

# It's all Part of the Service.

- Sustainability, our Commitment to Green.
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## WOMEN NAILING IT IN CONSTRUCTION

### PEOPLE

by Karen Richter  
Marketing Executive



More Kiwi women than ever before are forging careers in the construction sector and forward-thinking organisations such as Winstone Wallboards are supporting the change.

Although still a heavily male-dominated industry, the tide is turning as an increasing number of employers tune into the unique attributes females bring to the sector. In this issue of GIB® News we talk to three inspiring women who are helping shape the industry in positive and proactive ways.

#### Meet Winstone Wallboards Partnership Manager Clara Sumner

Working in a male-dominated industry brings its challenges but according to

Clara Sumner, it also dishes up great rewards.

“Back in 1992 when I first started out in construction, females stood out a bit, but now we’re seeing a lot more women come through and there’s a huge amount of opportunity,” she says.

“Females have a slightly different approach, our focus is different, and we tend to shine in areas such as organisation, planning and communication. These are skills that stand you in good stead in the building industry.”

Clara has dedicated more than 20 years of her career to Winstone Wallboards, working her way up from a customer service role to become a highly respected professional at the top of her field.

“I’ve become quite ingrained in the industry in Christchurch. When I first started out, people would test me to see if I knew what I was talking about. Once they realised I knew my stuff, the questioning disappeared. You get to a point where respect kicks in and gender becomes less of a conversation.”



Clara’s skills have enabled her to carve a career that’s meaningful and rewarding, including working closely with families impacted by the Christchurch earthquakes.

“It was a very challenging time and I was able to help people work through the process of repairing their homes. I felt like I was really contributing something to the community. That was very special.”

In her current role Clara looks after partnership and sponsorship relationships, oversees the Club GIB® Installers programme, liaises with market influencers and works closely with the rest home segment. She’s also building her leadership, strategic

business and developmental planning skills through Fletcher Building’s Leaders’ Edge programme. Of the 22 students participating, Clara is one of just two women. Despite the gender imbalance, she says working in construction is a natural fit.

“My dad’s a builder so I’d already had a bit of industry exposure before I started out, and I’m quite a practical, hands-on person. I’ve painted lots of houses, done lots of DIY, I’ve even renovated a whole house on my own. I really enjoy it and there’s something about the people in this industry that I’m drawn to. They’re very down to earth and straight forward, they’re salt of the earth people and I like that.

“We touch a lot of different types of customers through what we do – from stoppers, builders and architects, to group housing companies and homeowners. They’re all quite different but share a common thread, they all have a passion for making a difference in the building sector. It’s very rewarding to be part of that.”

*Story continued on page 2.*

# THANKS FOR 2019

## FOREWORD

by David Thomas  
General Manager



From an activity perspective, calendar 2019 has certainly been another

busy year for Winstone Wallboards. The launch of GIB Weatherline®, the commencement of Delivered-to-Site services in the Wellington region, the increased functionality of the MyGIB® App, and the increase in Industry training/skills development are just a few of this year’s changes that spring to mind. I am very proud of the work our team has done this year but would also acknowledge that much of this has been facilitated by the positive engagement and feedback we have received from you, our customers,

as we have looked to bring these improvements to market. I would very much like to extend my most sincere thanks to you all for your ongoing support which has allowed us to continue to maintain a leadership position within the industry.

Of course the year has not been without its challenges, not the least of which have been the ever increasing focus on safety and well-being and a continuing rise in our cost base as we have expanded our footprint and

headcount to maintain our service standards. It won’t surprise you to know that improving those standards are on our agenda for 2020 - our challenge for next year. In the meantime we will look to close out the year incident free, take a well deserved break and come back in the New Year ready to successfully tackle the challenges ahead.

Once again, our most sincere thanks for your support and best wishes for the festive season and 2020.

Story continued ...



### Meet Winstone Wallboards Architectural Specification Manager Dennise Austin

A weekend job at the Home Ideas Centre was an unexpected launchpad to a construction career for Dennise Austin. Fast forward 18 years and she's now a highly regarded Architectural Specification Manager playing a leading role in a booming industry.

“When I first started out, I was at home with two young children. I had a start-up joinery business and to supplement our income I began working weekends at Wellington’s Home Ideas Centre. I became Centre Manager within six months, gaining exposure to every aspect of construction, which I found interesting and exciting,” says Dennise, who has been with Winstone Wallboards for the last three years.

The construction sector has given Dennise a pathway to connect and make a difference.

“You get to be involved in the buildings people depend on. How many people can point at a building and say, ‘I was involved with that build’? Whether it’s a home, a hospital, a school or a commercial building, they are all important to the people in the community.

“You also get to collaborate with a team to provide guidance, overcome obstacles and sometimes fix problems on site. Strong relationships and networks are formed on construction projects because everyone in the team depends on everyone else. It’s all about working together to get the job done.”

Being engaged in the New Zealand construction industry can be challenging without a formal qualification and Dennise is passionate about education. She provides CPD (Continuous Professional Development) presentations and is also studying towards a Diploma in Business Studies and learning Te Reo Maori.

