

Wall Linings Design Manual

an enduring solution for high impact surfaces



“premium spaces that enable a better user experience”

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01

Product Details

About the Product

Compact laminate is a very versatile and durable panel product that can be used in a variety of applications, particularly for interior surfaces where strength, resistance to wear, resistance to impact, and hygiene are important. Compact laminate is a high-pressure laminate (HPL) made from layers of kraft paper which are impregnated with resins and bonded together under high pressure and temperature.



Key Characteristics and Applications of compact laminate include:

- 1. Strength and Durability** – Compact laminate is known for exceptional strength and durability. It can withstand heavy loads and is resistant to impact, scratches, and abrasion.
- 2. Water and Moisture Resistance** – Compact laminate is highly resistant to water and moisture, making it suitable for use in areas prone to wet conditions, such as bathrooms, kitchens, and swimming pool surrounds.
- 3. Chemical Resistance** – Compact laminate is resistant to a wide range of chemicals, making it a suitable choice for laboratories, medical facilities, and industrial settings.
- 4. Decorative Options** – Compact laminate is available in a wide range of colours, patterns and textures, allowing for aesthetic customisation. It can mimic the look of natural materials such as wood or stone.
- 5. Hygienic Properties** – Compact laminate surfaces are easy to clean and maintain, and they do not support the growth of bacteria, making them ideal for use in healthcare and food preparation areas.
- 6. Fire Resistance** – Depending on the specific product and its composition, compact laminate offers good fire resistance properties.

02

Product Advantages

Advantages of Prefinished Linings

Unlike traditional lining sheets, prefinished linings are already prepared for installation, saving you both time and effort as there is no need for any additional finishing after installation such as on-site skimming and painting.



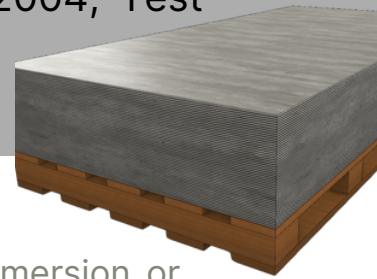
Some of the benefits of prefinished linings include:

1. Time Saving – as prefinished linings arrive ready for installation, the on-site time is significantly reduced compared to traditional lining sheets.
2. Consistency – they are manufactured in a controlled environment, guaranteeing consistency and a high-quality finish.
3. Reduced Mess – mess and dust during the installation process is significantly reduced as there is no need for onsite sanding, staining, or painting.
4. Durability – factory-applied finishes are often more durable and long-lasting than onsite finishes.
5. Aesthetic Options – the variety of finishes, colours, and styles available allows you to choose the one that best suits your interior design.

03

Durability

The durability of compact laminates for internal use shall be demonstrated by testing the following properties: immersion in boiling water in accordance with EN 438-2:2005, Test method 12, and density in accordance with EN ISO 1183-1:2004, Test method A.



Limitations

- Compact laminate panels must not be subjected to submersion or continuous immersion in water
- When exposed to direct sunlight, slight fading may be visible over time.
- Compact laminate can not be used as a bracing panel element.
- In places exposed to the external elements, exterior-grade compact laminate should be used.

Handling & Storage

Compact laminate must be stored in dry conditions and handled in accordance with this document. All the recommendations are general and there may be variations depending on each individual situation.

- Keep sheets flat by stacking them on evenly spaced bearers/gluts which extend across the full sheet width.
- When stacking high, line gluts vertically one above the other.
- Care of the sheet face is essential to protect the decorative surface.
- To avoid damage to the surface, lift rather than drag the sheets off the stack.
- Leave protective film on the sheets until ready for use.

03

Durability

Cleaning

- The recommended cleaning products are warm soapy water, Sunlight Liquid, and Multipurpose Spray and Wipe.
- Adhere to the cleaner manufacturer's instructions when using cleaning products.
- A soft cloth is recommended.
- Do not use scouring pads, cream cleaners, or abrasive cloths such as steel wool as these may cause damage to the surface finish.
- An electrostatic dusting cloth easily removes dust from the surface.

Cutting

- Circular saw blades are generally suitable for cutting compact laminate, while blades of less than 2mm are not suitable.
- Break-out on the underside of compact grade sheets can be reduced by various methods:
 - Using a pre-scoring blade on the underside.
 - Using a baseboard of plywood or hardboard beneath the sheet.
 - Altering the exit angle of the saw blade by adjusting the height setting.
- The pre-scoring saw usually runs in a forward or reverse direction.
- The quality of the saw cut when sawing compact grade laminates with two decorative faces is controlled by the feed speed. For optimal results, use a speed between 0.03 and 0.05mm per saw tooth. An effective way to prevent chipping of the lower decorative layer is by adjusting the exit angle.

Click Links Below for How To Videos:

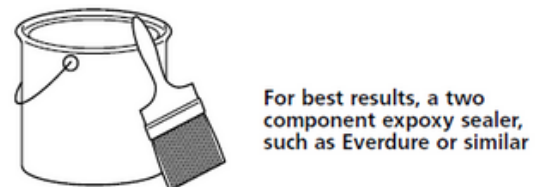
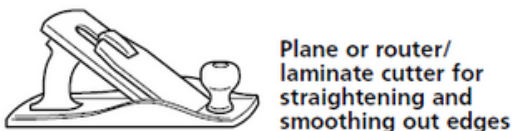
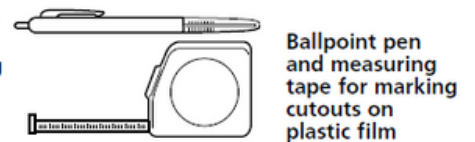
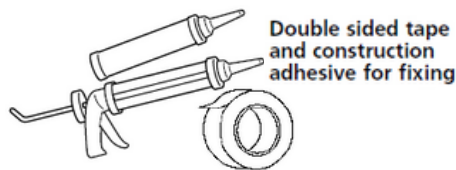
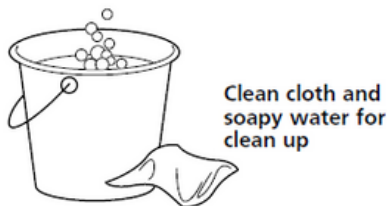
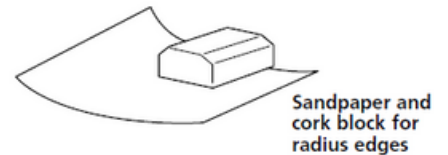
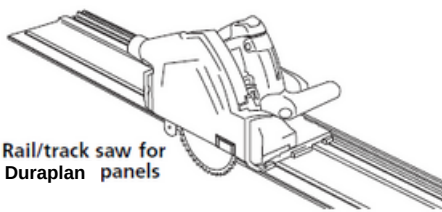
[Edge Scribe](#) [Preparing & Marking](#) [Preparing, Marking, and Cutting Rail Saw](#)
[Utility Penetrations](#) [Compact Laminate pt. 1](#) [Compact Laminate pt. 2](#)

04 Planning

Planning & Installation

Compact Laminate sheets are relatively simple to install using construction adhesive, and if desired, double-sided foam tape. These sheets can be directly applied to a timber frame wall or laid over various substrates like plasterboard, plywood, or MDF. During the planning phase, it is crucial to select the most suitable jointing and fixing method for your desired result.

