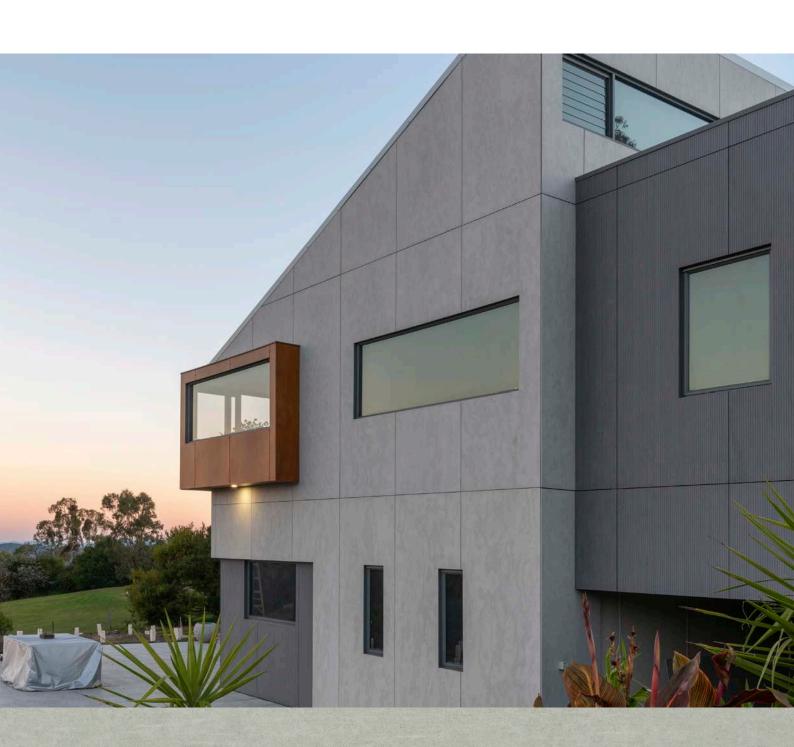
© EMINTEL







INTRODUCTION

TA	BLE OF CONTENTS				
01	INTRODUCTION	2	05	INSTALLATION	14
02	PRODUCT OVERVIEW	3	06	CONSTRUCTION DETAILS	15
	Applications	8	07	SAFETY, HANDLING AND GENERAL CARE	22
	Weather Resistance	8		Health, Safety and Personal Protection	22
	Corrosive Zones	8		Equipment (PPE)	
03	COMPONENTS + ACCESSORIES	9		Safety, Handling, and Maintenance	22
04	SYSTEM DESIGN	11	80	WARRANTY, CLEANING AND MAINTENANCE	23



Introduction

Cemintel's Barestone External and Surround panels combine with timber battens to form a simple, durable system for residential buildings. The use of corrosion resistant materials makes this system suitable for most applications, including coastal environments.

This Installation Guide includes system engineering information and installation procedures for common external cladding applications. Information on general design considerations is given in the Cemintel Facades and Cladding Design Guide.

It is assumed that the user has an expert knowledge of building design and construction. In no way does this guide replace the services of the building professionals required to design projects, nor is it an exhaustive guide of all possible scenarios. It is the responsibility of the architect, designer, and various engineering parties to ensure that the details in this Installation Guide are appropriate for the intended application.

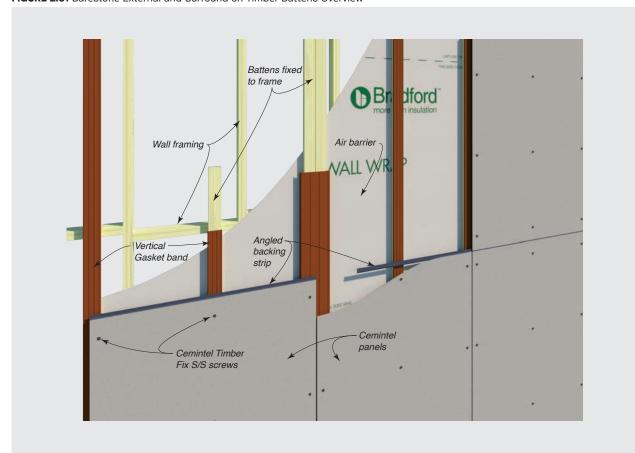
This guide should be read in conjunction with the relevant Cemintel Installation Guide, which provides a comprehensive list of design and aesthetic considerations including panel layout options, structural considerations, moisture management, insulation and energy efficiency, and additional installation details. Reference is also made to Cemintel Air Barriers, a guide for the design and installation of fibre cement and wall wraps as air barriers.