“Getting involved with industry associations also gives you a voice. I am a member of the New Zealand Institute of Building (NZIOB) currently serving on the Central Region Committee as chair, and a member of the National Association of Women in Construction (NAWIC) including being a judge for this year’s NAWIC excellence awards.

NAWIC is a support network for women working in the construction industry. Founded in Texas in 1952, its reach has spread across the globe as more and more women opt to work in the sector. Active in New Zealand since 1996, NAWIC encourages women to forge successful construction careers – and Dennise is a strong advocate.

“Hard hats and hammers are not the only opportunities in the construction industry. If a woman wants to swing a hammer, there is no reason she can’t do it just as well as a man - but women considering their career options should know that the construction industry presents lots of opportunities, from engineering and design, to project management and trades. Technology is an additional field of study that provides new opportunities for both young women and men of various backgrounds.”

### Meet Winstone Wallboards Technical Advisor Jennifer Haraki

Jennifer Haraki has always been a trailblazer. She was the first female Fletcher Challenge cadet, the first female Regional Services Manager for Master Builders, and the first female Quantity Surveyor. She even had a stint as the first female Project Supervisor for Keith Hay Homes.

Not one to rest on her laurels, she’s now passionate about applying her considerable skills to building momentum behind Maori housing.

One of the first apprentices in the Fletcher Challenge - Residential cadetship schemes, Jennifer credits what she learned there with helping her form a formidable work ethic, and a sharpened attitude to “get the bl\*\*dy job done”.

Hailing from Murupara, she grew up doing what all locals did to keep the community running, by getting work done with good old fashioned “hard yakka”. She went away to study at Polytech, but it wasn’t until Jennifer hit the bright lights of Auckland in 1986 to join the freshly minted Fletcher Challenge cadet programme that she realised her drive to be hands-on and trained-up was unusual for women in the industry.

“The definition of ‘being female’ in construction never crossed my mind and didn’t seem to be important as I did my training,” she says.

“I was really keen. I’d get to work early in the morning, before the bosses, and would be there well after they left. Any time I had I was getting out with the guys, building houses, digging, laying foundations, putting rooves up – you name it, I did it.

“After that I went from Fletcher Residential building houses and maintenance, to working at (now defunct) Neil’s Timber as

a pre-cut estimator. That’s where things really started to change.”

Jennifer went on to complete her Advanced Trade Certificate in Carpentry and a Quantity Surveyor Cadetship, becoming a highly competent architectural drafts person, running projects, and processing plans and inspections for council. After many years away, she returned to the Urewera to help her mum build a new house on Maori land.

“By that time, I had experience working with and for council, preparing plans, building and inspecting houses. I was like ‘oh easy – I’ll just get the plan together, put it in to council, and you’re done!’.”

How wrong she was; “It’s such a complex process, and the level of bureaucracy and admin is tough going. If someone wanted to hand me the job of sorting out Maori housing, I’d do it. I even told Minister Nanaia Mahuta that! A house is so much more than four walls, it’s a home and a place for family. We did get the job done for mum though, and I took what I’d learned to run a build for Oraeroa Marae Health Clinic Waikato and when it was opened, it even featured on TV!”

Today, after almost 40 years in the construction sector, Jennifer is still sharing her knowledge and expertise as an integral, and invaluable, member of the GIB® Technical Team.



ABOVE: Jennifer Haraki, together with cadet cohort Dale Olsen recently reunited to swap stories with Angus Fletcher, who started up the Fletcher Challenge cadetship programme in 1986.

# SUSTAINABILITY – OUR COMMITMENT TO GREEN

## SUSTAINABILITY

by Melissa Semmens  
Market Manager - Commercial



Winstone Wallboards are committed to increasing the importance we put on sustainability. We are currently looking at ways in which we can reduce our carbon footprint, increase our waste recycling options and improve internally to provide a better environment for future generations. It's not just something we talk about, it is a philosophy we live by.

### Current spotlight: Fabric Apartments

Fabric Apartments in Onehunga, Auckland is an example of a current large-scale project utilising one of the waste initiatives we have implemented with Green Gorilla – the company who provides specialised recycling and waste services for commercial, industrial,

construction and residential clients – with landfill being the last resort.

They have introduced a plasterboard recycling service in Auckland whereby plasterboard is collected separately from general building and construction waste and handled through Green Gorilla's custom designed and built plasterboard processing system.



We are proud to be associated with projects like this which are investing in creating a sustainable building and construction industry.

### Gypsum recycling – how it works

Green Gorilla take plasterboard off-cuts direct from building sites to their unique processing facility which separates the gypsum (the main component in most plasterboard) from the paper. The recycled gypsum, which is a soft sulphate mineral, is then used throughout the agricultural and horticultural industries to add calcium without shifting pH, for soil conditioning, dropping salinity levels and is supplied to farmers, freight companies, orchards and vineyards. The paper extracted from the recycling process is also recycled nearby.

The waste volumes and tonnages of recycled matter are recorded and reported per project for builders and their customers. This allows plasterboard recovery statistics to be provided as part of total site landfill

diversion and environmental reporting for Greenstar and Homestar accreditation.

Gordon White, Residential Market Manager at Winstone Wallboards says with Fletcher Building in the process of committing to carbon and waste production targets this has been a large contributor in the development of new products such as GIB Weatherline® which has been used throughout the Fabric Apartments site.

