool insulation @ 14kg/m ³ density c) 64mm x 0.50mm BMT light gauge galvanised steel frame or equivalent	76mm	22kg/m ²	41dB	•
	A82 L9	a) 9mm thick PRIMA liner b) 50mm thick mineral wool insulation @ 14kg/m ³ density c) 64mm x 0.50mm BMT light gauge galvanised steel frame or equivalent	82mm	31kg/m ²	50dB	•
	A118 L9	a) 9mm thick PRIMA liner b) 100mm thick mineral wool insulation @ 14kg/m ³ density c) 100mm x 0.55mm BMT light gauge galvanised steel frame or equivalent	118mm	33kg/m ²	52dB	•

* All STC values above predicted base on Marshellday Acoustic Prediction Software (insul 7.0)



Maximum Wall Heights Tables:

Steel Stud for PRIMA Premium Drywall

Table 1A: Internal Non-load Bearing Walls (L/240) for PRIMA[®]liner fibre cement board

Stud Width		51mm		64mm			76mm			92mm			150mm	
BMT		0.50mm	0.75mm	0.50mm	0.75mm	1.15mm	0.55mm	0.75mm	1.15mm	0.55mm	0.75mm	1.15mm	0.75mm	1.15mm
PRIMA [®] liner Board(mm)		Single Stud@ 600mm CENTRES												
Lined both sided	1 x 6.0mm	2680	2900	2930	3900	4150	3510	4400	4640	3550	4810	5100	6530	7210
	1 x 9.0mm	2680	3310	2920	3890	4410	3510	4390	5200	3850	4990	5740	6510	7510
PRIMA [®] liner Board(mm)		Single Stud@ 400mm CENTRES												
Lined both sided	1 x 6.0mm	3110	3300	3600	4250	4580	4130	4910	5230	4730	5430	5830	7340	7960
	1 x 9.0mm	3290	3660	3590	4500	4790	4310	5390	5710	4720	6020	6370	7600	8180
PRIMA [®] liner Board(mm)		Single Stud@ 300mm CENTRES												
Lined both sided	1 x 6.0mm	3370	3600	3930	4530	4920	4470	5280	5670	5300	5890	6370	7830	8520
	1 x 9.0mm	3710	3920	4150	4750	5110	4800	5740	6090	5460	6420	6850	8050	8700

Table 1B: Internal Non-load Bearing Walls (L/360) for PRIMA[®]liner fibre cement board

Stud Width		51mm		64mm			76mm			92mm			150mm	
BMT		0.50mm	0.75mm	0.50mm	0.75mm	1.15mm	0.55mm	0.75mm	1.15mm	0.55mm	0.75mm	1.15mm	0.75mm	1.15mm
PRIMA [®] liner Board(mm)		Single Stud@ 600mm CENTRES												
Lined both sided	1 x 6.0mm	2520	2650	2930	3460	3670	3320	4000	4200	3550	4390	4650	5830	6400
	1 x 9.0mm	2680	2990	2920	3700	3890	3510	4390	4670	3850	4950	5170	6180	6720
PRIMA [®] liner Board(mm)		Single Stud@ 400mm CENTRES												
Lined both sided	1 x 6.0mm	2800	2980	3260	3750	4030	3690	4390	4680	4370	4890	5240	6520	7240
	1 x 9.0mm	3120	3270	3540	3950	4210	3990	4830	5070	4660	5380	5680	6810	7490
PRIMA [®] liner Board(mm)		Single Stud@ 300mm CENTRES												
Lined both sided	1 x 6.0mm	3010	3220	3480	3980	4320	3970	4700	5040	4670	5270	5690	7080	7910
	1 x 9.0mm	3300	3490	3730	4170	4480	4240	5080	5390	4920	5700	6080	7330	8120

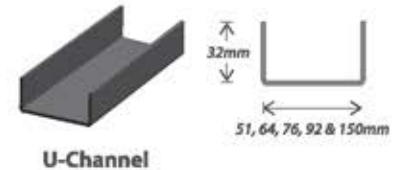
Notes to Tables 1A & 1B:

