PRIMA™
FIBRE CEMENT BUILDING SOLUTIONS

PRIMA*drywall*

SAINT-GOBAIN

PRÎMAdrywall

IBS, Fast, Lightweight, Durable, Fire-Rated

PRÎMAdrywall is a wall system which comprises of **PRÎMA**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. **PRÎMA**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.

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

PRÎMAdrywall system can be categorized into 4 groups:

Category 1: **PRÎMA**drywall – General
Category 2: **PRÎMA**drywall – Impact
Category 3: **PRÎMA**drywall – Acoustic
Category 4: **PRÎMA**drywall – Fire-Rated

Product Benefits

- Fire-Rated (BOMBA)
- Cost Effective
- Space Efficient
- CONQUAS & QLASSIC Standards
- Better Site Management, Low Wastage

- Fast & Lightweight (IBS)
- Simple Construction Method
- Solid, Strong & Secured (BS 5234, Part 2)
- High STC & Thermal Resistant
- No Stiffeners Required

Performance & Robustness

- IBS factor : 1.0
- Severe Duty (BS 5234: Part 2)

- Adhered to CONQUAS & QLASSIC surface evenness requirements
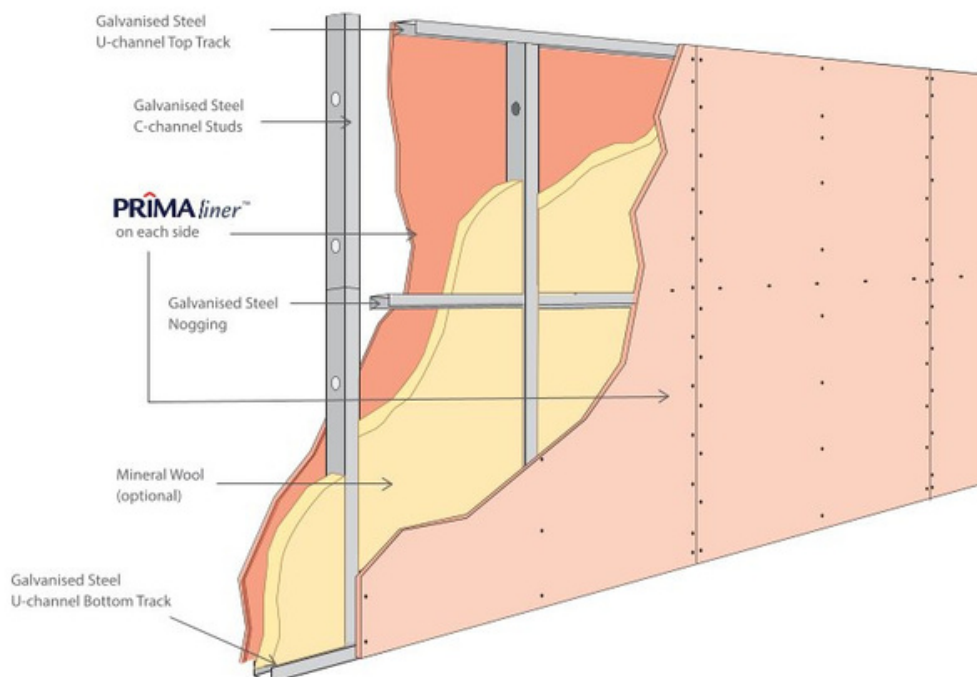- Installation speed 5 times faster than brick wall

