

**InnoWood™ CS14025 Cladding**  
Installation Guidelines



## InnoWood™ CS14025 Cladding

InnoWood™ cladding is a reconstituted wood-base composite made from plantation forest-product material, formed into an innovative sustainable and recyclable cladding alternative.

InnoWood™ has the appearance and beauty of natural timber, without the undesirable cracking, splitting, swelling or rotting characteristics of timber.

### InnoWood™ wood-based composite

- Wood-base fibre composite
- Made from 70% plantation forest
- Inorganic binding agent
- 100% recyclable
- Low VOC and environmental impact
- PEFC Chain-of-Custody

### Major Benefits

- Easy to install
- Low maintenance
- Fire resistant
- Water resistant
- Termite resistant
- Will not rot, crack or split

### CS14025 Cladding

InnoWood™ CS14025 cladding is designed for both horizontal and vertical fixing applications over steel or timber support framing and is ideal for most environmental conditions, including areas close to breaking surf and tropical regions.

### Components and Accessories

The InnoWood™ CS14025 system consists of the cladding boards, and aluminium flat bar fixing strips used between the boards.

Standard off-the-shelf aluminium, galvanized steel and PVC sections complement the system.

### Size and Availability

The InnoWood™ CS14025 cladding is available in 5.4 m lengths and the aluminium flat bar fixing strips in 6 m lengths.



### Quantities and Mass per metre square

Description mm x mm	Qty. Reqd. Lengths / m <sup>2</sup>	Mass / m	Mass / m <sup>2</sup>
Cladding 140 x 25	6.7 lm/m <sup>2</sup>	1.13 kg/m	7.5 kg/m <sup>2</sup>
AL Fixing Strip 30 x 4 <sup>NOTE 1</sup>	7.7 lm/m <sup>2</sup>	0.324 kg/m	2.49 kg/m <sup>2</sup>
AL Fixing Strip 30 x 3 <sup>NOTE 2</sup>	7.7 lm/m <sup>2</sup>	0.243 kg/m	1.87 kg/m <sup>2</sup>

The approximate InnoWood kg/m is based on 850 kg/m<sup>3</sup> at EMC.

NOTE:

- 1: 30 x 4 used for horizontal & vertical applications.
- 2: 30 x 3 mm used for vertical curved wall applications, only.

### Colour and Finishes

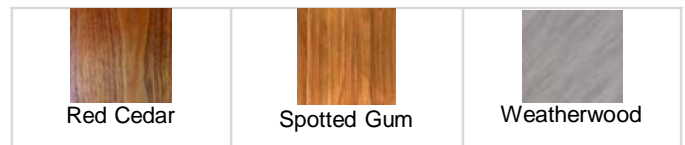
InnoWood™ prides itself into being able to achieve natural timber appearances and finishes, in textures, venations, colours and hues.

InnoWood™ products have a slight visible colour tone and hue difference across and along the InnoWood™ wood-composite profiles, simulating the grain, growth rings and other natural timber features.

Hence, as with milled natural timber, exact colour and pattern matches are virtually impossible.

The InnoWood™ CS14025 cladding is available in three standard natural wood grain colours.

Other colours, hues and finishes are available upon request.



[Colours and patterns shown are accurate within the limits of printing]

The InnoWood™ CS14025 cladding is available with either a plain or a full face-sanded finish giving the cladding the appearance of sawn timber.

### Site Storage and Handling

- InnoWood™ cladding should not be dumped or dropped when unloading.
- InnoWood™ cladding should be stored on a flat surface and supported at 600 mm centres.
- InnoWood™ cladding should be carried on edge, for better support.
- InnoWood™ cladding should be kept in the packaging, under cover out of the weather and in the shade, until ready to install.

### Tools

InnoWood™ cladding can be worked with ordinary woodworking tools.

Tape measure      Circular saw

Level and chalk line      Cross cut mitre saw

Carpenters square      Cordless drill & driver

Cutting and drilling will produce some dust and it is good practice to work in a well-ventilated place and to wear protective safety equipment.

### **Thermal Movement**

All materials are affected by atmospheric heat, and more significantly by direct solar radiation and all materials will to some extent, expand when heated and contract when cooled. Although thermal movements are reversible, these movements due to temperature change may be significant during the installation process.

