

# Installation Guide

SHADOWclad® product range

Description	Textured	Grooved
Finish	Natural or Primed	Natural or Primed
Sheet Length	2440, 2745 mm	2440, 2745 mm
Width	1216 mm	1216 mm
Length/Width Tolerance	+/- 1 mm	+/- 1 mm
Weight Kg/m <sup>2</sup>	7	7
Grooves	N/A	9 mm wide, 5 mm deep, 150 mm centres
Edge Profile	Shiplap with Weathergrooves	Shiplap with Weathergrooves
Treatment	H3 (AZOLE) LOSP Clear*	H3 (AZOLE) LOSP Clear*
R-Value	2†	2†

\* Untreated product is also available made to order.

† Total cavity value assumes 10 mm plasterboard lining, bulk insulation R 1.5 m, cavity width, reflective foil lining.

## Fasteners and Fixing with SHADOWclad

### Recommended Fasteners

- Nails in timber: For hand driven applications use 40 x 2.8 mm HDG (Hot Dipped galvanised) flat head
- Minimum machine driven nail is a 2.87 x 50 mm HDG (Hot Dipped Galvanised) flat head or D head framing nail flush with surface
- Screws in timber: 8g x 40 mm, HDG (Hot Dipped Galvanised) self drilling
- Screws up to 2.8 mm steel 10-16-45, HDG (Hot Dipped Galvanised) self drilling
- It is recommended in coastal areas to use stainless steel 316 type fasteners
- It is important that builders adhere to these nailing guidelines to minimise risk of rust marks

### Nailing Details

- Fasten centres 150 mm Top & Bottom plate. 150 mm Vertical Edges (50 mm minimum in from corners of the sheet). 300 mm Intermediate Studs and Nogs
- Fasten no closer than 9 mm from sheet edge
- SHADOWclad can be used as a simple reliable means to brace building frames
- The nailing detail in the diagram provides 3.4 kN/m bracing capacity
- Up to 6.4 kN/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 Association of Australasia and available at [www.ewp.asn.au](http://www.ewp.asn.au)

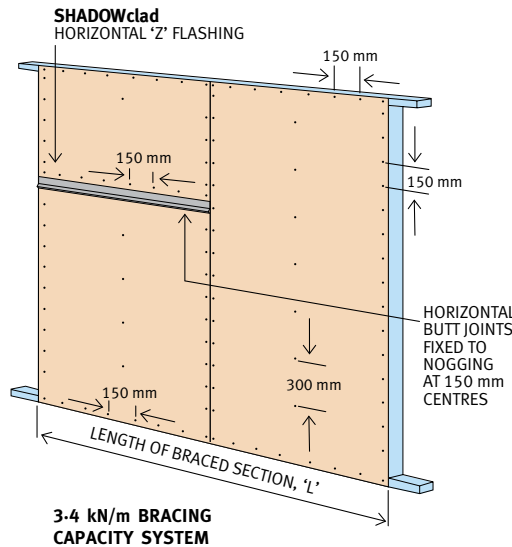


FIGURE 3 WALL SECTIONS (2440 SHEET ALTERNATIVE)

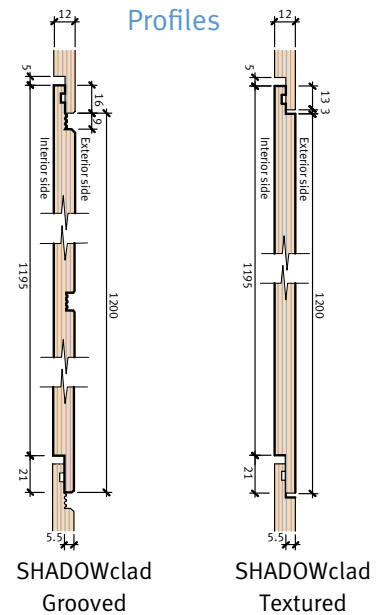


FIGURE 1 SHEET DIMENSIONS

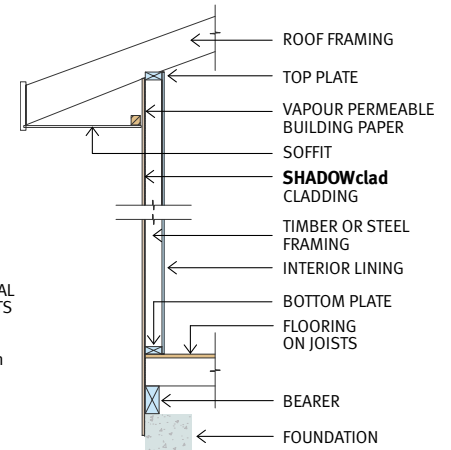


FIGURE 2 WALL SECTIONS (2745 SHEET)