Recommended Applications
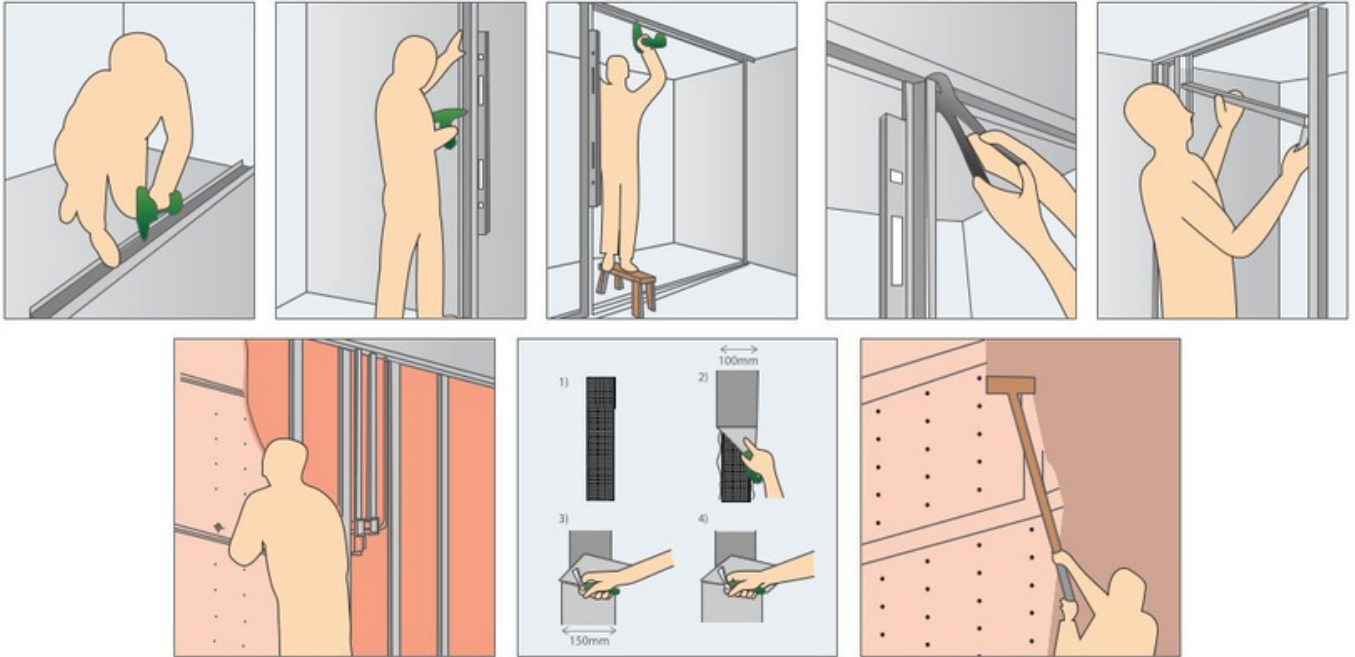
Fire-Rated
- General Fire-Rated Wall

Non Fire-Rated
- General Area
- Wet Area
- Internal & External Walls

PRÎMAdrywall System Overview

- Galvanised Steel U-channel Top Track
- Galvanised Steel C-channel Studs
- **PRÎMA**liner™ on each side
- Galvanised Steel Nogging
- Mineral Wool (optional)
- Galvanised Steel U-channel Bottom Track

How to install PRÎMAdrywall?

1. Set the wall position fix the soffit & floor tracks (U Tracks).
2. Fix the intermediate wall studs (C Stud).
3. Fix door frame & window frame.
4. Install the 1st layer of PRÎMAliner™ board.
5. Fix M&E services.
6. Insert mineral wool (optional)
7. Insert 2nd layer of PRÎMAliner™ board
8. Flush jointing & patching of fastener.
9. Finishes.

The wall is complete and ready for painting, texture coating, wallpaper or even tiling application.
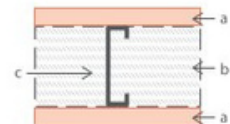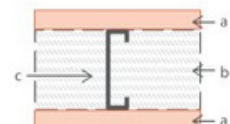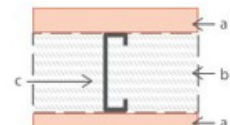
PRÎMA*drywall* - General

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
	G76L6	a) 6mm thick PRÎMA*liner*™ b) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64mm	76mm	21.0kg/m²	36dB	•	Internal Residential
	G88L6		76mm	88mm	21.1kg/m²	37dB*	•	
	G104L6		92mm	104mm	21.3kg/m²	37dB*	•	
	G112L6		100mm	112mm	21.4kg/m²	37dB*	•	
	G82L9	a) 9mm thick PRÎMA*liner*™ b) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64mm	82mm	30.0kg/m²	41dB*	•	Internal Commercial
	G94L9		76mm	94mm	30.1kg/m²	41dB*	•	
	G110L9		92mm	110mm	30.3kg/m²	42dB*	•	
	G118L9		100mm	118mm	30.4kg/m²	42dB*	•	

