

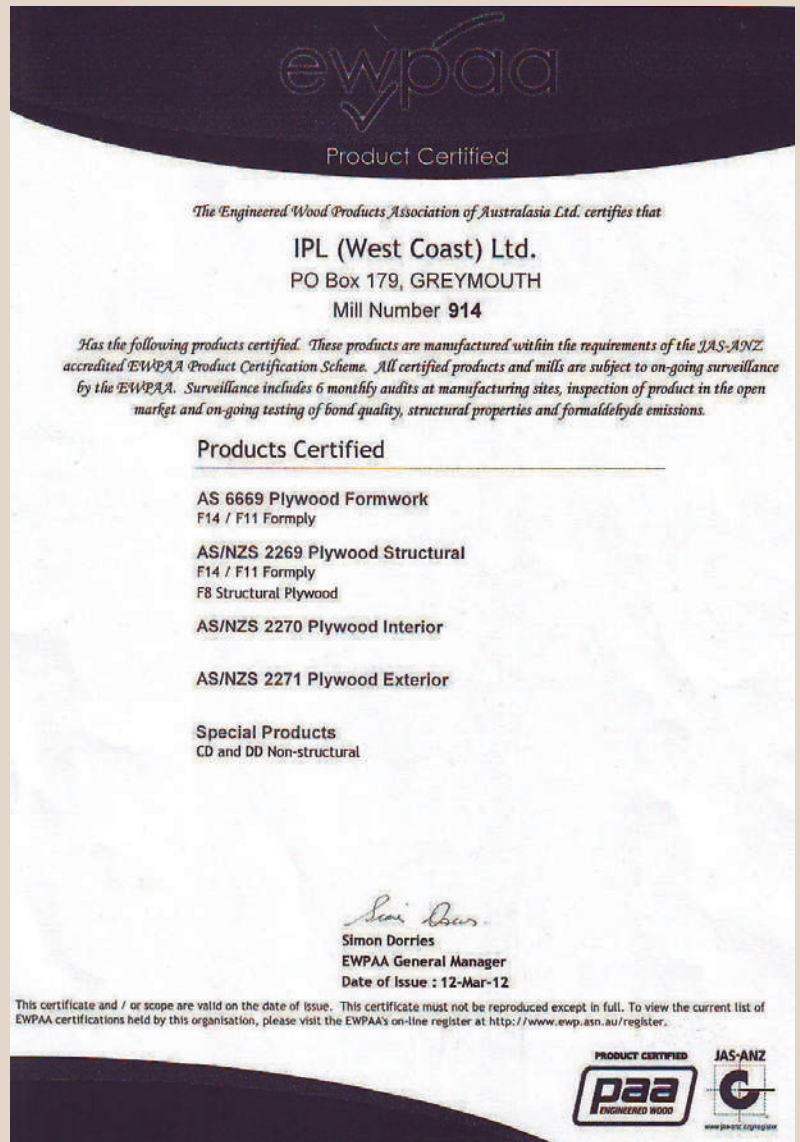
AlpineClad

exterior panelling



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IPL - 100% New Zealand owned and operated since 1991

For over half a century International Panel and Lumber (West Coast) Ltd has been operating on the West Coast of the South Island of New Zealand.

Following ownership changes in its formative years it became a 100% New Zealand owned private company in 1991.

The IPL mill is situated at Gladstone, 10 km south of Greymouth and employs around 100 staff making it one of the larger employers in the West Coast region.

Originally IPL produced plywood made from indigenous species of lumber sourced from the surrounding West Coast region. However since the Government imposed cessation of indigenous logging in the 1980's, plywood production shifted to the use of plantation grown Pinus Radiata sourced from the upper South Island of New Zealand.

IPL concentrates on supplying the New Zealand market through a network of Builders' Merchants although some product is exported to Australia and the Pacific Islands.

Whilst the majority of production is focused on the general construction industry there is an increasing

emphasis on high grade finishing plywood. This is being specified by interior designers and architects for a range of applications including shop fitouts, reception areas, public building and university interiors, design features in private homes, where the high quality of IPL products is widely recognised.



IPL AlpineClad combines the beauty of real wood with structural strength and lightweight

IPL AlpineClad gives the benefits of natural timber with the convenience of a strong, lightweight, easily installed panel cladding system. It is manufactured on the West Coast of New Zealand's South Island from renewable plantation grown Pinus Radiata trees.

IPL AlpineClad has been successfully used in construction of both residential and commercial buildings for in excess of 30 years in New Zealand.

IPL AlpineClad is for use as exterior cladding on residential homes and commercial buildings.