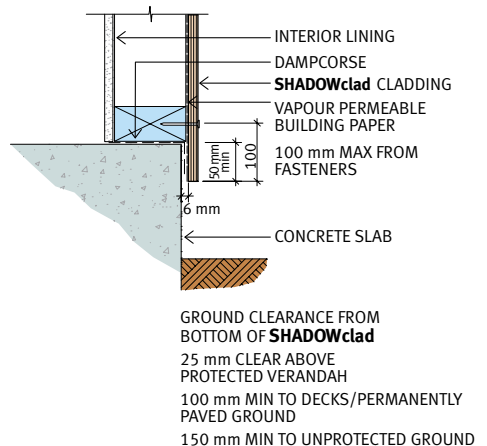
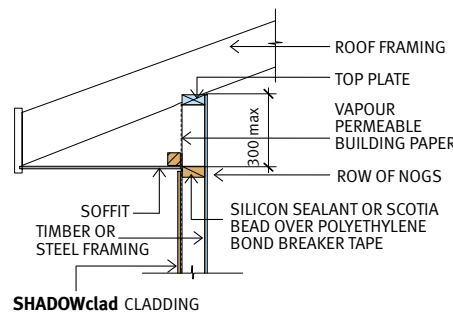


FIGURE 4 OVERHANGS AND GROUND CLEARANCE

## 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 3-5 mm between the vertical sheet joints and corner joints
- Allow an expansion gap of 5 mm between the bottom of the sheet and flashings for frame movement and drainage
- Fasten all edges at 150 mm centres and 9 mm from sheet edges
- Fasten to intermediate studs and nogs at 300 mm centres
- Fasten nails flush with surface. Do not punch
- Do not nail through the shiplap joint top lap
- Nail bottom lap, behind the weather groove
- Do not nail in 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 600 mm stud spacing
- Framing must support sheet edges
- Stack sheets flat on at least 3 evenly placed bearers and keep dry

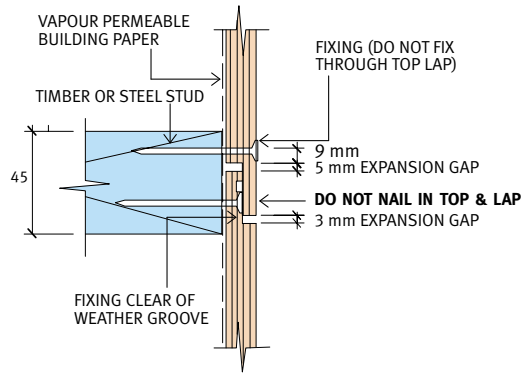


FIGURE 5  
VERTICAL JOINT (LAPPED JOINT) -  
SHADOWclad TEXTURE

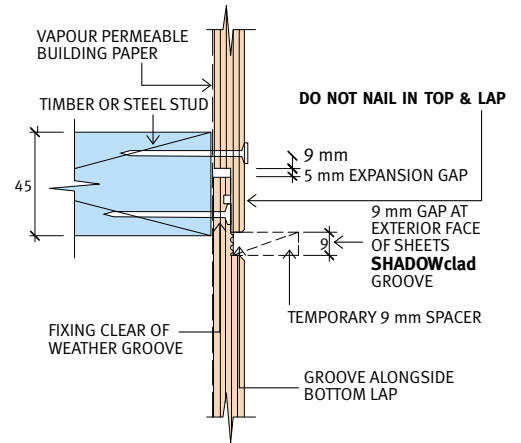


FIGURE 6  
VERTICAL JOINT (LAPPED JOINT) -  
SHADOWclad GROOVE

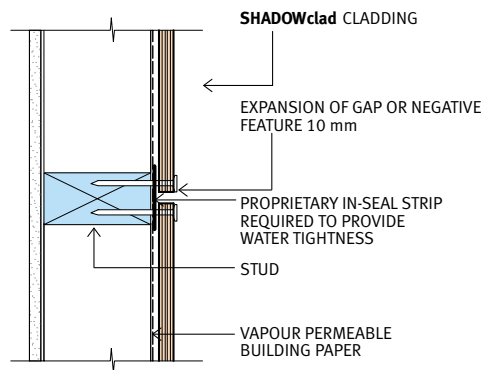


FIGURE 7  
VERTICAL JOINT (EXPRESSED SQUARE EDGE)