“When it comes to introducing eco-friendlier product, if you do it well, in a consistent manner and it can be rolled out in a cost-effective way, then people are more likely to use it,” he says. “Builders are becoming more aware of what they're putting in landfill and we're seeing demand for greener solutions at both ends – builders and end-users.”

# WHAT YOU NEED FOR DELIVERED TO SITE (DTS) DELIVERIES

## DELIVERY SERVICES

by Grant Glover  
Service Improvement Manager



To ensure a successful, problem-free DTS delivery, we encourage you to use this simple check list to ensure all goes well for your delivery – each and every time.

- If unsure on the requirements for a DTS delivery, request a site check which will occur 48 hours prior to delivery – it's a free service.
- Secondly ensure the correct site contact name and number is included when placing your order as this person will then receive important status updates and alerts for both site check and delivery of product.
- Be sure that the access way to the building where your GIB® plasterboard will be delivered is clear of any obstacles e.g. rubbish bins, piles of sand, concrete mixers etc.

- Ensure the board drop location is swept and clear of rubbish and debris.
- If you are having a standard delivery and want the board split into two separate areas, then this must be confirmed at site check otherwise all board goes to the nearest point of cover.
- Ensure any scaffolding to be removed is done prior to arrival of the delivery team.
- Consider smaller sheets for upstairs areas to avoid damage.
- Remove internal stairs if possible, to make GIB® plasterboard pass up more efficient.
- Protect tops of doorways and flashings with temporary timber to prevent accidental damage.
- In the case of wet weather on delivery day, ensure your site contact is available by phone 1 hour prior to delivery so we can make the best decision for you and the GIB® plasterboard to avoid rain damage or redelivery fees if we are unable to unload due to rain once on site.
- Use the MyGIB® ordering App available on both Android and Apple devices to place your orders and it will make this process even simpler and more effortless.

### MYGIB® ORDER AND TRACK — WHAT PEOPLE SAY

"I like the easy navigation. I have been using MyGIB® for some time now through a variety of projects and I got others to use it as well. My clients like it because they get all details in one portal." *Stuart, Stop The World*

It just gets better and better! Right from the start, when placing your first order, or ordering on an already existing account, details are stored and you get walked through each stage of picking the order, with all available board types and lengths. From there it lets you know the weight and m². Lastly the text/email notifications for the entire order – from confirmation of the order, all the way through to delivery completed – are awesome. Without the App, the job would take six times longer.

*Tolo, Global Linings Site Supervisor*

- ### Have you seen the latest new features on MyGIB® Order and Track?
- You can now order accessory products including fasteners, adhesives, sealants and GIB® Rondo® metal battens.
  - Order GIB Weatherline® and GIB Barrierline® system components.
  - You can now assign your order to someone else and they can take ownership of the order, make changes and proceed further with it.
- ### Need assistance or got a MyGIB® question?

Call 0800 475 475 or e-mail the Digital team at [wwbdigitalteam@gib.co.nz](mailto:wwbdigitalteam@gib.co.nz)
- ### Download the GIB® App and register at the 'MyGIB® Order and Track' tab.

# FABRIC APARTMENTS, ONEHUNGA

## CASE STUDY 1

by Gordon White  
Market Manager - Residential



Situated on a 1.29ha site, the Onehunga development when completed will comprise approximately 240 new apartments spread across five four storey buildings. Stage one is currently under construction by Kalmar Construction which consists of three four-storey apartment buildings due for completion in mid 2020.

Gordon White, Residential Market Manager at Winstone Wallboards, says that while gypsum based rigid air barrier systems may still be relatively new in New Zealand, their use has been commonplace in medium and high-rise commercial projects across North America and Europe for well over a decade.

"With over 7500 hours of research and development already committed, and with the sheets being manufactured at our local Christchurch plant, we've invested heavily to bring GIB Weatherline® systems to market. We have been really pleased with the level of market interest to date and will continue to work closely with our commercial customers to further evolve the offer to meet the changing needs of our rigid air barrier customers."

Branden Venter, Façade Site Supervisor at Kalmar, said while the new system has been a learning experience for his team, they are really impressed with the product from an installation perspective.

"The fixing has been easy – it's a hell of a lot lighter and the score and snap ability means putting the board on the wall has been way faster than anything the team have used before."

GIB Weatherline® sheets are fast to install compared to other commercial rigid air barrier products as they can be easily scored, snapped and screwed with no need for power tools to cut the sheets. The score and snap process also makes it easier to get a consistent, straight cut edge making positioning and installing sheets onto the frame simple and uniform.

To reduce any potential for moisture to penetrate beyond the building envelope, board edges and penetrations are sealed using a range of GIB Weatherline® flashing and sill tape products.

"The taping took a little while to get used to as it was the first time our installers had installed a rigid air barrier system but with time on the job we developed easier ways to speed this process up. We had lots of support from the GIB® team, they have been on site working with the installers, have run Q&A sessions and have used this project as a learning tool for ways they can improve it – they even bought tape guns on site to try and make things easier," Branden says'.