1. Deflection Limit is span/240 (or span/360 as applicable) to a maximum of 30mm at 0.25 kPa, in accordance with the BCA Specification *CL 8 - 200*
2. Maximum wall heights refer to the structural wall heights only. Maximum wall heights may be reduced from those in the table for fire rated walls, refer to HCI Technical Department for this information.
3. The tabulated heights are not for Axial Loads but do include Self Weight and Lateral Pressures.
4. Shelf Loading is not permitted on the tabulated wall heights.
5. Loadings: (a) *P_{ultimate}* = 0.375kPa
(b) *P_{service}* = 0.25kPa
6. These walls are not for external applications.
7. All loading in accordance with *AS 1170 : 2002*
8. Walls are analysed in accordance with *AS 1170 : 2002*

Framing member must be fabricated using light gauge galvanised coated (or equivalent) steel sections having a minimum of **0.50mm** base metal thickness with spacing not exceeding the following spacing distance:

- Wall studs - **610mm c/c** maximum
- Noggings - **1220mm c/c** maximum

The actual studs and noggings sizes shall be selected based on the above table. A fire rating or (and) sound insulation is required, refer to "System Components & Properties" table for additional requirements.



Sheet Installation & Fastening requirement

In drywall construction, **PRIMA**liner can be installed horizontally or vertically. The sheets must be laid staggered and ensure the sheet joints on one side of the wall do not coincide with the sheet joints on the other side of the wall.

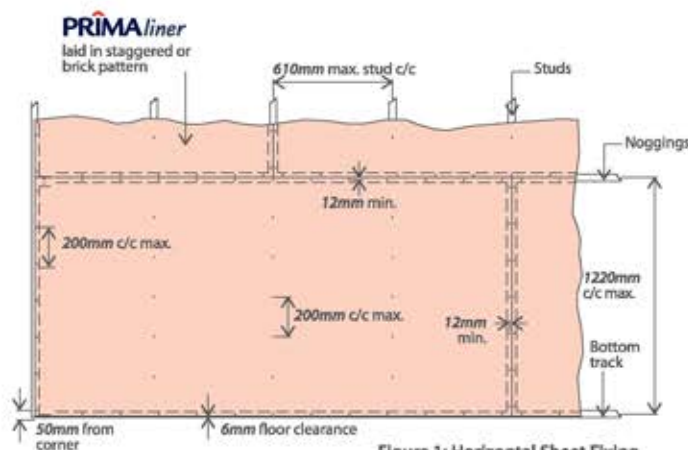


Figure 1: Horizontal Sheet Fixing

Fastener Fixing Distance For Untiled Wall

- 12mm minimum from edges
- 50mm minimum from corners
- 200mm centres spacing along edges
- 300mm centres spacing elsewhere

Fastener Fixing Distance For Tiled Wall & Fire-Rated Wall

- 12mm minimum from edges
- 50mm minimum from corners
- 200mm centres spacing along edges
- 200mm centres spacing elsewhere

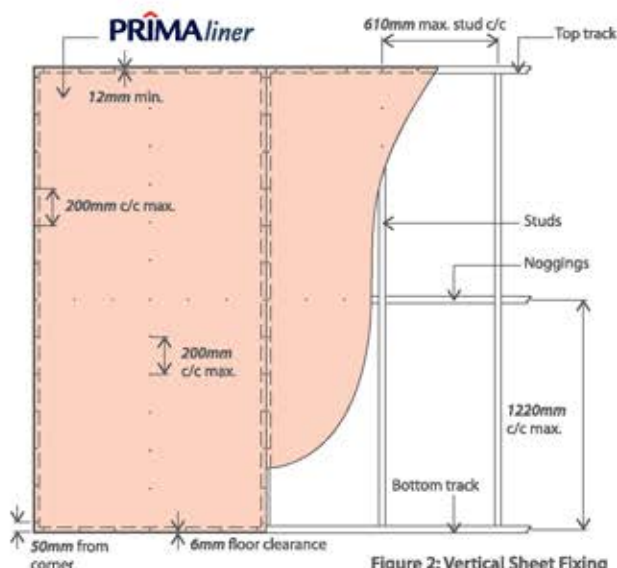
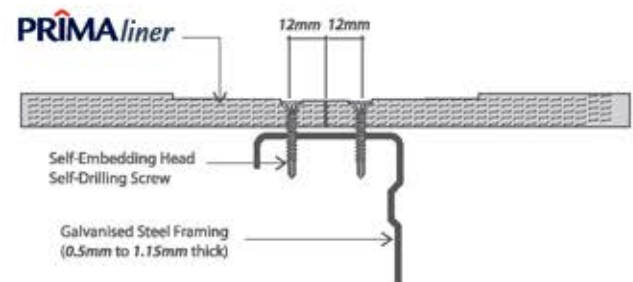