IPL AlpineClad exterior panelling comes in two types

- Bandsawn surface with grooves at 100mm, 150mm or 200mm centres
- Bandsawn only

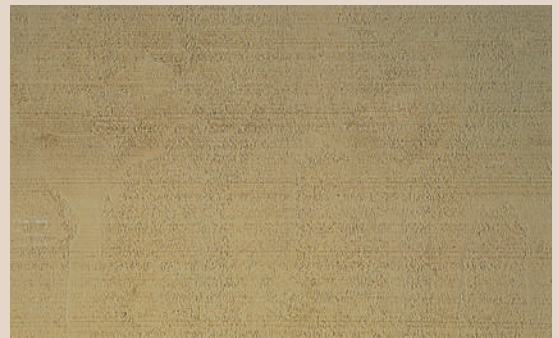
Features

- Lightweight, strong and easy to install
- H3.1 treated with LOSP preservative or H3.2 CCA (CCA is supplied preprimed)
- Offers diverse design possibilities for lightweight structures
- Complies with NZ Building Code and E2/AS1 requirements
- Provides a long-lasting and durable external surface
- Has excellent thermal qualities
- Manufactured in New Zealand for New Zealand conditions
- Can be fixed to timber and steel framework
- Interlocking shiplap system for easy, watertight installation
- Eco friendly. Rated as Super E0 (less than 3 parts per million formaldehyde emissions)



Type 1000/150

Bandsawn surface, grooved at 150mm centres



Type 3000

Bandsawn with no grooves

Environmentally Sustainable

All veneer used in IPL AlpineClad is from renewable plantation-grown Pinus Radiata New Zealand plantations and is available FSC (Forestry Stewardship Council) certified on request.



IPL AlpineClad Range Specifications

Type	Sheet size (mm)	Thickness (mm)	Ply	Grade	Surface	Groove Size (mm)	Groove Centres (mm)
1000/100	2440 x 1216	12	5	S	Bandsawn	6 x 8 wide	100
1000/150	2440 x 1216	12	5	S	Bandsawn	6 x 8 wide	150
1000/200	2440 x 1216	12	5	S	Bandsawn	6 x 8 wide	200
3000	2440 x 1216	12	5	S	Bandsawn	NO GROOVES	
3000 Superior	2440 x 1216	17	5	S	Bandsawn	NO GROOVES	

S Grade - specially selected face which has clean appearance. 2440 x 1216 sheet size allows 16mm for weatherproofing shiplap

Treatment: AlpineClad panels are H3.1 treated with LOSP preservative. Also available H3.2 treated with CCA.

If requested we can supply AlpineClad untreated for interior use only. Veneer Bonding: Marine type.

Compliance with Standards

IPL AlpineClad is manufactured in accordance with AS/NZS 2271 Plywood Exterior. The panels are to be installed in accordance with the building design code.

The Engineered Wood Products Association of Australasia (EWPAA or PAA) audits our production processes to ensure we meet the requirements of the product Standard. This third party audited, process based, quality assurance scheme meets the requirements of an ISO Type 5 system for production certificate. The EWPAA is an accredited body to JAS - ANZ under registration No. Z1460695AB.



IPL considers it not appropriate to use in bracing calculations as maintaining the bracing values relies on the maintenance of the coating system to retain full structural strength. Use the values derived from plywood use within cavity system.



Durability

NZ Building Code clause B2 requires claddings which do not form part of the bracing or structural element to achieve a minimum structural durability level of 15 years.

IPL AlpineClad will meet this requirement when coated with stains or paints to manufacturer's specifications. It is preferable to use lighter coloured stains / paints to lessen the effects of greater expansion and contraction which occurs when darker, heat absorbing shades are used.

Preservative Treatment

H3.1 LOSP

IPL AlpineClad is envelope treated to H3 with LOSP or CCA for exterior use but is available untreated for interior walls and ceilings. LOSP (Light Organic Solvent Preservative) doesn't discolour the panel surface and because no water is used in the treatment process panels retain uniform dimensions.

Panels treated with H3.1 LOSP must be checked for residual solvent and if necessary placed in a well ventilated area to allow the solvent to disperse before painting or staining.

Branding of IPL AlpineClad

The back of all sheets marked with sheet face and back grade

IPL	Company name
A Bond	Bond type
AS/NZS 2271	Plywood Exterior
914	Engineered Wood Products Association Mill number
12mm 12.5/24/5 17mm 17/24/7	Construction Code

Installation

Framing

External timber framing must be treated to a minimum of H1.2 (Refer to NZ Building Code Acceptable Solution B2/AS1 - Durability. For timber treatment and allowable moisture content refer to NZS 3602).

Use kiln dried framing in accordance with manufacturer's specifications and NZS 3602 requirements. Timber frame sizes and setout must comply with NZS 3604 or NZS 3603.