For more information call the GIB® Helpline 0800 100 442 or visit [www.gib.co.nz/weatherline](http://www.gib.co.nz/weatherline)

### Why GIB Weatherline®

- Acts as both an air barrier and secondary line of defence against water penetration into the building structure.
- 5 timber and 2 steel frame fire rated options.
- 4 structural bracing options.
- A range of environmental noise options.
- BRANZ Appraised for buildings within the scope of NZS 3604.
- Specific Engineering Design (SED) information available.
- Ease of handling – no harmful dust created.



# GIB BARRIERLINE® – NOISE CONTROL FOR MEDIUM-DENSITY INTERTENANCY WALLS

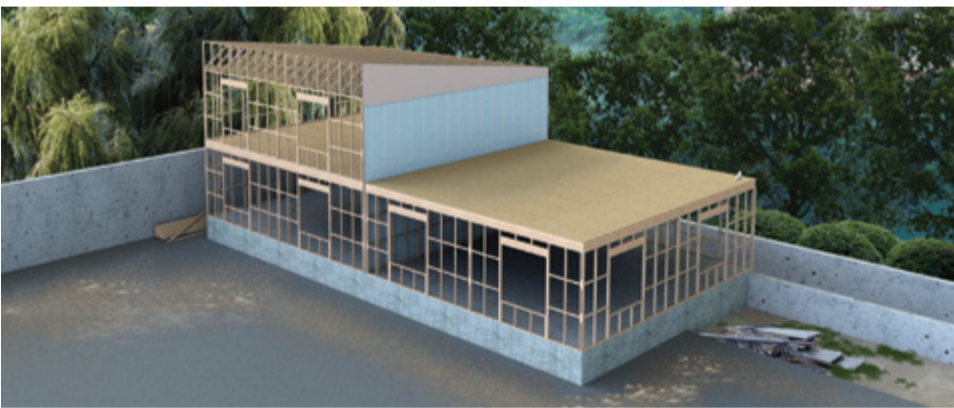
## TECHNICAL

by Russell Pedersen  
Technical Support and Training Manager



Noise control didn't need much consideration when building the traditional "Kiwi ¼ acre dream". That is not the case now, with many residential developers working to the mantra of "rack-em, pack-em, stack-em".

Using a traditional double frame system for the intertenancy walls in these attached dwellings is fine and building up layers of plasterboard on the walls works well but with the fire safety regulations



each penetration needs careful consideration and junctions can cause roadblocks at every turn.

Achieving adequate levels of noise control performance is often harder to attain than achieving a compliant fire safety design.

With the shift away from stand-alone dwellings to attached, terraced style housing, GIB Barrierline® intertenancy systems were developed as a quick and easy 'one-stop-shop' to address all the usual difficulties encountered. With the central 25mm thick plasterboard

barrier boasting 60 minutes FRR and a minimum 61 STC, junctions and smaller penetrations in the adjacent walls do not need special treatment.

Demand for this innovative intertenancy wall system has been strong and production has had to step-up to meet the sales. As you will expect, we have developed a wide range of specific construction details that can be found in both the GIB Noise Control® Systems and the GIB® Intertency Barrier Systems for Terrace Homes manuals. One of the flow-on effects of having such a great product is that it has often been adapted

for use in other situations where it was not originally designed for.

An example of this is the adoption of a GIB Barrierline® Intertency System in something like a three storey, timber frame, 'walk-up' apartment building. The presence of horizontal, as well as vertical, fire separations causes issues and we only have a few specific construction details available when GIB Barrierline® Intertency Systems are used in this type of application.

However, one of the benefits of partnering with Winstone Wallboards is we have a team of Engineers, Technical Advisors and Architectural Specification Representatives ready and able to be engaged at early design stage and can assist with developing those Specific Engineered Details (SED) for your project.

**Talk to our Technical Advisors about your project today, call the GIB® Helpline 0800 100 442 or visit [gib.co.nz](http://gib.co.nz)**

# GIB WEATHERLINE® FAÇADE TEST

## CASE STUDY 2

by Hamish Ewan  
Senior Technical Support  
and Development  
Engineer



In February 2019 MBIE released a document entitled “Building Performance Guide: Fire Performance of External Wall Cladding Systems.” This document includes a simplified risk assessment

approach to classify a building’s level of complexity and fire risk as either Low, Medium or High. The parameters that influence the risk include:

- Building height.
- Vulnerability of risk group.
- Provision of an automatic fire sprinkler system.

Buildings that fit into the High Risk classification have four available fire testing protocols. The Project Fire Engineer can accept an external wall cladding system tested to any one of these four protocols as well as a cladding system that falls within strict prescriptive parameters.

In GIB® News Issue 2 2019 we described the successful testing by cladding manufacturers in accordance with the NFPA 285 protocol P3 method. More recently we have tested 13mm GIB Weatherline® as a cladding substrate in accordance with the more severe protocol P2. In protocol P2 the external wall cladding system, which includes the substrate, must meet the performance criteria given in BR 135 following testing in accordance with BS 8414.

The 9 metre tall BS 8414 test panel consisted of 90 x 45mm timber framing fixed to a steel support frame. This timber frame received a 10mm GIB® Standard

plasterboard lining to the internal face, Pink® Batts® cavity insulation and 13mm GIB Weatherline® Rigid Air Barrier to the external face. Solitex Extasana Adhero® self-adhesive membrane was applied to the face of the 13mm GIB Weatherline® before an external cladding system consisting of Paneltec Induracore G2 was installed.