InnoWood™ cladding boards that have been exposed to the direct sun for several hours, prior to installation will have expanded significantly more than those boards left in the shade. When installed, the hotter boards will contract more than the cooler boards that were left in the shade prior to installation. It is important to try to maintain an average consistent temperature for all the boards as it is being installed.

### **Movement Control Joints**

It is best to design the layout of the cladding, with the boards laid in long lengths and allow movement to occur at control joints. Movement control joints are best placed at the sides of openings in the wall or at regular intervals in a continuous line in the wall. Movement control joints must occur at 5.4 m maximum. The ends of the cladding must fall on a stud or framing member, where staggered pattern joints are used. Short lengths of cladding must be supported over three or more framing studs.

### **Framing Construction Requirements**

InnoWood™ cladding may be fixed to timber or steel stud wall framing members or to a proprietary batten system. Stud spacing for InnoWood™ cladding is nominally set at 600mm centres for urban and non-cyclonic wind load areas. For higher wind-load areas please contact our office. Studs, noggings and trimmers must have a face not less than 45mm for timber and 38 mm for steel. Where studs are less than the required minimum face-width under a joint, sufficient landing must be provided by fixing an additional stud or trimmer.

#### **Timber Framing**

Timber framing must comply with AS 1684: Timber Framing Code.

It is important to use adequately seasoned timber to minimise shrinkage and associated building movement, which may damage the cladding system.

#### **Steel Framing**

Steel framing must comply with AS/NZS 4600: Cold-Formed Steel Structure or AS 3623: Domestic Metal Framing. Where steel framing members are specified, use only corrosion resistant galvanized steel framing. Specific instructions for fixing to steel frames are included where appropriate.

**NOTE:** Thermal breaks are required for steel framed buildings and should be installed between the InnoWood™ cladding and lightweight steel CFS stud and or top hat sections. Thermal break tapes should have a minimum R-Value of 0.2 or less.

### **Installation**

Adhesives must not be used to attach the InnoWood™ cladding to the stud framing.

### **Installation procedure for horizontal applications**

#### **Step 1**

Use a string, spirit or laser level to establish the lowest point of the cladding around the perimeter of the building. Fix the starter strip to the studs or bottom wall plate, at each stud position, using the string, spirit or laser level to keep the starter strip in a true and level plane. Refer Figures 3 & 4.

#### **Step 2**

Fit the first row cladding onto to the starter bead strip, with one end of the cladding board flush with an external corner; Refer Figures 7, 8 & 9 and temporarily hold the cladding board in place. Fit the aluminium flat-bar in the top groove of the cladding board and temporarily screw fix into place at the ends and the middle of the cladding board.

#### **Step 3**

Fit the second row cladding board onto to the aluminium flat-bar inserted in the cladding board below, with one end of the cladding board flush with an external corner and screw fix the aluminium flat-bar between the first and second row of cladding boards at each stud position. Refer Figures 1 & 2.

#### **Step 4**

Fit the next aluminium flat-bar in the top groove of the previous cladding board and fit the next cladding board row in place onto to the aluminium flat-bar. Then, fix the aluminium flat-bar into place at each stud position, with screws. Repeat this step until the wall is fully clad. Refer Figures 1 & 2.

### **Installation procedure for vertical applications**

#### **Step 1**

Use a string, spirit or laser level to establish the lowest point of the cladding around the perimeter of the building. Fix a 50 x 25 x 1.6 mm aluminium support angle to the studs or bottom wall plate, at each stud position, using the string, spirit or laser level to keep the starter bead strip in a true and level plane. Refer Figure 12.

#### **Step 2**

Sit the first board onto the aluminium support angle, align one edge of the first board flush with an external corner and temporarily hold the board in place. Refer Fig 13. Fit the aluminium flat-bar in the groove of the cladding board and temporarily screw fix into place at the ends and the middle of the cladding board.

#### **Step 3**

Sit the second board onto to the aluminium support angle and slide the second board over the aluminium flat-bar inserted in the first board and screw fix the aluminium flat-bar between the first and second boards at each support position.

#### **Step 4**

Fit the next aluminium flat-bar in the groove of the previous board and fit the next board row in place onto to the aluminium flat-bar. Then, fix the aluminium flat-bar into place at each stud position, with screws. Repeat this step until the wall is fully clad.