- Framing must fully support IPL AlpineClad sheet edges.
- Studs must not exceed 600mm centres.
- Single spans of IPL AlpineClad should not exceed 600mm.
- Nogs must be provided at a maximum 800mm centres.
- For ventilated cavities install an extra stud at internal corners.
- Moisture content for frame and cavity battens should not be more than 20%. (Refer NZS 3602)
- Keep framing as dry as possible at all times.
- A building underlay or rigid air barrier complying with E2/AS1 must be fixed over framing prior to installing IPL AlpineClad whether construction is direct fix or cavity.
- In extra high wind zones rigid sheathing is required.



Cavity Battens

Cavity battens should be installed in accordance with Acceptable Solution E2/AS1.

Battens must be fixed over the building underlay or a rigid air barrier.

All timber battens to be nominal 20mm thick (minimum 18mm) and at least the same width as the studs. Minimum treatment H3.1 LOSP. (Refer NZS 3640).

Polystyrene battens must not be used with IPL AlpineClad which has been treated with H3.1 LOSP because the solvents could melt the battens.

Fix battens to all studs as follows:

Studs at 600mm centres

- Battens must be fixed vertically at 300mm centres using a batten in between each two studs and fixed to top and bottom plates and nogs.
- Battens fixed between studs are to keep the building underlay and insulation from bulging into the drained cavity.
- Fix IPL AlpineClad only to the cavity battens fixed to the studs.

Studs at 400mm centres

- Battens must be fixed to studs only.
- Use horizontal battens at the top of wall to prevent the top of the cavity from venting into the roof space.
- When using short pieces of cavity battens to support the bottom sheet edge or to provide intermediate support above window openings etc allow water drainage to the outside. Fix them with a 5 degree minimum slope and an air gap at either side of 50mm minimum.

Fixing

- Sheet edges must be supported by the frame.
- Sheets must be fixed vertically.
- When laying up start at framing corners and work across the wall placing shiplap away from the prevailing wind.
- All H3.1 LOSP and CCA treated IPL AlpineClad panels are envelope preservative treated. Any cut edges must be coated with a brush-on timber preservative.
- Always place cut edges at the top of the sheet to avoid damage by water drips soaking into cut edge grains.
- Where sheets will be in close proximity to moisture prime or pre-coat bottom edges and sheet backs to a minimum 150mm.
- Use flat head or rose head nails with timber framing.
- Fasten sheet edges at a maximum of 150mm centres and within the panel on all supports at 200mm centres.
- When fixing over a ventilated cavity fix only to battens which are attached to studs.
- Fasten no closer than 7mm to sheet edges except on top lap. Do not nail through top lap.
- Fasten shiplap joints independently to enable sheet expansion without restriction.
- When using a rigid air barrier the fastener lengths for IPL AlpineClad should be increased accordingly to maintain necessary fastener pullout loadings.
- Drive nails and screws flush.
- Do not overdrive nails into the sheet.
- Do not nail through the grooves of IPL AlpineClad.

Fastener Types and Sizes

	Direct Fix	Cavity Fix
Nails		
Hot Dipped Galvanised	50 x 2.8mm	60 x 2.8mm
Screws		
Stainless Steel	40mm x 8g	65mm x 8g

NOTE: Exposure Zones are detailed in NZS 3604 Section 4
Galvanised Hot Dipped nails are acceptable for H3.1 LOSP in Zones B and C.
In Zone D Stainless Steel screws must be used.
H3.2 requires Stainless Steel screws to be used in all Zones.



IPL AlpineClad, the environmentally friendly choice of exterior cladding

It's a known fact that real wood is a highly cost-efficient renewable resource.

What is not as well known is that far less fossil fuel is used in its extraction than steel, concrete or aluminium.

Trees absorb carbon dioxide and release oxygen as they grow which reduces CO² emissions, the harmful emissions which contribute to global warming.

Wood is also extremely thermally efficient.

So wood is a very environmentally friendly building choice.

Add to that the fact that IPL AlpineClad is produced from wood veneers grown in sustainably managed renewable plantations. It is available untreated (for interior use), H3.1 LOSP or the eco-friendly H3.2 ACQ which is offered as an alternative to CCA treatment.

IPL AlpineClad is also certified by the Engineered Wood Products Association of Australasia as having a formaldehyde emission classification of Super E0 which means a maximum of 0.3 mg/l.

Simply put that means less than 3 parts per million of formaldehyde emissions which is often less than that which occurs naturally in the environment.



Coatings and After Care

Application

- It is recommended that if LOSP sheets feel greasy they should be separated and placed in a well ventilated dry area to allow any residual solvents to disperse before painting or staining.
- IPL AlpineClad panels are envelope preservative treated. Panel cuts must have a brush-on treatment applied prior to applying coatings.
- Coatings should be applied by brush to ensure there is a satisfactory buildup of coating film.
- Ensure that all surfaces are clean and dry before applying coatings.

