

# Solutions HealthCare

Healthcare facilities require unique solutions for the people and processes they support.

Fire Rated Wall  
Acoustic Wall  
Impact Resistance  
Radiation Protection  
Wet Area Solution  
Anti Condensation Wall  
Mounting Fixtures on **PRIMA**drywall

# Introduction

The construction industry is ever-changing and has its own set of challenges, requirements and demands. Thus, at Saint-Gobain Prima, we strive to innovate and create not just individual products for the mass market but also systems that cater to different industries while complying to their specific requirements.

Realizing the needs of clients in solving the puzzles to their construction difficulties, Saint-Gobain Prima now offers owners, developers, contractors and individual builders a wide range of construction solutions.

As such, we have come to understand the strict requirements within the constructions and developments of hospitals that is growing steadily with the increasing populations around the world.

In this instance, Saint-Gobain Prima is proud to present you with our Healthcare Building Solutions. A system that is specially customized for the construction of healthcare facilities at large.

To make this possible, our senior R&D and technical teams have rigorously tested a wide range of products and have put together various systems comprising of elements that match or exceed the requirements stated in the handbook of hospital constructions.



## Sustainability

### Our Green Initiatives

Proceeding with sustainability in mind, motivated by reducing our carbon footprint; Saint-Gobain Prima worked with worldwide environmental bodies in establishing **PRIMA** board, a green product.

Whenever possible, sustainable raw materials are sourced such as the pulp from the Softwood trees which can be replanted. Our manufacturing methods and processes are ISO 14001:2015 recognized, deeming compliance to reduce, reuse and recycle, aligned with our sustainability policy.

As with **PRIMA** products, we continue to enhance and develop durable products as well as products that require low maintenance and can conserve energy.

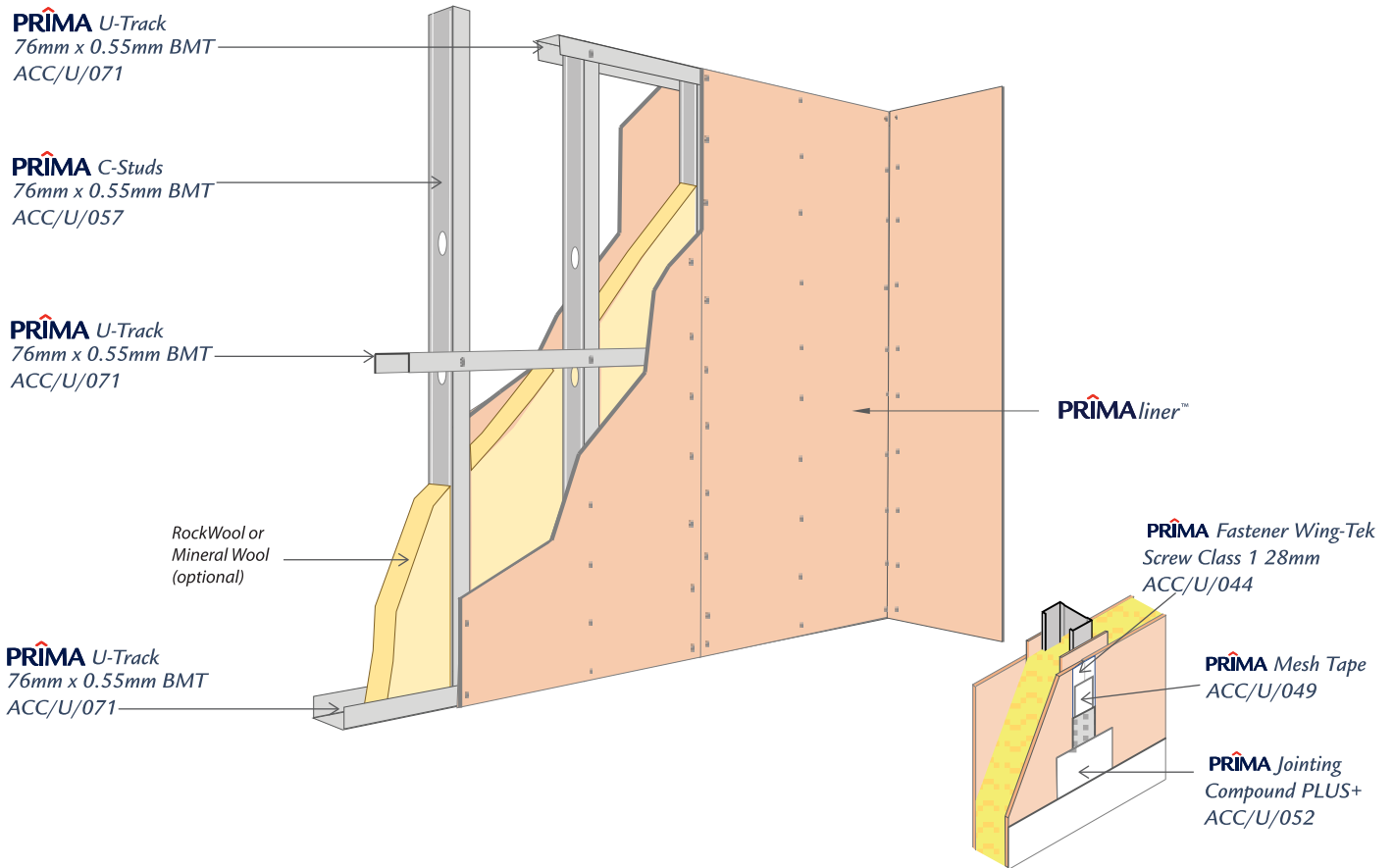
**PRIMA**'s range of products obtained its first recognition by the Singapore Green Label in 2009 by the Singapore Environment Council, Good Environmental Choice Australia Eco-Label in 2010, Korean Eco-Label by Korean Environmental Industry & Technology Institution (KEITI) and Healthy Building Material mark by Korean Air Cleaning Association (KACA), naming a few.

Domestically, we are a member of the Malaysian Green Building Council, contributing to the assessment criteria of Green Building Index classification (GBI). GBI is Malaysia's Construction Industry recognized green rating system used to promote sustainability in the building environment, raising awareness about environmental issues and responsibility for future generations.

**PRIMAdrywall** is a wall system which comprises of **PRIMALiner™** fibre cement boards fixed onto galvanised steel structure that can be erected in a fully (100%) dry condition without the need for cement mortar plastering. **PRIMAdrywall** system's acoustic and fire resistance performance can be improved by adding mineral wool as the insulation material; and at the same time meeting the Malaysia Uniform Building By-Laws (UBBL) & BOMBA requirements.

