



Removing & Replacing GIB® Plasterboard



This brochure is intended as a guide for **tradespeople**. This document must not be used as a substitute for specific advice from either building practitioners or legal practitioners.

Introduction

As a home ages the wall and ceiling linings can begin to look tired. When faced with this situation there are a number of options that can be taken to rejuvenate walls and ceilings. The three most common are:

1. Repaint the existing walls and ceilings.
2. Remove wallpaper and/or make good the walls with a coat of plaster (skim coat) and paint.
3. Remove and replace the existing wall or ceiling linings.

The selected option will depend on the desired outcome. There is no doubt the first option is the easiest, however, this will not make the linings smoother or give the best finish.

The second option, removing wallpaper if necessary, and skim coating, can make the walls look better once painted but does not address issues, such as lack of electrical fittings or insulation. Cracks can also reappear if joints are not reinforced. The removal of wallpaper can be a long, messy process. For more information on skim coating plasterboard, contact GIB® Project Support on 0800 442 4663.

Removing and replacing linings not only gives a better finish but also gives the greatest amount of flexibility as additional features can be installed. These include wall insulation (houses built before 1978 were not required to have wall insulation), noise control, new electrical fittings, and phone jacks.

This brochure covers some options for removing and replacing commonly encountered wall linings. Every project is different and as a result all situations cannot be covered in this guide.

Since wall and ceiling linings can contribute to the structure of the house, special precautions or consents may be required.

GIB® strongly recommends that DIY renovators consult the Consumer Build website (www.consumerbuild.org.nz) prior to carrying out any renovations. This website aims to provide clear, independent and up-to-date information to the public about building, renovating and maintaining houses in New Zealand. This includes basic DIY renovation tips covering Building Consents, Legal Restrictions, Restricted Work, Insurance Cover and DIY Safety.

DIY renovators will be able to carry out 'restricted work' as long as they are supervised by a **licensed building practitioner**. For DIY renovators this work may include:

- Removing a structural wall between dining room and lounge.
- Installing a new external window and door.
- Designing and constructing an additional room.

Because of the differing conditions that can arise in this type of work, GIB® strongly recommends employing an experienced contractor.

Before Starting

Building Consents/Permits

In most cases where linings are being replaced with similar linings and fixings, a building permit will not be required. However, this must be clarified with the Building Consent Authority (BCA) before starting work.

Bracing

In homes built post 1978 the plasterboard linings could be contributing to the bracing requirements of the building. The local BCA should hold copies of plans showing bracing for homes built after 1978. If the type of bracing is being changed e.g. angle bracing to panel bracing, then a building consent may be required. Check with the BCA

to ensure that bracing is not compromised by the proposed relining. For older homes it is strongly recommended that an engineer is consulted prior to removing and relining to confirm that adequate bracing exists.

Tip: Existing bracing can be identified as it commonly includes GIB® plasterboard fixed at 150mm centres around the perimeter of the bracing element.

Electrical

Disconnect electricity in areas where you will be working. Use the services of a registered electrician. If in doubt turn off the mains for the entire house before conducting any work.

Plumbing

When working in areas which contain plumbing use the services of a plumber. Special fittings are available to temporarily plug or replace taps, etc. which make working in these areas considerably easier.

Gas

If the working area is connected to gas, make sure this has been properly isolated by a registered tradesman.

Health & Safety

- Always wear appropriate personal protective equipment. Due to the dusty nature of this work and the possibility of lead based paints, always wear a dust mask and safety glasses. Always wear safety boots.
- If the house contains any kind of textured ceiling coating DO NOT commence work until this has been verified as asbestos free by an inspector. Contact your local council for a list of inspectors. Many of these older texture coatings contain asbestos and as a result will require special methods of removal and disposal.
- Many of the tools required to effectively carry out this work need to be very sharp. Extreme care must be taken when using sharp tools.
- Keep children away from the work area. Dust, debris and exposed electrical outlets can be 'explored' by inquisitive little fingers.

Housekeeping

- If possible remove furniture from work areas.
- Place drop sheets over the floor coverings (when working over timber floors, consider placing a layer of carpet or similar underneath the drop sheet).

Removing Plasterboard Wall Linings

Trims

Decide early on whether or not you wish to retain or discard any trim such as skirting, scotia, cove, cornice or architrave. The easiest method is to remove the trims completely and replace them with new ones. This should always be your first choice.

