

Fasteners and Fixing with Shadowclad®

Recommended Fasteners

- Nails in timber: For hand driven applications use 40x2.5mm HDG flat head. For power driven applications we suggest Paslode Impluse 2.87x50mm Framing nail, D head or contact your power tool suppliers driving flush with surface
- Screws in timber: 8g x40mm, HDG self drilling
- Screws up to 2.8mm steel 10-16-45, HDG self drilling
- Coastal areas may require stainless steel 316 type fasteners in accordance with BCA requirements

Nailing Details

- Fasten centres 150mm Top & Bottom plate. 150mm Vertical Edges. 300mm Intermediate Studs and Nogs
- Fasten no closer than 7mm from sheet edge
- Shadowclad® can be used as a simple reliable means to brace building frames
- The nailing detail in the diagram provides 3.4kN/m bracing capacity
- Up to 6.4kN/m bracing resistance can be achieved using M12 tie rods at each end of sheathed section
- For other bracing configurations refer to the "Structural Plywood Wall Bracing Limit State Design Manual" for permissible stress design in accordance with AS1684. "Residential Timber-Framed Construction". This Manual is published by the Engineered Wood Products of Australasia and available at www.ewp.asn.au

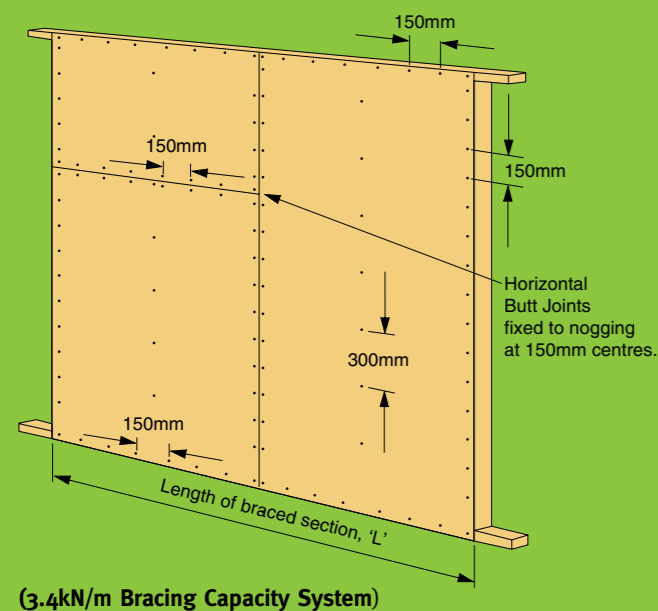


Figure 1: Shadowclad® groove sheet dimensions

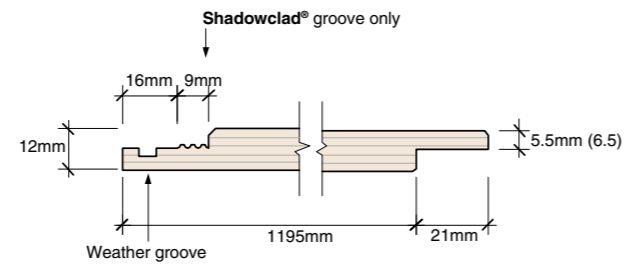


Figure 2: Wall Sections (2745 Sheet)

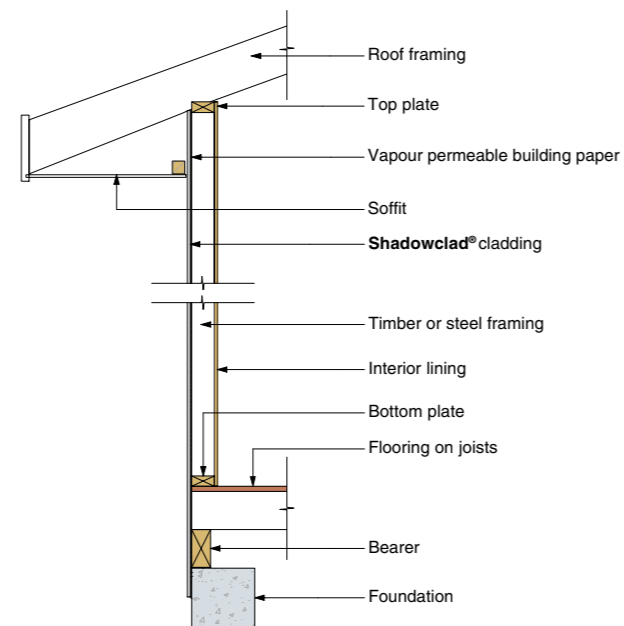


Figure 3: Wall Sections (2440 sheet alternative)