Painting and Film Forming Stains

- A good quality 100% acrylic latex 3 coat paint system, regularly maintained, will provide a high level of protection and good looks.
- It is preferable to use light colours which have a light reflectance value (LRV) of 40% or higher. This will lessen the effect of greater expansion and contraction which occurs when using darker colours (LRV of below 40%).
- Darker colours will require more frequent maintenance than lighter colours. If the ply is left without coating protection the cladding faces will degrade.
- Some film forming stains have the consistency of paint but the appearance of penetrating stains. They may provide a similar level of protection as paint. (Refer to the coating manufacturer for advice on the suitability of film forming stains for IPL AlpineClad)
- It is essential to coat panel edges and the back of panels to a depth of 150mm in areas where IPL AlpineClad is close to moisture, unprotected ground or building framing overhangs.
- 90 microns is the recommended total film buildup when painting or using film forming stains.
- Preprimed panels to be top coated with a minimum of two coats of acrylic paint system.

Penetrating Stains

- Penetrating stains display the natural characteristics of timber and are often used for IPL AlpineClad. However it should be noted that penetrating stains provide less protection from weathering than paints or film forming stains. Penetrating stains are also likely to require more frequent recoating to maintain adequate protection and a good appearance.

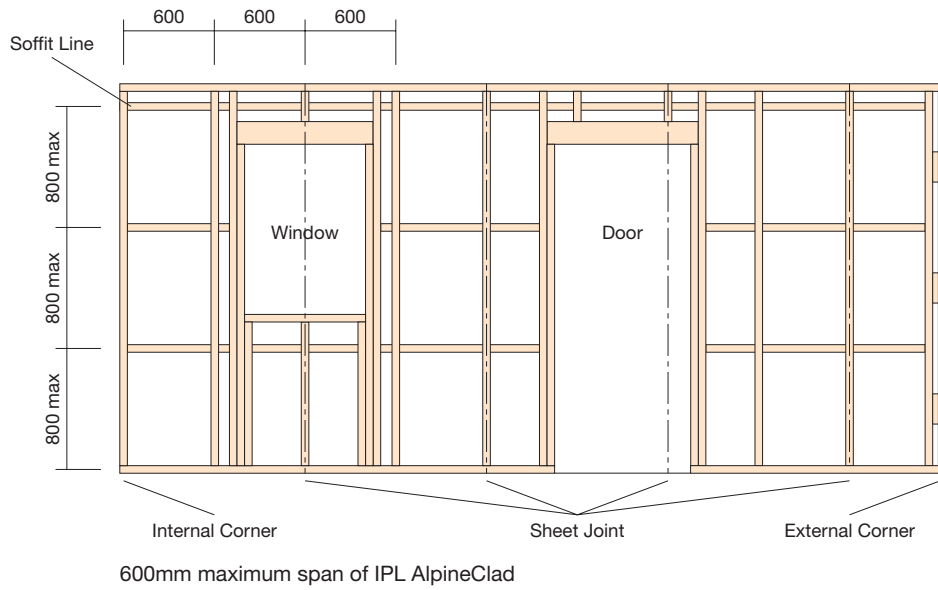
Always refer to the coating manufacturer for advice on the most suitable coating system based on location, climatic conditions and building type.

After Care

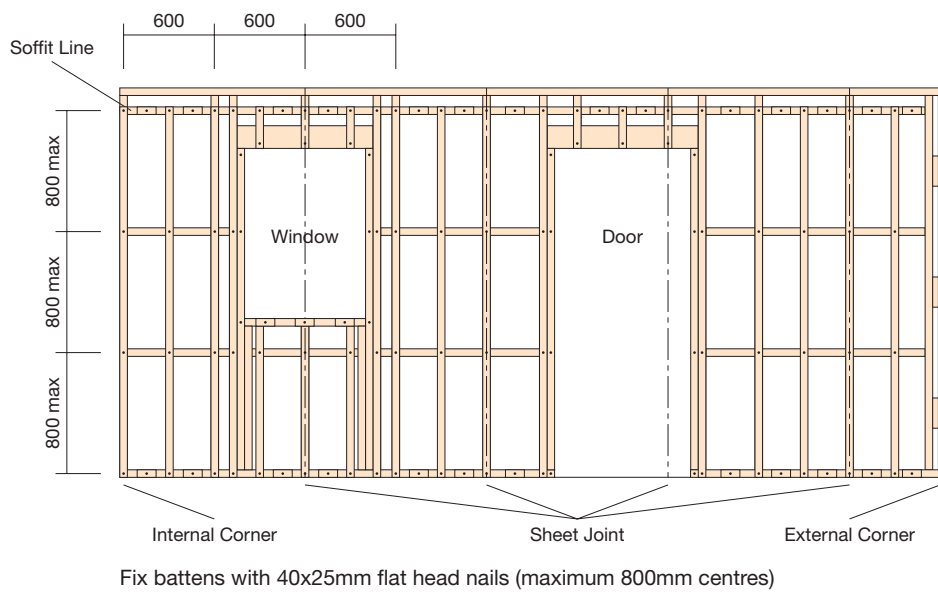
To ensure long-term durability of IPL AlpineClad and to maintain its good appearance routine maintenance is required.