PRÎMA*drywall* - Impact

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
	I88L12	a) 12mm thick PRÎMA*liner*™ b) 0.50mm BMT light gauge zincalume / galvanized steel frame or equivalent	64mm	88mm	40.0kg/m²	44dB*	•	Internal Commercial
	I100L12		76mm	100mm	40.1kg/m²	44dB*	•	
	I116L12		92mm	116mm	40.3kg/m²	45dB*	•	
	I124L12		100mm	124mm	40.4kg/m²	46dB*	•	

PRÎMA*drywall* - Acoustic

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
	A76L6	a) 6mm thick PRÎMA*liner*™ b) 50mm thick mineral wool insulation @ 16kg/m³ density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64mm	76mm	22.0kg/m²	41dB*	•	Internal Residential
	A112L6	a) 6mm thick PRÎMA*liner*™ b) 100mm thick mineral wool insulation @ 16kg/m³ density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	100mm	112mm	22.4kg/m²	47dB*	•	Internal Residential
	A82 L9	a) 9mm thick PRÎMA*liner*™ b) 50mm thick mineral wool insulation @ 16kg/m³ density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64mm	82mm	31.0kg/m²	51dB*	•	Internal Commercial

Remark: * STC value predicted base on Marshellday Acoustic Software (Insul 7.0)
   ** Tested value from SIRIM Bhd.

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
	A118 L9	a) **9mm** thick **PRĪMA**_liner_™ b) **100mm** thick mineral wool insulation @ **16kg/m³** density c) **0.55mm** BMT light gauge zincalume / galvanized steel frame or equivalent	100mm	118mm	33kg/m²	53dB*	*	Internal Commercial

Remark: * STC value predicted base on MarshellIday Acoustic Software (Insul 7.0)
       ** Tested value from SIRIM Bhd.

PRĪMA_drywall_ - Fire-Rated

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
One Hour FRP (SIRIM) 	F94 L9	a) **9mm** thick **PRĪMA**_liner_™ b) **75mm** thick rockwool insulation @ **60kg/m³** density. c) **0.55mm** BMT light gauge zincalume / galvanized steel frame or equivalent	76mm	94mm	34kg/m²	51dB* 50dB**	1 hour**	Internal Commercial
Two Hours FRP (SIRIM) 	F136 L12	a) **12mm** thick **PRĪMA**_liner_™ b) **6mm** x **100mm** **PRĪMA**_flex_™ strip c) **100mm** thick rockwool insulation @ **80kg/m³** density. d) **0.55mm** BMT light gauge zincalume / galvanized steel frame or equivalent	100mm	136mm	50kg/m²	54dB* 53dB**	2 hours**	Internal Commercial

Remark: * STC value predicted base on MarshellIday Acoustic Software (Insul 7.0)
   ** Tested value from SIRIM Bhd.

Framing

Framing member must be fabricated using light gauge galvanised coated (or equivalent) steel sections having a minimum of **0.55mm** 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.

C-Channel

35mm

51, 64, 76, 92 & 100mm

U-Channel

32mm

51, 64, 76, 92 & 100mm
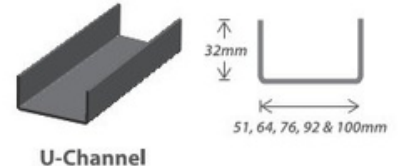
Sheet Installation & Fastening requirement

