## I. SELECTING GIB® PLASTERBOARD

For most areas in the home, GIB® Standard plasterboard (10mm for walls or 13mm for ceilings) is sufficient. However, for added performance, a range of different GIB® plasterboards are produced, each with different properties, that help solve common household issues

#### Zone Selector

| GIB Dry Zone®  | Area/Room   | Fire Rated GIB Aqualine®  |  |  |
|--|---|---|--|--|
| Superior protection<br>from steam &<br>moisture damage                                 | Bathroom,<br>ensuite, toilet,<br>kitchen & laundry  | Contains special wax<br>polymers to help prevent<br>water absorption                    |  |  |
| Ref: For fixing details - C  | GIB Aqualine® Wet A   | rea Systems brochure  |  |  |
| GIB Quiet Zone®  | Zone® GIB Noiseline®  |   |  |  |
| Using 2 layers helps<br>reduce the noise<br>entering rooms through<br>walls & ceilings | Bedrooms, study<br>& TV room<br>Bud more rigid core.<br>Much tougher than GI<br>Standard plasterboard |   |  |  |
| Ref: For fixing details - C  | GIB Noise Control®  | Systems brochure  |  |  |
| GIB Toughzone®   |   | GIB Toughline®  |  |  |
| Improved durability & greater resistance to damage                                     | Stairway, hall,<br>rumpus room,<br>garage & kids'<br>bedrooms   | Much tougher than<br>GIB® Standard due to<br>high density core and a<br>fibreglass mesh |  |  |
| GIB Feature Zone®  |   | GIB Ultraline®  |  |  |
| Superior, smoother<br>looking ceilings &<br>walls                                      | Ceilings & walls<br>in feature areas<br>such as lounge<br>& dining areas                              | Finer, smoother face paper  |  |  |
| GIB Fireguard Zone®  |   | GIB Fyreline®   |  |  |
| Added protection for<br>expensive assets in<br>the home                                | Kitchens, other<br>at risk areas  | High density core for up<br>to 4 hours extra protection<br>in the event of fire         |  |  |
| Ref: For fixing details - GIB® Fire Rated Systems brochure                             |   |   |  |  |
|  |   |   |  |  |

Many of these can be combined in the same area or room, for more information about this contact GIB® Helpline on 0800 100 442.

## 2. PREPARING THE SUBSTRATE

1. Remove any nails, old glue or other fixings that are protruding from the timber framing.

2. Using an 1800mm straight edge, check the flatness of the timber walls and ceilings. There should be no deviations in the framing greater than 2-3mm from the straight edge.

#### Tip: Check around windows and doors as these are usually places where problems with flatness occur.

- 3. Plane any high areas flat or straighten any misaligned ceiling battens, studs, or nogs/dwangs.
- 4. Check the timber framing is dry. The moisture content of the timber should be between 12 and 16%. Timber with a moisture content outside these limits is prone to movement causing problems with joint distortion and cracking.

#### Tip:

- In older homes the moisture content will probably be OK. If there is any doubt, have the moisture checked by a professional.
- 5. When fixing vertically, all joints will need to be made over timber. Plan where your joints will be and make sure these will be over timber. Horizontal fixing is the recommended method of fixing GIB® plasterboard, however, there are times when this is not possible.

## **3. CUTTING GIB® PLASTERBOARD**

#### **CUTTING GIB® PLASTERBOARD SHEETS**

- 1. Place the sheet with the light-coloured face paper side up. Measure and mark the sheet to the size desired.
- 2. Line a straight edge up with the marks and hold firmly against the sheet. Draw a pencil line as a guide for scoring. Score through paper and lightly into the core using a drywall or craft knife

#### Extreme care should be taken when using sharp tools such as these.

- 3. To break the sheet core, securely grasp the board edges on both sides of the score line and snap the board with a quick firm movement. Alternatively, break the sheet over the end of the working surface or a length of timber.
- 4. Complete the cut by running the knife through the back paper of the sheet and snapping back to the face.



#### Tip:

For sheets that require stepped areas it will be necessary to cut the short cuts with a saw prior to snapping the board.

### CUT OUTS

For openings such as an electrical outlet or switch box use the following method.

DO NOT use a hammer to create the hole.