**Cladding Board End Butt Joints**

Innowood cladding boards are normally end butt jointed with an aluminium straight joint mould in long runs and finished at corners with surface mounted universal aluminium corner moulds. Butt vee joints are also possible and must be done carefully. To seal the butt-end joints use a neutral cure sealant, over a closed-cell foam backing-rod. Refer Fig 14. Cut the nozzle of the cartridge to suit the gap between the boards.

Mask the edges with an easily removable masking tape. Apply the sealant in an upward motion, forcing the sealant into the gap to fill it.

Filling the gap should be done slowly to ensure the sealant completely fills the gap and bonds to the ends of the boards. Run a spatula over the joint, carefully wiping away the excess sealant.

Carefully remove the masking tape immediately and wipe over with a mixture of methylated spirits and water damp cloth.

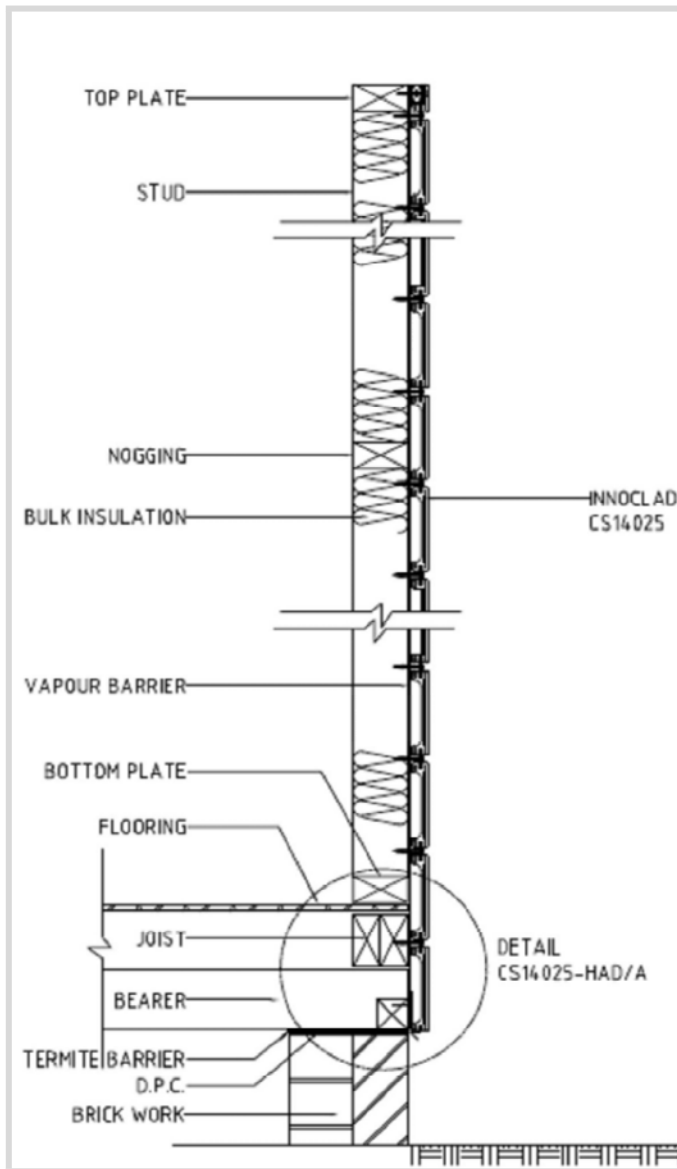


Figure 1; Typical Cladding Detail – Timber Floor Construction

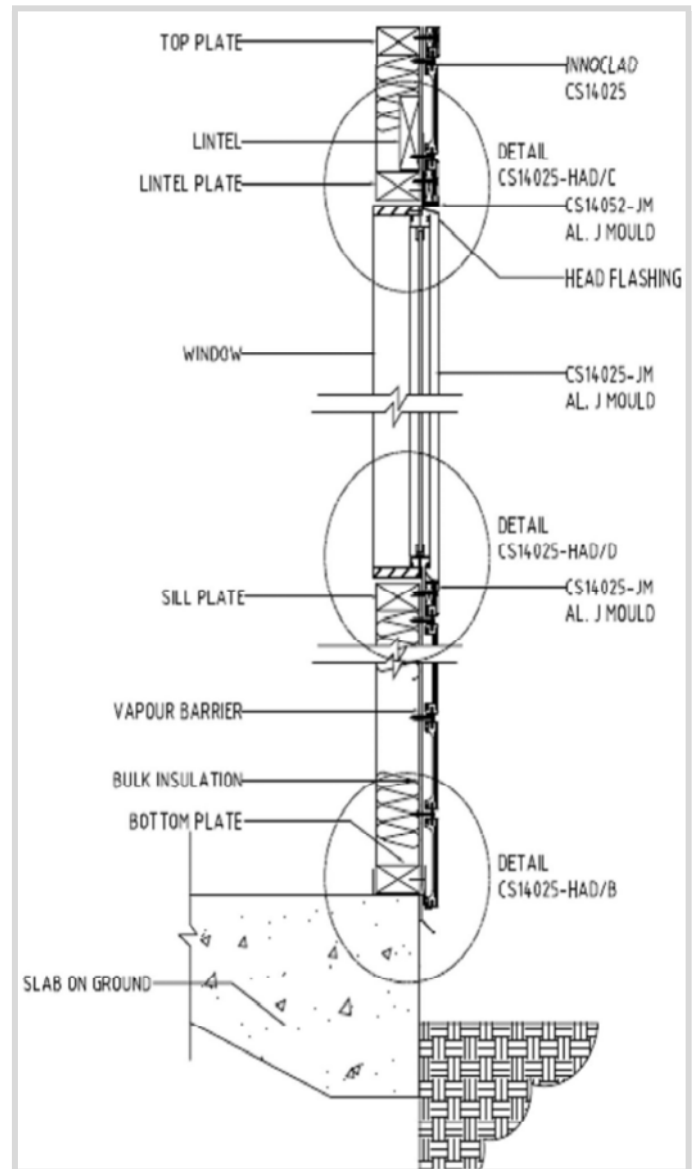
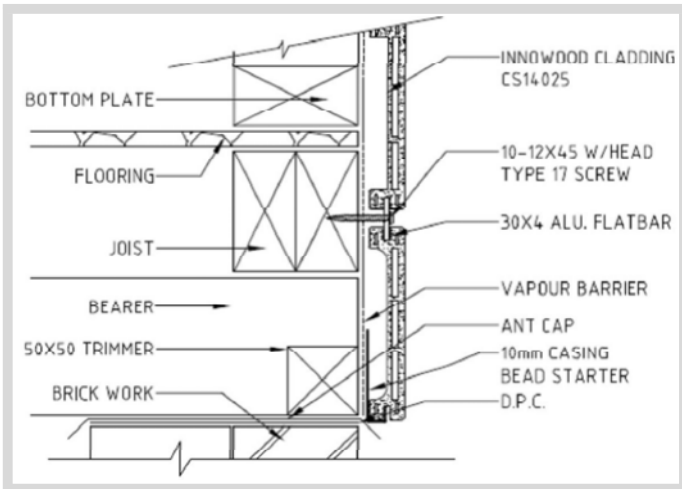
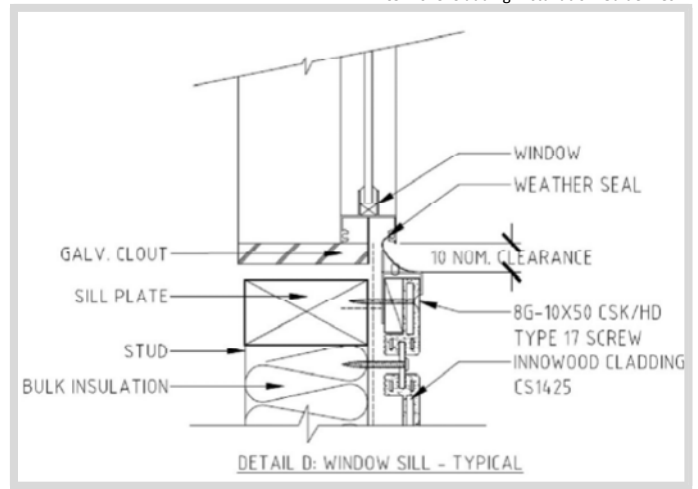