- Each year wash down the surfaces, using a mild detergent, to remove dirt, mould and moss. (and salt from sea air)
- Each year inspect panel joints, corners and bases of panels and repaint if necessary.
- Keep roof guttering and downpipes clean to avoid overflows onto IPL AlpineClad.
- Ensure the bases of IPL AlpineClad are kept clear of soil and garden vegetation.
- Recoat as required in accordance with coating manufacturer's specifications.

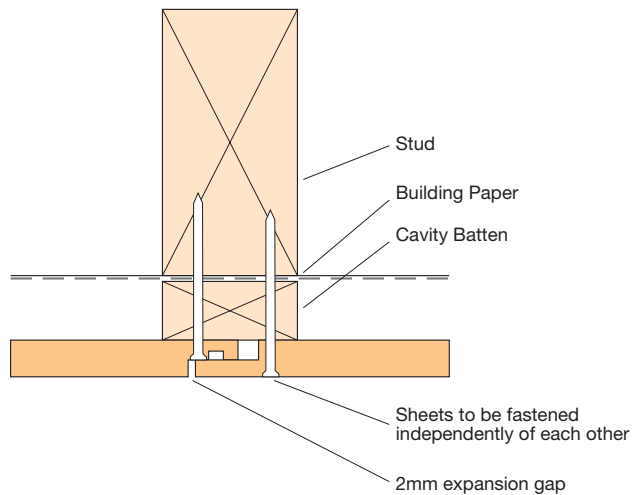
Typical Framing (without Battens)



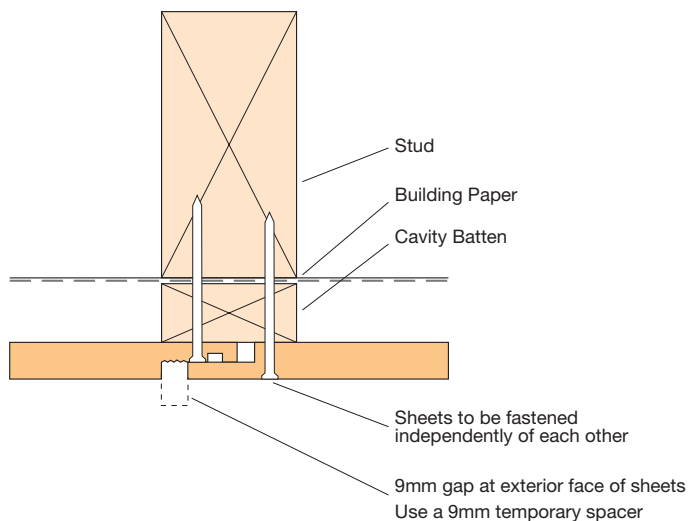
Typical Framing (with Battens)



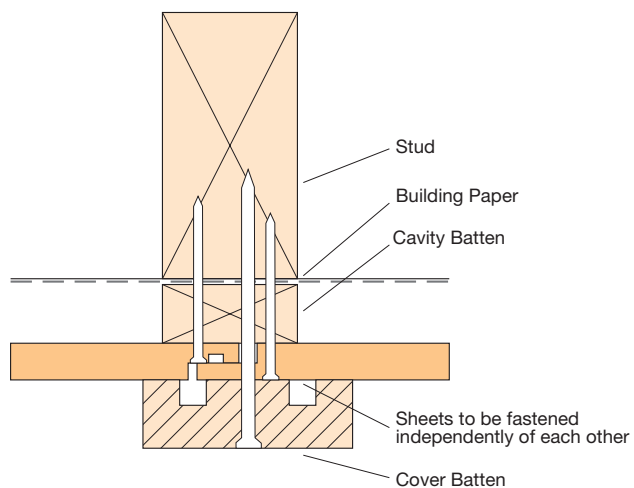
Vertical Joint for Ungrooved AlpineClad using Cavity Battens



