



## **SUPABOARD LINING SYSTEMS**

- **Internal Wall Lining**
- **Internal and External ceiling linings**
- **Eaves Lining**

## **INSTALLATION GUIDE**

## **INTRODUCTION**

### **Supaboard Lining System**

BUILDITECO' Supaboard has unique features, it is rigid and extremely tough but also practical and very versatile, which makes it a compelling choice in ceiling or wall lining solutions for the construction industry. Supaboard lining systems offer an extensive range of options and solutions. These systems can be used in a variety of applications, whether it is in new buildings such as: offices, shops, transportable or kit homes, or additions and renovations to an existing building. Supaboard is ideal for wet area lining, dry walling eaves lining, alfresco ceilings, suspended ceilings and areas where moisture resistance is necessary. A wide variety of finishes including tiling, rendering and painting can be applied to Supaboard.

Using Supaboard in your next project will not only provide you with a cost effective alternative to other products, but it will also give you the satisfaction of knowing that you are using a product with superior sustainability credentials.

This Installation Manual provides information and details merely as a guide for intended applications. The final decision on product suitability always rests with the Architect / Building Designer.

### **Product Range and Details**

Thickness: 4.5 mm, 6 mm or 10 mm are standard [3 mm up to 25 mm is available to order]

Standard widths: 900 mm or 1200 mm. Other widths are available to order.

Standard Lengths: 2400 mm, 2700 mm or 3000 mm. Other lengths up to 3000 mm are available to order.

Edge treatments: Square edge, beveled on long sides or rebated on long sides are available.

Tongue and grooved is available in higher thicknesses to order.

### **Special Features of the Product**

1. No treatment is required for termite resistance, as the board provides no attraction for termites.
2. The board is recyclable and contains low embodied energy.
3. The board is asbestos free and non-toxic.
4. It is weather resistant and durable.
5. There are no special requirements for on-going maintenance.
6. It is moisture resistant and hence can be used as a substrate in wet areas, with no risk of wall failure as a consequence of a water proofing membrane failure.
7. It is a non-combustible material when tested to AS1530.1.
8. It is 25% lighter than compressed cement sheeting.

## Product Installation Requirements:

Products/Accessories/Tools you will need:

**Supaboard sheet:** Length, width, thickness and edge treatment as specified.

<b>Accessories</b>	<b>Description</b>	<b>Tools</b>	<b>Description</b>
<b>Fixing to timber. Ideal Fasteners. WDR10035R</b>	8g x 32 mm CSK Rib Head.	Level/Straight Edge	For checking the levels and ensuring straightness of joist frame.
<b>Fixing to steel. Ideal Fasteners. CBR08032R.</b>	10g x 35 mm CSK Rib wing.	Spatula	Filling screw holes.
<b>Sika Foam Backer rod</b>	Backer rod for expansion joints.	Power Drill or Impact Driver..	For screw fixing Supaboard to frame.
<b>Bostic Seal n Flex Polyurethane Mastic.</b>	For use as adhesive and expansion joints.	Barrel gun or caulking gun.	For application of adhesive Sealant.
<b>Uniseal Glo Mastic.</b>	Acrylic Sealing negative detail joints.	Diamond tip Power Saw, or power saw with fibre cement blade.	For cutting the boards.
<b>Uniseal Supabond or Supaboard Adhesive.</b>	Adhesive and Laminating boards.	Chalk line.	Marking frame.
<b>Dulux Acrapatch fine</b>	For filling screw heads, and top coat, if required.	Brush.	For cleaning surface of edges of board.
<b>Supaprime, or Dulux Green Render Sealer.</b>	To seal and prime, finishing surface.	Supatexprime or Dulux Acraprime TXT.	Priming for texture finish

**Supaboard** is a very easy product to handle despite its rigid nature. It must be installed in a "Tradesman-Like" manner and to best industry and trade practices, to get the desired durability and perfect finish. Supaboard's unique strength and controlled manufacture ensures Supaboard will exceed similar products in terms of its durability and strength ensuring no drop off in performance over time.