- Measure from where the side of the sheet will be located to the near and far sides of the installed box.
- 2. Measure from the top or bottom edge of where the sheet will be located to the top and bottom of the box.
- Trace the outline of the electrical box at the appropriate position on the sheet. 4. Cut with a keyhole saw.

#### Tip:

To get the saw started drill holes at each of the corners but within the opening. In some cases the saw can simply be pushed through the sheet without the need for holes.

## 4. ATTACHING GIB® PLASTERBOARD SHEETS

The best practice for fixing GIB® plasterboard involves the use of screws and glue. For walls glue is used to fix the areas in the centre of the sheet that come into contact with a stud or dwang/nog. Screws are used around the perimeter of the sheet. For ceilings the same process is used, however, additional screws are required down the centre of the sheet.



Do not fix nails or screws through or closer than 200mm from adhesive as this can cause the nails or screws to 'pop' as the glue dries and shrinks.

GIBFix® All Bond can be used for attaching GIB® plasterboard to all surfaces.

- 1. Make sure that the framing is clean and free from oil, dirt or a combination of the two.
- 2. Apply adhesive using a gun at the appropriate spacing. A glue daub approximately the diameter of the framing timber should be used.
- 3. Fix the sheet immediately after applying the glue to avoid the glue from 'skinning', resulting in poor adhesion.

### SCREWING

Screwing, rather than nailing, is the recommended method for fixing. 1. Hold the sheet tight against the framing.

2. Sink screws to just below the sheet surface, leaving the paper intact. Tips:

- Use an electric drywall screwgun equipped with an adjustable depth control head and Philips bit.
- If a screw is overdriven and the paper and/or core of the GIB® plasterboard is damaged, insert a second screw approximately 50mm from the first and then remove the first screw.
- Do not screw within 200mm of any glue daubs as this can lead to problems such as 'popping'.

GIB® Nails can also be used in place of screws. These nails are specially designed for use with GIB® plasterboard. The nailing of ceilings is not recommended due to the 'springiness' in some timber ceiling battens.

## **TOOLS NEEDED**

#### 1800mm Straight edge

- Drywall/craft knife
- Electric drywall screwgun or Cordless drill with clutch
- Adhesive gun
- Hammer (if fixing with nails)
- Keyhole saw
- Measuring tape
- 150mm Broad-knife
- 200mm Trowel (Optional)
- 280mm Trowel
- Sanding Float & 220 grit (or finer) sandpaper
- Paper jointing tape

## MATERIALS

## DISCLAIMER

#### Please Note: Whilst the advice and

recommendations contained in this brochure have been produced with proper care, they are offered only with the object of assisting those interested in home improvement projects and ITM does not accept responsibility for the advice, recommendations, etc, contained herein.

If you have any queries please contact your local ITM store for further advice.

#### Note: A Building Consent may be required.





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Produced in association with BRANZ and Winstone Wallboards

THE RIGHT WAY

# TO FIX AND JOINT GIB® PLASTERBOARD



"We'll see you right"





| Material  |          | Approximate Quantity [per 100m <sup>2</sup> ]      |  |
|---|----------|--|--|
| GIB® Grabber® Screws  |          | 700 walls<br>1015 ceiling                          |  |
| GIB® Nail   |          | 1.5 kg walls                                       |  |
| GIBFix <sup>®</sup> Wood Bond<br>or All Bond                    |          | 4 litres   |  |
| or All Borid  |          | and the designed                                   |  |
| Approximate Coverag   | ge of Jo | bint Compour<br>t/2nd Coat<br>[m/kg]               | nds<br>Top Coat<br>Im/kgl              |
| Approximate Coverag<br>Compound<br>GIB Tradeset®                | ge of Jo | bint Compour<br>t/2nd Coat<br>[m/kg]<br>2.5        | nds<br>Top Coat<br>[m/kg]<br>-         |
| Approximate Coverag<br>Compound<br>GIB Tradeset®<br>GIB Plus 4® | ge of Jo | bint Compour<br>t/2nd Coat<br>[m/kg]<br>2.5<br>3.5 | nds<br>Top Coat<br>[m/kg]<br>-<br>18.0 |



## 5. FIXING GIB® PLASTERBOARD **TO CEILINGS**

#### PLANNING THE LAYOUT

- Use sheets that are the full length of the room, if possible, so no end joints are formed.
- If end joints must be formed they should be staggered.
- Battens should be fixed at right angles to the trusses or joists. Where trusses or joists change direction within a room, battens should be fixed in one direction only. This may require additional nogs/dwangs between trusses.
- GIB® plasterboard sheets should be fixed at right angles to the battens.
- Metal battens should be placed at a maximum of 600mm centres when using 13mm GIB® plasterboard. If 10mm GIB® plasterboard is used, battens should be spaced at a maximum of 450mm centres.