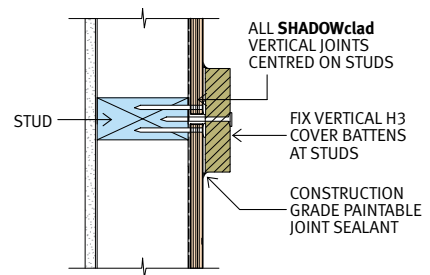
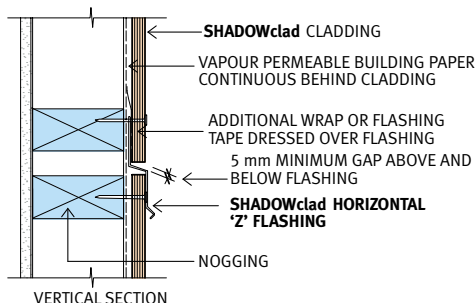


FIGURE 8  
VERTICAL JOINT (BATTENED SQUARE EDGE)



(NOTE: OPTIONAL H3 ACCENT BOARD OVER JOINT. ALL FIXING CLEAR OF FLASHING)

FIGURE 9  
HORIZONTAL JOINT

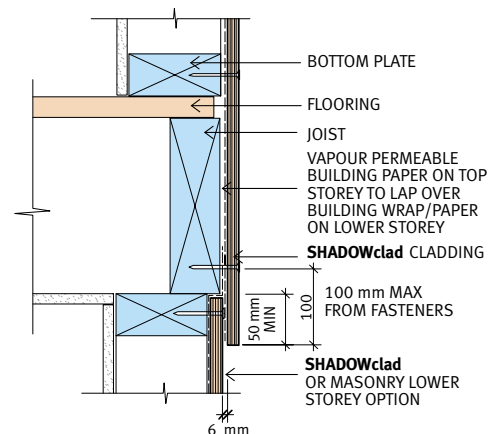


FIGURE 10  
SHADOWclad UPPER TO LOWER STOREY  
(MASONRY VENEER OR SHADOWclad)