Often in older homes a fancy cornice may have been used. In this case consideration may be given to leaving it in place. Existing trims that are to be kept should be carefully removed before reuse. This may be possible for timber architraves, scotia and skirting, however the removal of GIB-Cove® or plaster cornice without damage will not be possible.

In this case existing trims can be left in place and the linings cut 150mm below the trim to enable the wall lining to be removed. Bear in mind that this will generally result in an additional plasterboard joint which could be visible under certain critical lighting conditions.

Tip: Manufacturers of fibrous plaster trims seldom throw away their moulds. In most cases decorative cornices can be matched. If this is not possible, a fibrous plaster manufacturer can prepare a new mould to match existing cornice. Alternatively remove the cornice and replace it with a new decorative GIB-Cove®. Numerous profiles are available to match the character of the home.

Note: Ensure that these wall linings will not be used as a bracing element. All bracing elements must be secured to the top and bottom plates, this will not be possible once the sheet is cut.

Option 1 - Remove and Discard Existing Trims

1. Using a flat bar, remove the architraves and skirting.

Tip: Lever away from the wall sheet lining side of the architrave so as not to damage door or window jambs. Since the linings are being replaced it does not matter if these are damaged in the removal process.

Tip: If the skirting and floor have been varnished, removal of the skirting may damage the floor. Carefully score the varnish at the floor/skirting intersection before removing.

2. Remove GIB-Cove® or plaster cornice from wall/ceiling junction.

Tip: This can be very difficult. Sometimes a spade makes a suitable tool for removing the GIB-Cove® or plaster cornice.

3. Remove the plasterboard from the wall. If the plasterboard is fixed over matched linings (common in pre 1920s homes) do not damage or remove the matched linings.

Tip: Try to remove the plasterboard in large sections to reduce the amount of dust and to make disposal easier.

4. Remove any nails or fasteners from the studs and dwangs/nogs.

5. Remove any old adhesive from the framing using a sharp chisel.

6. Check the soundness of the framing, for any borer activity (exit holes in the timber), and for signs of mould and weather penetration. Consult an expert in case of any doubt.

7. Check the flatness of the framing using a long straight edge. Aim to have a maximum deviation of between 3-4mm in the framing over the length of a 1.8m straight edge.

Tip: Remove or drive any protruding nails below the surface of the timber. Plane flat any high areas such as twisted studs, nogs/dwangs and window or door lintels. Drive fasteners well below the surface with a nail punch so as not to damage the plane.

8. The framing is now ready for installation of new GIB® plasterboard. Take this opportunity to install insulation and any additional electrical or plumbing services.

Option 2 - Remove and Reuse Existing Timber Trims

This option should only be considered if the trim is either difficult to replace or if it needs to exactly match other existing trims.

1. Using a flat bar, carefully remove any architraves.

Tip: Try to lever the architrave at points near nails so as to cause the least amount of damage.

2. De-nail the architrave and remove any adhesive.

Tip: Pulling nails through from the back will help prevent damage to the front of the trim. Alternatively drive these through from the back and remove carefully from the face.

Tip: Label these trims clearly on the reverse and work to a pattern, so that when they are replaced later, the pieces can easily be returned to the right place.

3. Sand the architrave and repair any damage with appropriate filler.

Tip: Store away from the area of work to prevent damage.

4. Repeat this process with other timber mouldings such as scotia and skirting.

5. Continue from Step 3 under Option 1 - Remove and Discard Existing Trims.

Option 3 - Retain Existing Cornice

1. If the existing cornice is to be retained, mark a line on the wall approximately 150mm below the bottom edge of the cornice using a chalk line or laser.