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

# PRIMA drywall System Overview



## Performance & Robustness

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



Scan to Watch  
**PRIMA** drywall  
Installation Video



# PRIMA<sup>drywall</sup> Healthcare Solutions

PRIMA Healthcare Solutions is created with comprehensive considerations based on the requirements in the construction of healthcare facilities in designing & specifying walls for healthcare facilities there are 7 important criteria to be considered namely;

1. Fire rating
2. Acoustics
3. Impact / Durability
4. Wet prevention
5. Radiation protection
6. Anti Condensation-  
(Anti Fungus)
7. Wall Mounting Provision

Each solution is carefully designed based on specific requirements and meets the standards required by medical professionals in Malaysia and other countries.



MyHP00175/16



041-026  
MADE FROM RECYCLED MATERIALS



SIRIM  
ECO-LABEL  
License No.  
ELH0006001



# Fire Rated Wall

Many hospitals are designed on the principle of horizontal evacuation where bed-bound patients are moved from the fire compartment where the fire is located to the safety of an adjacent compartment on the same level, where they either remain until the fire is dealt with or are evacuated further from the location of the fire.

These places have greater importance on the integrity of fire-rated partitions within healthcare facilities as compared to other building types where the whole building will be immediately evacuated when a fire alarm is activated.

Hence, fire resistance is amongst the most important criteria to be met in order to comply with the requirements by the Fire & Rescue Department.

For your references, we have listed the certifications obtained for **PRIMA<sup>drywall</sup>** as per the fire resistance performance requirements:

- BS476 part 6 (1987) & part 7 (1997) - SIRIM Certified
- Fire & Rescue Department Malaysia - Class 'O' Material Certified
- BS476 part 22 (1987) Fire Resistant Period (FRP) up to 2 hours -SIRIM Certified;
  - FRP 1 hour - Fire Integrity & Insulation up to 70 minutes
  - FRP 2 hours - Fire Integrity & Insulation up to 130 minutes

\*Application in reference to Uniform Building By-Laws 1984 (Peninsular Malaysia & Sabah) & building Ordinance 1994 (Sarawak) requirements.



## PRIMA<sup>drywall</sup> - Fire-Rated

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
<p>One Hour FRP (SIRIM)</p>	F94 L9	a) 9mm thick <b>PRIMA<sup>liner</sup></b> b) 75mm thick rockwool insulation @ 60kg/m <sup>3</sup> density. c) 0.55mm BMT light gauge zinalume / galvanized steel frame or equivalent	76mm	94mm	34kg/m <sup>2</sup>	51dB* 50dB**	1 hour**	Internal Commercial Institution
<p>Two Hours FRP (SIRIM)</p>	F136 L12	a) 12mm thick <b>PRIMA<sup>liner</sup></b> b) 6mm x 100mm <b>PRIMA<sup>flex</sup></b> strip c) 100mm thick rockwool insulation @ 80kg/m <sup>3</sup> density. d) 0.55mm BMT light gauge zinalume / galvanized steel frame or equivalent	100mm	136mm	50kg/m <sup>2</sup>	54dB* 53dB**	2 hours**	Internal Commercial Institution

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



# Acoustic Wall

Creating a comfortable acoustic environment in healthcare environments can play an important role in supporting safety, health, healing, and well being for all occupants.

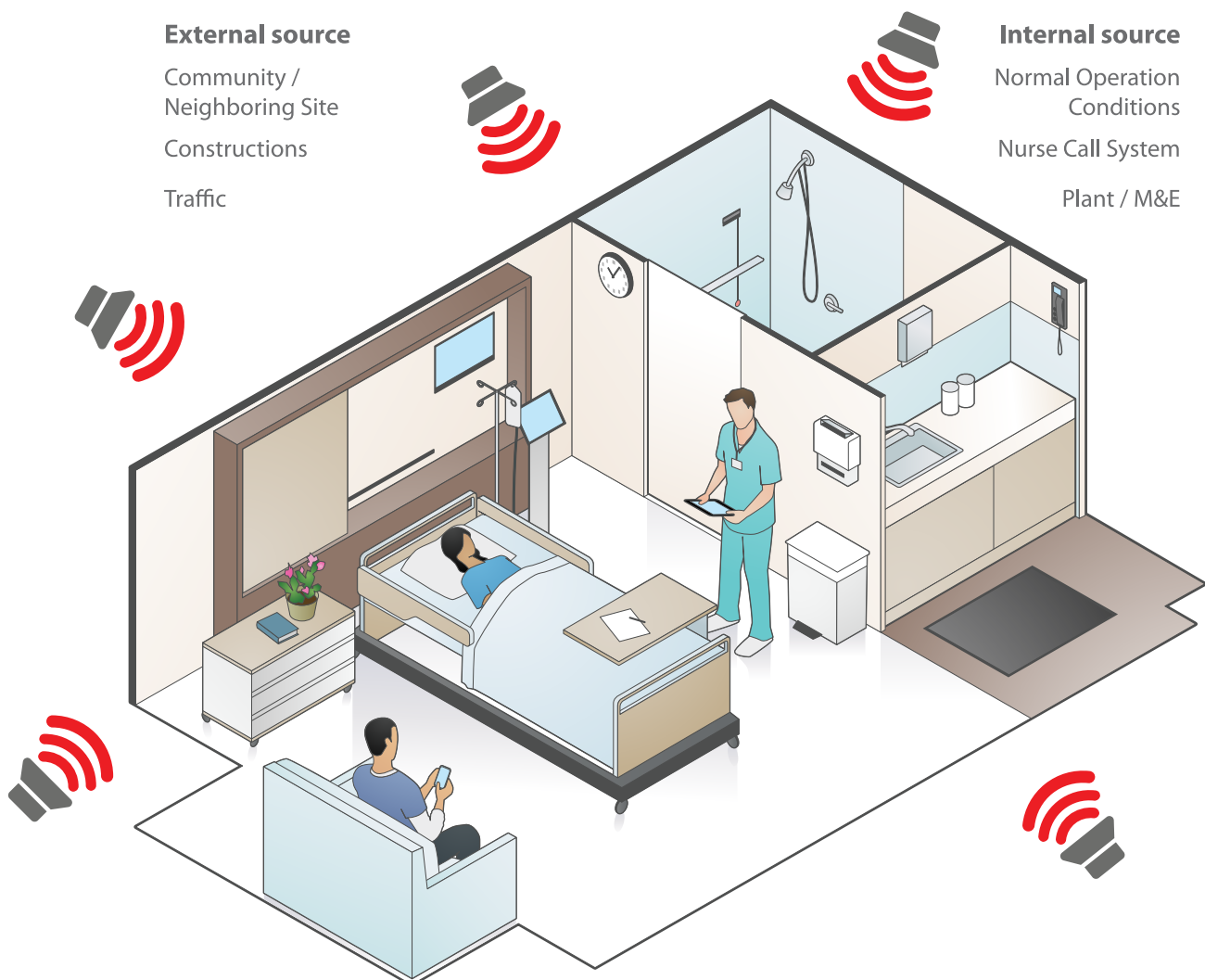
Additionally, maintaining speech privacy in healthcare settings helps reduce medical errors as it supports open conversations among patients, families, and patient care teams and is believed to influence patient satisfaction.