Whilst this Installation Guide is applicable for use with Cemintel Surround panels, please note however, that not all colour matched screws for the Secondary Palette panels are stocked, and lead times apply.





FIGURE 2.01 Barestone External and Surround on Timber Battens Overview



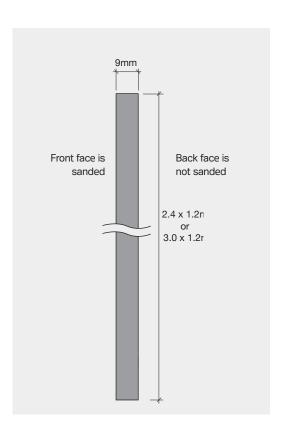
Barestone Panel Information

Cemintel Barestone External panels are prefinished, square edged, compressed fibre cement (CFC) panels.

Consisting primarily of Portland Cement, cellulose fibre, air and water, panels are compressed to produce a dense 9mm panel that offers superior performance in terms of strength and durability, making Barestone External an excellent choice for commercial applications subject to higher wind loads.

Panels also incorporate Cemintel's unique penetrating Ceminseal® waterblock technology (factory sealed on all sides) for added weather resistance and durability.

Barestone External is popular with architects and designers due to its contemporary raw concrete aesthetic. As with natural timber or stone, every piece is unique in colour and patterning reflecting the qualities of the natural ingredients used and the manufacturing process.



Product Specifications

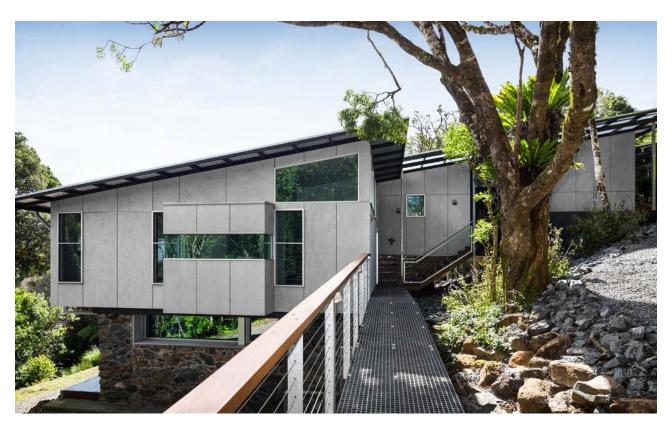
Property	Specification	Manufacturing Tolerance	Relevant Standard
Panel Width	1200mm	+ 0 / - 2.0mm	AS 2908.2
Panel Length	2400 and 3000mm	+ 0 / - 2.0mm	AS 2908.2
Panel Thickness	9mm	+ 0.45 / - 0mm	AS 2908.2
Panel Weight (EMC)	17.8kg/m ²		AS 2908.2
Solar Reflectance	39.8%	NA	ASTME 903-12
Solar Absorption	60.2%	+ / - 1.2	ASTME 903-12

Thickness (mm)	Width (mm)	Length (mm)	Mass (Nominal)	Panels per pack
9	1200	2400	17.8kg/m ²	20
9	1200	3000	17.8kg/m ²	20

Barestone panels are manufactured in Australia and provide a natural, raw concrete appearance that blends seamlessly into its environment and easily adapts to modern, contemporary designs. Ash, Lunar and Graphite add colour depth, while maintaining the raw, natural appeal of the much loved Original.

Learn more











Surround Panel Information

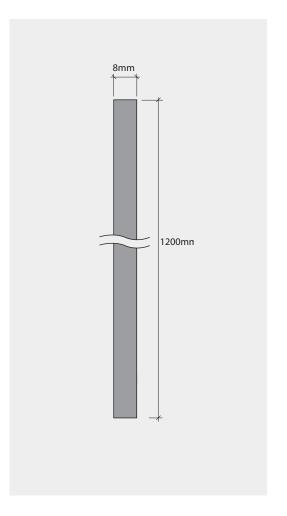
Cemintel Surround panels are prefinished, fibre cement panels that are colour bodied delivering a more natural appearance and depth of colour than can be achieved with a standard surface painted finish. They come trimmed and sealed in a standard $1200 \times 3000 \times 8mm$ size*.

Consisting primarily of Portland Cement, wood pulp, reinforcement fibres, air and water, panels have undergone a longer, natural air curing process and offer superior performance in terms of strength, density and durability, making them an excellent choice for commercial applications subject to higher wind loads.

The range comprises 5 colour groups. Each group has a foundation 'Base' colour and 4 complementary textures/patterns featuring a matte finish. There is also a 'Secondary' palette with colours that work across each range. Panels come with a range of colour matched rivets to provide a more seamless aesthetic finish.