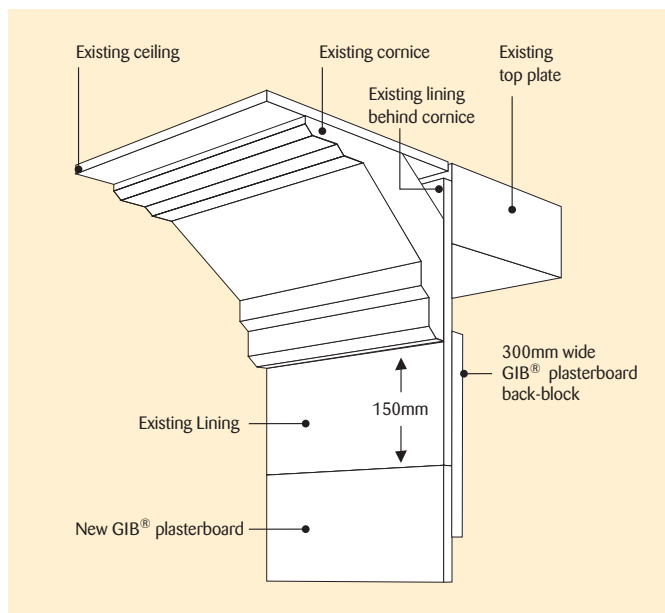
2. Cut through the plasterboard along this line using either a keyhole saw or reciprocating saw, taking care not to cut into or through framing members, plumbing or wiring.

Tip: To avoid the risk of cutting through live electrical cables ensure power to the area is properly isolated. If any doubt exists, turn off all power at the main switch. Check also for the existence of any gas or water pipes in the area.

3. Proceed with steps 3 to 8 under Option 1 - Remove and Discard Existing Trims.

4. Install a 300mm wide GIB® plasterboard back-block (Figure 1) using GIB-Cove® Bond. Use GIB® Grabber® High Thread Laminator screws to temporarily support the back-block. Remove these screws once the new GIB® plasterboard has been installed.

Figure 1 - Retaining Cornice - Wall Detail



5. See Jointing GIB® Plasterboard later in this brochure for information on finishing the joint between the new GIB® plasterboard and old lining.

Note: A similar technique can be employed around other areas which can not be easily removed or replaced.

Removing Plasterboard Ceiling Linings

There are several situations which may require replacement of existing ceiling linings, including:

- Cracked or damaged ceilings.
- Old looking ceilings.
- Dated looking sprayed on texture.
- Water damaged ceilings.
- Softboard ceilings.
- Sagging ceilings.

In some cases it is possible to simply line over the top of existing linings. This should only be considered if the existing linings are flat and the ceiling framing is structurally sound and able to support the weight of the additional lining.

Tip: If loose fill insulation has been installed it is more practical to leave the existing lining in place.

Fibrous Plaster Ceilings

It is possible for fibrous plaster ceilings to be repaired. In cases where the fibrous plaster is in very poor condition, consider upgrading these linings.

Tip: Fibrous plaster work requires specialised skills and should be carried out by an experienced contractor.

Softboard Ceilings

Typically these would be encountered in the form of tiles. Softboard ceilings can represent a fire hazard and removal is recommended.

Softboard tiles are often fixed to 40 x 20mm lightweight ceiling battens, not designed to support the weight of a 13mm GIB® plasterboard ceiling. Replace the lightweight battens with GIB® Rondo® Metal Ceiling Battens before installing the new 13mm GIB® plasterboard ceiling.

If the new ceiling is installed directly over the existing softboard ceiling, particular care must be taken to ensure that the screws used to fix the plasterboard are long enough to penetrate through the softboard, lightweight battens and at least 20mm into the main structural framing. Check that framing members are spaced at no more than 600mm centres. Additional screws will need to be used to replace adhesive as no extra weight can be suspended from the tiles.

Textured Ceilings

If the house contains any kind of textured ceiling coating DO NOT commence work until this has been verified as asbestos free by an inspector. Contact your local council for a list of inspectors. Many of these older texture coatings contain asbestos and as a result will require special methods of removal and disposal.

Plasterboard Ceilings

Plasterboard ceilings may be old or damaged, with cracks from unreinforced or poorly reinforced joints. Being large visible surface areas it is often better to replace these ceilings to get the best finish.

Option 1 - Removing Ceiling Linings

1. Using a flat bar, remove any scotia or cornice from the wall/ceiling junction. If the cornice is to be retained see Option 4 - Retaining Existing Cornice (below).

Tip: If the wall linings are not being replaced at the same time, try to lever against the ceiling as much as possible.

Tip: To help prevent damage to the wall surface carefully score the paint at the scotia/wall intersection before removing.

2. Isolate any electricity, gas and plumbing in the area.
3. Remove the lining material from the ceiling. Wear a dust mask and eye protection.

Tip: Try to remove the linings in large sections to reduce the amount of dust and make disposal easier.