Sound waves can be transmitted via many different routes, be it directly or indirectly. An example of direct sound transmission would be through a partition between the source and the receiving room. Whilst, indirect sound transmission can be defined as the sound coming from a source room to an adjacent receiving room but not via the common partition.



**PRIMA** Acoustic drywall designed to provide a quiet and ideal recuperating environment for patients.

Variable of sound transmissions such as a room or walkway design and types of materials used to construct the acoustic wall will play a big difference in improving appropriate sound insulation.

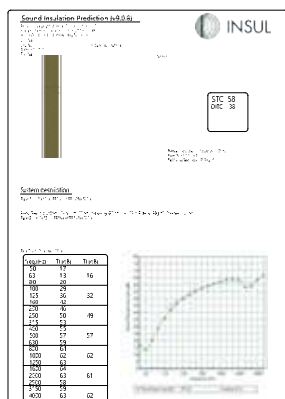


Typical noise sources for hospital

# PRIMA 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 <b>PRIMA liner™</b> b) 50mm thick mineral wool insulation @ <b>16kg/m<sup>3</sup></b> density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64 mm	76 mm	22.0kg/m <sup>2</sup>	<b>41dB*</b>	•	Internal Commercial Institution
	A112L6	a) 6mm thick <b>PRIMA liner™</b> b) 100mm thick mineral wool insulation @ <b>16kg/m<sup>3</sup></b> density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	100 mm	112 mm	22.4kg/m <sup>2</sup>	<b>47dB*</b>	•	Internal Commercial Institution
	A82 L9	a) 9mm thick <b>PRIMA liner™</b> b) 50mm thick mineral wool insulation @ <b>16kg/m<sup>3</sup></b> density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	64 mm	82 mm	31.0kg/m <sup>2</sup>	<b>51dB*</b>	•	Internal Commercial Institution
	A118 L9	a) 9mm thick <b>PRIMA liner™</b> b) 100mm thick mineral wool insulation @ <b>16kg/m<sup>3</sup></b> density c) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent	100 mm	118 mm	33kg/m <sup>2</sup>	<b>53dB*</b>	•	Internal Commercial Institution

Remark: \* STC value predicted base on Marshall Day Acoustic software (Version 9.0)  
 \*\* Tested value from SIRIM Bhd.



# Impact Resistance

Hospital walls are not like any other walls. Due to different specific activities carried out within the healthcare facilities, there are areas that are subjected to more substantial wear and tear. Areas such as the corridors, wards, walkways, day rooms, lobbies and public areas would tend to display signs of wear much earlier than areas with lower foot traffic.

Therefore, proper planning, design and materials used are crucial in constructing a more sustainable building that is more robust yet easy to maintain. As such, it is very important to identify drywall products which can withstand proper impact resistance.

Perforation strength\*, large soft body impact strength\*\* and stiffness\*\*\* tests are the usual benchmarks used when determining the suitable types of products to be used based on the requirements of the related areas.

Notes:

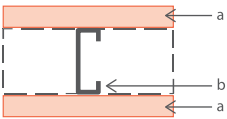
\*Measures the resistance of the drywall partition to perforations from impact by small hard objects (i.e. hammer)

\*\*Measures the ability of the drywall to withstand typical impact caused by people falling against or any large soft body object.

\*\*\*Measures the ability of the drywall to withstand people or ladder leaning against the partition.

**PRIMA**drywall was tested on its perforation strength and passed TUV stiffness and large soft body impact strength tests complying to BS 5234 Pt 2 (Severe Duty).

## PRIMAdrywall - 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 <b>PRIMA</b> liner™ b) 0.50mm BMT light gauge zincalume / galvanized steel frame or equivalent	64 mm	88 mm	40.0kg/m <sup>2</sup>	44dB*	•	Internal Commercial Institution
	I100L12		76 mm	100 mm	40.1kg/m <sup>2</sup>	44dB*	•	
	I116L12		92 mm	116 mm	40.3kg/m <sup>2</sup>	45dB*	•	
	I124L12		100 mm	124 mm	40.4kg/m <sup>2</sup>	46dB*	•	



Conventional wall



**PRIMA**drywall



Conventional wall



**PRIMA**drywall

\*Note: possible damages in conventional walls caused by routine usage at areas within the healthcare facilities.



# PRIMA<sup>liner</sup>™ Wet Area Solution

## Wet Areas

It is commonly misunderstood that wet areas in the healthcare facilities are built with the same methodology as those in non-medical private and commercial buildings. Technically, designing and building wet areas in the healthcare facilities can be more complex than renovating or building a standard bathroom.

Wet rooms or common wet areas in a hospital have a number of crucial elements that need to be factored into their construction to ensure they not only look good, but function efficiently, requires minimal maintenance and most importantly, do not leak (water leakages may lead to unwanted contaminations within the healthcare facility).

In the healthcare setup, wet areas are no longer constrained to a solid floor. Instead, water resistant walls and water proofing materials used also play an equal role in ensuring the building requirements are met.

Tests conducted by SIRIM QAS International on **PRIMA<sup>liner</sup>™** had shown passes for both the moisture movement and water permeability requirements as per the MS 1296:2010.



*\*Diagram is just for illustration purpose only.*

*\*Please consult waterproofing specialist for the waterproofing system. Actual applications may vary according to building requirements and regulations*



Scan to Watch  
Wet Area Video

PRIMA<sup>liner</sup>™ is applicable for the wet areas such as wash station and washroom

Radiation shielding is the science and practice of protecting people and the environment from the harmful effects of ionizing radiation. In other words, it is a term applied to concepts, requirements, technologies and operations related to the protection of people (radiation workers, members of the public, and patients undergoing radiation diagnosis and therapy) against the harmful effects of ionizing radiation.

Therefore, rooms in the healthcare facilities requiring radiation shielding need to conform to very stringent, critical and high safety standards. In Malaysia, the regulation is governed by MS 838:1985 and latest revision MS 838:2007 'Code of Practise for radiation (Medical X-ray Diagnosis)'.