This successful test returned a great outcome and established that the cladding system described above met all the performance criteria given in BR 135, thereby satisfying MBIE protocol P2.



# GIB WEATHERLINE® SYSTEM TAPES – HOW DO THEY WORK?

## CASE STUDY 3

by Dan Reynolds  
Technical Training and  
Development Advisor



GIB Weatherline® Tapes have been developed and tested for use in GIB Weatherline® Rigid Air Barrier Systems. But why are they necessary and what do they do?

### Why are GIB Weatherline® Tapes necessary?

GIB Weatherline® Tapes have been specifically developed and thoroughly tested for use in GIB Weatherline® systems. They perform a critical function in creating a permanent and continuous seal at sheet joints and around sheet penetrations. When used in conjunction with GIB Weatherline® sheets they help manage the air pressure that can act on the exterior of a building which has the potential to drive rain water through the exterior cladding.

### Types of GIB Weatherline® Tapes:

Most sheet joints and penetrations are sealed using GIB Weatherline® Flashing Tape. This product comes in a variety of widths to help minimise tape wastage.

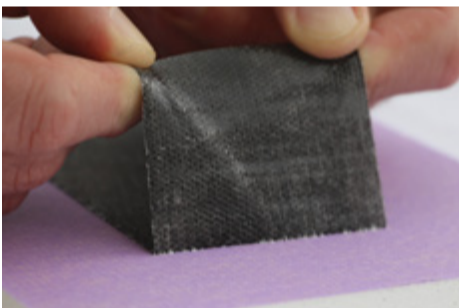
GIB Weatherline® Sill Tape is made of self-adhering, stretchable butyl rubber and are used to seal the base of the window sill opening prior to window installation.

A range of Pro Clima KAFLEX or ROFLEX penetration sealing grommets are also available to seal a variety of building service penetration sizes.

### How do GIB Weatherline® Tapes bond?

GIB Weatherline® sheets may appear smooth at first glance, but under close examination the surface will comprise of hills and valleys. The adhesive on the tape flows into these areas and keys into the sheet surface.

If the adhesive is in direct contact with the sheet surface, attractive forces (also called Van der Waals forces) will result at a molecular level. The closer the adhesive comes to the sheet surface, the more these forces come into play and the greater adhesion strength between the sheet and the tape.



These photos show how strength builds up over the course of contact time. **LEFT:** 2 mins after GIB Weatherline® Flashing Tape installation. **RIGHT:** 20 min after GIB Weatherline® Flashing Tape installation, significantly stronger adhesive bond.

This is why it is recommended to use a GIB Weatherline® paddle or similar paddle to help create strong and consistent surface pressure on the tape when applying it to the sheet surface. The strength of the adhesive bond between the tape and sheet surface builds up over a period of hours.

### Durability and NZBC Compliance

As part of the wider GIB Weatherline® testing programme, GIB Weatherline® Tapes have undergone rigorous testing to ensure they are fit for use in NZ conditions. This includes BRANZ accelerated aged weather testing to simulate long term exterior exposure, GIB® Bracing and Fire system testing, and MBIE Guidance (Feb 2019) for External Wall Cladding System Vertical Fire Spread testing.

GIB Weatherline® systems are compliant with the relevant NZ Building Code requirements for rigid air barriers, are BRANZ Appraised 1048 (2019) for buildings within the scope of NZS 3604 and have Specific Engineering Design information available for buildings outside of NZS 3604.



**For more information call the GIB® Helpline 0800 100 442 or visit [www.gib.co.nz/weatherline](http://www.gib.co.nz/weatherline)**

**Also check out our helpful ‘How-to’ installation videos available on the GIB® website or the GIB® App.**

# OUR TRIED AND TESTED SOLUTIONS SUPPORT PANELLISATION MOVEMENT

## CASE STUDY 4

by John Kitchen  
Area Sales Manager  
- Architectural



Winstone Wallboards has been working closely with Fletcher Building's new panellisation business Clevercore, drawing on the extensive experience of our Engineering team to support the Clevercore factory teams and aligning or modifying our systems to allow rapid installation.

Panellisation, an element of prefabrication, has become a method by which we can deliver more buildings in New Zealand while not being affected by weather, adverse conditions or the lack of daylight hours. Building in a controlled environment such as a factory enables faster delivery of a semi-finished product to site come rain, hail or shine – enabling quicker installation and faster overall project completion.

We have been testing our systems to the way certain elements will be produced in order to show compliance to the building code. The build typologies are different and everything we are doing needs to be verified and technically precise – we double and triple check because ultimately what they are doing with our product isn't the norm, so it has to be verified.

We have worked with Clevercore to verify the systems for bracing, fire and acoustics in the mass-production process that they are using.

We are tailoring the solution to what the customer wants to achieve – in this case they have a large factory and want to produce in a way that is smart, efficient and correct.

# It's all part of the service.

## Specifically developed solutions – stapling systems

Staple fixing systems were part of the required scope to facilitate efficient manufacturing on the assembly line

and was a collaborative development between Winstone Wallboards engineers, Clevercore Architects and their engineers.