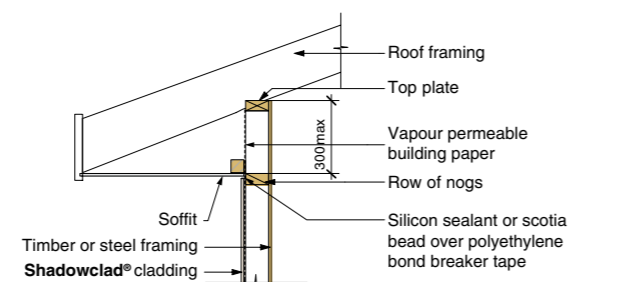


Figure 4: Overhangs and ground clearance

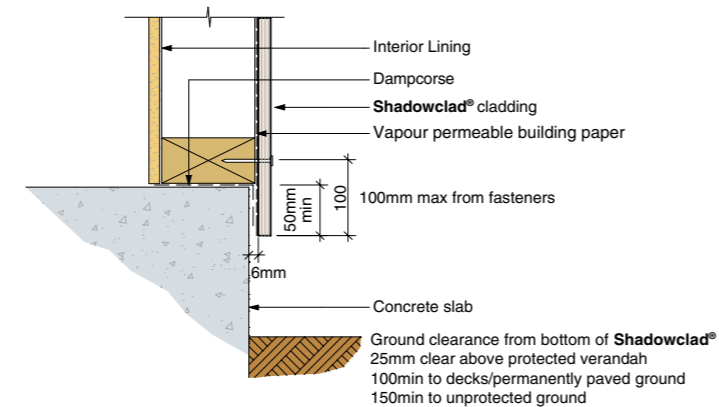


Figure 5: Vertical joint (lapped joint) - Shadowclad® texture

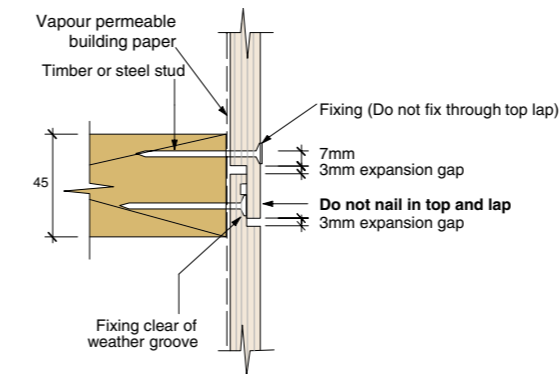


Figure 7: Vertical Joint (expressed square edge)

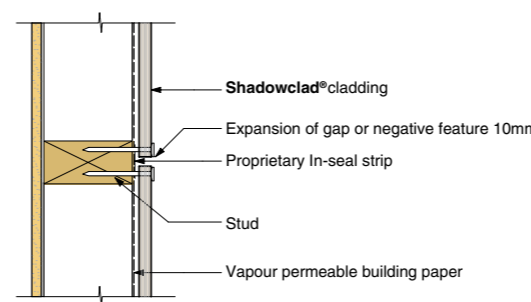


Figure 9: Horizontal joint

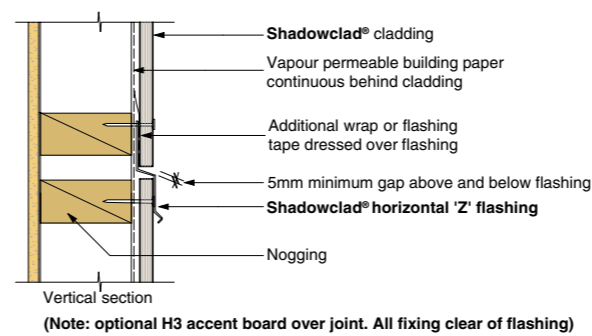


Figure 6: Vertical joint (lapped joint) - Shadowclad® groove

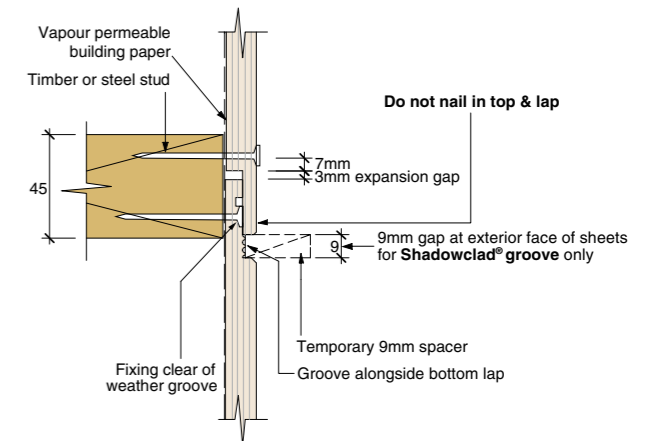


Figure 8: Vertical joint (battened square edge)