### **Wall lining Installation**

Supaboard may be fixed to either light or heavy gauge domestic type steel frames, timber frames or timber battens over masonry. The framing and substrate used must comply with relevant building regulations and standards. It is also important to ensure that the frame is square and straight to provide the flush face to receive the sheeting.

Unless full height sheets are used, always adopt the usual building practice and install Supaboard sheets horizontally.

In all cases, installed Supaboard lining should be primed with the appropriate primer before any finishing is carried out.

Ensure that a “dob” of adhesive about the size of a 50 cent piece is used in between each screw position on all studs.

### **Steel frame**

Steel studs must be a minimum of 45 mm wide at joint face, and 0.55mm gauge minimum BMT (Base metal thickness).

Steel framing must comply with the requirements of Australian Standards.

### **Timber Frame**

Timber framing must comply with the requirements of “Timber Framed Buildings” code and any other relevant Australian Standards. Studs must be provided at 600mm centres maximum, and nogginns at 1200 mm centres nominal. Furthermore, timber studs must be a minimum 45mm wide.

### **Cutting**

Supaboard can be cut very easily with a carbide tip knife or any timber cutting tools, however if cutting considerable quantities of material, we recommend diamond or fibre cement cutting tools.

For rough cuts, place the Supaboard smooth side up, score along a straight line with the knife then snap along the scored line

When cutting with power saws it is important that the blade teeth come through the smooth face. That is, have the board smooth face down when cutting with power saws, or smooth face up with a hand saw. This will minimise the effect of the fibreglass reinforcement being exposed which can create finishing difficulties.

Finer cuts are achieved by using power tools such as a circular saw, jig saw, bench top saw etc. Service holes may be created by using drills, hole saws or jig saws.

***NB: Please observe the usual Occupation Health and Safety Practises as dust will result from mechanical cutting***

### **Back Blocking**

It is essential that back blocking is used in all flushed jointed applications. See **Diagrams 1 and 2**. Supaboard should not be joined on a stud as this is where most movement occurs in a frame. We recommend that sheets are joined between studs with back blocking the joints as shown in diagram 1. This is best carried out using fillets of Supaboard of the same thickness as the wall lining. The sheets are glued and screwed to the fillets using Supabond adhesive and screws as listed in the table above. Ends of sheets need to be back blocked and also fixed to steel furring channel or timber battens to keep sheet face straight when off a stud. See **diagrams 4, 5 and 6**.

## Jointing

For flushed straight joints, align the recessed ends of the Supaboard sheets together, and back block. Ensure that the joints are dry, clean and free from grease, oils or any other materials.

The detail given in this jointing guide must be followed explicitly to ensure that there will be a maximum adhesion of fillers and jointing compounds to the board in the jointing system used.

Please refer to the DuSpec for jointing and finishing, this can be downloaded from our downloads page on our website [www.supaboard.com.au](http://www.supaboard.com.au).

We recommend that only fiberglass mesh is used in joints for external applications, whereas Fibafuse Type 52 tape is suitable for internal joints.

Embed the appropriate jointing tape in a fine layer of the jointing compound, Dulux Acrapatch Coarse. Add another layer of jointing compound to the desired finish, wiping off any excess materials. This process will usually require a second coat being careful to keep the surface as flat as possible, any high spots will be difficult to sand back. Once this compound is set it can be top coated with AcraPatch fine in the same manner.

**The ultimate performance of every wall joint is the responsibility of the installer, as this is governed by the standard of workmanship and good industry trade practices.**

Factors that may affect the joint performance are framing quality, movement and vibration, moisture, weather exposure, humidity, and ambient temperature. These factors must be carefully understood and considered by the installer when selecting jointing compounds. Ensure that the product selected has the physical attributes required to perform in any particular circumstance. In some situations flush jointing may not be appropriate and a negative detail joint should be used.