The following are examples of rooms with radiological application;

- General Radiography
- Fluoroscopic room
- Computerized Tomography (CT) scan room
- Cardiac
- Chiropractic
- Mammographic
- Dental Cephalometric
- Dental Intraoral & OPG



## Structural Shielding (Wall) Requirement (MS 838:1985)

- To protect the x-ray exposure rate at every occupied position outside the room and at the position normally occupied by the operator at the X-ray control station.
- The shielding material shall perform to control the exposure rate at every position does not exceed  $2.58 \times 10^{-6}$  CKg-1 per week or 10 mR per week.
- Protective barriers shall be provided in all walls, ceiling and floors as secondary protective barriers in the absence of primary barriers.
- The tabulated values (schedule below) give the shielding required to reduce the exposure to  $2.58 \times 10^{-6}$  CKg-1.

## Structural Shielding Wall Requirement MS 838 : 2007

Tube Voltage Constant Potential	WT in mA min. per week	Tenth value layer	Required barrier in millimeters of lead			
			At a source distance of			
			1m	2m	3m	5m
50kV	3000	0.2	0.25	0.15	0.1	0.1
	1000		0.2	0.1	0.1	0
	300		0.1	0	0	0
	100		0	0	0	0
70kV	3000	0.5	0.7	0.5	0.3	0.1
	1000		0.5	0.3	0.1	0
	300		0.3	0.1	0	0
	100		0.1	0	0	0
85kV	3000	0.8	1.1	0.7	0.4	0.2
	1000		0.3	0.4	0.2	0
	300		0.4	0.2	0	0
	100		0.2	0	0	0
100kV	3000	0.85	1.2	0.8	0.5	0.2
	1000		0.9	0.4	0.2	0
	300		0.5	0.2	0	0
	100		0.2	0	0	0
125kV	3000	0.9	0.4	0.9	0.5	0.2
	1000		1.0	0.5	0.2	0
	300		0.5	0.2	0	0
	100		0.2	0	0	0
150kV	3000	0.9	0.9	0.9	0.6	0.2
	1000		0.6	0.6	0.2	0
	300		0.2	0.2	0	0
	100		0	0	0	0

Schedule 3A

\*Secondary protective barriers in lead and concrete.

\*The tabulated values give the shielding required to reduce the exposure to  $2.58 \times 10^{-5}$  CKg<sup>-1</sup>.

\*To compute the shielding required outside controlled areas it is necessary to add one tenth-value layer to reduce the exposure to  $2.58 \times 10^{-5}$  CKg<sup>-1</sup>.

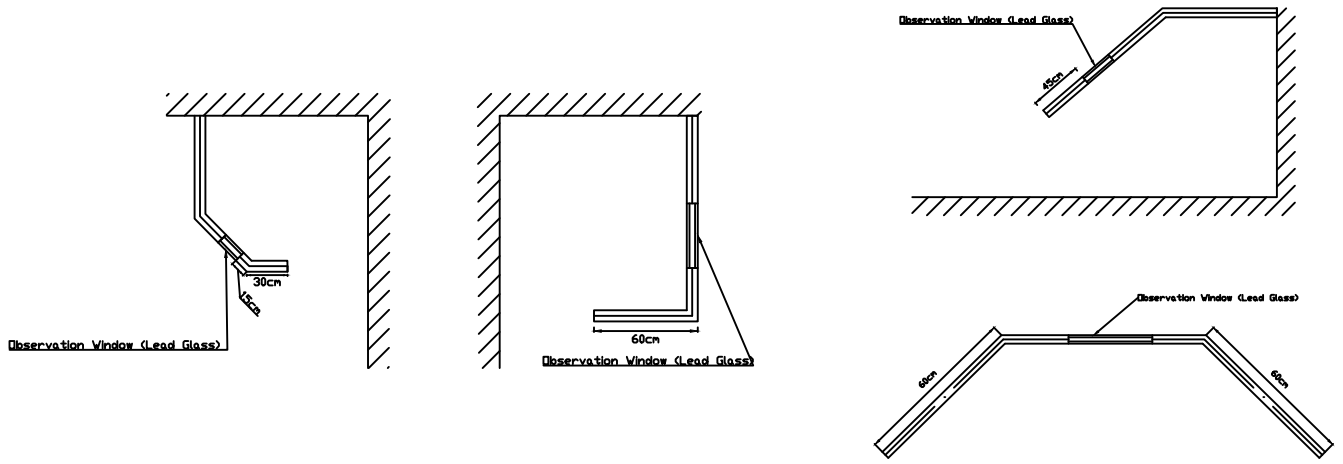
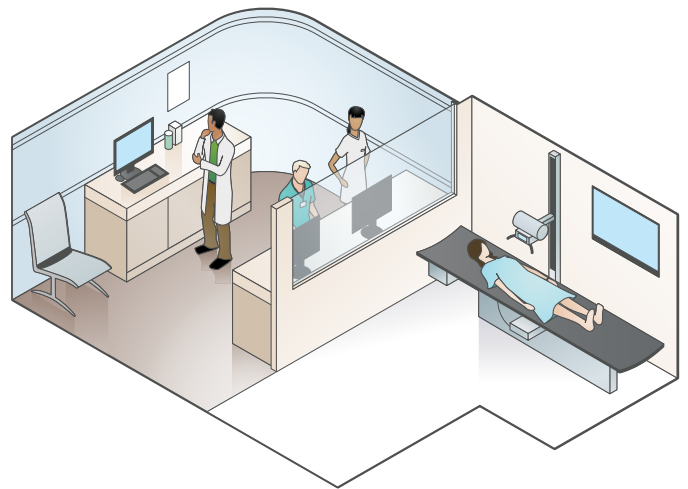


Figure 2 : Typical designs of control stations (minimum floor area 1.5m<sup>2</sup>)

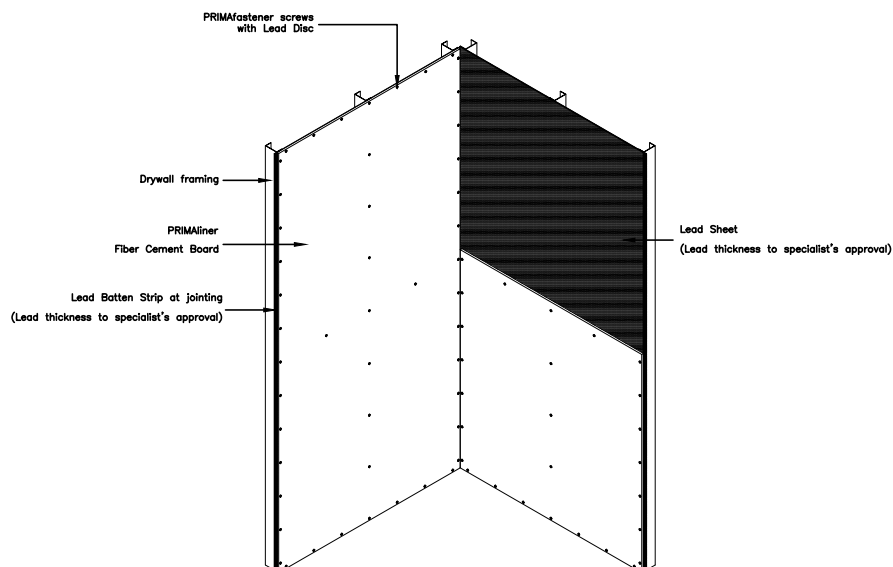
### "Typical design of control stations" from MS 838:1985

Radiation shielding is required to provide protection outside the room where the X-ray unit will be operated to ensure machine operators and members of the general public are not exposed to radiation.



