

# EXTERNAL CLADDING & EAVES LINING



FC121

EXTERNAL CLADDING SYSTEMS

JULY 2007-R

**cemintel**<sup>™</sup>  
fibre cement systems



**CSR**

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# DESCRIPTION

Cemintel<sup>™</sup> Cladding Sheet and Cemintel<sup>™</sup> Eaves Lining Sheet are autoclaved, cellulose fibre reinforced cement sheets with a smooth flat surface. They are immune to water damage and will not rot.

# APPLICATIONS

Cemintel<sup>™</sup> Cladding Sheets are designed for use as external wall claddings, lining of verandahs and soffits, gable ends, garages and upper storey additions

Cemintel<sup>™</sup> Eaves Lining Sheets are specifically designed for use in the lining of eaves.

Cemintel<sup>™</sup> Cladding and Eaves Lining Sheets conform to the requirements of AS2908.2 – Cellulose-cement products Part 2: Flat sheets.

## HIGH WIND AREAS.

The systems in this manual are designed for non cyclonic regions. For high wind and cyclonic areas, closer framing centres will be required. Contact your CSR Building Products state office for further information.

# ADVANTAGES

- Smooth surface finish on face of sheet easily accepts popular exterior paint finishes.
- Simple and quick to install using standard building methods.
- Immune to permanent water damage.
- Will not rot.
- Maintenance free.
- High durability exterior grade material.
- Fire resistant and non combustible.
- Termite resistant.

# PROPERTIES

## MASS.

Cemintel<sup>™</sup> Cladding and Eaves Lining Sheet has a nominal mass as follows:

Thickness (nominal) 4.5mm ≈ 7.3kg/m<sup>2</sup>.

Thickness (nominal) 6mm (Cladding only) ≈ 9.1kg/m<sup>2</sup>.

## FIRE RESISTANCE.

Under the Building Code of Australia, Part 3.7.1.2, Cemintel<sup>™</sup> Fibre Cement can be used wherever non-combustible material is required.

When tested in accordance with AS1530.3, the Early Fire Hazard Indices are as follows:

EARLY FIRE HAZARD INDICES.	
Ignitability	0
Spread of Flame	0
Heat Evolved	0
Smoke Developed	0

# COMPONENTS.

## CEMINTEL<sup>™</sup> CLADDING SHEET.

Cemintel<sup>™</sup> Cladding Sheet is available in a range of sizes. Sheets are supplied with a slightly bevelled edge on all four sides for ease of insertion into the plastic joining strips.

Sheet Length mm.	Width 900mm		Width 1200mm	
	Thickness (nom.)		Thickness (nom.)	
	4.5mm	6mm	4.5mm	6mm
1800	✓		✓	✓
2100			✓	
2400	✓	✓	✓	✓
2700	✓		✓	✓
3000	✓		✓	✓

All dimensions nominal. Thickness tolerance ±0.25mm.

## CEMINTEL<sup>™</sup> EAVES LINING SHEET.

Available in 4.5mm sheet thickness only.

Sheet Length mm.	Width mm.		
	450	600	750
2400	✓	✓	✓

All dimensions nominal. Thickness tolerance ±0.25mm.

## FASTENERS.

To guarantee performance, only Cemintel<sup>™</sup> Fibre Cement sheet fasteners should be used in these systems.

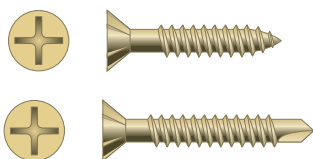
**Cemintel<sup>™</sup> Fibre Cement Nails:** Galvanised 2.0mm x 30mm for softwood and 2.0mm x 25mm for hardwood.