Tools & Accessories Required



04

Planning

When planning, remember not all surfaces and intersections are flat and square, including walls, ceilings, and floors. It is usually advisable to begin in the centre of the wall or ceiling with a full compact laminate sheet and work out towards each side.

- Plan for part sheets to be placed at the corners of the room.
- Ensure sheet joints (and jointers where appropriate) coincide with the centre of studs or supports when installing directly to timber framing.
- Complete plan for joint sequence layout.

Timber Framing

- Ensure the timber support (nog/dwang/batten/stud) faces are straight, in alignment, and flush.
- Studs and nogs need to be at 600mm maximum centres for 1200mm wide sheets. For ceilings, suitable sized battens should be spaced at 400mm centres.
- Ensure all support surfaces to be bonded are clean and dry (maximum moisture content 18%)

Lined wall and ceiling linings

- Walls and ceilings lined with plasterboard or similar are suitable for direct fixing providing the surface is flat, sound, and properly fixed.

Renovations

- When using compact laminate panels to reline over existing walls or ceilings, previously painted surfaces should be cleaned and then scuffed with coarse abrasive paper to form a key for adhesion.
- Old shower linings must be removed before installation of new sheets. Existing framing and plumbing should be inspected to ensure no degradation has occurred.
- Check the adhesive doesn't soften old paint work.

04

Planning

Concrete and masonry walls and all ceilings

- Do not fix directly to concrete or masonry walls.
- Ensure the concrete/masonry wall is dry and will stay dry. It may be necessary to apply a waterproof membrane to prevent continuous moisture problems.
- Strapping and battens must have a damp-proof course between timber and concrete.
- For ceilings, suitable sized battens should be spaced at 400mm maximum centers.
- Fix strapping with nails or screws.

Check sheets & precondition

- Always check for colour match when sheets are on the same wall plane or where colour/shade matching is critical. For areas where colour matched sheets are desired, order as “batch matched” to minimise colour variation.
- Precondition panels: fillet stack pairs of panels and leave for at least 48 hours in the room where they will be installed.

Removing the packaging and protective film

- A sheet of protective film protects the face of each compact laminate sheet. The film is designed to keep the sheet clean and to protect against scratches. The film should be removed in two stages:
 - 1. Initially 50mm should be removed from all edges to allow for jointing/sealing.
 - 2. Only when the sheet is completely installed should the remainder of the film be removed.

Click Links Below for How To Videos:

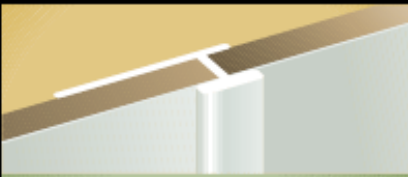

[Plastic Protection](#) [Removing Plastic on Wall Face](#)

04

Planning

Fixing sheets

- Refer to the table.

Application type	Aluminium mouldings
Dry area	
Wet area	

Fixing onto plasterboard lining

- Ensure all bond surfaces are clean, dry, and free from dirt, dust, oils, or any other surface contaminants.
- Apply continuous full panel length of double-sided tape to the back of the panel at 400mm centers.

Click Link Below for a How To Video:

[Double Sided Tape Application](#)

04

Planning

Fixing onto plasterboard lining

- Apply continuous full-length beads of adhesive no less than 10mm in diameter to the back of the panel at 300mm centers between the strips of adhesive tape.

Click Link Below for How To Video:

Adhesive Application

- Ensure the adhesive doesn't encounter or interfere with the double sided tape.
- Remove tape backing, place the panel into the correct position, and apply pressure to ensure full contact over the entire surface area of the panel.

Fixing directly onto timber studs

- Nogs shall be at 600mm centers (three rows of nogs when direct fixing to framing).
- Ensure all bond surfaces are clean, dry, and free from dirt, dust, oils, or any other surface contaminants.

04

Planning

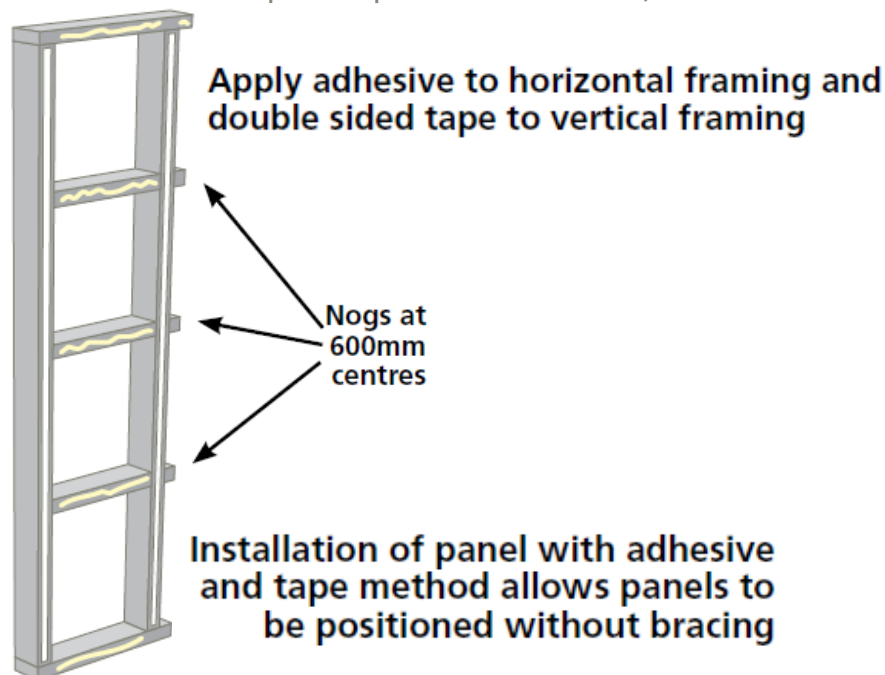
Fixing directly onto timber studs

- Apply continuous full panel length beads of double-sided tape to the right or left of the centre of each vertical stud where two panels will be joined (edge stud). All sufficient room between the two strips of double-sided tape for the jointer to be located (no adhesive will be applied to these studs).

Click Link Below for How To Video:

[Double Sided Tape Application](#)

- Apply continuous panel length beads of adhesive no less than 10mm in width next to the strips of double-sided tape on each centre stud. (Each stud supporting the sheet edge should now have a strip of double-sided tape, and each stud supporting the centre of the sheet should have both a strip of tape and adhesive).



04

Planning

Fixing directly onto galvanised steel studs

- Ensure all bond surfaces are clean, dry, and free from dirt, dust, oils, or any other surface contaminants.
- Scuff surface of galvanised framing with Scotch-Brite (or similar)
- Apply a degreaser to fully flash off the bond surface before applying adhesive.
- Apply continuous full panel length beads of adhesive no less than 10mm in width to each stud.
- Place the panel into desired position and apply pressure to ensure full contact between the steel framing and the panel.
- Position timber supports to ensure pressure is provided while the adhesive cures.