- The team worked on understanding the manufacturing line process.
- Assessed alternative panel hold down options for bracing.
- Developed a staple install option for GIB Weatherline® Rigid Air Barrier and other GIB® Plasterboard Bracing and Fire Systems.
- Stapled install option is tested at the ALTUS wind pressure booth.
- Stapled install option is tested on the P21 rig for bracing resistance.

When customers use our products or systems we work closely with them to tailor and test solutions to meet their needs, engaging our engineering and technical resources and availing them of our test results – it's all part of the service.

# GIB TRADETALK® LBP TRAINING SESSIONS

## EVENTS

by Doug Connors  
Technical Training  
Advisor



Let's face it, being a builder is not what it used to be. When I started my time earmuffs and safety glasses were often laughed at and building 3'x2' scaffolding while wearing safety Jandals was the 'norm'.

With the changes in our industry there is a drive to comply with codes and standards and a builder will often spend more time looking through plans and supplier manuals than actually banging bits of wood together.

GIB® plasterboard is the leading brand of plasterboard in New Zealand and is manufactured right here in New Zealand to meet our unique conditions. The Technical Support team are available 7.30am – 5.00pm, five days a week on the Technical Helpline 0800 100 442.

We also get around the country to hold technical workshops and training

sessions for everyone from the Building Consent Authorities and Councils to Architects, Tradies and building apprentices.

One of our core training platforms is the GIB TradeTalk® programme which provides attendees the opportunity to get into the nitty gritty of installing GIB® systems with our technical experts in a relaxed and comfortable environment, while also gaining valuable LBP points.

To date in 2019 we have held 34 GIB TradeTalks® across the country including our first sessions directed towards the Asian installer community.

Next year's programme will include sessions on GIB® Rondo® metal batten systems as well as the always popular GIB® Fire, Noise and Bracing systems.

**To find a GIB TradeTalk® session in your area check out the 'Training and Events' tab at [gib.co.nz](http://gib.co.nz) or keep an eye out for notifications through your email or via the GIB® App.**

Alternatively, you can contact us directly on 0800 100 442 or via your local building merchant to find out when the next session is due to be held in your area.

# ACHIEVING A LEVEL 4 OR 5 FINISH

## TECHNICAL

by Graeme Robertson  
Senior Technical Advisor



Levels of finish is an age-old discussion where everyone seems to be an 'expert' but not everyone knows the facts. Watching a YouTube clip can magically turn a novice into an expert overnight and "a friend told me..." gives confidence beyond the ability to fully grasp what is actually involved.

So let me help bring some facts to the conversation.

Firstly, let's reference where all the facts come from. Winstone Wallboards is a product manufacturer, we make products to be used within and satisfy

requirements based on the standards AS/NZS 2589:2017 Gypsum linings – Application and finishing. Most of the recommendations and methods in our GIB® Site Guide and other literature are based directly on this and associated standards.

## Let's start with Level 4

The key requirements of achieving a Level 4 finish are;

- 1 x base coat of GIB® jointing compound with GIB RocTape® or GIB® Paper tape in the joint.
- A second coat of GIB® compound typically 170mm wide.
- A final coat of GIB® compound no less than 250mm wide for a tapered joint or 500mm for a butt joint.
- A joint build depth of no more than 2mm over the width of the joint and not forming a "peak" (that means an obvious line).

## Level 5

Typically, Level 5 is specified where Semi-gloss paint is to be used and/or where Critical Lighting conditions occur. Including the requirements of Level 4 (as previously), Level 5 additionally requires:

- Tighter tolerances in the framing preparation (AS/NZS 2589).
- All Joints must be back blocked, walls and ceilings.
- An air-drying compound to be applied over the entire surface, this could be sprayed, rolled or troweled on.

When assessing the finished quality, this should be done at handover from stopper to painter. A coat of sealer can help highlight any imperfections while still showing the joint widths.

Standing 2 metres away from the wall under normal lighting conditions, not with a high powered light glancing across the surface, is the accepted way to inspect the finish.

Exposing the wall to any expected critical light may reveal an unexpectedly imperfect surface, even with a good level 5 finish.

Level 5 includes a skim coat however this is not to flatten the surface but to remove the differential porosity between the joints and the board face paper. If unwanted imperfections are still visible or highlighted with a level 5 finish under critical light, then either the critical lighting needs to be avoided, or a different finish applied to the wall for example, solid polished plaster. Additional things to look for are:

- Over sanding whereas to damage the surface paper.
- No visible gouges, 'pin holes' or pock marks.
- Definitive tool marks.

**For further information refer to the GIB® Site Guide, also available on the GIB® App, or call the GIB® Helpline 0800 100 442.**

# REINFORCING TAPE FOR GIB® PLASTERBOARD JOINTS – PREVENTING FAILURES

## CASE STUDY 5

by Zoe Xie  
Development Chemist



The reinforcing tape in plasterboard joints form a critical component to achieve the performance stated in various GIB® systems.

A taped and stopped plasterboard joint provides the load transfer mechanism between plasterboard sheets in GIB EzyBrace® Systems. Stopped and taped joints are also important to achieve stated performance in GIB® Fire Rated Systems and GIB Noise Control® Systems.