**Cemintel<sup>™</sup> Fibre Cement Screws:** For 6mm thickness sheets only.

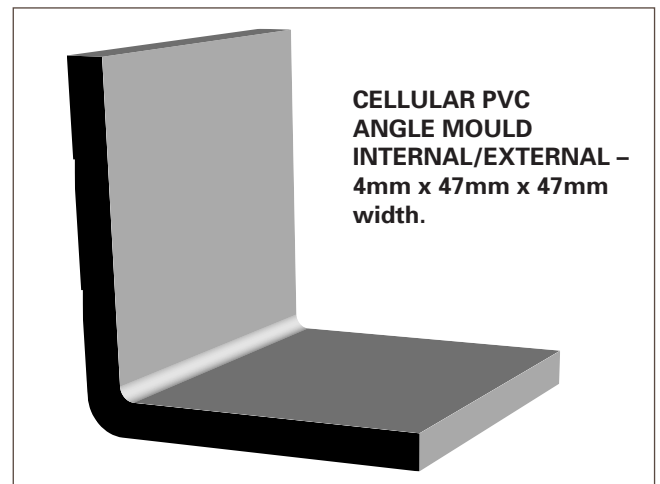
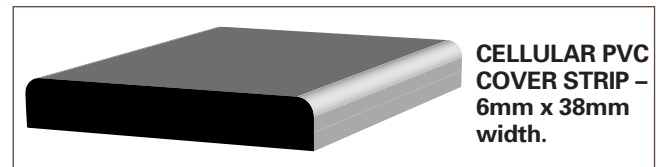
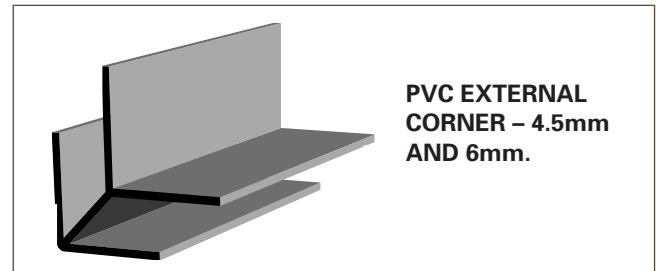
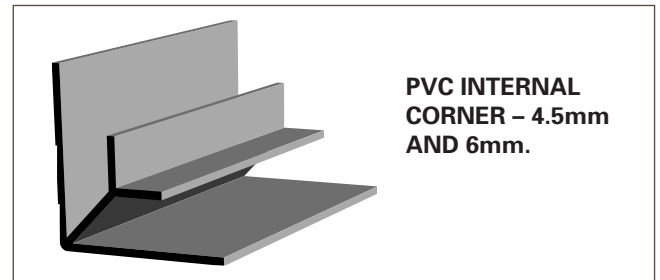
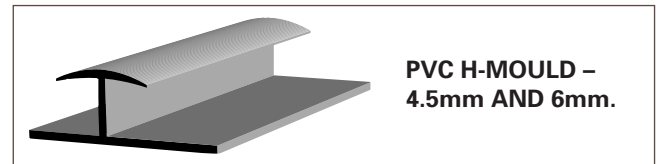
Nº 8 x 20mm self embedding head, needle point for light gauge steel frames up to 0.8mm.

Nº 8 x 25mm self embedding head, drill point for heavy gauge steel frames from 0.8mm to 1.2mm.



## PVC JOINING STRIPS.

The following PVC extrusions for sheet joining and edge finishing are available in various lengths ranging from 1800mm to 3600mm. Several Joining Strips have an extended leg of PVC to enable nail or screw fixing of the profile to the supporting frame.



# HANDLING & STORAGE.

All Cemintel<sup>™</sup> Fibre Cement sheeting should be kept dry, preferably by being stored inside the building. Where it is necessary to store sheets outside, they should be stacked flat, off the ground, properly supported on a level platform and protected from the weather.