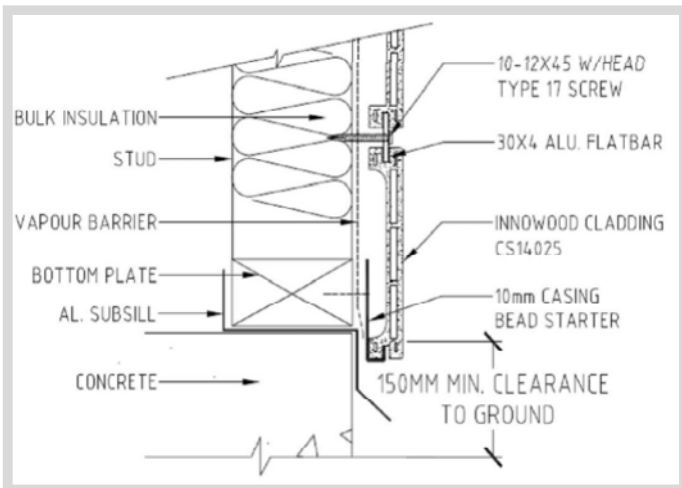
Figure 2; Typical Cladding Detail – Concrete Floor Construction



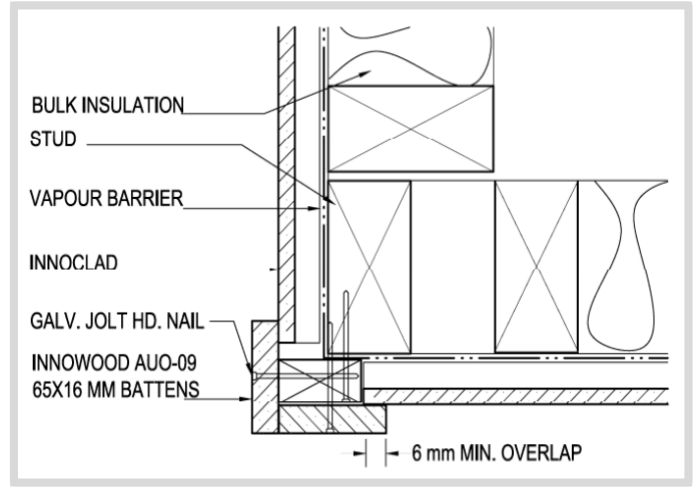
**Figure 3; Typical Detail - Timber Ground Floor Level.**  
First and second row fixing detail.



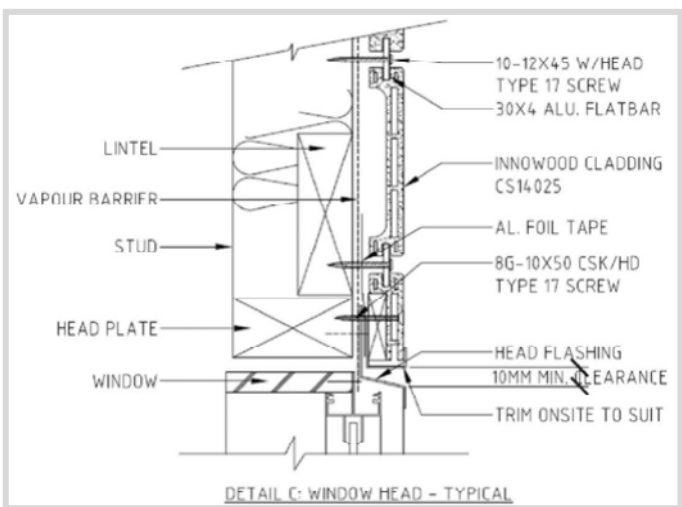
**Figure 6; Typical Window Sill Detail**



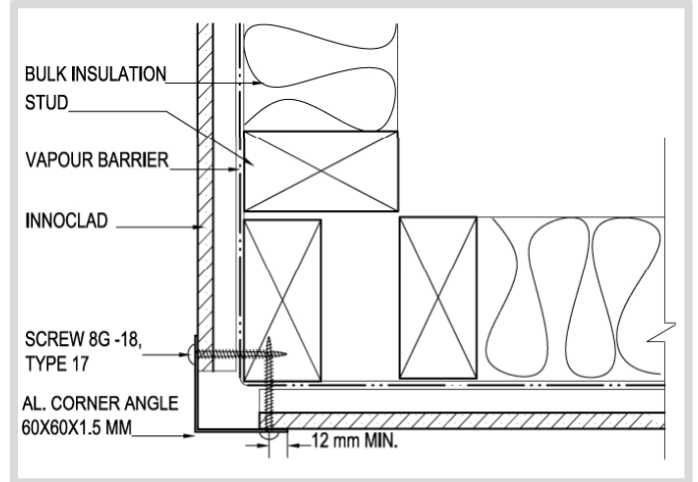
**Figure 4; Typical Detail - Concrete Slab-on-Ground Level.**  
First and second row fixing detail.