For corner joints, use a suitable corner reinforcement product and finish off with the appropriate jointing compounds. If working conditions are hot and dry, dampen the area around the joint, prior to application of jointing materials.

BuilditEco cannot warrant other trade's workmanship. While we have put together this installation instruction as a guide to get the best result possible we cannot control every condition or situation when installing these systems.

## Ceiling Linings

Generally, application of ceiling linings will follow the detail given above for wall linings. Supaboard must be back blocked in the same way as walls. Ceiling lining must run across the ceiling joists at 90 degrees to the joists. The boards must be glued and screwed into place at 250mm centres. Please see **Diagram 5 and 6**

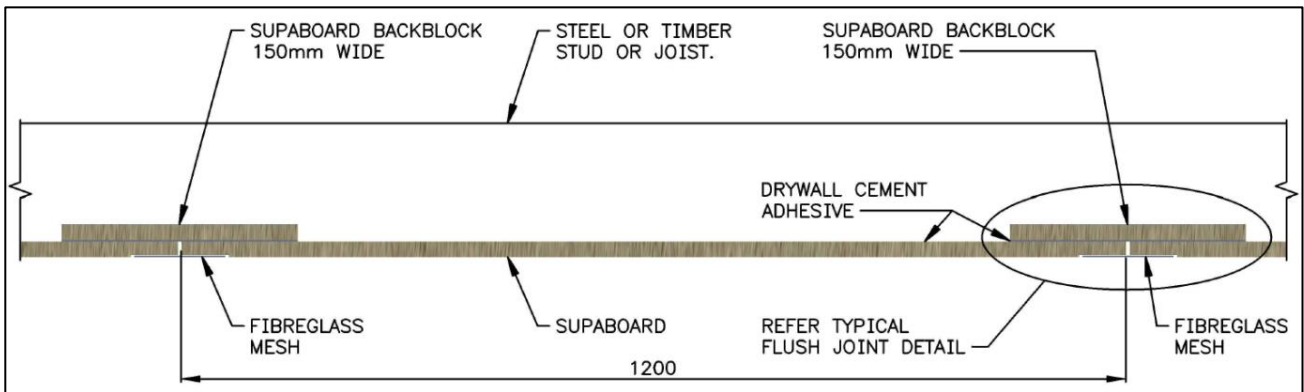
## Tiling

Supaboard is an excellent wet area lining material and is suitable for direct tiling. Supaboard can be butt joined and sealed with Glo mastic or Bostic seal & flex polyurethane mastic. Use Supaprime before applying the tile adhesive system of your choice.