#### Tips:

- For best results use 13mm GIB® plasterboard with battens at 600mm centres.
- Back-blocking will be required on the edge (longitudinal) joints where the room is wider than six sheets (7.2m) on metal battens and four sheets (4.8m) on timber battens. Back-blocking strengthens the joints between sheets. For more information contact the GIB® Helpline 0800 100 442

#### **INSTALLING GIB® PLASTERBOARD**

Tip:

Because sheets are difficult to manoeuvre above your head it is best to enlist the help of one or two extra people or use a GIB® plasterboard lifter.

Screwing is the preferred method of fixing. Nails must not be used when fixing GIB® plasterboard to metal battens.

- 1. Apply GIBFix<sup>®</sup> All Bond glue daubs to the steel battens at 200mm, 400mm, 800mm and 1000mm centres starting from the wall ceiling junction. Do not apply glue to the battens closest to the wall or at the edge of the sheet.
- 2. Lift the sheet into position and support using T-braces by wedging these between the floor and the ceiling.
- 3. Starting from the centre of the sheet and working toward the outside, screw the sheet in place using 32mm x 6g GIB® Grabber<sup>®</sup> screws.
- 4. Fix each end of the sheet at 200mm centres. At the intersection with each batten, fix the centre and each edge of the sheet
- 5. Fix the remainder of the sheets in the same fashion by "touch fitting" each sheet to the edge of the previous sheet.

#### **COMPLETED SHEET**



## TO WALLS





Window Horizontal Fixed Preferred Option



- For older, existing homes stud spacing may require that GIB® plasterboard sheets be trimmed when fixing vertically. Horizontal fixing is the preferred method.
- NEVER make joints above or below the corners of windows or doors.

#### HORIZONTAL FIXING

Install the lower panel first as this will help support the top panel during fixing. If the wall-ceiling junction will be squarestopped it may be preferable to fix the top sheet first to form a neat edge at the top of the wall.

#### **Completed Horizontally Fixed Sheet**



#### Tips:

- Be sure to use sufficient glue (approximately the size of a 50 cent piece, 10mm thick). Using too little can lead to loose GIB® plasterboard and drummy walls.
- Place some small off-cuts of GIB® plasterboard at intervals along the wall-floor junction and rest the sheet on these to create a 10mm gap.
- Always fix screws working away from the previous sheet to prevent the board from bowing.
- If the top sheet has been fixed first, use a flat crowbar to lift the sheet into place. Ensure there is 10mm beneath the bottom of the sheet and the floor.
- It may be necessary to trim a small strip from the top edge of the sheet for it to fit. Measure this distance and cut carefully before applying the glue.

#### VERTICAL FIXING

The best place to start when fixing vertically is around windows and doors. This ensures joints are not made above or below the corners of windows or doors.

#### **Completed Vertically Fixed Sheet**



Tip:

Ensure the join extends a minimum of 200mm beyond the corner of the edge of the window or door. Joins less than 600mm in length do not need to be made over framing.

## 7. STOPPING GIB® PLASTERBOARD

#### EDGE (LONGITUDINAL) JOINTS

These are the joins where two edges of GIB® plasterboard meet side by side. The GIB® plasterboard will have a slight recess (taper) in the edge of the GIB® plasterboard, making for easier stopping.

#### PREPARATION

- Ensure all fixings, screws or nails, are seated below the surface of the GIB® plasterboard. These should be just below the surface. Any fixings driven too far into the GIB® plasterboard will cut the paper of the board causing problems such as 'popping'.
- Tidy up any damaged areas of GIB® plasterboard such as broken corners. It is usually easier to remove these completely and fill them with a plaster based (setting) compound prior to continuing.
- Remove any dust or loose material from the GIB® plasterboard.
- Mixing instructions can be found on the back of the bag or
- pail.