### PRIMA<sup>®</sup> drywall System for X-Ray Shield applications and features

- **PRIMA<sup>®</sup> drywall** with lead sheet insulation is designed to control general radiographic rays up to 150kVp.
- Total wall thickness is customizable and flexible to Architect's / Medical Planner's design.
- **PRIMA<sup>®</sup> liner™** 9mm thk. provides a robust, moisture resistant, anti-fungus drywall surface & protect the lead sheet layer.
- 1 layer of 1.5mm thk. Lead sheet as insulation with height of 2.0m above floor & overlap by min. 1.5cm at the joints.
- Precaution measures – lead sheet should not crinkle or creep under its own weight & protected from physical damage.
- To suit the lead glass observation windows if any (by others)
- Easy & fast to install drywall. No wet work involved.



# Anti-Condensation Wall (Fungus Resistance Wall)

## PRIMA drywall versus Moulds

Moulds are common in both indoor and outdoor environments. In the healthcare facilities, everyone can be exposed to moulds through inhalation, ingestion, and touching mouldy surfaces.

Moulds infestation not only affects the well beings of healthcare providers, but could also pose risks to the immune-compromised patients who are seeking treatments at the healthcare facilities.

When signs of moulding start to appear visibly on the exterior surfaces of ceilings or walls, it usually indicates that severe contaminations might have had occurred in the area and its vicinities.

Besides health risks and odours, the moulds infestations may also cause irreparable damages to furnitures, medical equipments, and clinical documents and so on. Hence, prompt corrective actions have to be taken in order to prevent further deteriorations.

Remedial works are costly and would require closures of the affected areas, thereby effectively interrupting normal working operations of the healthcare facilities.



Condensation creates damp conditions causing black moulds on the wall

## Where do moulds come from?

Moulds spread and reproduce by making spores, which are small and lightweight, able to travel through the air, capable of resisting dry, adverse environmental conditions, and capable of surviving for a long time.

They may be transported into buildings on the surface of new materials or on clothing. They may penetrate the building through active or passive ventilation. Mould spores are found in the dust and surfaces of every building, including those with no dampness problem.

Once indoor, moulds growth can occur only in the presence of moisture, and most moulds can grow rapidly on any surface that becomes wet or moist. Although moulds can be found almost anywhere, they also need nutrients to grow.

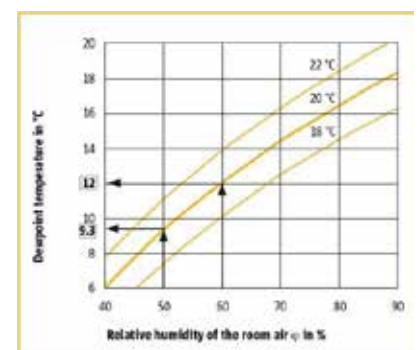
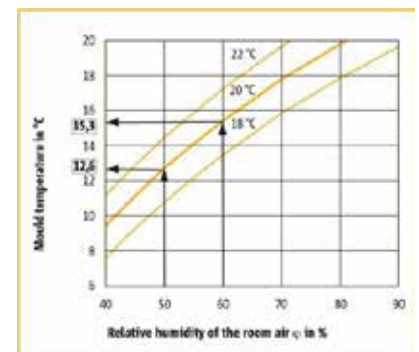
## Wall Condensation (moulds growth factor)

The effects of temperature gradient due to improper humidity and temperature control can lead to condensation. Condensation forms whenever moist air contacts a surface (such as a wall) at a temperature below the dew point (moist air within the rooms); subjected to the relative humidity percentage.

In hospital and healthcare facilities, it is common for some rooms required to be fully air-conditioned 24/7 to maintain the temperature between 16°C to 20°C. This temperature range is found to inhibit and slow down bacterial growth.

Examples of Hospital rooms commonly running air conditioning 24/7;

- Accident & Emergency Department
- ICU/CCU/NICU/HDU/PICU/AICU
- Operation Theatre Dept.
- Labour & Delivery Dept.
- Obstetrics & Gynaecology Dept.
- Paediatric Dept.
- Imaging Dept.
- Special Clinic
- Laboratory/In-patient & Out-patient Pharmacy/Drug store
- CSSD / Mortuary / Server Room
- Pathology Dept.





- Airborne water vapour condenses into a liquid and is deposited on the interior (or exterior) surfaces such as wall and ceiling. This may be caused by poor insulation inside the wall.
- Water presence in the form of condensation is often identified as the root cause of moulding cases on most hospital walls and ceilings.
- With proper planning coupled with proper selections of building materials, moulding issues can effectively be minimized.

### SOLUTION: **PRIMA**drywall with Polyurethane (PU) Insulation

- **PRIMA**drywall system can be specifically designed according to the requirements for inhibiting mould problems.
- The configuration of combining **PRIMA**liner™ fibre cement boards (anti-mould material) with fire retardant Polyurethane (PU) Foam insulation in between, STOPS 'thermal bridging' and keep the drywall surface temperature above the room dew point.
- Among all drywall insulation material, PU can provide the lowest K value with only at 0.017 to 0.023w/m.k (25°C ), almost the same level as refrigerator and effective for thermal insulation.



Condensation

Material	K--factor (w/m.k)
Polyurethane (PU)	0.017-0.023
XPS	0.030
EPS	0.040
Rock Wool	0.043
Glass Fiber	0.042
Cork	0.045
Wood	0.065
Brick	0.100

- The same solution can also be matched for treating or upgrading any existing brick walls that require anti-condensation performance.
- 'GUIDELINES ON THE PREVENTION OF MOULD GROWTH IN BUILDINGS (2009)' by the Public Works Malaysia Dept. (JKR) recommends the applications of PU paint to be applied on both sides of the wall.
- In addition, the walls must be fully partitioned right up to the floor slab to ensure no thermal leakages occur in between the rooms.