4. Remove any nails or fasteners from the ceiling battens or substrate.
5. Remove any old adhesive from the substrate using a sharp chisel.
6. Check the soundness of the battens and if they are suitable for supporting the weight of the new plasterboard.
7. Check the flatness of the substrate using a long straight edge. Aim to have a maximum deviation of between 3-4mm in the framing over a 1.8 m length of the straight edge.

Tip: Remove or drive any protruding nails below the surface of the timber. Plane flat any high areas on the ceiling framing. Drive fasteners well below the surface with a nail punch so as not to damage the plane.

8. The framing is now ready for the installation of the new 13mm GIB® plasterboard ceiling.

Option 2 - Lining Over Uneven, Existing Ceilings (New Ceiling Battens)

This option is only required if the ceiling is not flat. The battens are installed to a string or laser line and packed as required to achieve a flat substrate for the plasterboard. Bear in mind that this will lower the finished ceiling level by at least 48mm.

1. Using a flat bar, remove any scotia from the wall/ceiling junction.

Tip: These trims may be reusable if removed carefully. However, it is typically easier to achieve a good finish with new trims, such as GIB-Cove®.

2. Locate existing ceiling battens, joists or rafters above the existing linings and mark them clearly. (GIB® Rondo® Metal Ceiling Battens can span 1200mm maximum so ensure that framing can accommodate this).
3. Fix GIB® Rondo® Metal Ceiling Battens through the existing linings into the substrate above using pairs of screws through the flange of the batten. Screws must be long enough to penetrate the timber framing by 20mm.
4. Space the GIB® Rondo® Metal Ceiling Battens at no more than 600mm centres.

Note: GIB® strongly recommends the use of 13mm GIB® plasterboard with ceiling battens at 600mm centres. If for some reason 10mm GIB® plasterboard is used the battens must be spaced at a maximum of 450mm centres.

Tip: Metal ceiling battens are recommended due to their lower weight. Metal ceiling battens will not shrink or twist giving a stable substrate which looks good for longer.

Tip: If possible run battens parallel to the major light source in the room - normally a large window. This will help hide imperfections in the finished ceiling once the GIB® plasterboard is fixed so light shines along the joints.

5. The framing is now ready for the installation of the new 13mm GIB® plasterboard ceiling.

Option 3 - Lining Over Even, Existing Ceilings (No New Battens)

If the existing ceiling is flat, structurally sound, and able to support the weight of the new GIB® plasterboard, it can be fixed directly to the existing ceiling.

1. Using a flat bar, remove any scotia or cornice from the wall/ceiling junction.
2. Locate the existing ceiling battens, joists or rafters above the existing linings and mark them clearly.

Note: To support the new 13mm GIB® plasterboard ceiling, framing members must not be spaced at more than 600mm centres.

3. Fix the new GIB® plasterboard through the existing lining and into the framing with screws long enough to penetrate the timber by at least 20mm. Screw fixing is generally at 200mm centres along all framing members.

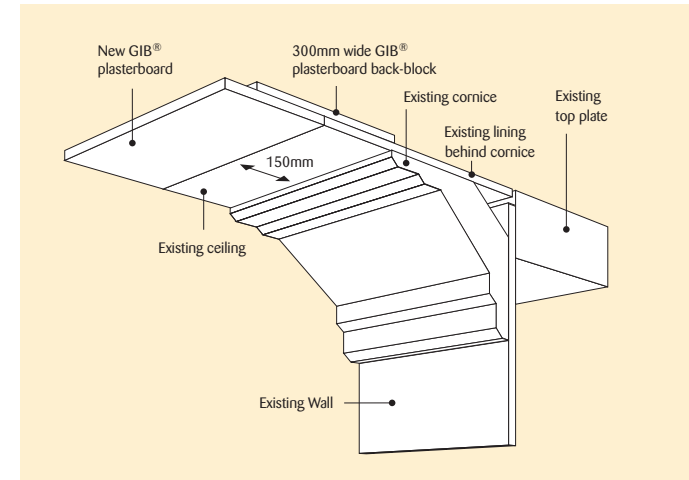
Option 4 - Retaining Existing Cornice

1. Mark a line on the ceiling 150mm from the top edge of the cornice using a chalk line or laser.
2. Cut through the plasterboard along this line using either a keyhole saw or reciprocating saw, taking care not to cut into or through framing members.

Tip: To avoid the risk of cutting through live electrical cables ensure power to the area is properly isolated. If any doubt exists, turn off all power at the main switch. Check also for the existence of any gas or water pipes in the area.