Panels feature a UV protective coating applied during the manufacturing process. Rain water washes contaminants away entailing minimal maintenance, ongoing good looks and superior durability.

*Lengths up to 3050mm are available as special orders.



Product Specifications/System Solutions

A technical Data Sheet can be downloaded from cemintel.com.au

Dimensional/Geometrical Characteristic	Specification (trimmed panel)	Manufacturing Tolerance	Relevant Standard
Panel Width	1200mm	+ / - 1.5mm	EN 12467
Panel Length	3000mm*	+ / - 1.5mm	EN 12467
Panel Thickness	8mm	+ / - 0.8mm	EN 12467
Panel Mass (EMC)	15.7kg/m ²		



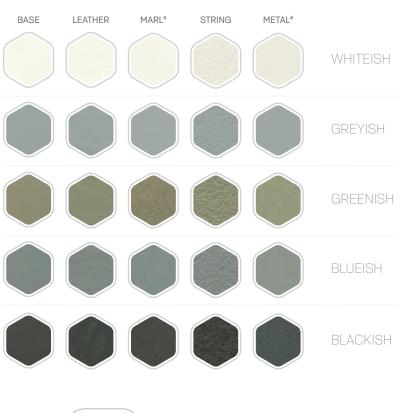


Colour Palette

Allowing you to mix and match colours with confidence, Surround has a core palette of 5 neutral colours and discrete patterns with a secondary palette of 16 colours designed to highlight and complement the core colour offering.

As Surround is a prefinished product, product images may vary from the actual product in regard to colour and surface finish.

NEUTRAL PALETTE





SECONDARY PALETTE#



*Limited stock held otherwise minimum order quantities and lead times apply.





Applications

Barestone External and Surround panels can be used for residential projects in various applications including:

- New home facades and cladding
- Upper and lower storey additions
- Composite construction
- Gable ends

- · Infill sheets around windows and doors
- Outbuildings including garages and tool-sheds
- · Over-cladding of existing walls
- Ceilings
- Soffits and Eaves

Barestone External and Surround panels with timber battens are intended for use on timber framed Class 1 and 10 residential buildings in accordance with the relevant Australian Standards and are suitable for wind zones N1 to N6/C4 in accordance with AS4055: Wind loads for housing.

Weather Resistance

Cemintel Barestone External and Surround prefinished panels are installed as part of a pressure equalised system, using vertical timber battens to create a ventilated cavity. The system provides a versatile and durable facade which is suitable for a range of building styles. Panels can be orientated horizontally or vertically with expressed joints and are fixed using stainless steel exposed head screws.

The timber fix system has been assessed to AS 4284 to withstand water ingress for serviceability wind loads of up to 2.5 kPa using Cemintel Rigid Air Barrier.

Wall wraps Enviroseal Proctorwrap CW and HTR have been assessed for serviceability pressures up to 1.2kPa and 1.5 kPa respectively. It is recommended that wall wraps used as an air barrier have an air resistance greater than 0.1 MNs/m³ when tested to ISO 5636-5. Refer to the Installation section in this manual and "Cemintel Air Barriers" guide for details on wall wraps and Cemintel Rigid Air Barrier.

A vertical gasket is placed over each batten to provide added weather resistance, and a backing strip is used at horizontal joints to reduce water ingress.

Corrosive Zones

Corrosivity zones are detailed in AS 4312, and the Architect/ Building Designer is responsible for assessing the site in accordance with the standard and to local conditions. The Barestone system on timber battens and timber framing may be used in environmental zones up to and including C5 - Very High. This includes the beachfront in regions of rough seas and surf beaches, and inland for several hundred metres, e.g. around Newcastle extending from 100m to over half a kilometre from the shoreline (high tide line). Barestone External and Surround systems are not suitable for Corrosivity Zone CX - Extreme, which includes areas up to 100m from the shoreline of surf or tropical locations. Cemintel's prefinished panels are not recommended for aggressive industrial areas, such as where the environment may be acidic with a pH of less than 5.

Walls must be sufficiently exposed from above so that rain can perform natural wash-down. Walls which are protected by soffits must be washed down twice per year to remove salt and debris build up, particularly around window/ door openings, and flashings must direct water away from the building.

The selection of materials used for framing, for flashings, additional fasteners, window frames, and for other façade components must be made with consideration of their performance in the corrosion zone. Note that 'tea-staining' may develop over time on timber fix stainless steel screw heads. This does not affect performance and can be reduced by regular washdown of the facade and fastener heads.