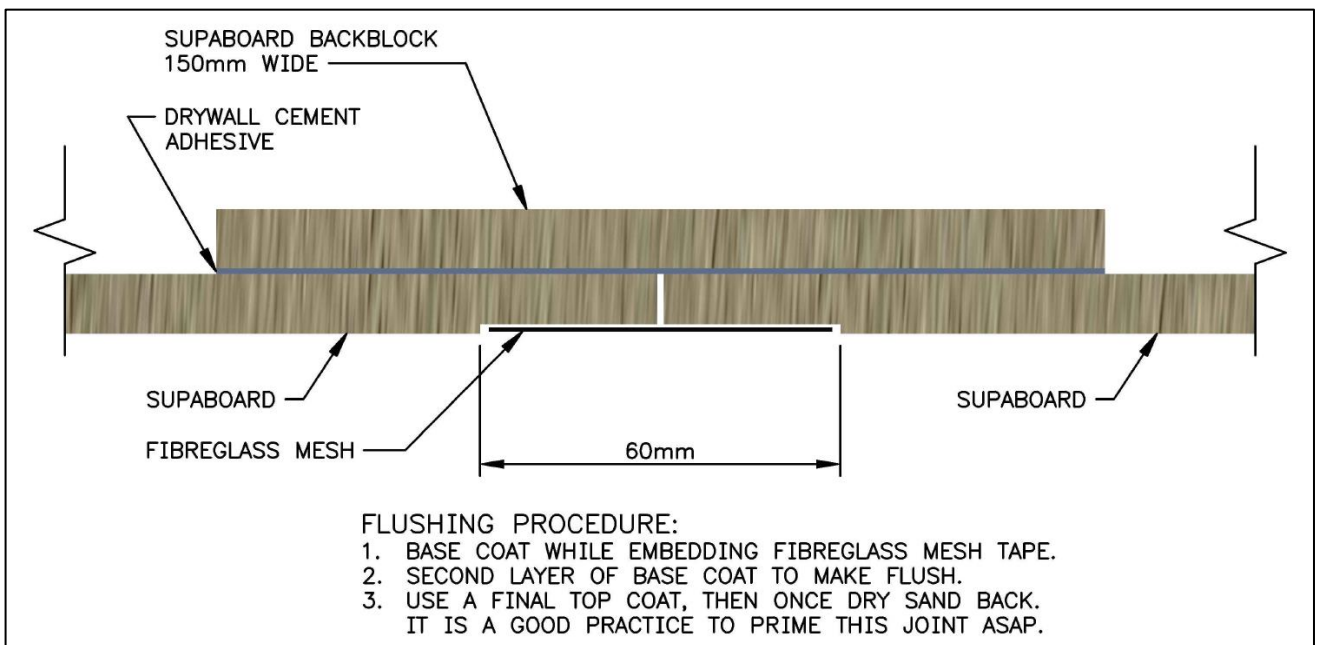
All wet areas require waterproofing to the BCA requirements, but unlike some products a membrane failure over a Supaboard wall will not result in a catastrophic wall failure..

If full height tiling is not required, follow the wall lining installation as an internal flushed system.