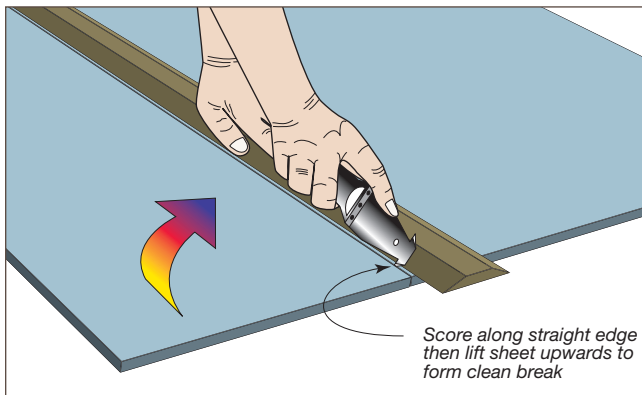
Care should be taken to avoid damage to edges, ends and surfaces. If sheets become wet, allow to dry thoroughly before fixing.

# SHEET PREPARATION.

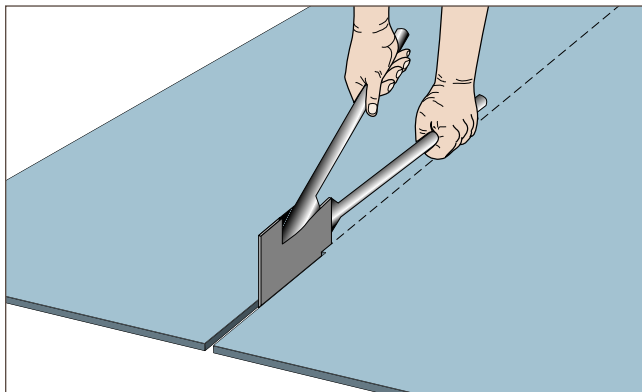
## CUTTING.

Tungsten Tipped Score and Snap Knife.

1. Score face of sheet 4 to 5 times using a tungsten tipped knife against a straight edge.
2. Support the scored edge with the straight edge and snap the sheet upwards for a clean break.

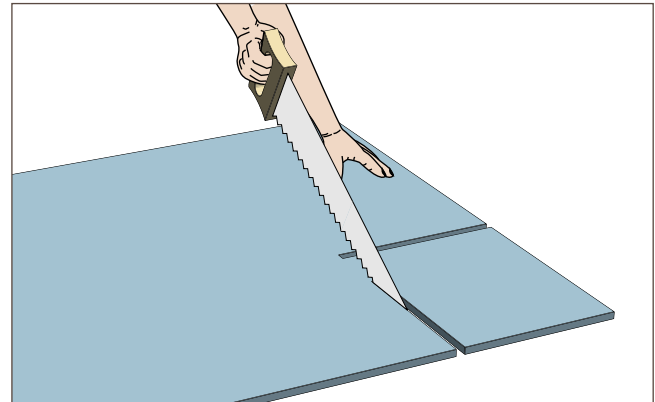


## Hand Guillotine.



## Hand Saw.

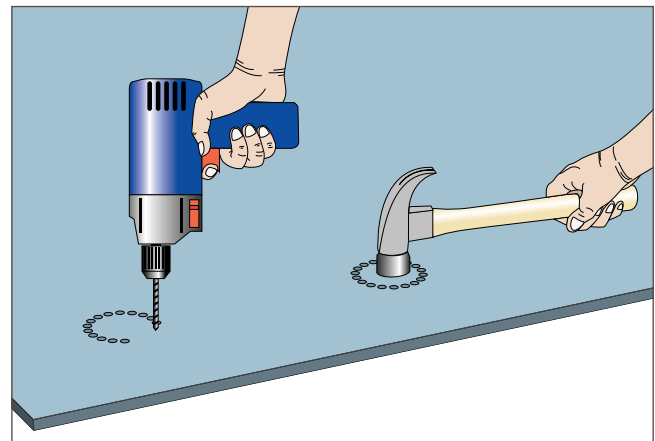
Work with sheet face up to prevent burrs forming on the face.