COMPONENTS + ACCESSORIES



Accessories

Note: The length of batten fixings will need to be increased to ensure the same or greater embedment depth is obtained when additional layers or packers are added, such as a Rigid Air Barrier (RAB) and fire-rated linings. Nail fixing through multiple layers can be difficult and screw fixings are the preferred method of batten attachment.

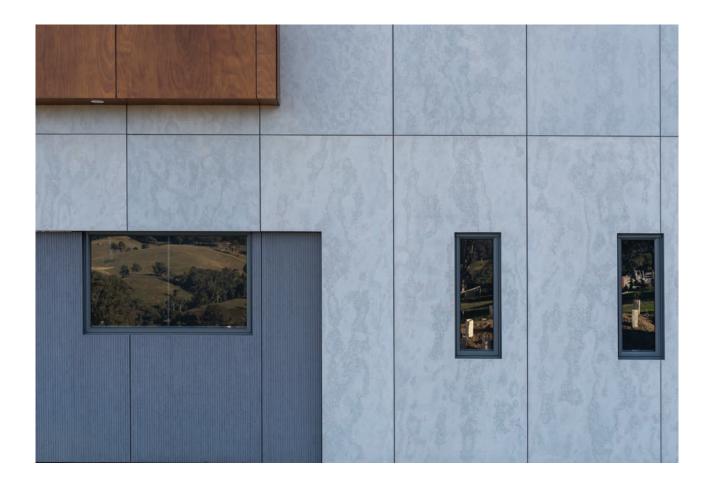
Product	Description	Size/Colour	Qty	Product Code
	Cemintel Timber Fix Stainless Steel screws with EPDM seal – for fixing cladding to battens. Screws have a corrosive coating applied and are colour matched to panels.	4.8 x 38mm Greyish Blueish Blackish Natural Silver Note: For other colours, lead times apply.	100/ pack	466222 466223 466224 466225 466226
	HDG Flat head nail - for fixing batten to stud framing	3.75mm dia x 75mm	Sup	plied by others
	Paslode HDG or SS, screw shank or ring shank, dome head, 15° – for fixing batten to stud framing	3.15mm dia x 90mm	_	
	Type 17 CSK Rib head, Phillips drive wood screw Class 3 – for fixing batten to stud framing	8-10 x 57mm	_	
	Battens – 70 \times 35mm H3 treated timber with a minimum stress level grade of MGP10 or equivalent. Battens reduce the number of structural noggings when off stud.	70 x 35mm		
	EPDM Vertical Gasket band used over all battens, at corners, and behind panel joints.	60mm wide x 50m 180mm wide x 25m	1 single roll	466220 470329
	Angled Backing Strip – a rolled aluminium section used at horizontal joints.	3040mm	1 each	132681
SEALANT	Sealant Sikaflex Sealant PRO Grey – used to seal control joints, junctions etc. Other colours maybe used if available to this specification (supplied by Sika Australia)	310ml tube	1 each	11378
	Backing Rod – used to enable correct filling of joints with sealant.	10mm dia x 50m	1 each	11177
CEMINYES (SECT SEALISE	Cemintel Edge Sealer – for sealing panel edges after on-site cutting	200ml 2litre	1 each 1 each	100166 180928
	Flashing & Capping – flashings are to be corrosion resistant to suit the project. They should be designed and installed in accordance with SAA-HB39 1997 and good building practice	Custom	Sup	plied by others





COMPONENTS + ACCESSORIES

Product	Description	Size/Colour	Qty	Product Code
for annual	Cemintel Rigid Air Barrier	6 x 1200 x 3000mm	Pack of 30 sheets	170076
	Enviroseal™ Residential (RW) Classification – Class 4 Vapour Permeable	1500mm x 50m 1500mm x 30m	1 roll 1 roll	120923 192726
	Enviroseal™ Commercial (CW) Classification – Class 4 Vapour Permeable	1500mm x 50m	1 roll	118593
	Enviroseal™ Commercial (CW-IT) Classification – Class 4 Vapour Permeable	1500mm x 50m	1 roll	153675
	Enviroseal TM Hightack Tape – used to seal wall wrap/sarking at overlap joins, around openings and at flashings. Black, single sided, aggressive adhesive tape with a high initial grab and flexible carrier.	60mm x 25m	1 roll	160950
	Thermoseal™ Wall Wrap Classification – Non-permeable Reflective Water Barrier	1350mm x 30m 1350mm x 60m	1 roll	107458 10576
	Thermoseal™ ResiWrap Classification – Non-permeable Reflective Water Barrier	1350mm x 30m 1350mm x 60m 1500mm x 30m	1 roll	116531 116532 120121
	Enviroseal™ SLS Flexi Tape – used to tape corners of openings	60mm x 5m	1 roll	124872
	Cemintel Drill Bit – for drilling accurate holes in the Surround panel to accept the Surround screw. Fits standard 10mm drill chuck.	9.5mm dia	1 each	132673



SYSTEM DESIGN



System Design

Panels, battens, and structural framing are required to resist wind loads that are specific to the building site. It is recommended that the Architect / Building Designer assigns the responsibility for the facade design to the Project Engineer. Once wind loads have been determined, batten spans, fastener spacings, and sheet fixing details may be selected from the appropriate tables in this manual.