05

Installation

Installation of jointers using aluminium

- The aluminium jointing systems are designed for use in both wet and dry areas. The system is suitable for installation on fully lined walls/ceilings (plasterboard) or direct to timber studs.
- At the installation starting point:
- For cutting compact laminate jointers, use circular drop saw with blade suitable for cutting aluminium
- Mark out the areas for penetrations on the protective film and cut it.
- Take the first panel and peel the protective film approximately 50mm from the edge.
- For jointers, nail jointer in place using galvanised flat head nails, at 300mm centres.
- For aluminium jointers, screw fix, glue, or tape in place (countersink screws at 300mm centers).
- For all wet areas, apply a continuous bead of silicone into the jointer recess before inserting the panel.
- If you have difficulties inserting panels into the jointers, lightly sand the back of the panel and then reseal per manufacturers' recommendations and fixing instructions.
- Continue installation by inserting each new panel into the jointer of the previous panel. Screw, glue, or tape the jointers to studs/substrates as installation progresses.
- Check for adhesive and silicone spillage and clean off if necessary.

Click Links Below for How To Videos:

[Fitting Joiners](#)

[Fitting Panels pt. 1](#)

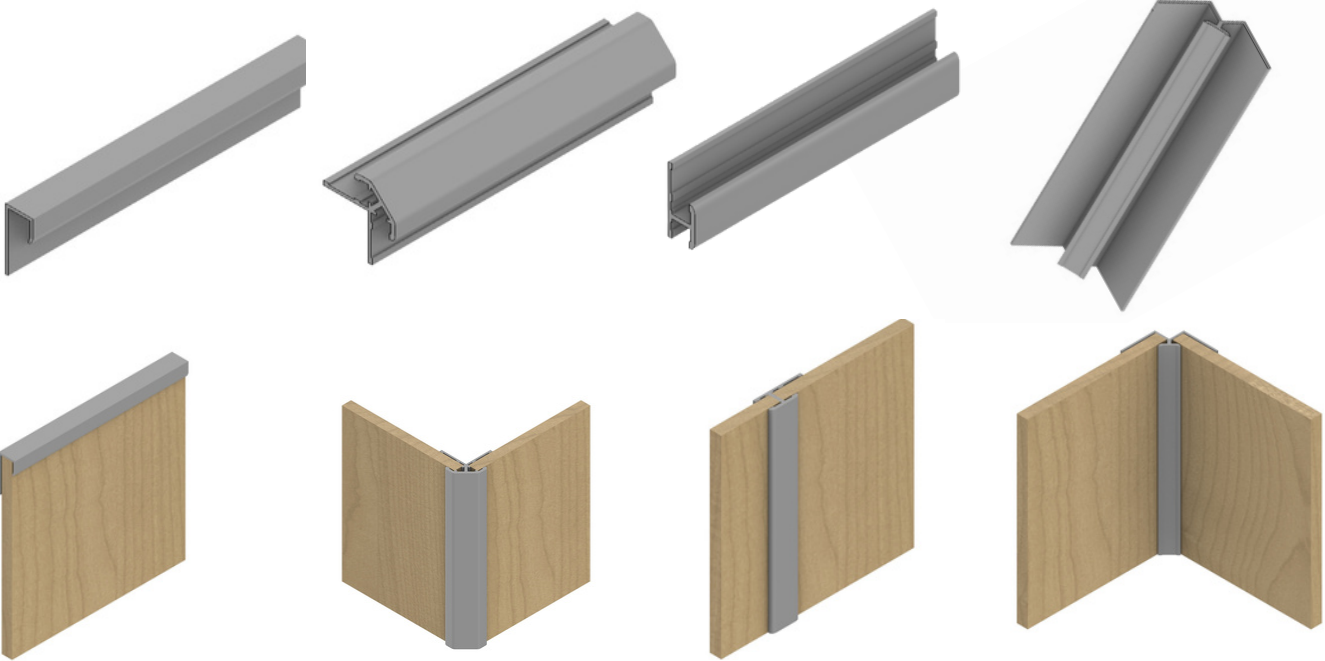
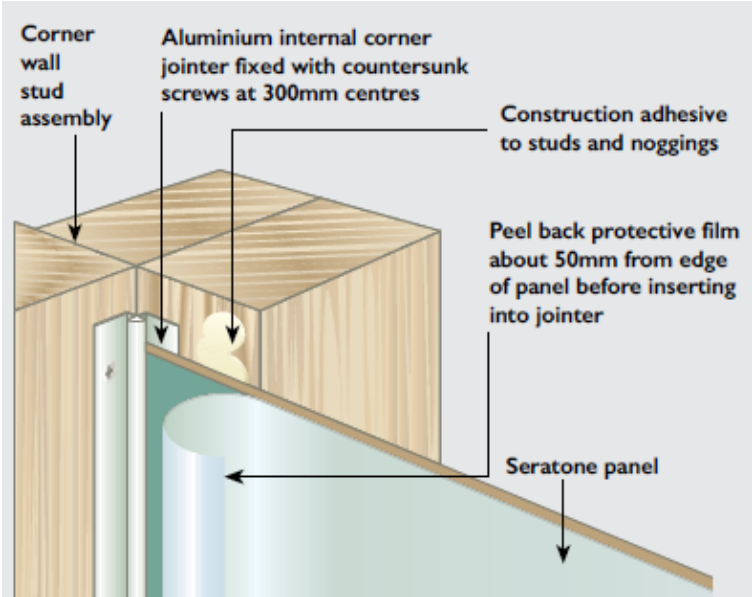
[Fitting Panels pt. 2](#)

[Packing & Dry Fiting](#)

05

Installation

Installation of Aluminium Jointers Using Aluminium



05

Installation

At the installation starting point

- Apply construction adhesive and/or double-sided tape to the framing, or substrate as per manufacturers' recommendations and fixing instructions.
- If fixing using construction adhesive, follow the manufacturer's recommendations.
- Fix stop nails against the trailing edge of the panel to provide the required gap between sheets.
- If fixing using construction adhesive only, temporarily brace the panel edges against the stud while the adhesive cures, using blocks fixed to framing with small diameter nails. If fixing using a combination of adhesive and tape, this step is not necessary as the tape will hold the panel in place while the adhesive cures.
- Continue the process until panel installation is complete.
- Carefully remove stop nails as installation progresses.
- Clean out any adhesive showing between the panels.
- Once adhesive cures, remove blocking.
- Peel approximately 50mm of the protective film from panel edges (leave balance on the panel until installation completed).

06

Duraplan Applications

- Bathroom, shower wall, and ceiling linings
- Laundry and kitchen splash backs
- Commercial, industrial, and healthcare spaces



07

Product Sizing

Duraplan Wall Linings are available in following sizing:

6mm Range	3mm Range
2440x1220	2440x1220
2700x1220	2700x1220
3050x1220	3050x1220

Note: the colors and sizes available will depend on stock and current project commitments. It is recommended to reach out to sales@duraplan.co.nz to confirm and secure your order ASAP.