3. Draw the broad-knife, held at approximately 45 degrees to the board surface, along the joint to remove any trapped air bubbles beneath the tape. Ensure that sufficient compound is left behind the tape to achieve a good bond.

Tip:

- $\square$ If any blisters appear in the tape this is usually an indicator that insufficient compound is present behind the tape. Simply lift the area of tape away using the corner of the broad-knife. Apply a small amount of compound and press the tape back into the compound once more.
- 4. Immediately apply a thin coat of compound over the surface of the tape. This reduces the possibility of the tape curling and wrinkling which can lead to edge cracking.
- When the compound is set and dried, scrape back any build-up of compound along the joint using a broad-knife or trowel

#### SECOND COAT

1. Apply a second coat of jointing compound with a 200mm trowel. Ensure the second coat extends outside the area of the first coat.

#### Tip:

To save money on additional tools it is possible to use a 280mm trowel. Ensure the compound is not spread the entire width of the trowel.



- 2. Feather the joints to eliminate build up of the compound at the edges.
- 3. Allow to thoroughly dry (24 hours) and scrape back any build-up of compound along the joint.

#### TOP COAT

- 1. Apply a finishing coat of compound with a 280mm trowel. Joint edges should be feathered at least 50mm beyond the edges of the previous coat.
- 2. Allow to dry for approximately 24 hours.
- 3. Lightly sand in the same direction as the joint using 220 grit, or finer, sandpaper. Tip:
  - Take care not to scuff the face paper of the GIB® plasterboard, as this can lift the paper fibres and mar the finish.
- 4. After sanding, mark any defects and imperfections with a pencil. Retouch these areas with compound. Leave to dry and sand. Repeat this process until the desired finish is achieved.

Tip:

Imperfections will be easier to see by shining a light, such as a torch, along the wall. This will show up any imperfections as shadows. The quality of the final decoration is dependent on the quality of the jointing. For a decoration that requires a high quality finish, such as painting, hiring the services of an experienced tradesman is recommended.

#### END JOINTS AND CUT EDGES

When jointing sheet ends, which are not recessed, care needs to be taken to ensure the surface build-up of compound is minimised. The same basic procedure as for tapered edges should be followed, except that each of the stages should be doubled in width, resulting in a 600mm finished joint width. Tip:

Take extra care when bedding in the tape to ensure sufficient compound remains behind the tape. The absence of a recess can often lead to all the compound being forced out from behind the tape.



Window Horizontal Fixed - Alternate Option





Window Vertical Fixed

Window Vertical Fixed

#### Tips:

- Doors should be treated the same way as windows.
- Fix the GIB® plasterboard horizontally, this will ensure that joints are below eye-level & as a result, any imperfections are more difficult to see. Any glancing light from windows or lights is less likely to show a shadow line (if joints are finished slightly raised).
- Screwing and gluing reduces the number of mechanical fixings in the face of the plasterboard decreasing the number of possible imperfections from problems such as 'popping', which can be caused by wet timber.
- When fixing horizontally, using Taper/Square Edge board makes subsequent installation of skirting & cove/cornice easier.
- If end joints are required when fixing horizontally, these should be staggered a minimum of one stud apart, 600mm.
- Stud spacing should be at a maximum of 600mm.

#### Tips:

- As a guide, when mixing powdered compounds, sprinkle in just enough powder until the water no longer soaks through. If water soaks through, sprinkle in a little more powder.
- It is better to mix a compound too thick than too thin as it is easier to add water than to add powder.

#### **FIRST COAT**

1. Using a 150mm broad-knife, fill the recess formed by the edges of the sheets with jointing compound.

#### Tip:

- Generally the flatter a trowel or broad-knife is held to the board surface, the more compound will be applied. The closer to perpendicular the trowel or broad-knife is held, the more compound will be removed.
- 2. Centre the paper tape along the joint. Using a 150mm broad-knife, press the tape into the compound. Take care not to cut the paper tape.



#### Tip:

Fixing and Stopping GIB® plasterboard perfectly is a skill that requires some practice and competence. For a professional finish, you may like to consider hiring the services of an experienced tradesman.

For more information on fixing or jointing such as dealing with corners and nail spotting, refer to the 'Fixing GIB® Plasterboard' or 'Jointing GIB® Plasterboard' guides available from Winstone Wallboards Ltd (0800 442 4663) or www.gib.co.nz.