### **PRIMA**drywall System

\* **PRIMA**liner™ fibre cement boards were used to make up all of the **PRIMA**drywall System partitions.

#### Laboratory Tests Summary (SIRIM and TÜV) on **PRIMA**liner™ fiber cement boards

1. Laboratory incubation tests were carried out at SIRIM and TÜV facilities to determine how well **PRIMA** fibre cement board material inhibits moulding growth.
2. Aspergillus Niger species was used and incubated on a **PRIMA** fibre cement board (sample) at 29°C temperature.
3. After 28 days of observation, fungus growth was recorded at the rate of '0' (none).
4. Test reports showed that the Aspergillus Niger were totally absent on the **PRIMA**liner™ fibre cement boards tested.
5. As such **PRIMA**liner™ fibre cement can be deemed as resistant for the growth of moulds or fungal (even under the ideal condition that promotes moulds growth)



### **PRIMA**drywall Solution – Anti Mould Building Material

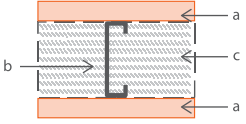
Both sides of **PRIMA**drywall use **PRIMA**liner™ fibre cement boards.

Consisting of unique mixture of elements and formula, the end product has been laboratory proven to inhibit mould and fungus growth, thus making it an ideal wall material for hospitals and healthcare facilities.

#### Disclaimer:

As moulds can also grow on the paint surface, applications of 'anti-fungus grade paint' as finishes are highly recommended.

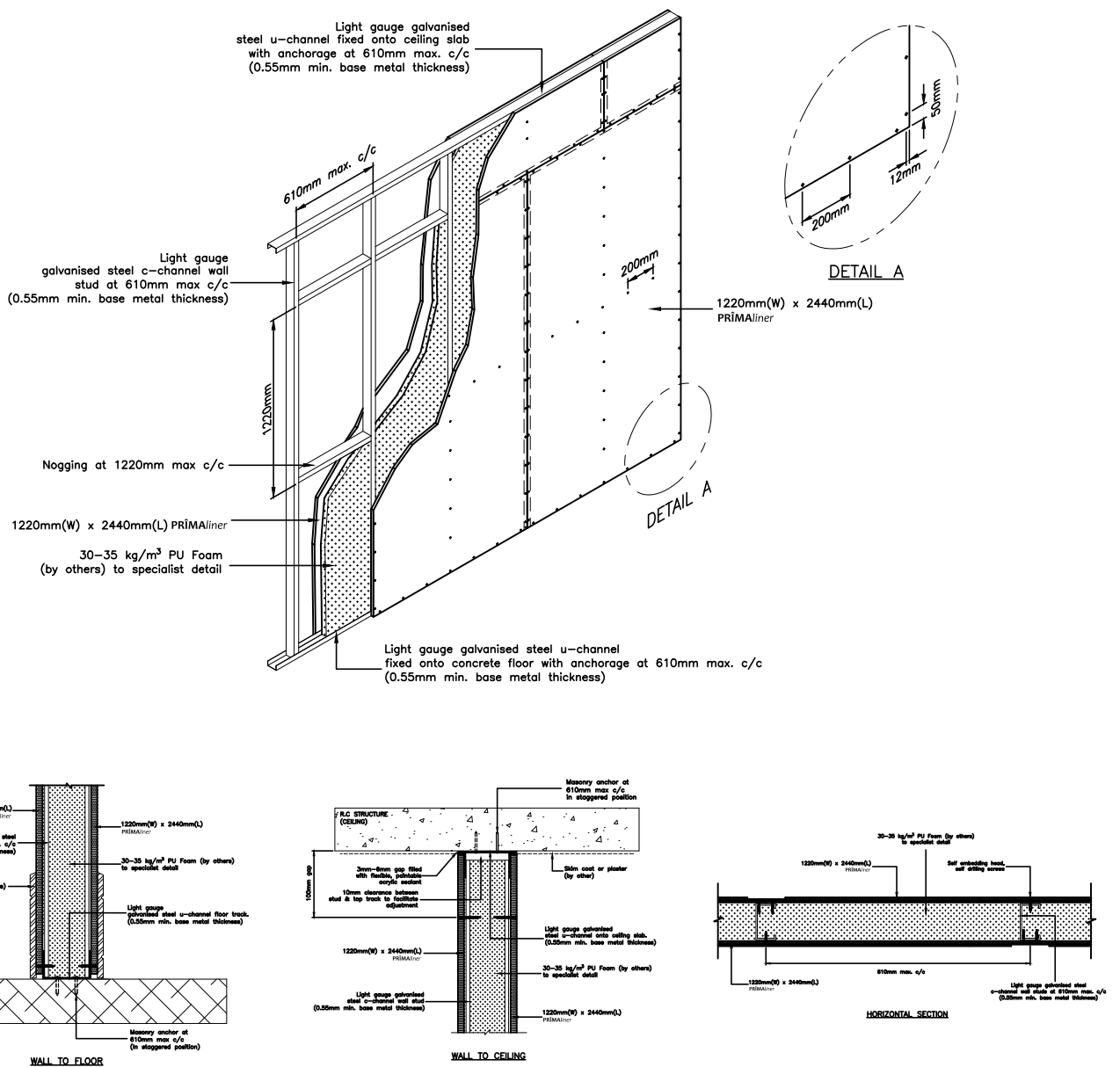
# PRIMA<sup>drywall</sup> - Anti-Condensation

System Configuration	System ID	System Components	Stud Size	Nominal Wall Thickness	Nominal Wall Mass	Sound Transmission Class (STC)	Fire Resistance Period	Recommended
	AC88L6	a) 6mm thick PRIMA <sup>liner</sup> b) 0.55mm BMT light gauge zincalume / galvanized steel frame or equivalent. c) PU foam min density of 30-35kg/m <sup>3</sup> .	76mm	88mm	20.8kg/m <sup>2</sup>	41dB	*	Internal Commercial Institution

Remark: \* STC value predicted base on Marshall Day Acoustic software (Version 9.0)

\*\* Tested value from SIRIM Bhd.

\*\*\* PRIMA<sup>drywall</sup> - Anti-Condensation can also be customized to meet specific project requirement.



# Mounting Fixtures on PRIMA<sup>drywall</sup>

PRIMA<sup>drywall</sup> system was tested and passed both the Light Weight and Heavy Weight Anchorage (support) tests with no damage occurring in the listed scenarios as per Test Report No. 719181223- MEC10-MH conducted by TUV Singapore.