Setting compounds (plaster-based) typically provide better tape adhesion and joint strength compared to using a multi-purpose air drying compound. Hence setting compounds are recommended for bedding in joint tapes.

Setting compounds need to be fully hydrated to set (by a chemical reaction) after the specific working time and cannot have dried out (ie, water needs to be present for the plaster to react and form the gypsum crystals). Also when bedding in the joint tape, appropriate contact is needed between the compound, the tape and the plasterboard surface to produce a strong bond.

- Chemical reaction. The bond strength of a setting compound is developed by a chemical reaction, which requires water to hydrate, crystals to form and set hard after a specific working time.
- Adequate contacts. Comprehensive mechanical entanglement of the setting compound with the surface of plasterboard and joint tape is also required to create a good joint and finish.

In New Zealand two types of jointing tape failure are more commonly observed.



FIGURE 1: Basecoat compound has a darker colour and indicates it has set properly.



FIGURE 2: Basecoat compound is lighter in colour and shows it has not set properly.

### Dried before setting.

One common failure is when the chemical bonding process is not fully accomplished due to water loss in the compound and insufficient water present when setting needs to occur. This phenomena is where the compound has dried out before it sets and there is no, or insufficient, water left in the compound after the working time has finished. The plaster then doesn't have water for the chemical reaction to occur and form gypsum crystals. The drying out before setting phenomena is more common during hot weather conditions and when using compounds with longer working time. Figures 1 and 2 show the colour differences between a standard hydrated setting compound. The dark basecoat plaster hydrated to form gypsum crystals. Compared with the much lighter in colour, dry basecoat compound that has not set and is still plaster that hasn't changed to gypsum.

When the plaster hasn't set it is still soft. Scrapping the light coloured joint (with the plaster that hasn't set) a deep gouge is made. As opposed to scrapping the darker coloured joint (where the plaster has set and changed to gypsum) only a shallow scratch is made (see figures 3 and 4). Also when the plaster hasn't set the bonding strength isn't there to hold in the tape and causes the bedding coat to fail.



FIGURE 3: A scratch in a properly set basecoat is only super-visual and indicates it is hard.



FIGURE 4: A scratch in a basecoat not properly set goes deep/right through and indicates it is soft.

### Inadequate compound/plaster under the tape.

The other common failure seen with paper joint tapes is where the joint has bubbled, cracked or is falling out. These symptoms are often due to the lack of mechanical entanglement with the surface of the plasterboard or paper joint tape and are referred to as tape adhesion failure. Good tape adhesion requires an adequate amount of compound placed behind/under the paper joint tape. At least 0.5mm thickness of compound is required under paper joint tape.

Figures 5 and 6 show the performance of a standard paper tape joint and compared to a failed embedded paper joint tape that had inadequate contact between the plaster, the surface of plasterboard or paper joint tape. The joint will not achieve adequate reinforcing if inadequate compound has been placed underneath the paper joint tape.

Figure 7 shows where the two plasterboards sheets that form a joint are not flat (ie, one is higher than the other). Half the paper joint tape has adhered well (ie, the lower half where the paper is delaminating when pulled out), and half the paper tape hasn't adhered well and comes out relatively cleanly. Under the top half of the paper tape there is little compound, it is so thinly applied that the plasterboard paper can be seen.

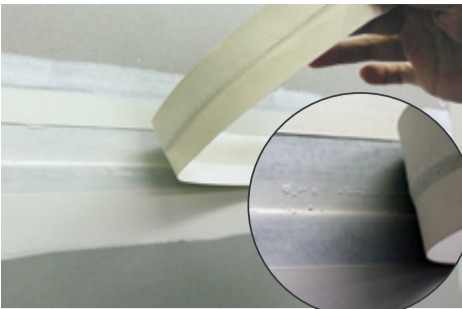


FIGURE 5: Inadequate compound under the tape and the tape can be removed relatively clean and easily.



FIGURE 6: Here the tape has adhered well. It is difficult to pull out and delaminates when pulled out.

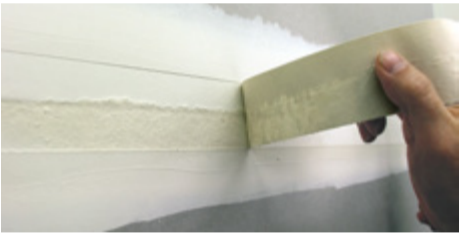


FIGURE 7: Shows lower half of the tape has adhered well to the basecoat and the top half has not, indication inadequate compound under the top half.

In summary, both well hydrated compound and adequate compound under the paper joint tape are essential to avoid two common joint tape failure modes in New Zealand conditions. A well hydrated compound is needed for the chemical reaction to occur and form a strong bond as the compound sets. Adequate compound under the paper joint tape is needed for good tape adhesion, created with proper mechanical entanglement between the tape, compound and plasterboard.