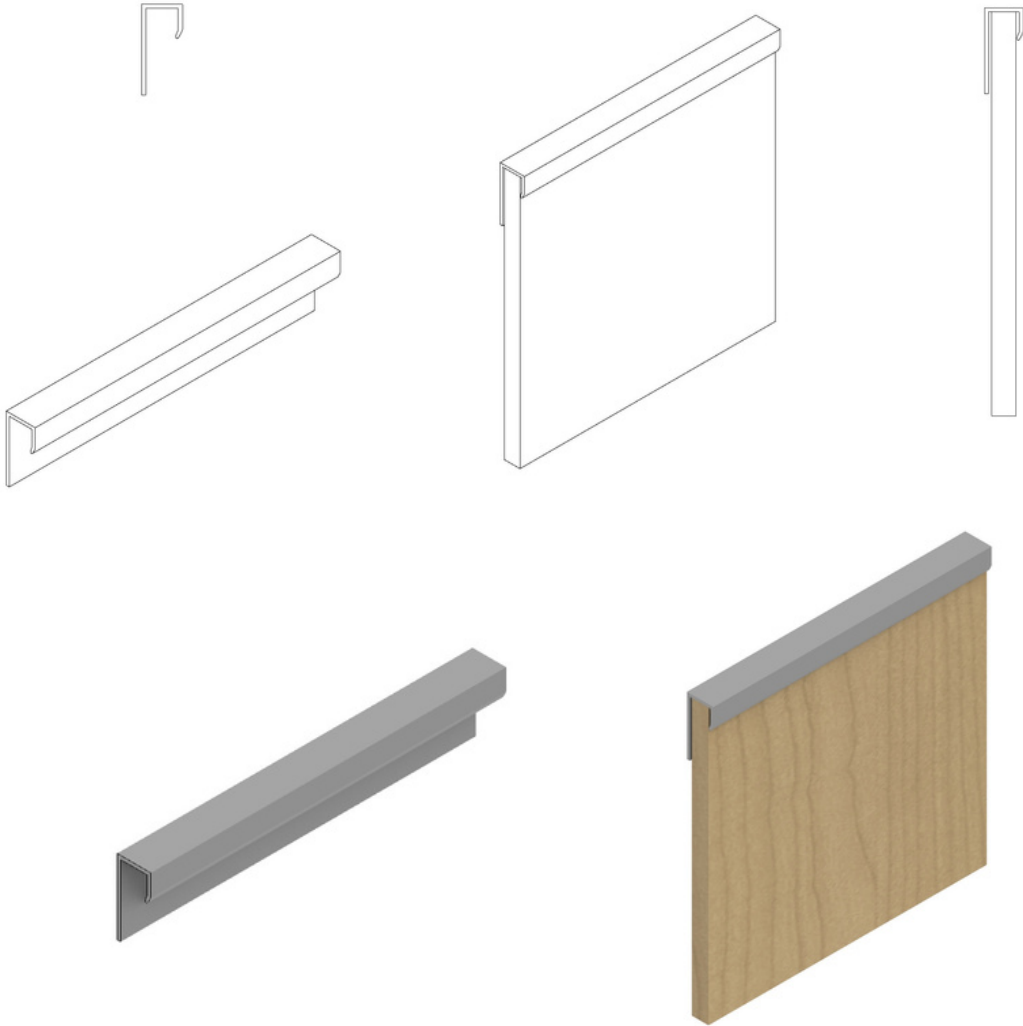
Technical Properties

- Product details and components
 - Glue
 - Tape
- Colours
 - 3mm & 6mm Stocked Range (refer to colour chart)
 - 3mm & 6mm Extended Range - 12 week lead time applies (refer to extended colour chart range)

08

Duraplan Product Details

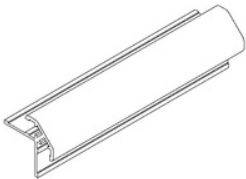
Jointers - Capping



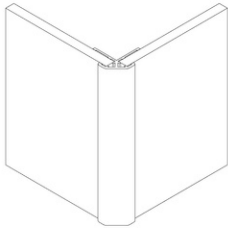
08

Duraplan Product Details

Jointers - External Corner



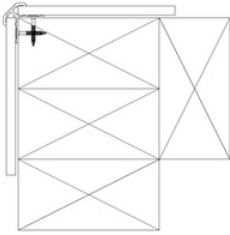
External Corner



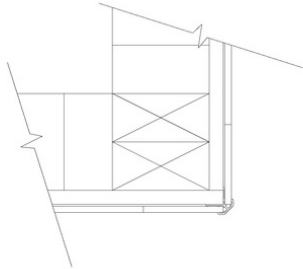
External Corner 2



External Corner 3



Screw Fixing



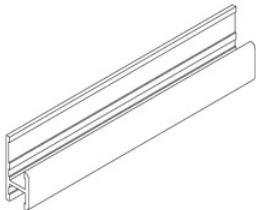
External Corner 4



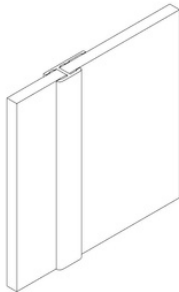
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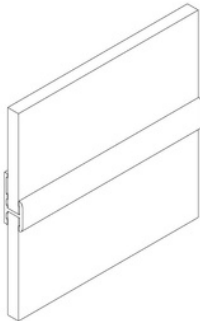
Jointers - H Joiner



H Joiner



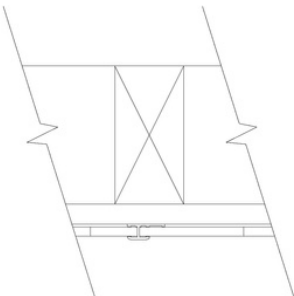
H Joiner Vertical



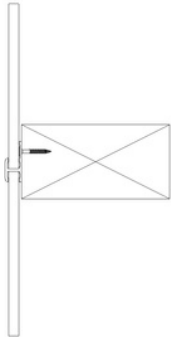
H Joiner Horizontal



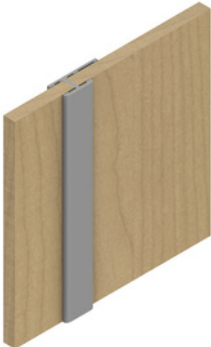
H Joiner



H Joiner



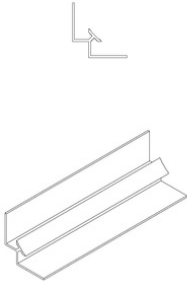
Screw Fixing



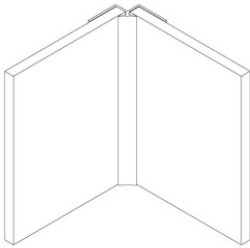
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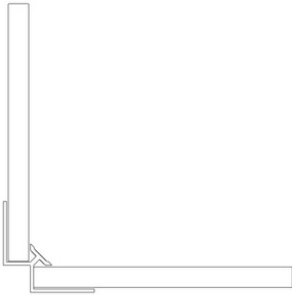
Jointers - Internal Corner