## HOLE FORMING.

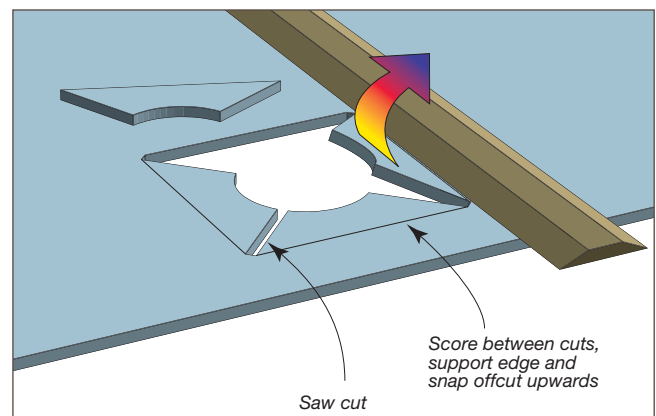
Small holes are formed by:

1. Drilling a number of holes around the perimeter of the opening to be formed.
2. Support edge of opening to minimise damage to sheet, and use a hammer to carefully tap out the centre.



Large holes or openings are formed by:

1. Scoring around the perimeter of the opening.
2. Form a large hole in the centre as noted above.
3. Saw cut from the hole to the corners of the opening.
4. Support edges and snap away off cuts.



## SUPPORT FRAMING.

Cemintel™ Cladding and Eaves Lining Sheets may be fixed to timber or steel frames which satisfy local government building regulations.

Timber framing should comply with AS1684 – 1992 National Timber Framing Code.

Maximum framing centres for fixing sheets to walls, ceilings and eaves are shown below.

Application	Sheet Thickness mm.	Eaves Width mm.	Maximum Framing Ctrs. mm.
Walls	4.5	–	600
	6.0	–	600
Ceilings	4.5	–	450
	6.0	–	600
Eaves	4.5	450	1200
		600	1200
		750	600
		900	600
		1200	600

Joints between Cladding Sheets should always coincide with a supporting framing member. To provide sufficient support for nails or screws, a minimum stud width of 35mm is required. Where this is not possible, an additional stud or trimmer will be required to ensure fasteners can be fixed at a minimum distance of 12mm from the sheet edge.

## INSULATION.

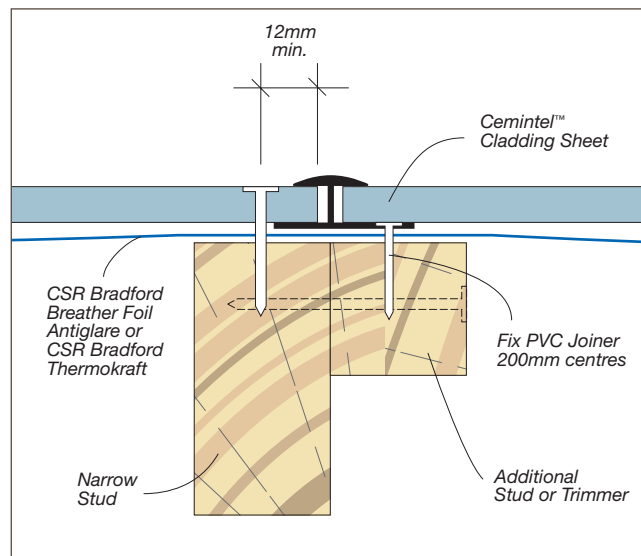
Insulation materials should be installed to enhance thermal insulation properties and occupant comfort. Insulation also acts as an additional barrier against wind, dust, rain and noise. Depending on the level of thermal insulation required, two alternatives are recommended.

The minimum recommendation is to install a reflective foil fixed to the outside of the frame. It is important that a vapour permeable foil, such as Bradford Breather Foil Antiglare is used. The correct installation of this Bradford foil will provide an insulation rating of approximately R0.6.

Where greater thermal insulation properties are important, it is recommended that Bradford Gold Batts be installed in the wall framing. Requirements will vary from region to region, but Bradford Gold Batts are available with insulation performance ratings of up to R2.0.