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# OPEN CHRISTCHURCH

## EVENTS

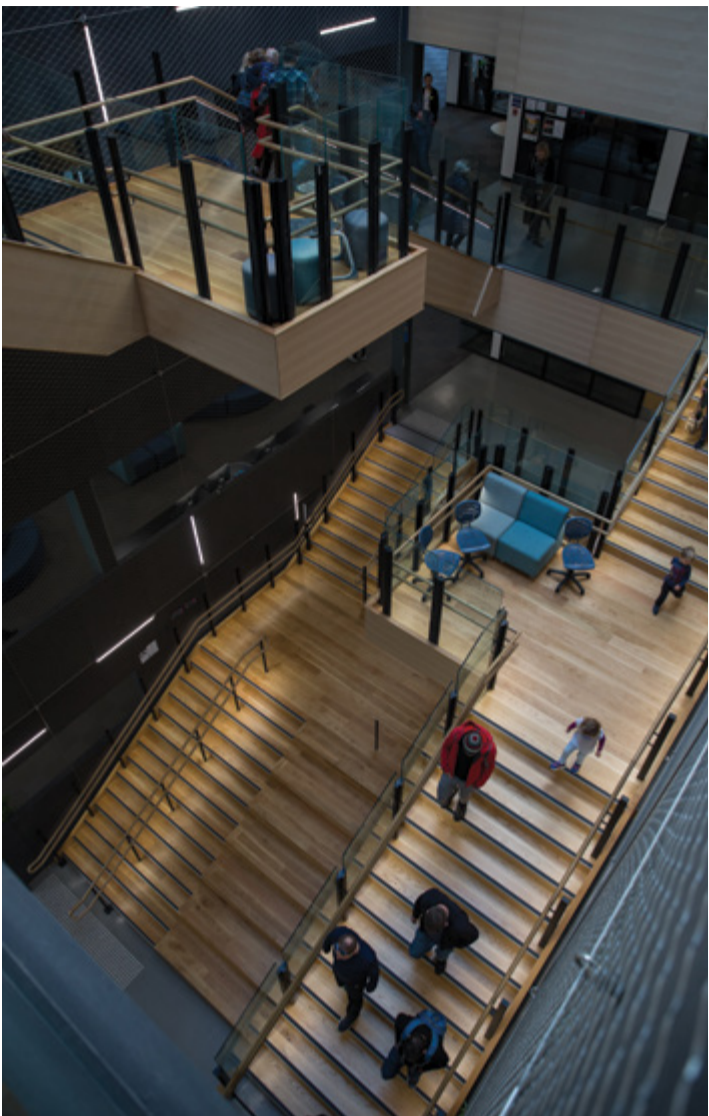
by Clara Sumner  
Partnership Manager



Winstone Wallboards recently supported a new architectural event - Open Christchurch - which was a hit with the public and architects alike. For 11 weeks over winter, Open Christchurch allowed the people of Christchurch, and visitors to the city, to discover the city through architecture.

The mix and variety offered by the open buildings and guided walking tours attracted over 2300 people. Attendees relished this rare opportunity to experience three very different inner city schools - getting behind the scenes and gaining access to works of architecture that aren't usually accessible to the public.

The programme was developed and presented by Te Pūtahi - Christchurch centre for architecture and city-making. Director Jessica Halliday says the idea won't be a one-off and that they are planning much bigger events for the coming years. "Christchurch has changed so much in the past nine years and people are hungry to encounter and learn about their city's new buildings and reacquaint themselves with restored and strengthened heritage treasures."



TOP LEFT: Open Christchurch: Christ's College. Photo: Peanut Productions. RIGHT: Open Christchurch: Ao Tawhiti. Photo: Peanut Productions. BOTTOM LEFT: Open Christchurch: The Cathedral Grammar Junior School. Photo: Peanut Productions.

"The schools were wonderful in inviting us all in and we couldn't have done it without the support of the construction sector. Winstone Wallboards were major sponsors for the event alongside Resene. The Warren Trust and Christchurch City Council also provided funding and the NZIA and ADNZ were event partners, with several members of those organisations, alongside engineers, art historians and other volunteers, providing tours of the open buildings.

"One of the reasons people told us they embraced the open building events so readily was because it was free to attend. This meant Open Christchurch was accessible to families and fixed income households. The meaningful support of our sponsors and funders meant more people learnt about the value of well-designed places. People have told us how much they enjoyed these encounters with buildings and that they want to see and learn more about the

city's architecture again in the future. We are planning more events - so watch this space!"

*The Article was supplied by Dr Jessica Halliday, Director - Te Pūtahi Christchurch centre for architecture + city-making.*

# WE'VE DONE IT AGAIN

## EVENTS

by Sarah Joblin  
Marketing Services  
Co-ordinator



A big thanks to all those who voted for us in this year's Hardware Awards.

We feel very humble to have won the 2019 Supplier of the Year - Building Supplies award, for the 15th consecutive year.

The award is voted on by our merchant customers and it is wonderful to be recognised by them as being number 1 by the customers choice.

This is a huge sign of appreciation from our customers for what every individual does across the business every day, to make things as easy as possible for them. Thank you very much to everyone.

"This doesn't happen by chance or by standing still. It is because of the attitude of each of us delivering for our customers in every interaction and continually looking for ways to raise the bar and be better tomorrow than what we are today," says Marketing Manager Troy Smith.

We believe this is the best recognition we can get, and it's an accolade we are extremely proud of.



ABOVE: Hardware awards