## PASSED: Light weight anchorage (support) test

The tests were concluded based on the following scenarios:

- A static load is applied on the steel bracket fixed onto the partition wall by a specified type of anchorage.
- A shim plate supporting a 20 N weight is inserted in between the bracket and wall.

### Passing criteria:

Pull up load: 100 Newton

- The partition wall shall withstand the axial load without releasing the pull up shim plate or damaging the partition other than superficial cracking.

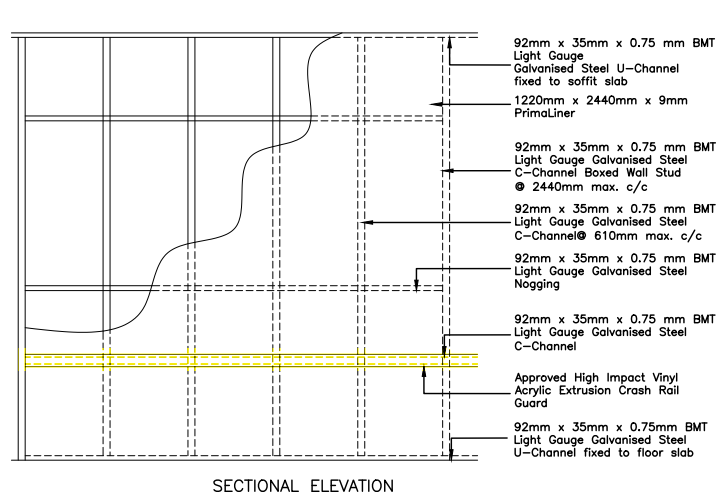
Pull down load: 250 Newton

- The partition wall shall withstand the transverse load without releasing the pull up shim plate or damaging the partition other than superficial cracking.
- The maximum movement of the pull down bracket shall not exceed 2mm.

## PRIMA<sup>drywall</sup> - Handrails



Crash Rail installed on PRIMA<sup>drywall</sup>



## PRIMA<sup>drywall</sup> System Support Tests

### PASSED: Heavy weight anchorage (support) test

Test specimens:

- Wash basin
- Wall cupboard

The tests were concluded based on the following scenarios:

- An eccentric cyclic load is applied onto steel brackets fixed onto the partition by a specified type of anchorage.
- Shim plates supporting a 20 N weight are inserted in between the bracket and wall.

### Passing criteria:

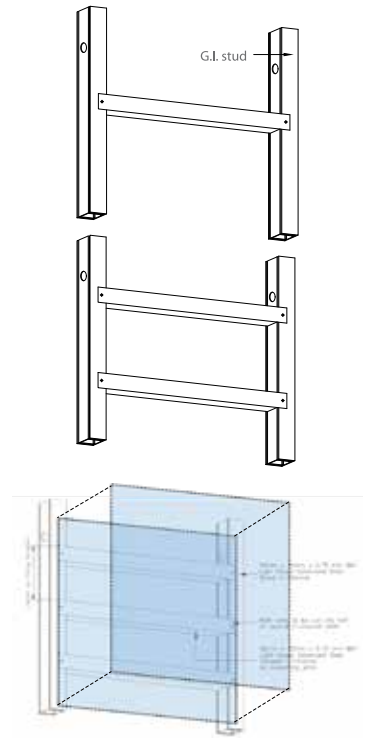
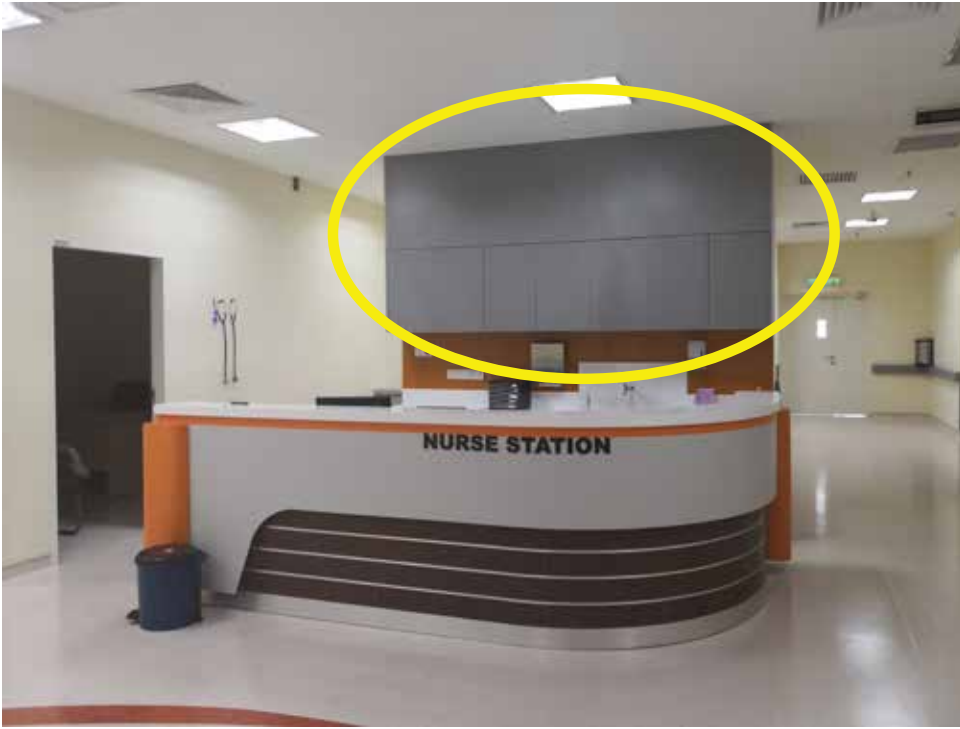
Wash Basin Load applied: 1500 Newton

- The anchorages shall be capable of withstanding the load selected applied to the 2 linked brackets without releasing either pull-up shim plate, exceeding 20 mm deflection or 1 mm residual deformation limits and without loosening, detaching or damaging the partition wall.

Wall cupboard Load applied: 4000 Newton

- The anchorages shall be capable of withstanding the load selected applied to the 2 linked brackets without releasing either pull-up shim plate, exceeding 5 mm deflection or 1 mm residual deformation limits and without loosening, detaching or damaging the partition wall.