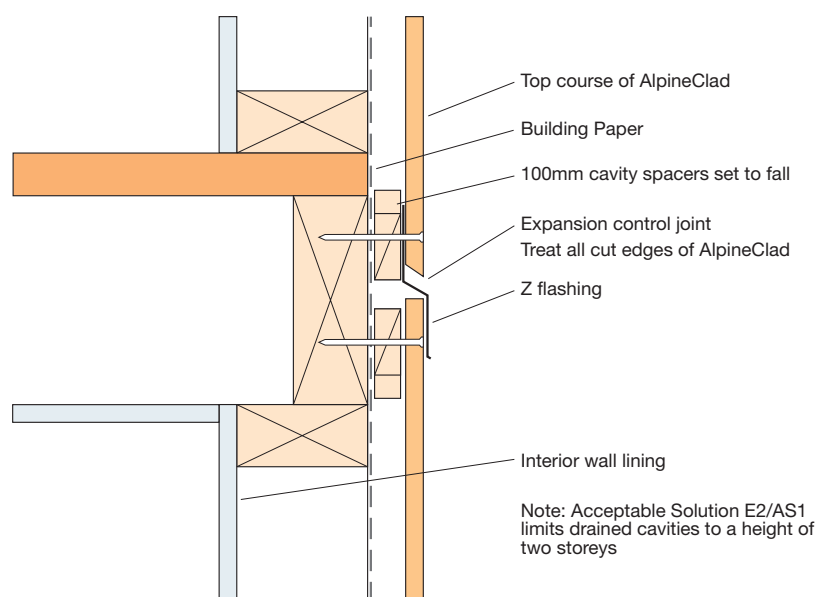
Vertical Joint for Grooved AlpineClad using Cavity Battens



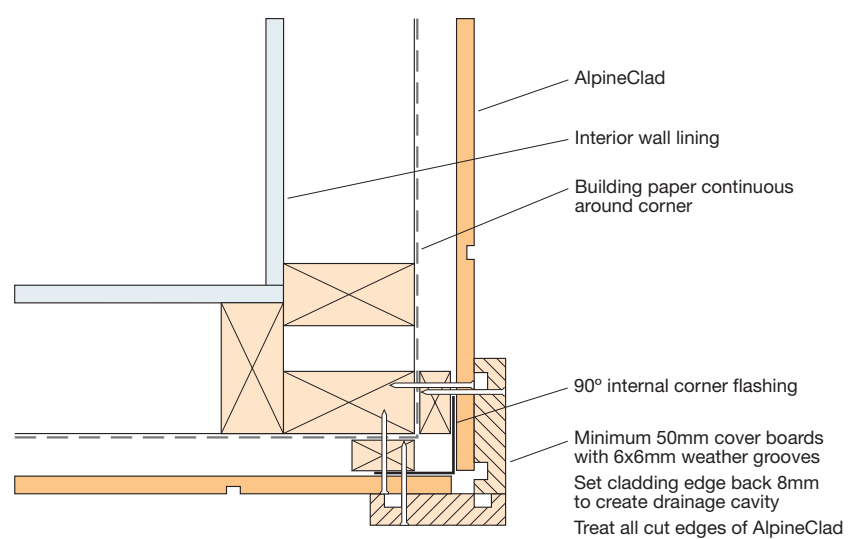
Vertical Joint for Ungrooved AlpineClad showing Optional Cover Batten