3. Proceed with steps 3 to 8 under Option 1 - Removing Ceiling Linings.
4. Install a 300mm wide GIB® plasterboard back-block (Figure 2) using GIB-Cove® Bond. Use GIB® Grabber® High Thread Laminator screws to temporarily support the back-block. Remove these screws once the new GIB® plasterboard has been installed.
5. See Jointing GIB® Plasterboard below for finishing the new-to-existing GIB® plasterboard joint.
6. If 13mm GIB® plasterboard has been used to replace 10mm linings there will be a 3mm discrepancy between the surfaces. The thinner lining can be built up by the plastering contractor using a suitable compound such as GIB Tradeset® or GIB Plus 4®.

Figure 2 - Retaining Cornice - Ceiling Detail



Before Relining

With the linings removed from walls and ceilings an excellent opportunity exists to upgrade certain aspects of the home.

Insulation

Add bulk insulation such as Pink® Batts® to the cavity of external walls and ceilings. For more information contact Pink® Batts® on 0800 802 287 or www.pinkbatts.co.nz.

Consider the following when installing insulation:

- Small gaps, as little as 5mm, around the insulation can reduce effectiveness by up to 50%. Ensure that insulation is tightly fitted around all edges and at joints.
- Houses with a brick veneer exterior have approximately 40mm between the framing and the bricks. Ensure that insulation is supported to stop it sagging into this cavity.

Tip: If there is no building paper present or if it is in poor condition, run lengths of packaging strapping across the back of the studs to support the insulation. Wrap the strapping around the studs and staple it to make it rigid. Seek expert advice in case of any signs of mould, or evidence of poor weather tightness.

Wiring and Electrical

Plan the placement of electrical sockets, light switches, light fittings, phone and TV jacks. When doing so, think about what these rooms may be used for today and in the future. Carefully consider what future occupants of the house might want to use each room for.

Tip: Always make a plan for the whole house, as cabling and wiring for certain rooms may be required to run through other areas.

Also consider new technologies and ways you can future proof the home. You may want to wire up a room to allow for a home theatre system in the future.

Tip: There is plenty of free advice from telecommunication companies and electronic stores.

ALL ELECTRICAL WORK MUST BE CARRIED OUT BY A REGISTERED ELECTRICIAN.

For more information contact Schneider Electric on 0800 652 999 or visit www.schneider-electric.co.nz.

Plumbing and Gas

This is the ideal time for taps and drains to be relocated. Plan for existing and new appliances.

Tip: When renovating a laundry consider whether a dryer will be placed on the wall and make sure you place appropriate framing (and electrical sockets) to accommodate this.

Installing New Plasterboard Linings

Refer to the GIB® Site Guide and Fixing GIB® Plasterboard guide, for step by step instructions and tips on how to install GIB® plasterboard on walls and ceilings.

Refer to the GIB® Site Guide and the Jointing GIB® Plasterboard guide for jointing and stopping plasterboard. Employ an experienced plasterer for this work. A high level of skill is required to get a good finish.

The above guides can be requested by calling 0800 442 4663 during office hours or can be downloaded/requested at www.gib.co.nz.

Some key pointers on installing, jointing and decorating the new linings are given below.

Fixing GIB® Plasterboard

Walls

- Fix GIB® plasterboard horizontally - this will ensure joints are below eye level and as a result any imperfections are more difficult to see.

Tip: In older houses stud spacing often does not allow for vertical fixing, anyway.

- Most GIB® plasterboard is 1200mm wide. Where stud heights exceed 2400mm, use 1350mm GIB Wideline® or a combination of GIB® plasterboard widths.

Tip: Older houses have unusual ceiling heights. If you end up with a small gap at the top or bottom of a wall, a wider GIB-Cove® or skirting board can be used to cover the gap, avoiding the need for an extra part sheet of GIB® plasterboard.

- Screw and Glue - by screwing all sheet perimeters (including joints) of the plasterboard and using glue to fix the remaining areas of the plasterboard, the need to apply plaster over fixings in the middle of the sheet is eliminated, leading to a much better finish. Do not place fixings, screws or nails, within 200mm of adhesive.
- Do not join sheets above the corners of windows and doors - this is where stresses from applied loads and shrinkage are greatest, hence the risk of cracking is dramatically increased. The best method is a full sheet around windows and doors. Failing this, joints should be made nearer the centre of the window or door.