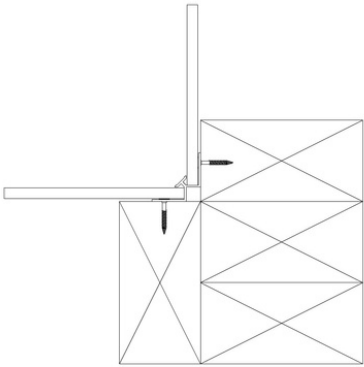
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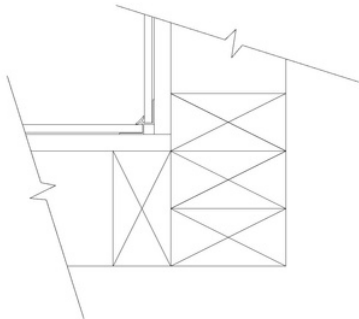
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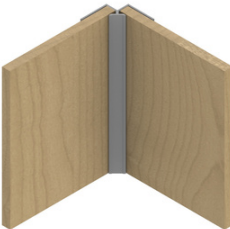
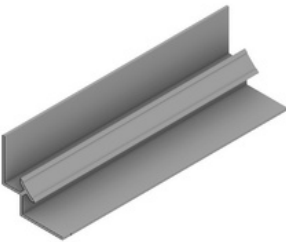
Internal Corner



Screw Fixing



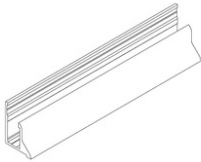
Internal Corner



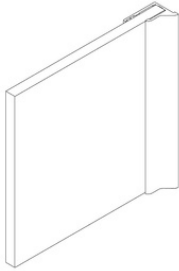
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Duraplan Product Details

Jointers - Internal Corner



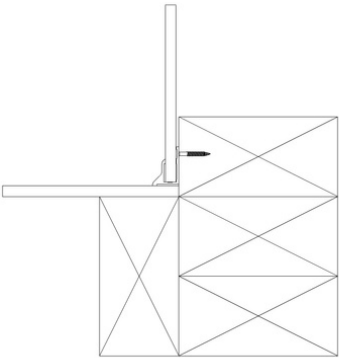
Internal Corner Cap



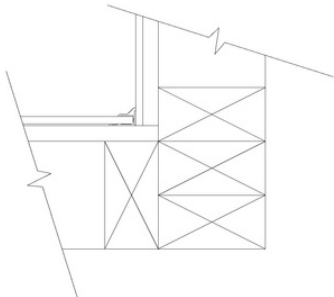
Internal Corner Cap 2



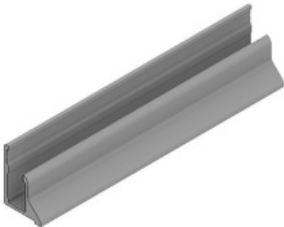
Internal Corner Cap 3



Screw Fixing



Internal Corner Cap 4



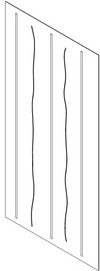
08

Duraplan Product Details

Glue and Tape - Methodology



Glue and Tape Application



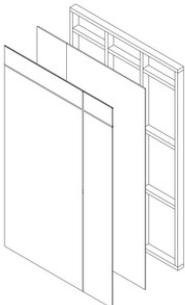
Double sided tape and glue to gib



Double sided tape to framing



Double sides tape and glue to framing



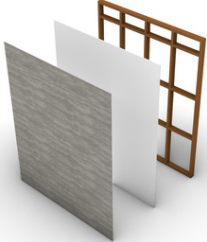
Recomended Application



Double sided tape and glue to gib render



Compact to Framing



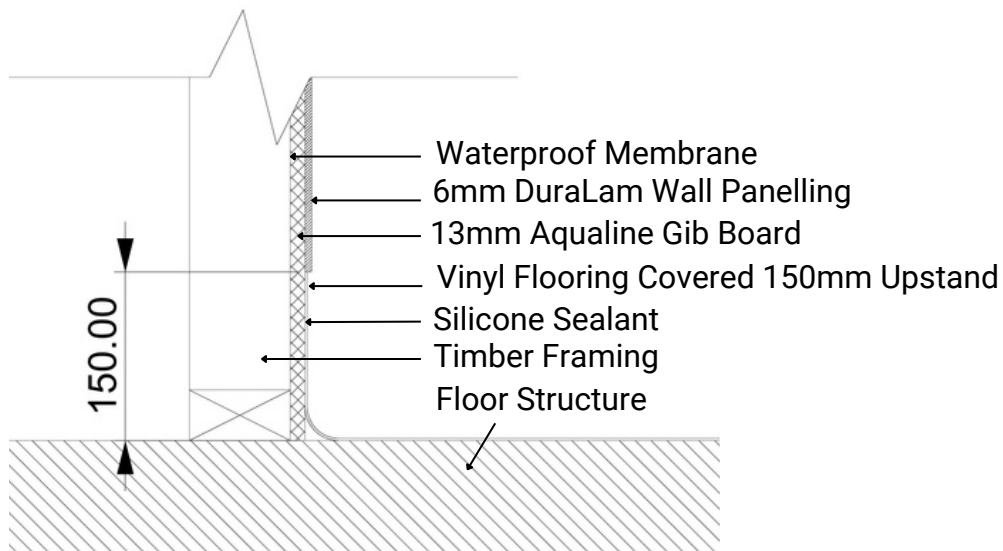
Recomended Application Perspective

08

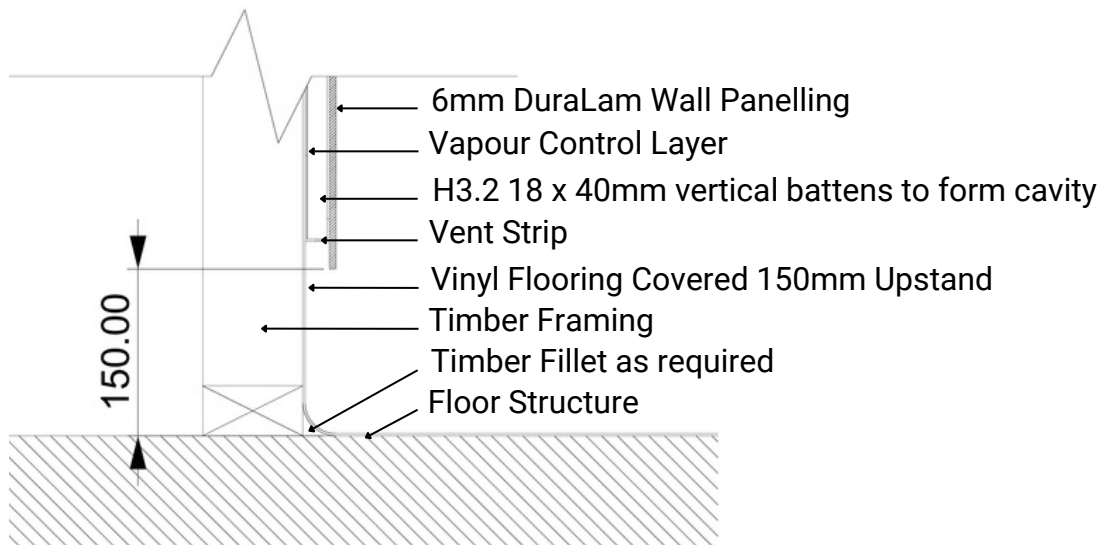
Duraplan Product Details

Floor Junction - Potential details

150mm Vinyl Core (Direct)