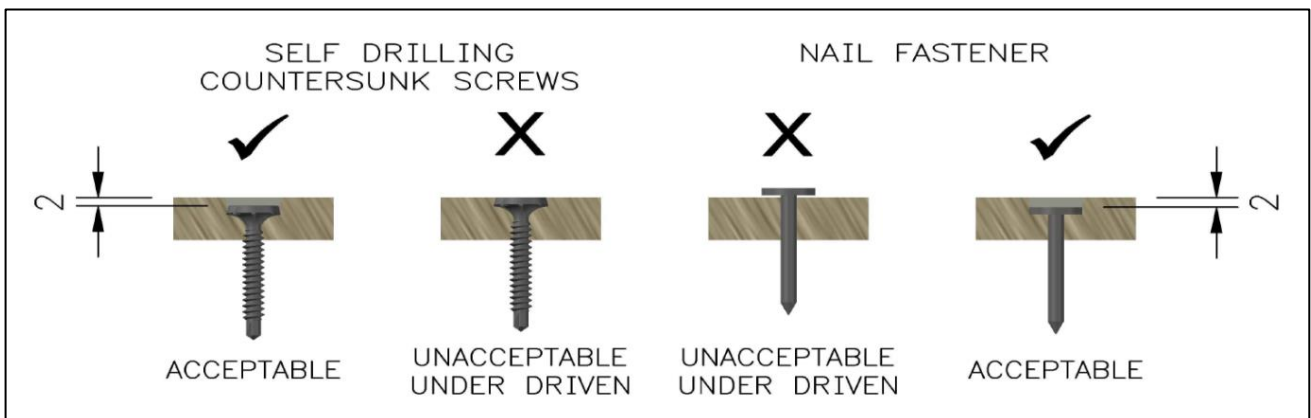
**Diagram 1**



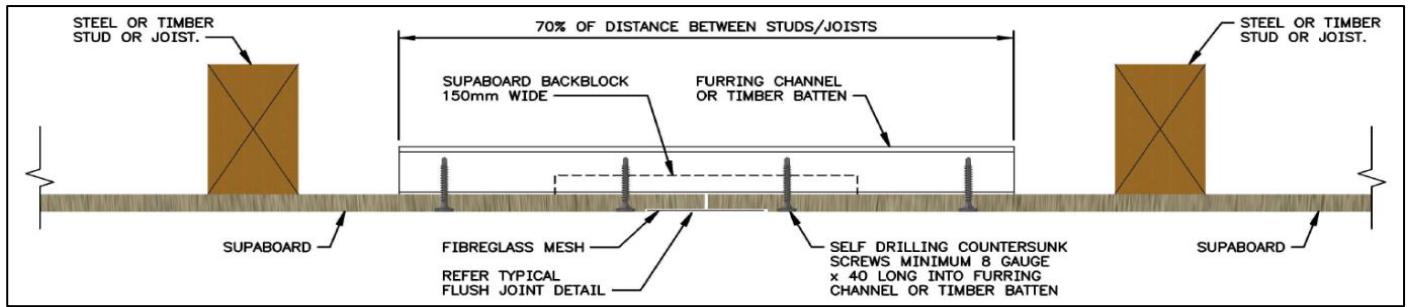
**Diagram 2**



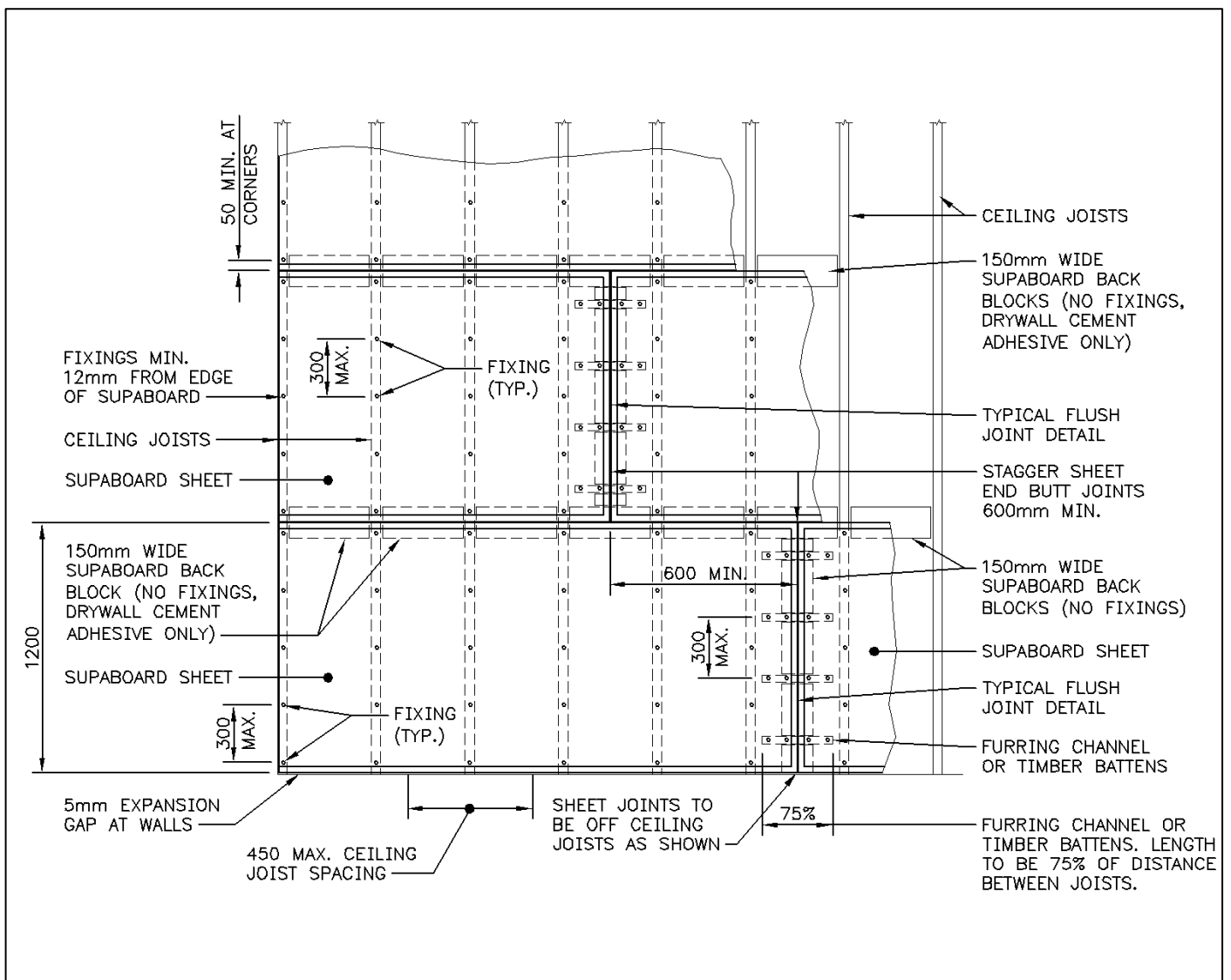
**Diagram 3**



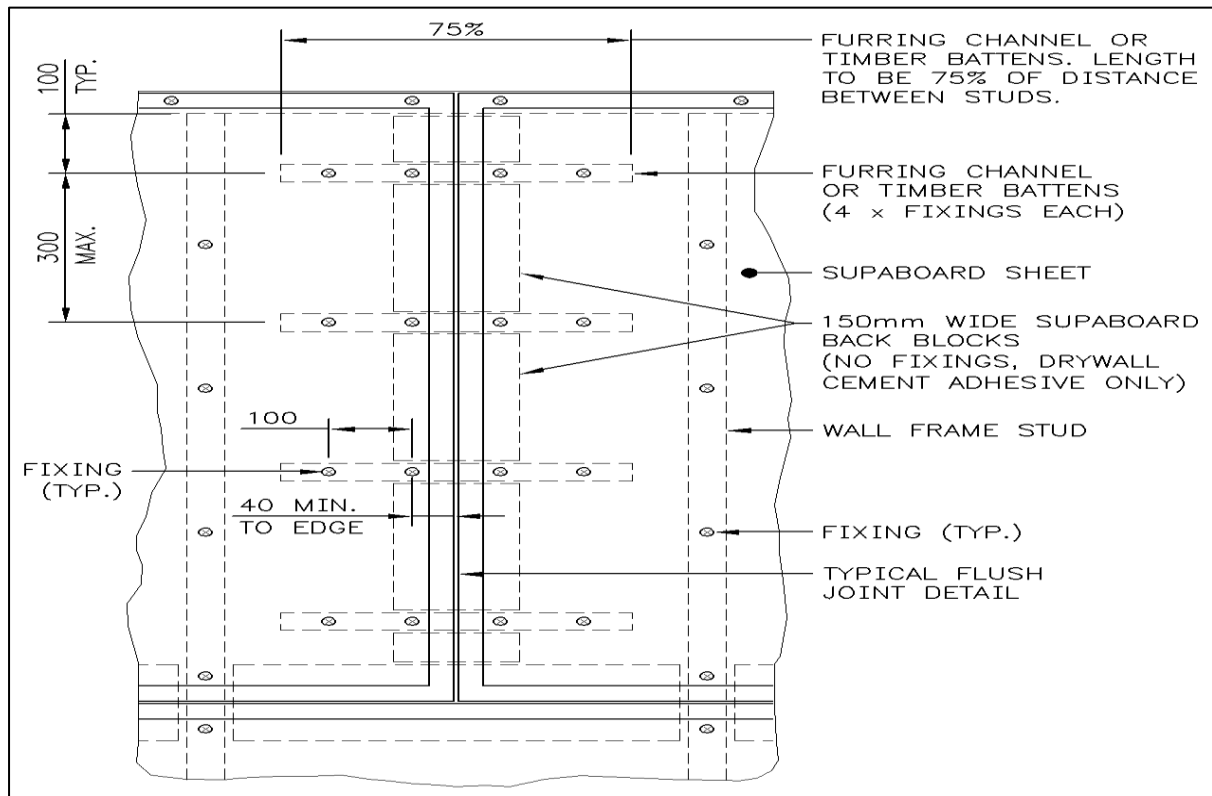
**Diagram 4**



**Diagram 5**



**Diagram 6**



### **Masonry Substrates**

It is important to ensure that the substrate is allowed sufficient time to completely dry before the installation of Supaboard. Apply battens at a maximum of 600 mm centres, and follow the general wall installation guidelines. The wall surface must be clean and dry to prevent distortion of battens which could adversely affect the finishing of the surface.

### **General**

Supaboard should be installed individually and with minimal tolerances to prevent problems associated with movement. Keep sheeting 6 mm away from the floor and ceiling to allow for any thermal movement.

For the best results secure the Supaboard sheeting with mechanical fixings. To ensure that the screws don't over-spin make sure the tension is adjusted on power tools. See **diagram 3** for correct screw embedment.

Ensure screws are kept no less than 20 mm away from the Supaboard sheet edge and 60 mm away from the corners of the board. Ensure screws are between approximately 250mm and 350mm apart.

Ensure that a "dob" of adhesive about the size of a 50 cent piece is used inbetween each screw position on all studs.



## **Finishing**

Supaboard can be finished in a variety of ways including painting, wall paper, render, tiles or as required.