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.
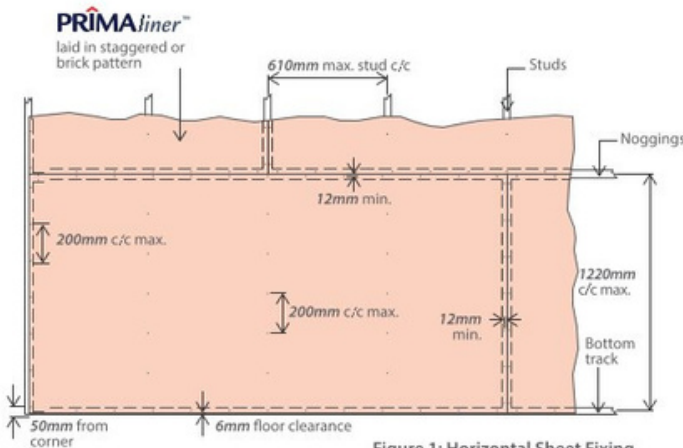
PRIMAliner™
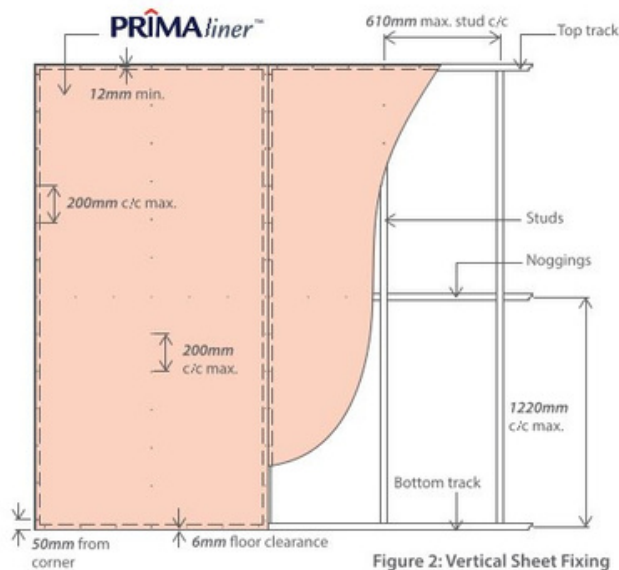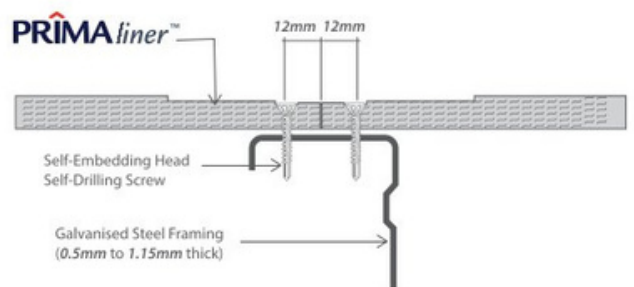laid in staggered or brick pattern

610mm max. stud c/c

Studs

Noggings

12mm min.

200mm c/c max.

200mm c/c max.

12mm min.

1220mm c/c max.

Bottom track

50mm from corner

6mm floor clearance

Figure 1: Horizontal Sheet Fixing

Fastener Fixing Distance For Untiled Wall
12mm minimum from edges
50mm minimum from corners
200mm centres spacing along edges
200mm 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

PRIMAliner™

12mm 12mm

Self-Embedding Head
Self-Drilling Screw

Galvanised Steel Framing
(**0.5mm** to **1.15mm** thick)

PRIMAliner™

12mm min.

610mm max. stud c/c

Top track

200mm c/c max.

Studs

Noggings

200mm c/c max.

1220mm c/c max.

Bottom track

50mm from corner

6mm floor clearance

Figure 2: Vertical Sheet Fixing

PRIMA fastener -
Wing Tek **28mm C1**

Self-embedding head wing tek screw,

#8 x 1 1/8" (28mm)

Applications:
7.5mm - 12.0mm
board thickness

PRIMA fastener -
Wing Tek **32mm C1**

Self-embedding head wing tek screw,

#8 x 1 1/4" (32mm)