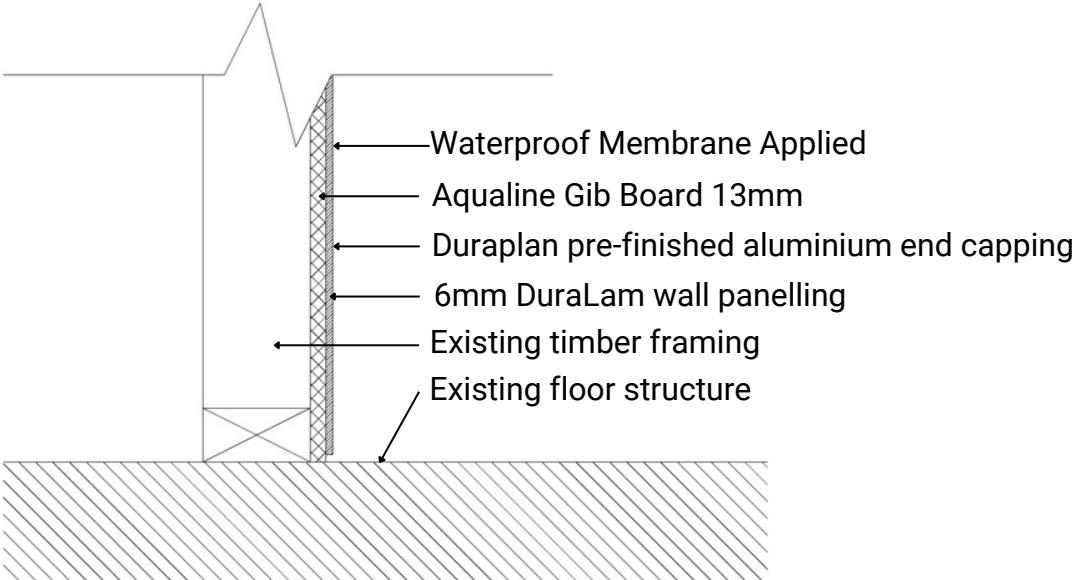
Core With Cavity Batten



08

Duraplan Product Details

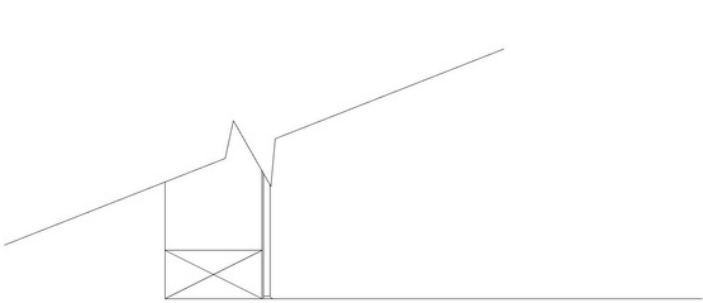
Floor Junction - Potential details



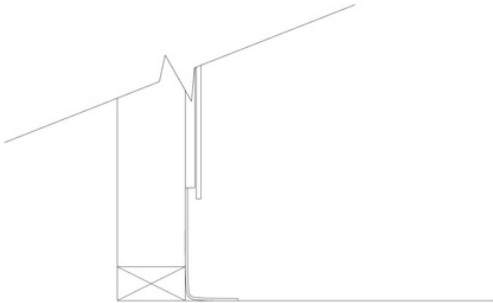
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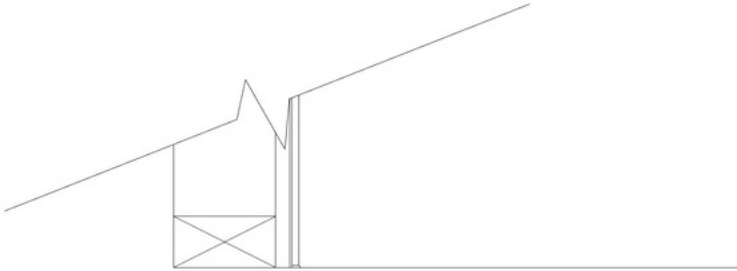
Floor Junction



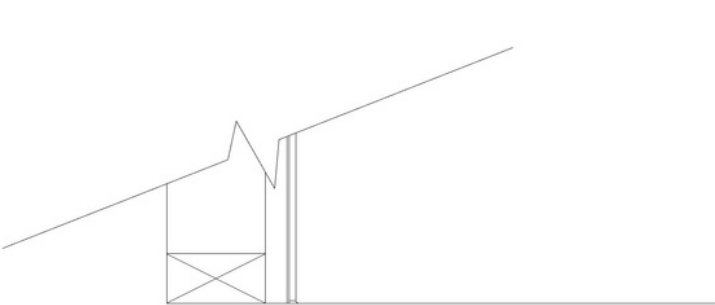
Floor Junction with Silicone



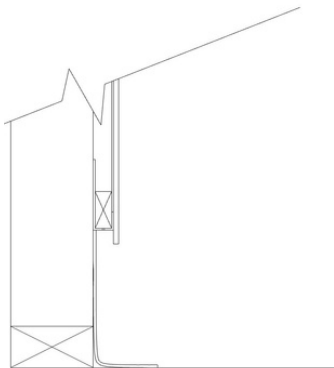
Not To Floor Junction With Gib



Floor Junction with Silicone and Gib



Floor junction with Silicone and Batten

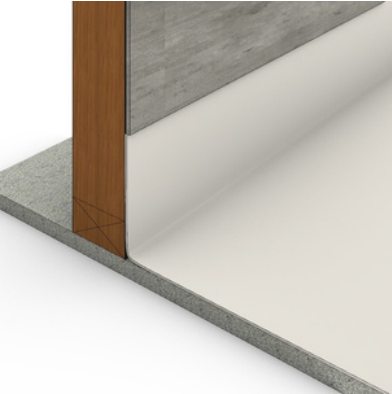


Not To Floor Junction With Batten

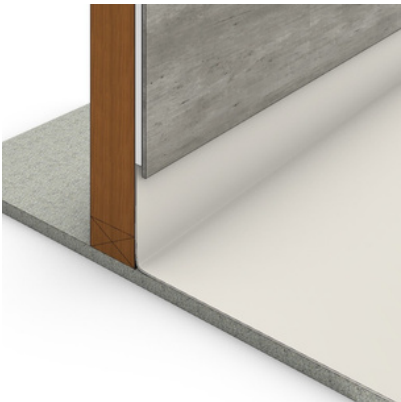
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Duraplan Product Details