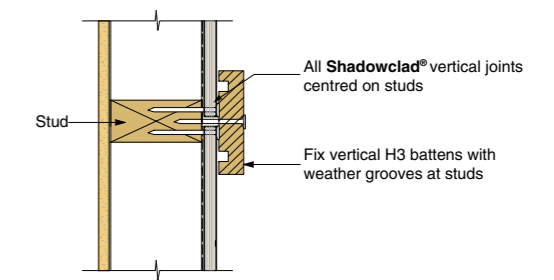
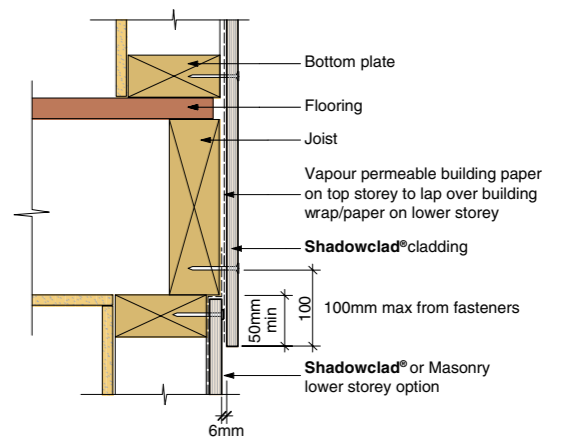


Figure 10: Shadowclad® upper to lower storey (Masonry veneer or Shadowclad®)



Installation Tips

- Seal all cut edges with a preservative such as PROTIM® LOSP. Laps and edges should be sealed with acrylic primer
- Allow an expansion gap of 2-3mm between the vertical sheet joints and corner joints
- Allow an expansion gap of 5mm between the bottom of the sheet and flashings for frame movement and drainage
- Fasten all edges at 150mm centres and 7mm from sheet edges
- Fasten to intermediate studs and nogs at 300mm centres
- Do not nail through the shiplap joint top lap
- Nail bottom lap, behind the weather groove
- Do not nail in the bottom of the groove of the grooved panels
- Start fixing sheets from a corner, ensuring sheet is plumb and laps are facing away from the prevailing wind.
- Put any cut edges facing upwards
- Use high vapour permeable building paper in accordance with the local building code requirements
- Thermal bridging can be reduced by using timber or polystyrene strips on steel framing
- Do not fix Shadowclad® groove sheets horizontally
- Ensure a maximum of 600mm stud spacing
- Framing must support sheet edges
- Stack sheets flat on at least 3 evenly placed bearers and keep dry