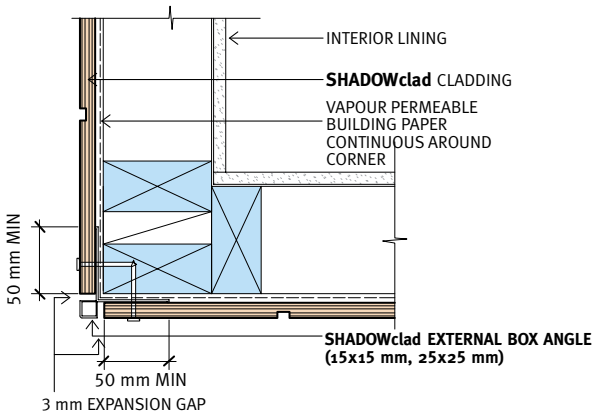


FIGURE 11  
EXTERNAL CORNER WITH SHADOWclad  
EXTERNAL BOX ANGLE

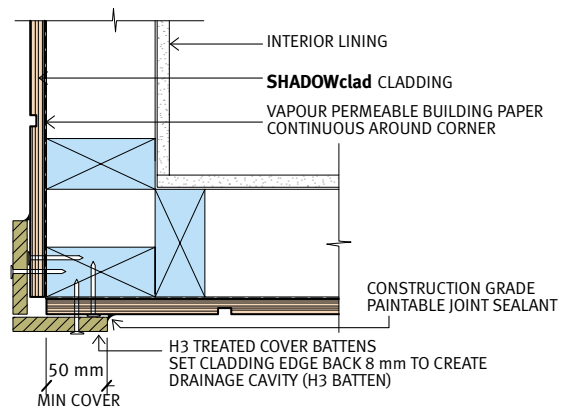


FIGURE 12  
EXTERNAL CORNER WITH COVER BOARDS

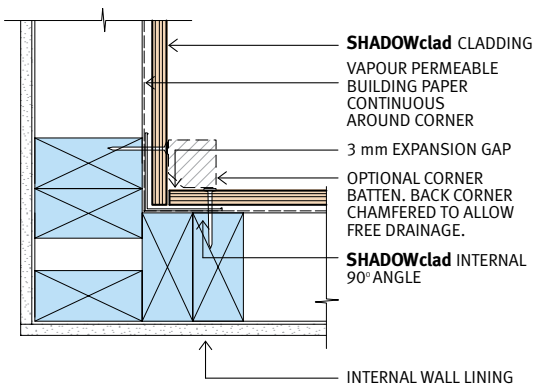


FIGURE 13  
INTERNAL CORNER WITH SHADOWclad  
INTERNAL 90° ANGLE

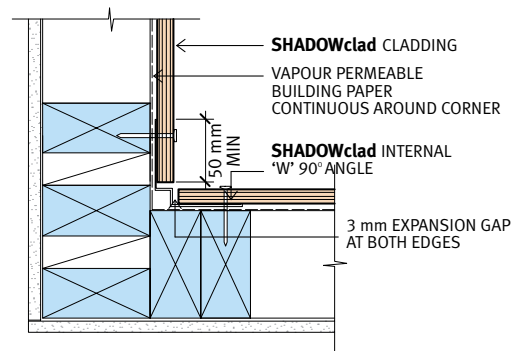


FIGURE 14  
INTERNAL CORNER WITH SHADOWclad  
INTERNAL 'W' 90° ANGLE

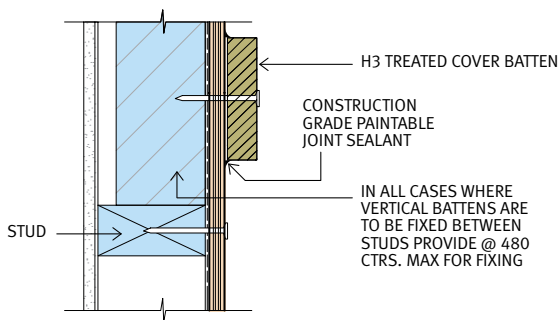


FIGURE 15  
VERTICAL BATTEN (OFF STUD)

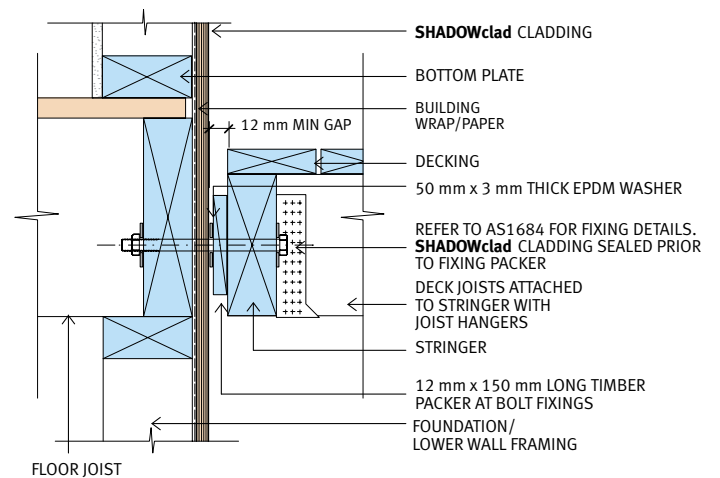
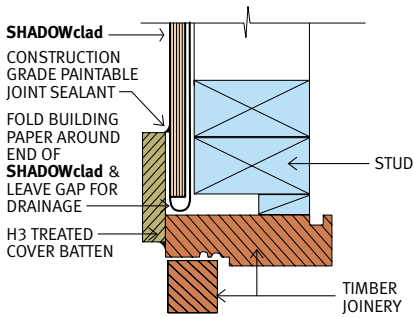
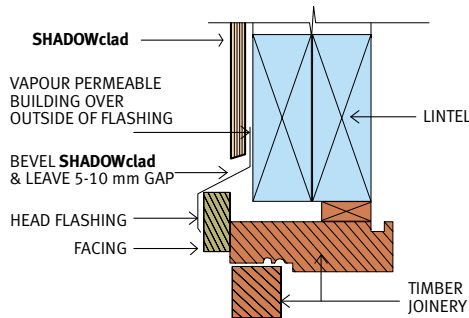


FIGURE 16  
JUNCTION WITH WALL FOR  
NON-CANTILEVERED TIMBER DECK



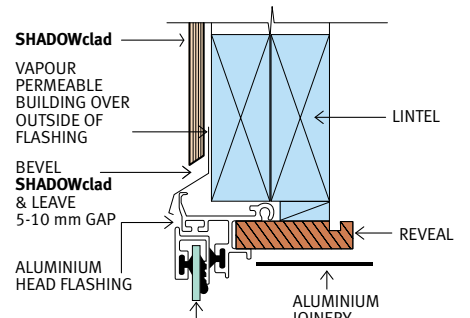
(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 17  
INDICATIVE TIMBER WINDOW JAMB DETAIL