When glasswool insulation is installed, it is essential to use a vapour barrier. However to reduce overall costs, building paper such as Bradford Thermokraft may be used instead of Bradford Breather foil.

### INSTALLATION DETAIL FOR NARROW STUD APPLICATION.



# INSTALLATION: WALL CLADDING.

Cemintel™ Cladding Sheet should be fixed vertically to the frame.

Fasteners are to be positioned at 200mm centres along sheet edges and ends, at 300mm centres in the body of the sheet, and are to be applied in accordance with the chosen sheet joining method.

Fasteners must be positioned a minimum of 12mm from sheet edges and 50mm from sheet corners.

## FIXING TO TIMBER FRAMING.

For timber frame installations, use 2.0mm dia. Cemintel™ Fibre Cement Nails, 30mm long for softwood and 25mm long for hardwood.

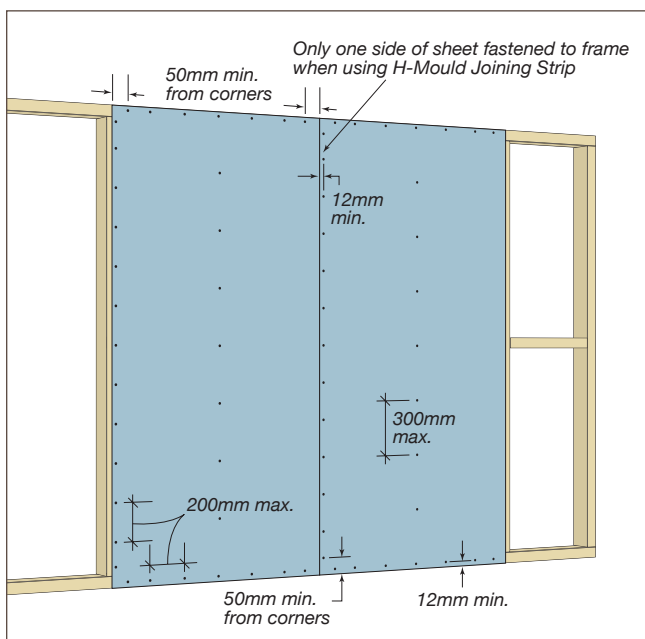
Nail heads may be driven flush.

## FIXING TO STEEL FRAMING.

Cemintel™ Fibre Cement sheets are to be fixed to steel frames or furring channels using N° 8 x 20mm self embedding head needle point screws, for light gauge frames; and N° 8 x 25mm self embedding head drill point screws, for heavy gauge frames. When fixing to steel frames, 6mm thickness sheets must be used.

Hot rolled steel structural sections must be battened out with timber or steel battens before sheets are fastened. Sheets must not be fastened directly to hot rolled steel sections.

## FIXING OF WALL SHEETS TO FRAMING.



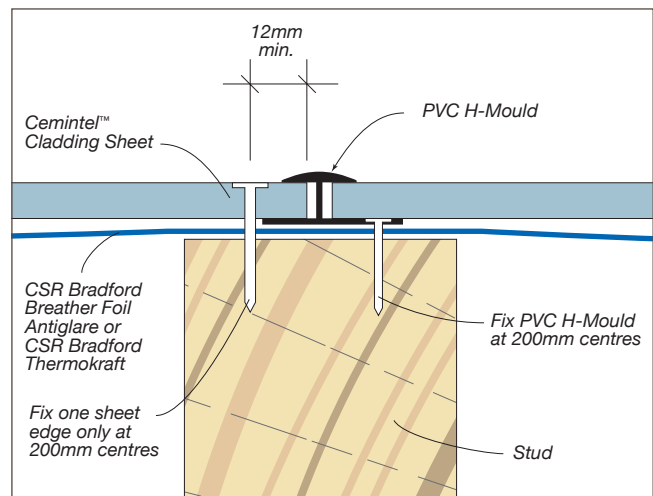
## JOINT DETAILS.