Figure 11: External corner with Shadowclad® External box angle

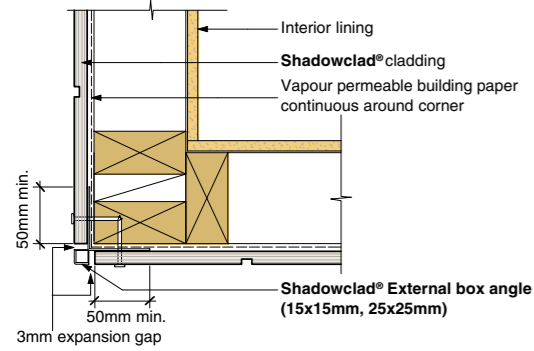


Figure 12: External corner with cover boards

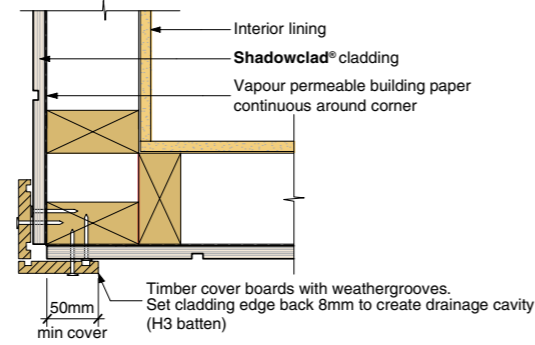


Figure 13: Internal corner with Shadowclad® Internal 90° angle

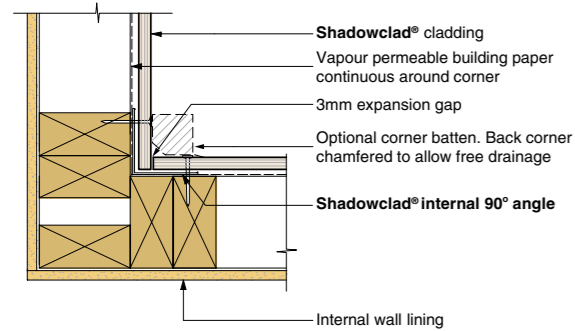


Figure 14: Internal corner with Shadowclad® Internal 'W' 90° angle

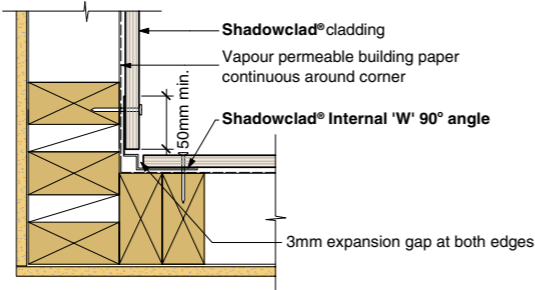


Figure 15: Vertical Batten (Off Stud)