Applications:
12.0mm- 16.0mm
board thickness

PRIMA*liner*™ sheet joints can be treated as described in the **Figure 3**, incorporating PRIMA*Fibre Mesh Tape* and PRIMA*Jointing Compound PLUS+*. The best result can be achieved when both PRIMA*liner*™ edges have recesses. Jointing non-recessed edges should be avoided.
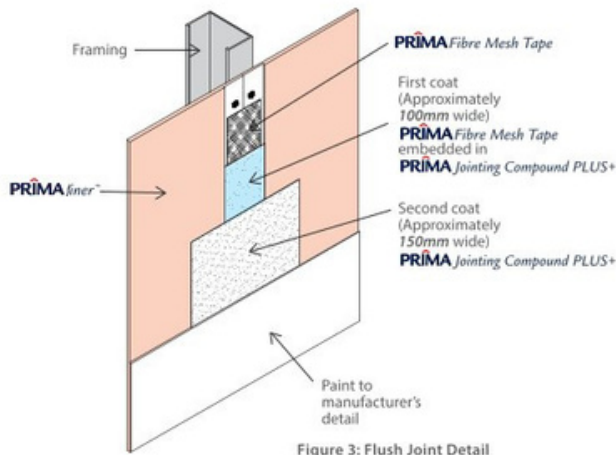
Expansion joints must be provided to accommodate anticipated movement within a building. PRIMA*drywall* systems require expansion joints spacing to be located as follow:

Recommended Expansion Joints Spacing

Untiled walls	9.0m
Tiled walls	4.8m

Figure 3: Flush Joint Detail

Labels:
- Framing
- PRIMA*Fibre Mesh Tape*
- First coat (Approximately *100mm wide*) PRIMA*Fibre Mesh Tape* embedded in PRIMA*Jointing Compound PLUS+*
- PRIMA*liner*™
- Second coat (Approximately *150mm wide*) PRIMA*Jointing Compound PLUS+*
- Paint to manufacturer's detail

Figure 4: Vertical Control joint

Labels:
- Light gauge galvanized steel / zincalume C-channel wall stud
- Backing tape
- Paintable polyurethane sealant
- PRIMA*liner*™
- 5mm min
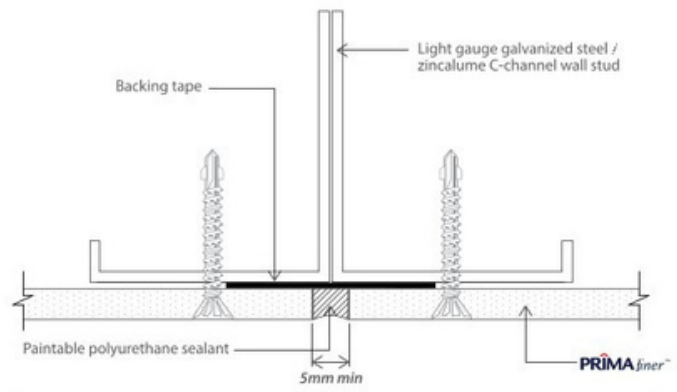
Finishes

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, water proofing and 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.
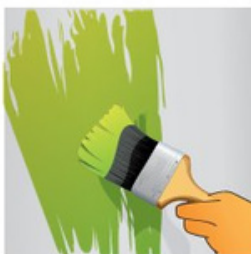
Paint

Wall Covering
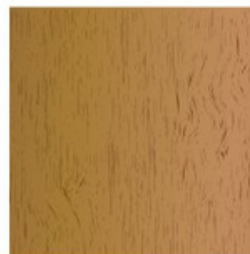
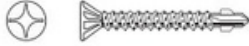Texture Coating

Tiles

PRÎMA *fastener -* Wing Tek 22mm C1

Self-embedding head wing tek screw,
No 8# x 22mm

Applications:
4.5mm- 6.0mm board thickness

PRÎMA *fastener -* Wing Tek 28mm C1

Self-embedding head wing tek screw,
No 8# x 28mm

Applications:
7.5mm - 12.0mm board thickness

PRÎMA *Jointing Compound PLUS+*

Applications:
28kg/tub. For flush jointing and patching of holes on Prima fibre cement board.

PRÎMA
Jointing Compound PLUS+

PRÎMA *Mesh Tape*

Applications:
Alkaline resistant tape for internal & external application

CIDB MALAYSIA

A CIDB certified - IBS status company

MyHP00175-16

SINGAPORE GREEN BUILDING COUNCIL

GreenLabel SINGAPORE
MADE FROM RECYCLED MATERIALS

Termite Resistant | Fire Resistant | Water Resistant | Weather Resistant | 100% Asbestos free | Superior Paint Adhesion | High Workability | Aesthetically Pleasing | **50** Years 50 Years Durability