**Figure 7; External Corner Detail Option 1**



**Figure 5; Typical Window Head Detail**



**Figure 8; External Corner Detail Option 2**

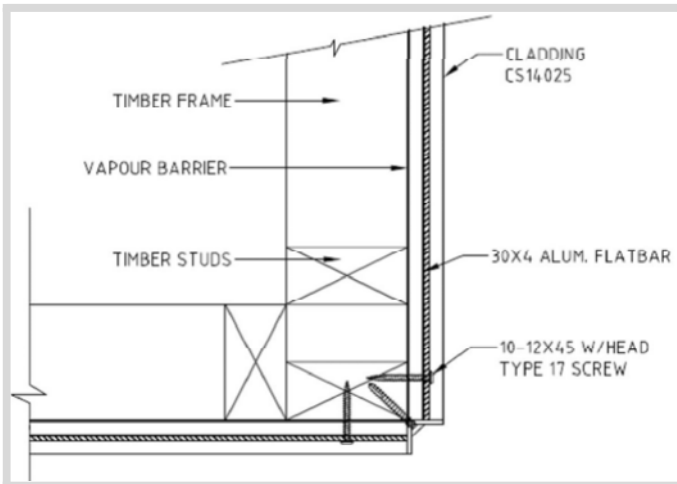


Figure 9; External Corner Detail Option 3

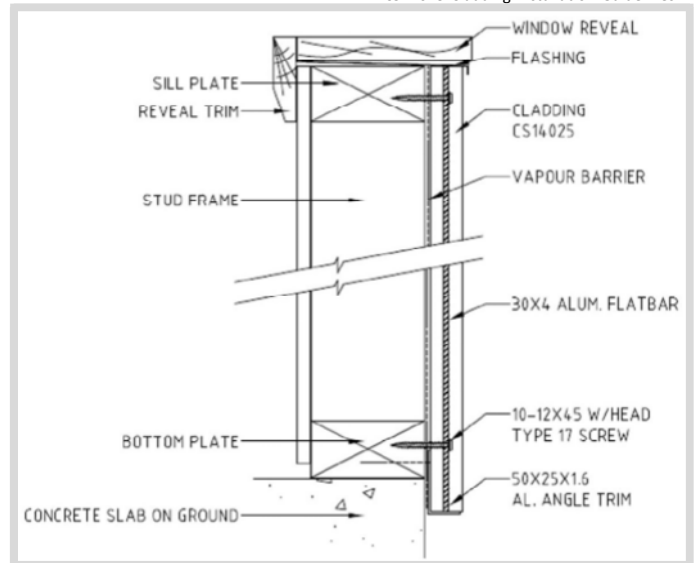


Figure 12; Vertical Fixed Cladding – Typical Window Sill & Slab Edge Detail