Floor Junction Details - Images



Floor Junction with Vinyl



Floor Junction with Gib and Vinyl



Floor Junction with Batten and Vinyl



Floor Junction with Gib



Floor Junction on Framing



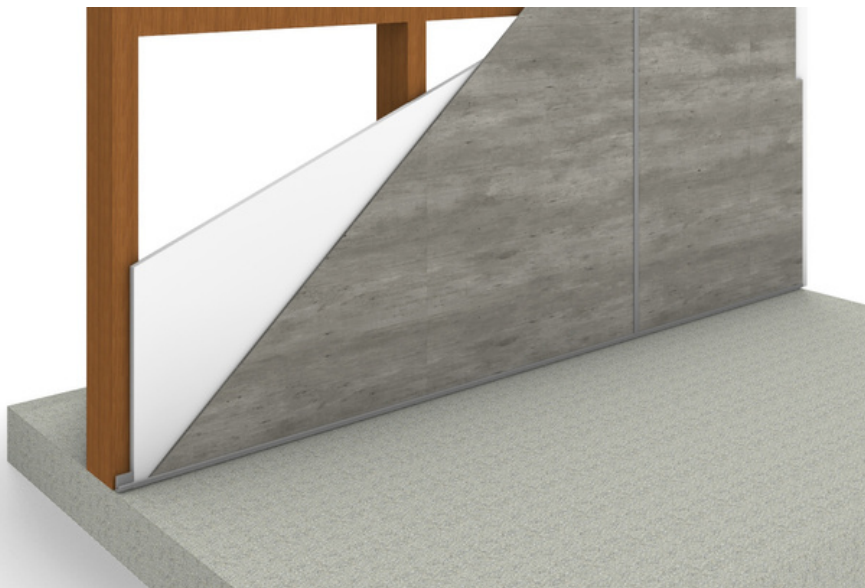
Floor Junction with Batten

08

Duraplan Product Details

Floor Junction - Standard Construction Details

Compact Laminate To Floor



08

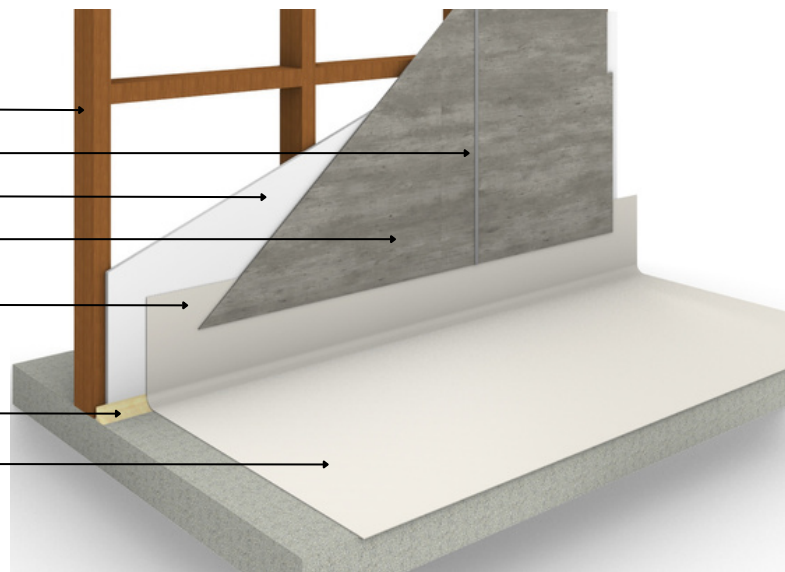
Duraplan Product Details

Floor Junction - Standard Construction Details

Vinyl Core

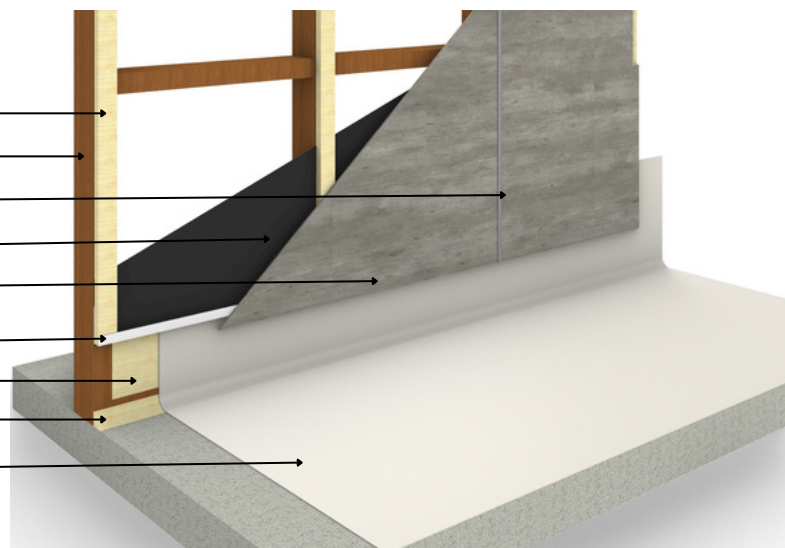
Panel 150mm From FFL

- Typical timber framing
- Duraplan pre-finished aluminium H joiner
- Aqualine gib board 13mm
- 6mm Duralam wall panel
- 150mm wall panel over hang to vinyl
- timber fillet as required
- vinyl flooring



Vinyl Core with Batten

- H3.2 18 x 40mm vertical battens to form cavity
- typical timber framing
- Duraplan pre-finished aluminium H joiner
- vapour control layer
- 6mm Duralam wall panel
- vent strip
- H3.2 200 x 45mm additional framing
- timber fillet as required
- vinyl flooring



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Duraplan Product Details

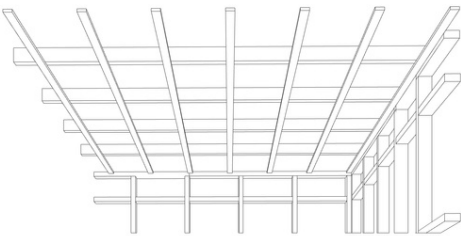
Floor Junction Perspectives - Standard Construction Details



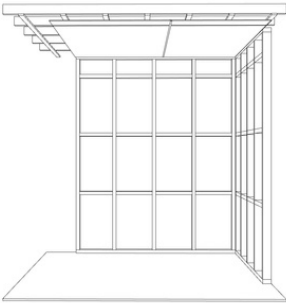
08

Duraplan Product Details

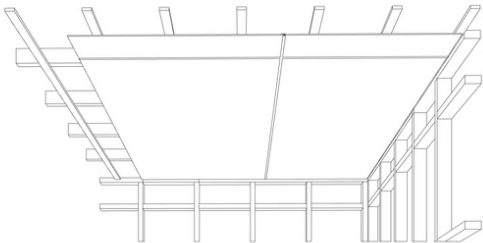
Ceiling Junction - Standard Construction Details - Drawings