Figure 2: Vertical Sheet Fixing



Self-Drilling Self-Embedding Head Wing Tek Screw for Board Fixing



Wafer Head Screw for Steel Frame Assembly

PRIMA^{liner} sheet joints can be treated as described in the **Figure 3**, incorporating Reinforcement Tape and Joint Compound. Use only Joint Compound produced or supplied by reputable manufacturers. The best result can be achieved when both **PRIMA^{liner}** edges have recesses. Jointing non-recessed edges should be avoided.

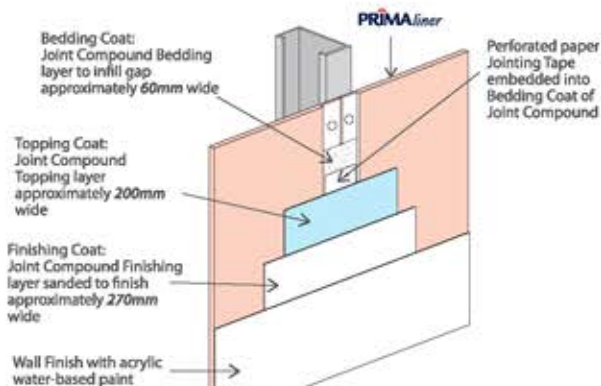


Figure 3: Flush Joint Detail

Finishes

PRIMA^{liner} can be decorated with 2 coats of 100% quality water-based Acrylic Paint. For general-purpose applications, there is no requirement for Primers or Sealers. Alternatively, the sheet surface can be decorated with wall covering materials, such as Wallpaper. In all cases, coating manufacturer's recommendations must be strictly adhered to. For wet area application, tile finishing may be preferred.

- The flexible Tile Adhesive shall comply to **AS 2358-1990**; Adhesive for ceramic wall tiles & mosaics.
- The choice of the Tile Adhesive varies, depending on the substrate and the type of tiles used. Refer to Tile Adhesive manufacturer for advice.
- DO NOT tile over the Expansion Joint.
- Expansion Joint should be sealed with flexible water-resistant Acrylic Sealant for general & wet area walls. Fire-rated seal is recommended for fire-rated walls.
- For wet area application, use cementitious Jointing Compound with alkaline-resistant fibre glass reinforcement tape to treat the sheet joints and finished with a layer of water-proofing coating on top before applying wall tiles.



Paint



Wall Covering



Texture Coating



Tiles



Termite Resistant



Fire Resistant



Water Resistant



Weather Resistant



Environmentally Friendly



Superior Paint Adhesion



High Workability



Aesthetically Pleasing



50 Years Durability

WARRANTY

Hume Cemboard Industries Sdn Bhd ("the Company") warrants that it will at all times ensure that the products referred to herein ("the Products") shall be supplied by it to the purchaser free of any manufacturing defects and defective materials used in their manufacture.

In the event and if contrary to this assertion the Products prove to be defective, whether as a result of manufacturing defects or arising from the Company's use of defective materials, the Company will supply replacement Products. The Company shall, however, have the option and may choose to reimburse the purchaser the purchase price of the Products instead. The Company shall not be liable for any economic or consequential losses arising from any use of defective Products.

This warranty shall be void unless the purchaser has, in its handling and installation of the Products, complied with the recommendations contained in this brochure and other good building practices expected of a reasonable purchaser.

ADVISORY NOTE

Successful installations of Hume Cemboard Industries Sdn Bhd's Products depend on a large number of factors that are outside of the scope of this brochure. Particular design, detail, construction requirements and workmanship are beyond the control of the Company. As such, Hume Cemboard Industries Sdn Bhd's warranty does not extend to non-usability of Products or damage to Products arising from poor or defective designs or systems or poor quality of workmanship in the installation of Products.

Expansion Joints must be provided to accommodate anticipated movement within a building. **PRIMA^{drywall}** systems require expansion joints spacing to be located as follow:

Recommended Expansion Joints Spacing

Untiled walls	9.0m
Tiled walls	4.8m