**PRIMA<sup>drywall</sup> - Wall Mounted Cabinets**

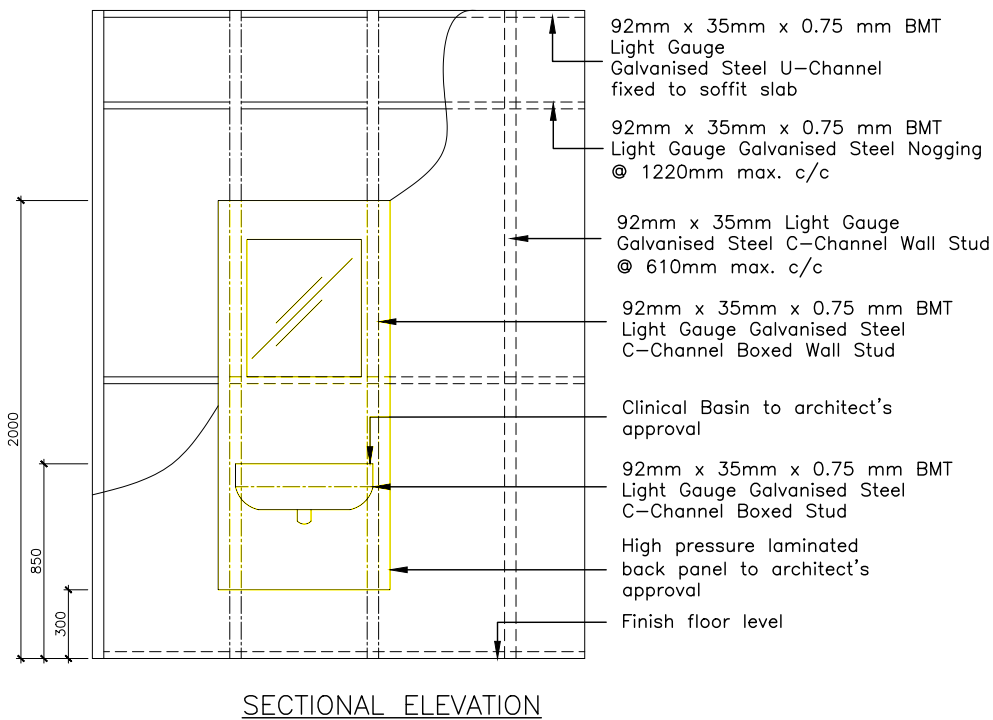


Wall-mounted cabinet and wall hung basin be permanently and safely anchored in **PRIMA<sup>drywall</sup>** with the right fastening method.

**Note:**

Number of supporting frame can be customized depending on usage and load.

**PRIMA<sup>drywall</sup> - Wall Hung Basin**



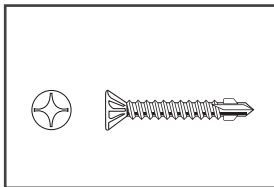


# Properties

# Values

Product Composition	<ul style="list-style-type: none"> <li>• Top Grade Cellulose Fibre</li> <li>• Finely Ground Sand</li> <li>• Portland Cement</li> <li>• Water</li> </ul>
Nominal Density	EMC= <b>1390kg/m<sup>3</sup></b>
Moisture Content	EMC= <b>7%</b> Saturation = <b>33%</b>
Moisture Movement	<b>0.08%</b> (EMC to Saturated)
Minimum Bending Strength, MoR	DRY >= <b>14 MPa</b> ; WET >= <b>7 MPa</b>
Average Modulus of Elasticity, MoE	DRY = <b>6GPa</b> ; WET = <b>4GPa</b>
Fire Rating	<b>Class O</b> Material (Certified by Bomba) Tested to <b>BS 476, Part 6: 1989 &amp; BS 476, Part 7: 1997</b>
Fungus Resistance	Passes ( <b>ASTM G21</b> )
Termite Resistance	Resistance to Damage (Field evaluation conducted by CSIRO)
Frost Resistance	Passed ( <b>AS/NZS2908.2, MS 1296, ISO 8336, BSEN 12467, ASTM C1186</b> )
Heat Rain Resistance	Passed ( <b>AS/NZS2908.2, MS 1296, ISO 8336, BSEN 12467, ASTM C1186</b> )

# Accessories



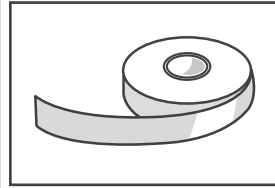
**PRIMA Fastener Wing-Tek Screw Class 1**  
(22mm/28mm/32mm)  
**ACC/U/044**  
Specifications : 22mm/28mm/32mm  
Quantity : 1000 pcs/box  
Category : Fasteners  
Application : Wall/Cladding  
6.0mm-12.0mm board thickness



**PRIMA M6 x 65mm Stud Anchor**  
**ACC/U/012**  
Specifications : M6 x 65mm Stud Anchor  
Quantity : 250 pcs/box  
Category : Anchor / Fastener  
Application : **PRIMA drywall**



**PRIMA Jointing Compound PLUS+**  
**ACC/U/052**  
Specifications : Jointing Compound Plus+  
Quantity : one bucket , 28KG/bucket  
Category : Sealers  
Application : Wall/Ceiling



**PRIMA Mesh Tape**  
**ACC/U/049**  
Specifications : 50 meter / roll  
Quantity : one piece  
Category : Mesh tape  
Application : Flush Jointing for wall and ceiling



**PRIMA C-Studs 64mm x 0.55mm BMT**  
**ACC/U/056**  
Specifications : 64mm C-Studs x 0.55mm BMT  
(S6455), 64mm x 35mm x 3000mm  
Quantity : one piece  
Category : Primary Section  
Application : **PRIMA drywall**



**PRIMA U-Track 64mm x 0.55mm BMT**  
**ACC/U/070**  
Specifications : 64mm U-Track x 0.55 bmt (T6455),  
64mm x 32mm x 3000mm  
Quantity : one piece  
Category : Primary Section  
Application : **PRIMA drywall**



**PRIMA C-Studs 76mm x 0.55mm BMT**  
**ACC/U/057**  
Specifications : 76mm C-Studs x 0.55mm BMT  
(S7655), 76mm x 35mm x 3000mm  
Quantity : one piece  
Category : Primary Section  
Application : **PRIMA drywall**



**PRIMA U-Track 76mm x 0.55mm BMT**  
**ACC/U/071**  
Specifications : 76mm U-Track x 0.55 bmt (T7655),  
76mm x 32mm x 3000mm  
Quantity : one piece  
Category : Primary Section  
Application : **PRIMA drywall**



**PRIMA C-Studs 100mm x 0.55mm BMT**  
**ACC/U/059**  
Specifications : 100mm C-Studs x 0.55mm BMT  
(S10055), 100mm x 35mm x  
3000mm  
Quantity : one piece  
Category : Primary Section  
Application : **PRIMA drywall**



**PRIMA U-Track 100mm x 0.55mm BMT**  
**ACC/U/073**  
Specifications : 100mm U-Track x 0.55 bmt  
(T10055),  
100mm x 32mm x 3000mm  
Quantity : one piece  
Category : Primary Section  
Application :



For more information, please contact us at:



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