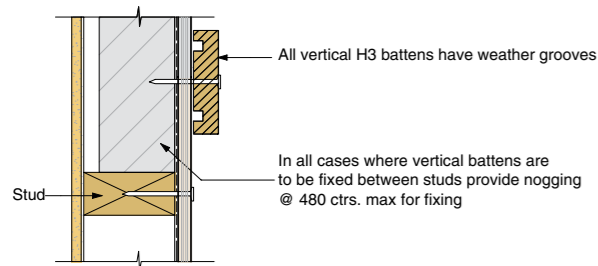


Figure 16: Junction with wall for non-cantilevered timber deck

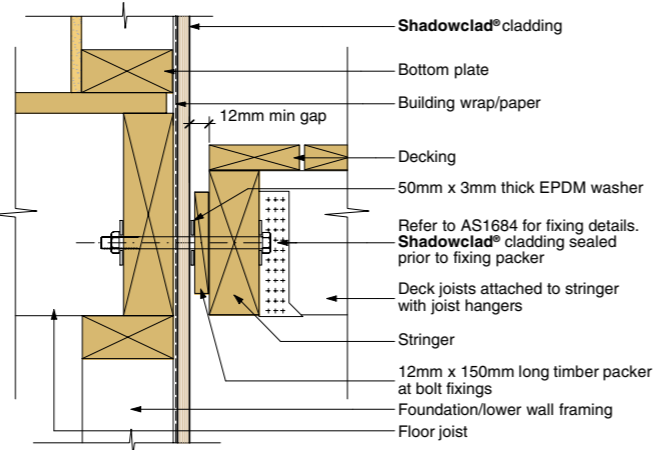


Figure 17: Indicative Timber Window Jamb Detail

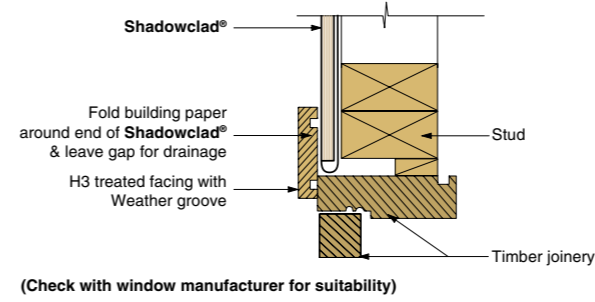


Figure 18: Indicative Timber Window Head Detail

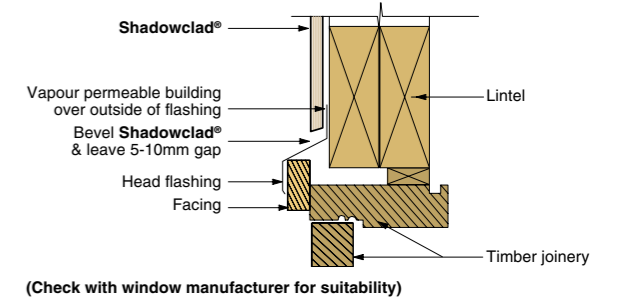


Figure 19: Indicative Aluminium Window Head Detail

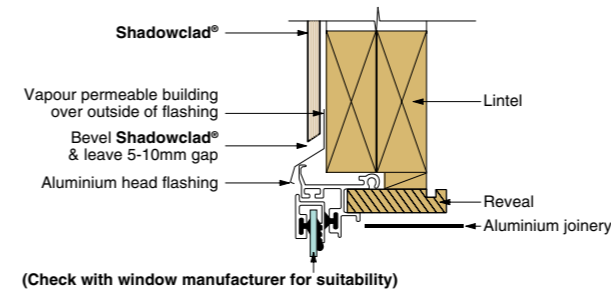


Figure 20: Indicative Aluminium Window Jamb Detail

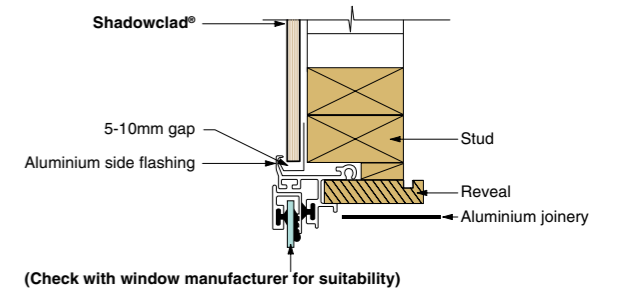


Figure 21: Indicative Head Flashing Details

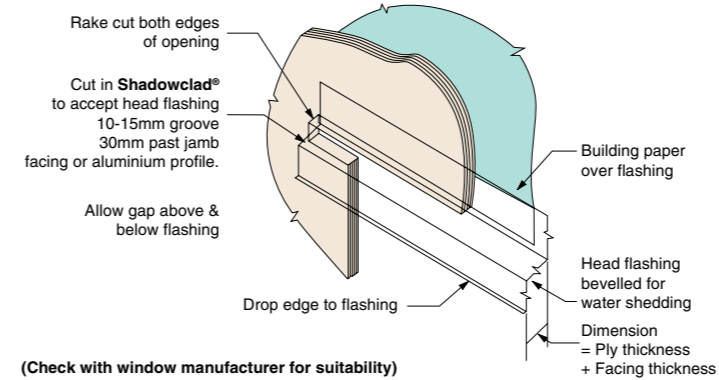


Figure 22: Indicative Head Flashing Installation Guide

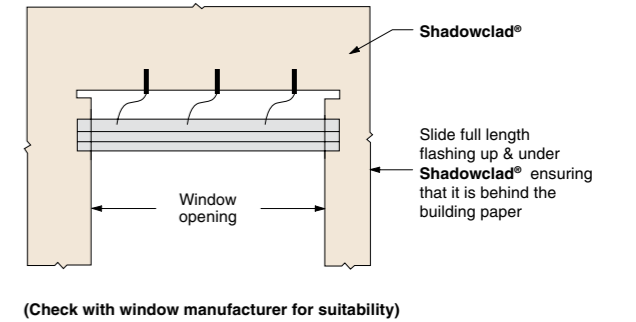
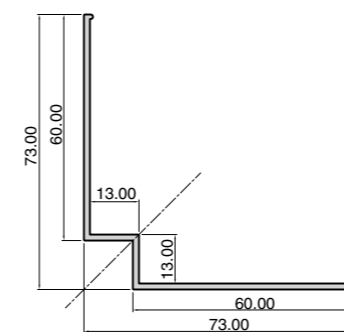


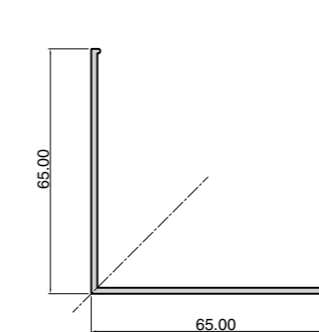
Figure 23: Flashing Details

An extensive range of custom made natural anodized Aluminium flashings are also available for corners and horizontal joints. The flashings are profiled to ensure weather seal protection and compliment the look and feel of Shadowclad®. Shadowclad® accessories include 3.6m Horizontal "Z", 2440mm, 2745mm & 3050mm Internal 90° angle and Internal "W" 90° angle and an External 90° box angle (15x15mm, 25x25mm). For professional technical advice contact a qualified CarterHoltHarvey representative or visit www.chhpanels.com.au

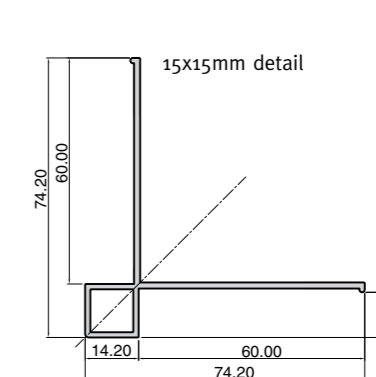
Internal 'W' 90° angle



Internal 90° angle



External 90° box angle (15x15mm, 25x25mm)



Horizontal 'Z' flashing