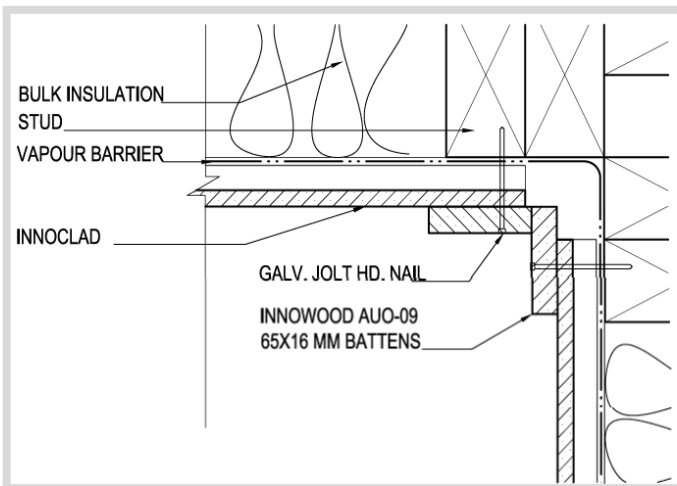


Figure 10; Internal Corner Detail Option 1

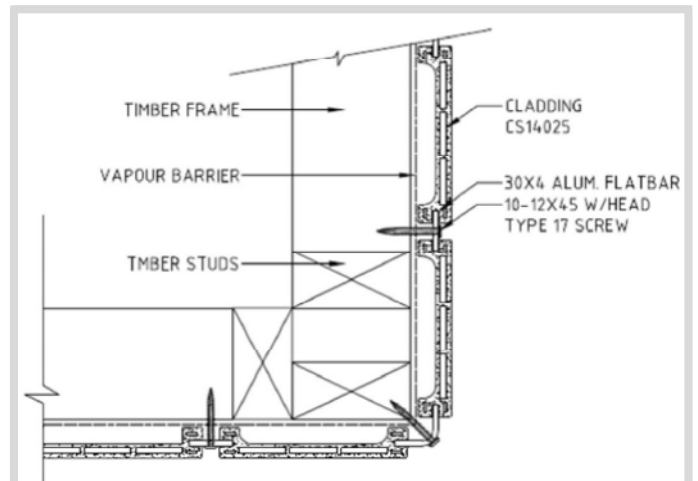


Figure 13; Vertically Fixed Cladding - External Corner Detail

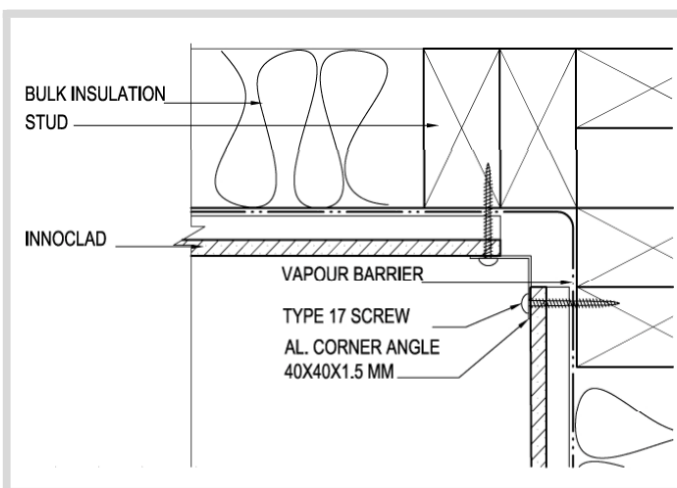


Figure 11; Internal Corner Detail Option 2

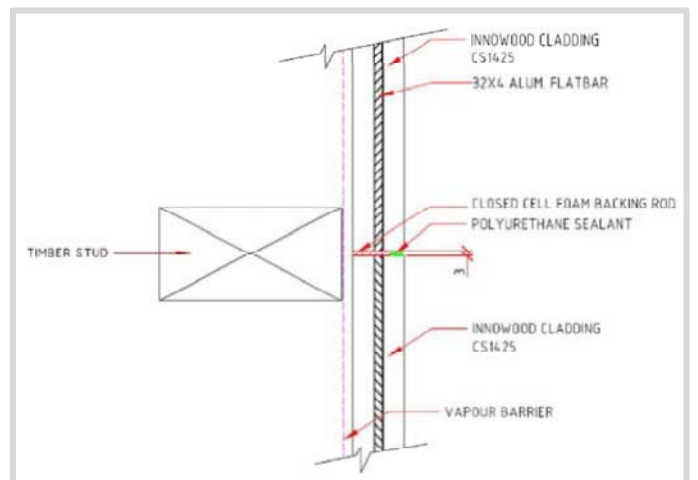
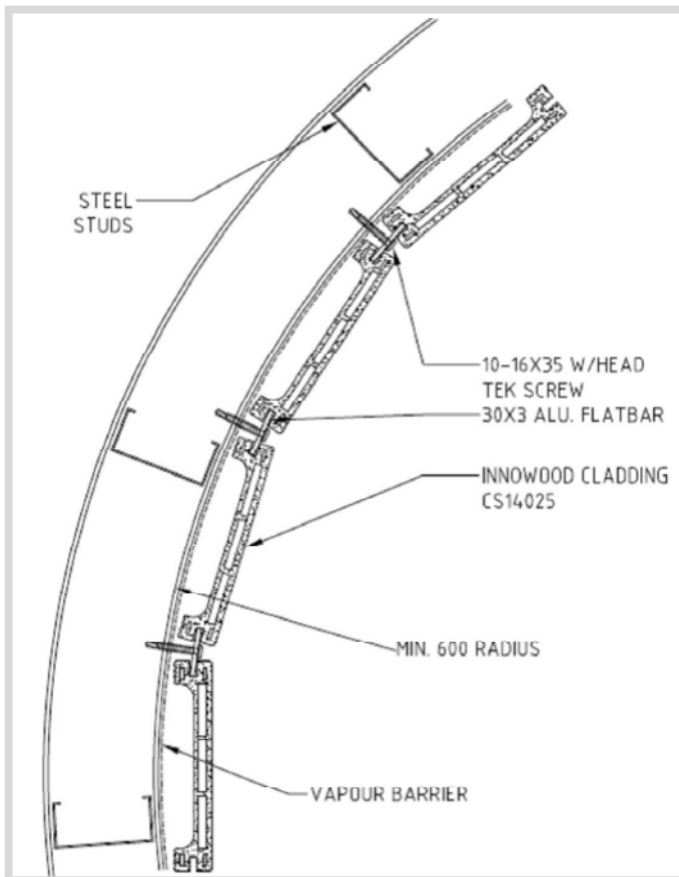