### PVC H-Mould Joint.

Fix PVC H-Mould to frame at 200mm centres. Slide sheet into the side of the PVC H-Mould which has been fixed to the frame. Fix the sheet centre, top and bottom edges. Slide the next PVC H-Mould onto the other side of the sheet and fasten the mould and the adjacent sheet edge to the frame.

NOTE: Only one sheet edge at each joint is fastened directly to the frame. The other sheet edge is not fastened, but is held in place by the PVC H-Mould, to allow for movement.

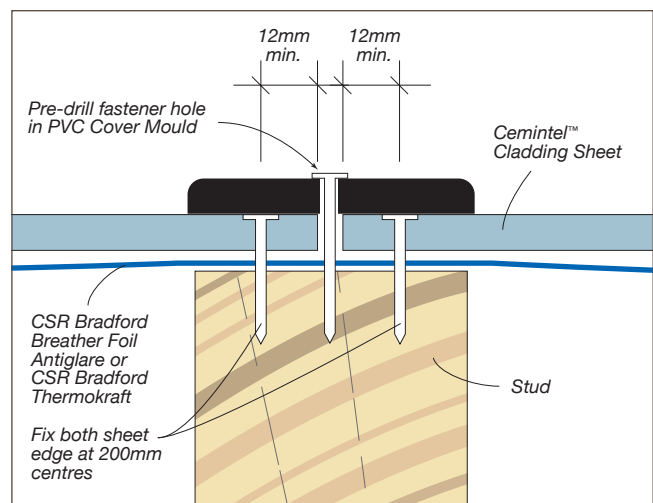
### JOINT DETAIL WITH PVC H-MOULD JOINT.



### PVC or Timber Cover Mould Joint.

Both sheet edges must be fastened to the frame prior to fixing Cover Moulds. When PVC Cover Mould is used, the hole for the fastener must be pre-drilled. Cover Mould is then fastened to frame at 200mm centres.

### JOINT DETAIL WITH PVC OR TIMBER COVER MOULD.



# INSTALLATION: CEILINGS & EAVES.

## CEILINGS.

Ceiling sheets are to be fixed at 200mm centres along sheet edges, and at 300mm centres in the body of the sheet. All sheet edges must be supported.

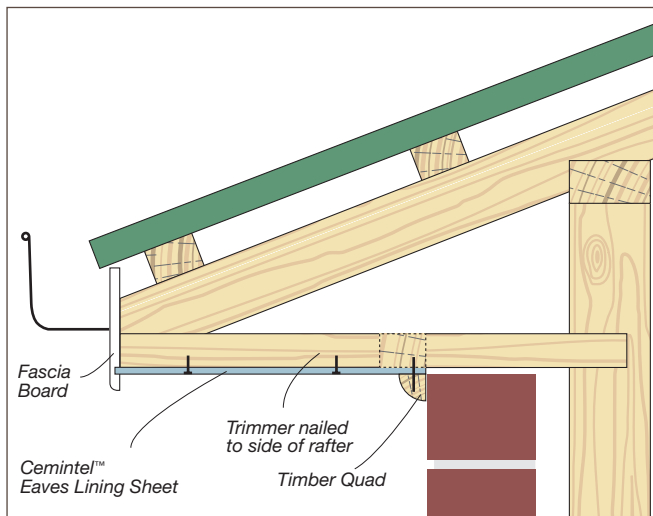
Fasteners must be positioned a minimum of 12mm from the sheet edges and 50mm from sheet corners.

## EAVES.

Support edges of Cemintel<sup>™</sup> Eaves Lining Sheet in fascia board rebate groove. Fix body of sheet to trimmers at 300mm centres. Where sheet edges are not supported in a fascia board, fasten sheet edges to a supporting member at 200mm centres. All sheet edges must be supported.