Figure 3 - Window/Door Detail Where New Lining is Thicker

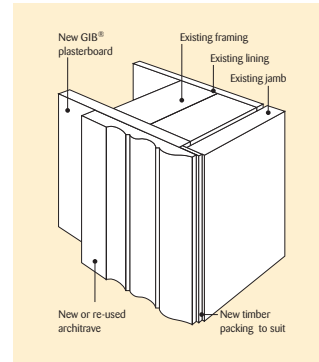
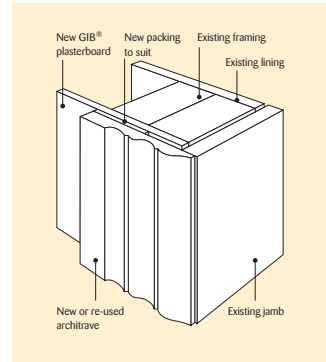


Figure 4 - Window/Door Detail Where Lining is Thinner



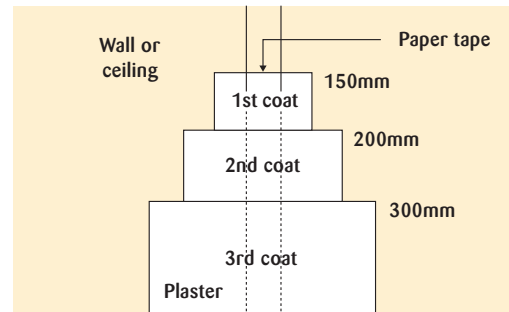
Ceilings

- Use 13mm GIB® plasterboard (GIB® Standard or GIB Ultralite®) with a batten spacing of 600mm.
- Use metal ceiling battens as these are dimensionally stable and are less likely to cause problems such as cracking.
- Screws are required at the edges and the centre of the sheets when fixing to ceilings. Adhesive can be applied to the areas in between.

Jointing GIB® Plasterboard

- When jointing new-to-existing GIB® plasterboard always make sure the existing plasterboard is clean and grease free. Sand any painted surface prior to jointing. GIB Plus 4® and GIB ProMix® All Purpose are recommended for these joints.
- Always use paper tape for reinforcing joints, as this provides greater crack resistance.

Figure 5 - Three Coat Jointing System



- Always make sure the previous coat is dry before commencing with the next.
- Maintain a temperature above 10°C, during the application and drying of joint compounds.
- Sand in one direction with 220 grit or finer sandpaper, taking care not to scuff the paper of the GIB® plasterboard.

- Examine for imperfections and repair once the first, or sealer coat, of paint has been applied.

Decorating GIB® Plasterboard

Paint Decoration

There is plenty of information available from paint manufacturers on decorating GIB® plasterboard. However, the following are provided as a summary of best practices:

- Always roll the sealer coat on with a long nap roller to create an 'orange peel' effect, as this will help disguise imperfections. If the sealer is spray applied, this should be immediately 'back rolled'.
- Use flat paints rather than semi gloss or gloss where possible. Gloss paints reflect light to varying degrees, exaggerating surface imperfections.
- Light colours tend to diffuse light helping to disguise any surface imperfections.
- Avoid harsh lighting conditions such as light shining down a wall, as these will highlight imperfections. In areas where this occurs consider skim coating the wall or ceiling.
- Use water based paints, where possible, as these make it easier to create an 'orange peel' effect.
- Always maintain a 'wet edge' with the roller and apply the last coat with the roller marks in the same direction, and parallel to the dominant light source.

For more information contact Resene on 0800 RESENE or visit www.resene.co.nz.

Wallpaper Decoration

- Some wallpapers are quite thin and the joint may telegraph through due to differences in the porosity of the joint and the plasterboard surface. It is important that an oil-based sealer is applied to the GIB® plasterboard surface prior to wallpapering. This also aids in the removal of the wallpaper at a later date if redecoration is required.

For more information contact Pacific Wallcoverings on 04 237 8029 or visit www.pacwall.co.nz.

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 or involved with the removal and replacement of existing linings with GIB® plasterboard. Winstone Wallboards Ltd do not accept responsibility for the advice, recommendations, etc, contained herein.

Note: Other similar guides in this series are available by contacting GIB® Project Support above or they can be viewed or downloaded from www.gib.co.nz.



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