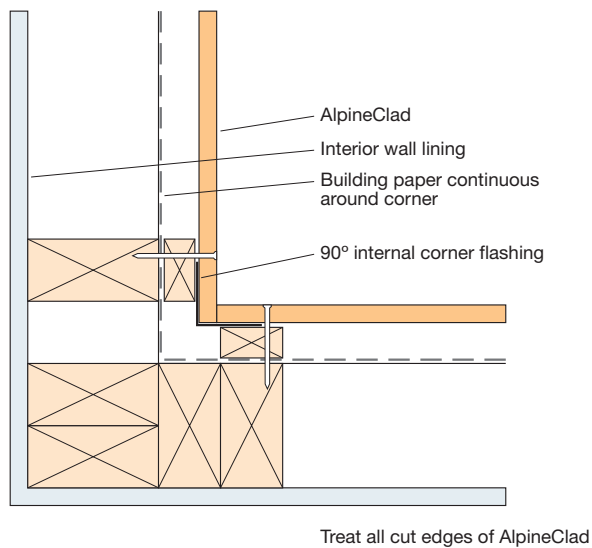
Horizontal Mid-Floor Joint with Cavity



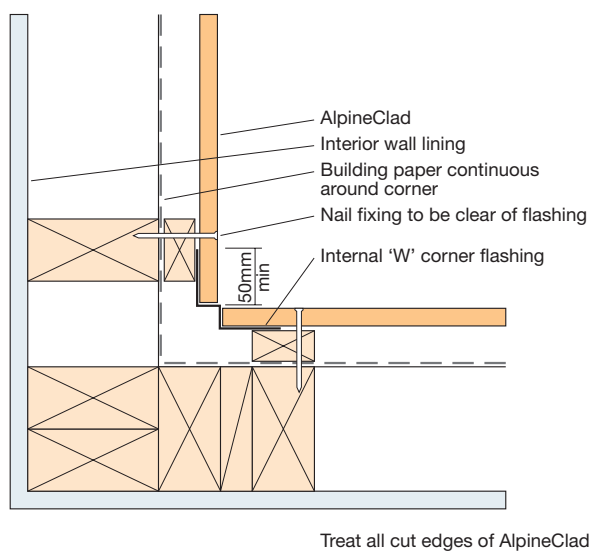
External Corner with Cover Boards



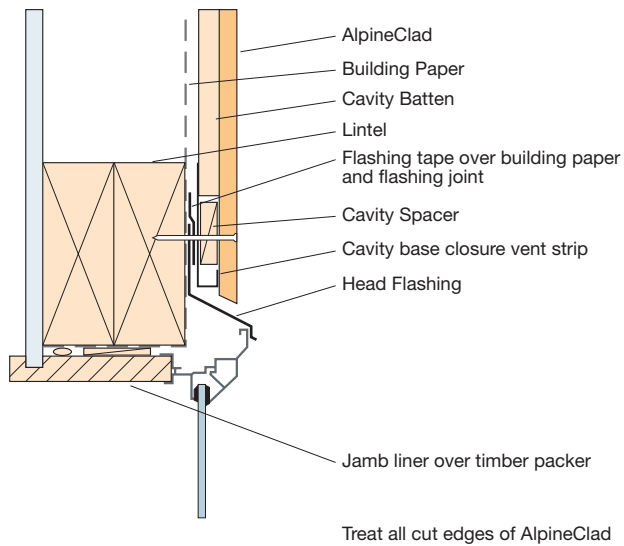
Internal Corner with 90° Flashing



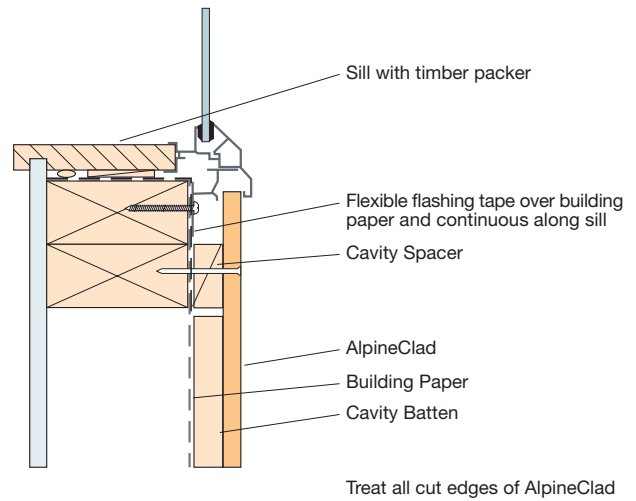
Internal Corner with 'W' Flashing



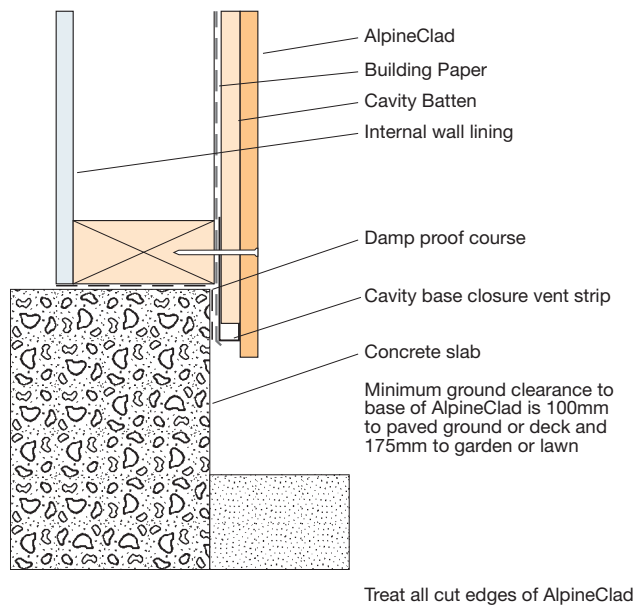
Window Head with Cavity



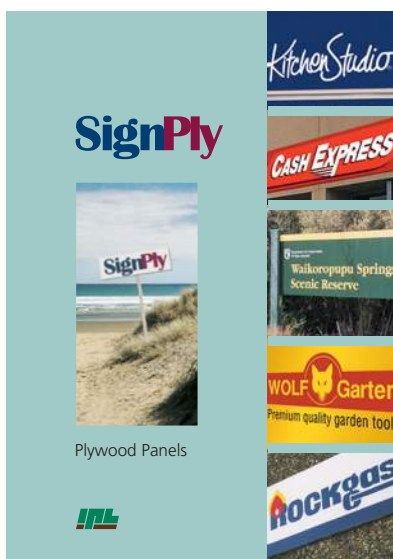
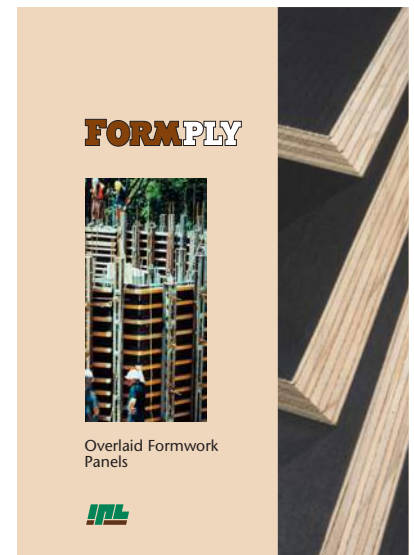
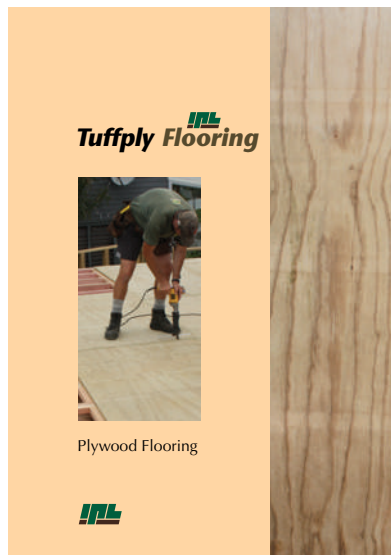
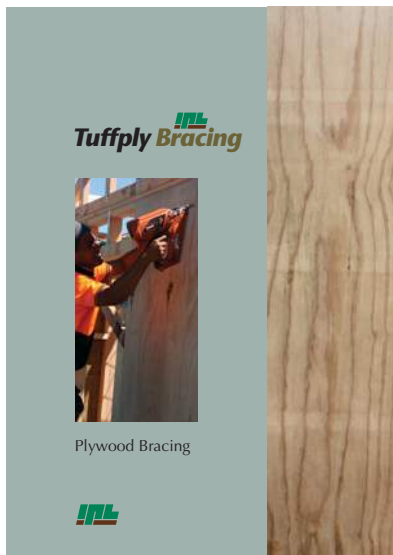
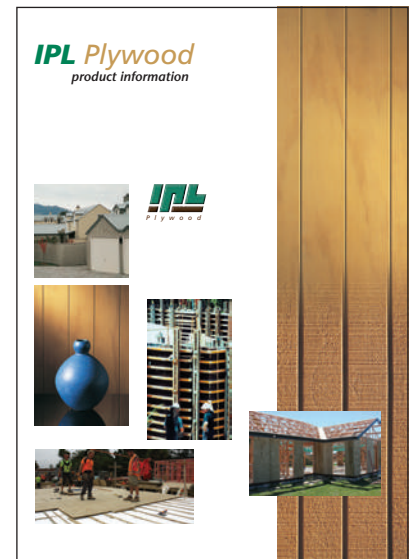