***Note: For wet areas, the water proofing requirement of all relevant codes, standards and regulations must be met.***

***Water proofing membranes must be installed to the manufactures specifications and application methods must be consulted and complied with.***

Supaboard has a smooth face on one side and a machined face on the other side, and the board can be used either way exposed to the elements. HS Supaboard has a minimum of 4 layers of fiberglass mesh throughout the board; this gives the Supaboard very high impact strength.

On curved surfaces, High Strength Supaboard must be used, with the product installed with the smooth side as the outer radius. Two layers of 6 mm thickness board with staggered joints will provide a smoother curve (and tighter radius) than one layer of thicker board.

The smooth face gives a great surface to finish with flat acrylic paints to the desired finish.

Prep work is kept to a minimum before applying our recommended DuSpec coating system as a final color finish.

We recommend sealing the board with the specified priming systems as soon as possible after board installation. The board must be dry before sealing.

We have worked with companies to develop special primer systems that will give a texture finish for applying trowel on finishes in 4 steps including top coat.

Please refer to the Supaboard finishing section on our website.

It is advised that a minimum of 6 mm Supaboard thickness on a 450 stud frame is required for tiling areas. Support angles maybe required to support tiled areas and the overall wall mass and stability may need to be considered.

Brand named paints usually give better results. Always follow the paint manufacturer's recommendations for paint suitability, mixing instructions and application.

## Summary

- Once Supaboard has been “glued and screwed” to the frame ensure there is a 2 mm screw head depth below the board surface,
- Dust off the Supaboard and remove any loose material from around screw heads.
- Fill screw heads with 2 coats of Dulux Acrapatch Fine with the addition of 5% cement.
- Sand back to a smooth finish.
- For paint finishes, apply another coat as a top coat if required then sand back smooth.
- If texturing, there is no need to top coat as the previous step, simply apply Supatexprime or Dulux TXT primer, see DuSpec Express jointed system at [www.supaboard.com.au](http://www.supaboard.com.au)
- Apply a roll on texture or trowel on finish, see the DuSpec data at [www.supaboard.com.au](http://www.supaboard.com.au).
- Apply top coat.

## Conditions of Warranty

BuilditEco warrants that the product shall be free from manufacturer’s defects and shall be subject to the General Terms and Conditions of Sale (available at [www.builditeco.com.au](http://www.builditeco.com.au)).

## Disclaimer

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