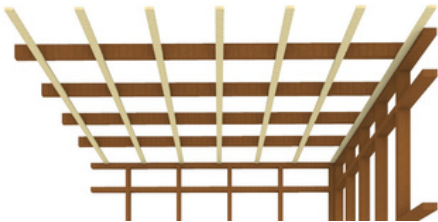
Ceiling Lining Lines



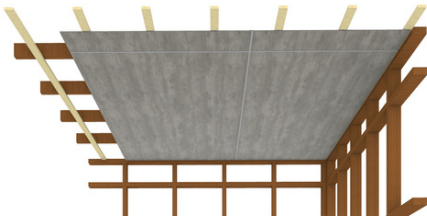
Ceiling Lining 2



Ceiling Lining 2 Lines



Ceiling Batten Lining



Ceiling Lining Batten Lines



Ceiling Lining



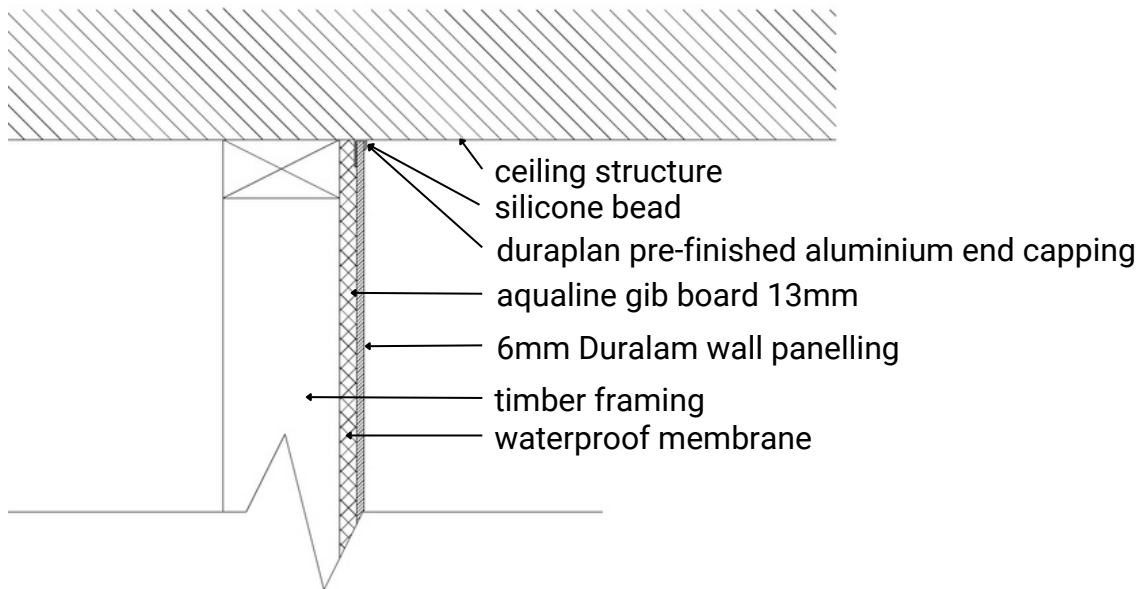
Ceiling Corner Junction

08

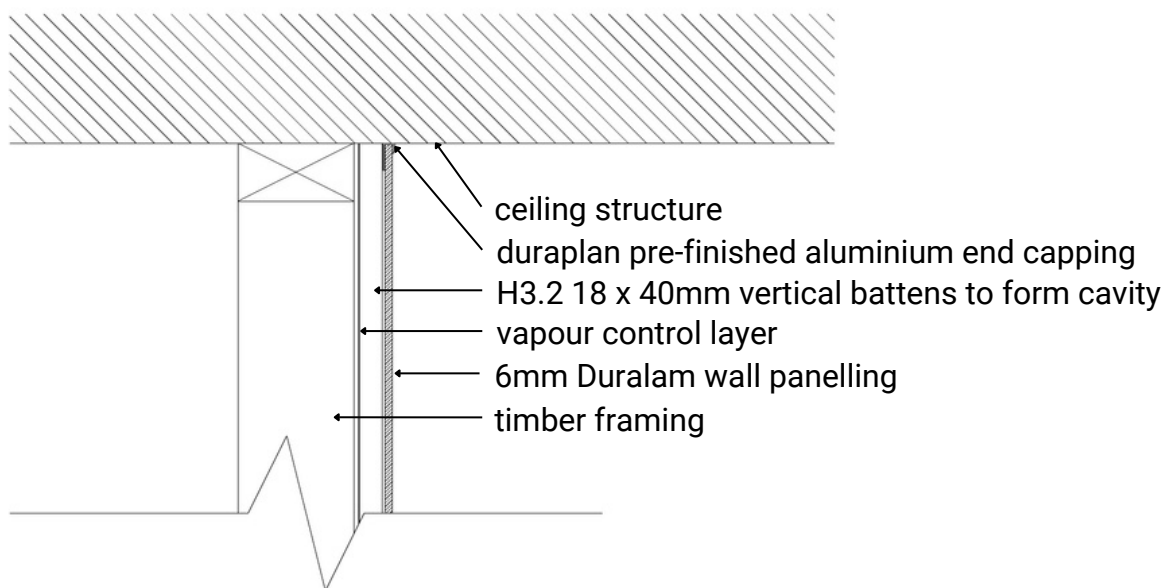
Duraplan Product Details

Ceiling Junction - Standard Construction Details

To Top Gib



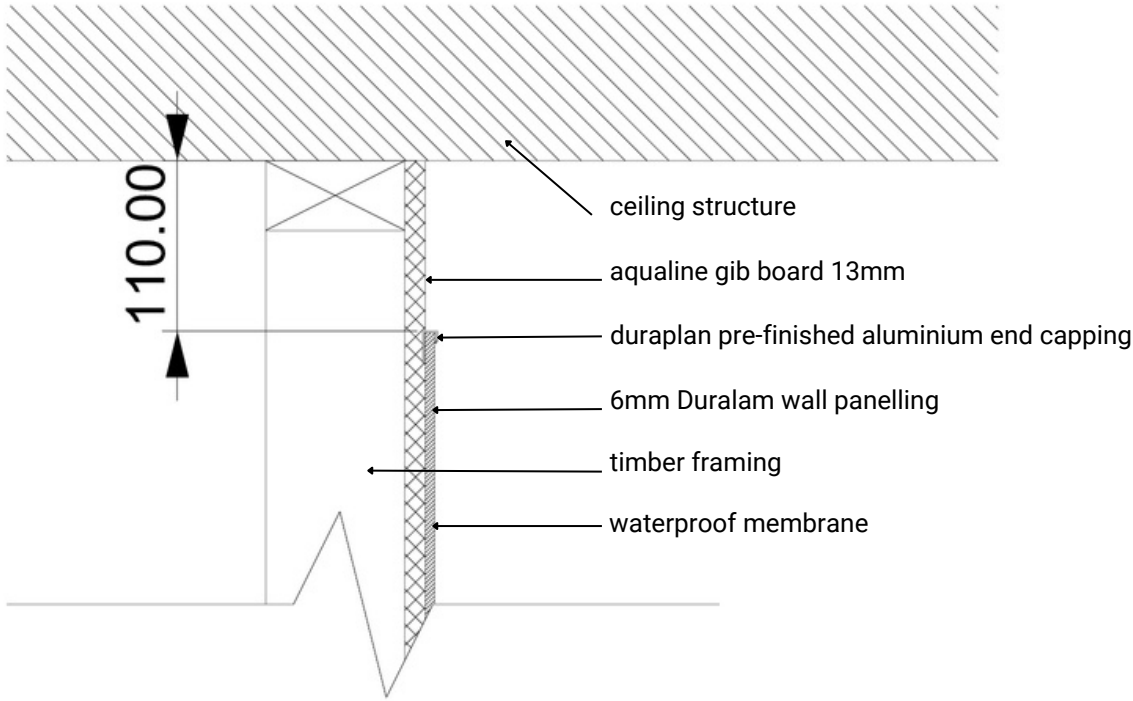
To Top Batten



08

Duraplan Product Details

Ceiling Junction - Standard Construction Details



08

Duraplan Product Details

Ceiling Junction - Standard Construction Details - Images



Direct to Framing



Not To Ceiling with Gib



Gib Fixing



Batten Fixing

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Duraplan Quality Assurance and Certification



BRANZ APPRAISAL



The mark of responsible forestry



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