Fasteners must be positioned a minimum of 12mm from the sheet edges, and 50mm from sheet corners.

### TYPICAL INSTALLATION DETAIL FOR EAVES.

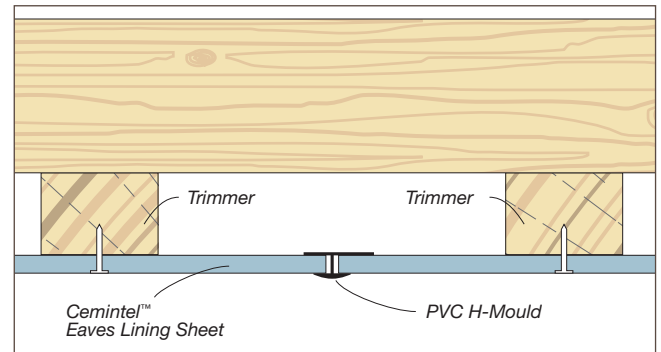


## JOINT DETAILS.

### PVC H-Mould.

Sheet ends are joined using a PVC H-Mould. These joints do not need to be supported by a trimmer.

### EAVES INSTALLATION DETAIL WITH PVC H-MOULD JOINT.

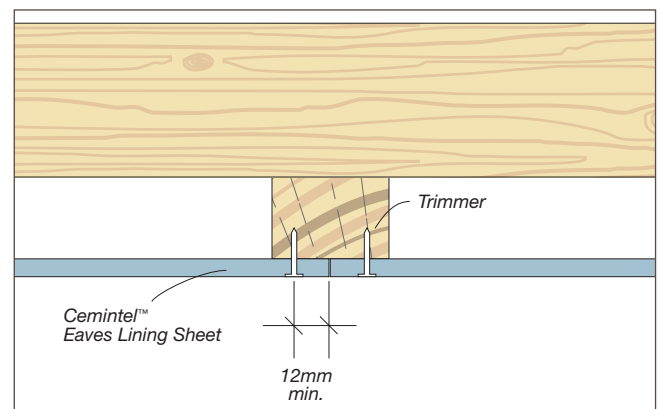


## BUTT JOINTS.

When no jointing strip is used, sheets may be butted together with both sheet edges fastened to the frame.

Butt joints must always coincide with and be supported by a framing member.

### EAVES INSTALLATION DETAIL FOR BUTT JOINT ON SUPPORT MEMBER.



# DECORATION.

Cemintel<sup>™</sup> sheets should be finished with two coats of exterior grade acrylic paint.

The surface must be clean and dry before application.

In all cases the paint manufacturer's instructions are to be followed.

## EXTERNAL CLADDING &amp; EAVES LINING



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EXTERNAL CLADDING SYSTEMS

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CEMINTEL<sup>®</sup> FIBRE CEMENT SYSTEMS, CSR BUILDING PRODUCTS LIMITED, A.B.N 55 008 631 356

**cemintel**<sup>™</sup>  
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[www.cemintel.com.au](http://www.cemintel.com.au)

## HEALTH & SAFETY

**WARNING:** Fibre Cement products contain crystalline silica. Repeated inhalation of fibre cement dust may cause lung scarring (silicosis) or cancer. Do not breathe the dust. When cutting sheets, use the methods recommended in this brochure to minimise dust generation. If power tools are used, wear an approved dust mask (respirator). These precautions are not necessary when stacking, unloading or handling fibre cement products.

For further information and for a Material Safety Data Sheet, phone 1800 807 668.

## GUARANTEE

CSR Building Products Limited warrants its Fibre Cement products to be free of defects in materials and manufacture. If a CSR product does not meet our standard, we will, at our option, replace or repair it, supply an equivalent product, or pay for doing one of these.

This warranty excludes all other warranties and liability for damage or loss in connection with defects in CSR's product, other than those compulsorily imposed by legislation, notably the Trade Practices Act.

## CONTACT DETAILS

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