Figure 14; Horizontal Cladding – End Butt Joint Detail



**Figure 15; Concave Curved Wall**

Concave and convex curved vertically clad walls may be constructed, with a minimum radius of 600 mm, as shown in Figures 15 & 16.

**Product warranty**

InnoWood™ Pty Ltd; warrants the InnoWood™ cladding materials, from the date of purchase, for a period of 7 years, to be free from manufacturing defects and or faulty material, provided that they are properly installed and maintained in accordance with the installation methods and specifications of a proprietary or a commonly used system, and will not crack, rot or burn.

**For Further information, please contact:**

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**Fax:** + 61 2 9630 8088

**Address:** 126 O'Connell Street

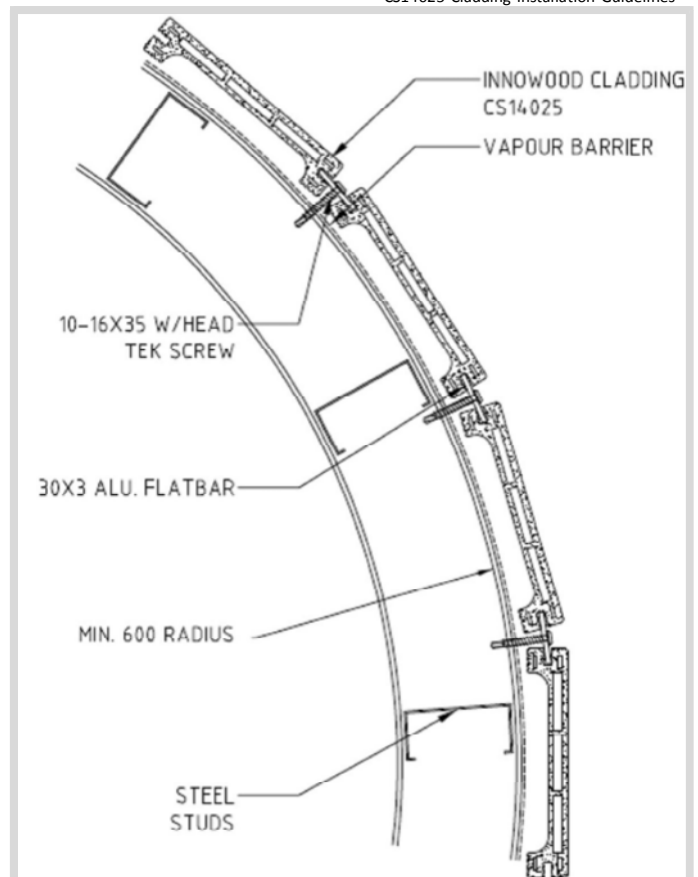
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**Figure 16; Convex Curved Wall**

Standard proprietary flexible track steel stud systems are suitable.

The installation procedure is the same as for the straight wall applications, except that the

It is the responsibility of the specifier or other party to ensure that the information in this manual is appropriate for the intended application and further design detailing may have to be made for specific applications that fall outside the scope of the manual.