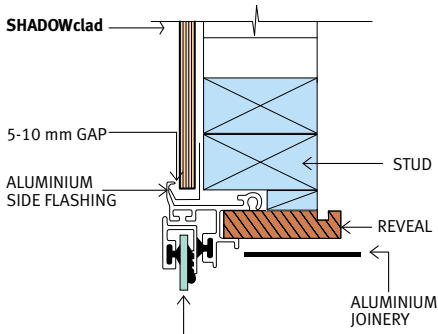
(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 18  
INDICATIVE TIMBER WINDOW HEAD DETAIL



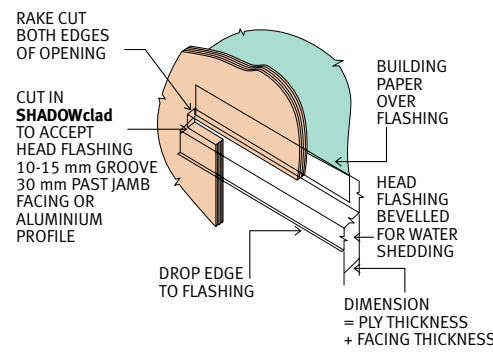
(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 19  
INDICATIVE ALUMINIUM WINDOW HEAD DETAIL



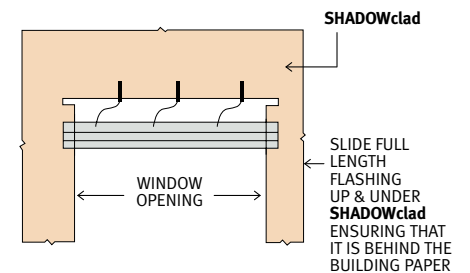
(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 20  
INDICATIVE ALUMINIUM WINDOW JAMB DETAIL



(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 21  
INDICATIVE HEAD FLASHING DETAILS



(CHECK WITH WINDOW MANUFACTURER FOR SUITABILITY)

FIGURE 22  
INDICATIVE HEAD FLASHING INSTALLATION GUIDE

## Flashing Details

Natural anodized aluminium flashings, as opposite and demonstrated in this guide, are 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 3.6 m Horizontal "Z", 2440 mm, 2745 mm Internal 90° angle and Internal "W" 90° angle and an External 90° box angle (15x15 mm, 25x25 mm).

For professional technical advice contact a qualified Carter Holt Harvey Woodproducts representative or visit [www.chhwoodproducts.com.au](http://www.chhwoodproducts.com.au)

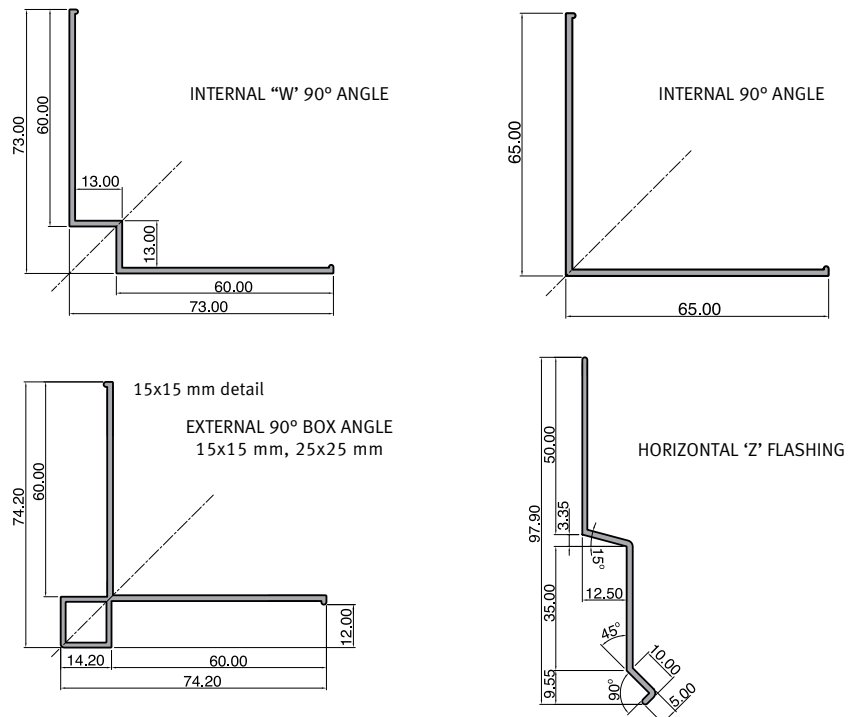


FIGURE 23  
FLASHING DETAILS

MORE ONLINE

[chhwoodproducts.com.au/SHADOWclad](http://chhwoodproducts.com.au/SHADOWclad)

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