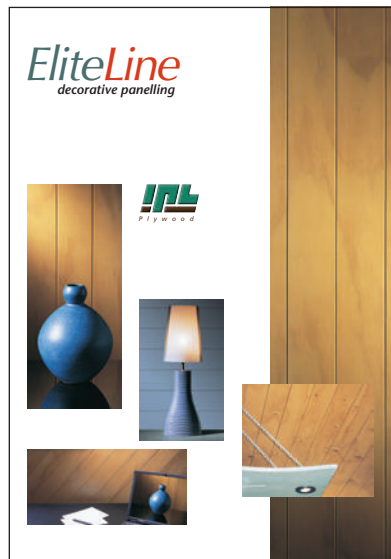
Window Sill with Cavity



Overhangs and Ground Clearances



Learn more about other New Zealand made products in the IPL range



Go to our website www.iplplywood.co.nz to download these brochures

or email sales@tuffply.co.nz

or freephone 0800 650 801 for your free copies.



Plywood



INTERNATIONAL PANEL & LUMBER (WEST COAST) LTD
 3 Trickies Road, Greymouth, New Zealand, PO Box 179
 Telephone 03-762 6759, Facsimile 03-762 6789,
 Freephone 0800 650 801, Freefax 0800 650 802, Email sales@tuffply.co.nz
 Website www.iplplywood.co.nz