The recommendations in this guide are considered as good building practice and are not intended to be an exhaustive statement of all relevant data. Cemintel is not responsible for the performance of constructed walls and does not interpret or make judgements about BCA requirements for any project.

Batten fixing

Tables are provided for the span, spacing, and fixing of timber battens to timber wall framing. The batten spans have been calculated in accordance with AS 1720.1: Timber Structures – design methods. Loads are based on AS 4055 with factored external pressure coefficient, kl.Cp,e = -1.3 & +0.7 The deflection of the battens as detailed in these tables is no more than span/250 when subjected to serviceability wind load of 68% of ultimate wind loads.

The minimum structural grade of the wall framing is to be F5, and the structural capacity of all support framing is to be confirmed by the project engineer. The battens may be fixed directly to studs or to appropriately designed horizontal members fixed between the studs. Additional timber members may also be required at ends of battens to ensure correct fastener end/edge distances are achieved.

TABLE 4.01 Maximum fastener spacing for fixing multiple span battens to timber framing

NOTE: This table is for the fasteners to fix 70 x 35mm F5 battens to timber framing. Fasteners are to be double screws or double nails at all batten connections to wall framing, and each batten must be fixed at three or more points.

Batten Spacing	Wind Classification	Double nail		Double	screw
	_	General Zone ①	Corner Zone ②	General Zone ①	Corner Zone ②
300	N1/N2	2300	1550	2300	1850
	N3/C1	1850	1000	2000	1550
	N4/C2	1250	650	1750	1150
	N5/C3	850	450	1400	750
	N6/C4	600	300	1050	550
400/450	N1/N2	1950	1050	2000	1600
	N3/C1	1250	650	1700	1100
	N4/C2	850	450	1400	750
	N5/C3	550	N/A	950	N/A
	N6/C4	400	N/A	700	N/A
600	N1/N2	1450	750	1800	1300
	N3/C1	900	500	1500	850
	N4/C2	600	300	1050	550

① GENERAL ZONES - Wall areas greater than 1200mm from an External Building Corner for Buildings satisfying the AS 4055 geometry limits.

② CORNER ZONES - Wall areas less than 1200mm from an External Building Corner for Buildings satisfying the AS 4055 geometry limits.



CEMINTEL

SYSTEM DESIGN

TABLE 4.02 Maximum fastener spacing for fixing single span battens to timber framing

NOTE: This table is for the fasteners to fix 70 x 35mm F5 battens to timber framing. Fasteners are to be double screw or double nail at all batten connections to the wall framing.

		Double Na	il or Screw
Batten Spacing (mm)	Wind Classification	General Zone ①	Corner Zone ②
300	N1/N2	1850	1500
	N3/C1	1600	1300
	N4/C2	1400	1150
	N5/C3	1250	1000
	N6/C4	1100	850
400/450	N1/N2	1600	1300
	N3/C1	1400	1150
	C2	1200	1000
	N5/C3	1050	N/A
	N6/C4	950	N/A
600	N1/N2	1450	1200
	N3/C1	1250	1000
	N4/C2	1100	850

① GENERAL ZONES – Wall areas greater than 1200mm from an External Building Corner for Buildings satisfying the AS 4055 geometry limits.

TABLE 4.03 Panel spans and connections - General zones

Note: This table is for the spans of Barestone and Surround panels fixed to timber battens with Timber Fix Stainless Steel screws

		Panel fixed to three or more	
Wind Classification	Panel fixed to two battens	battens	Maximum fastener spacing
N1/N2	600	600	600
N3/C1	600	600	600
N4/C2	450	600	600
N5/C3	450	600	600
N6/C4	450	400	500

TABLE 4.04 Panel spans and connections - Corner zones

Note: This table is for the spans of Barestone and Surround panels fixed to timber battens with Timber Fix Stainless Steel screws

Wind Classification	Panel fixed to two battens	Panel fixed to three or more battens	Maximum fastener spacing
N1/N2	600	600	600
N3/C1	450	600	600
N4/C2	450	600	550
N5/C3	300³	300 ³	450
N6/C4	300	300 ³	400

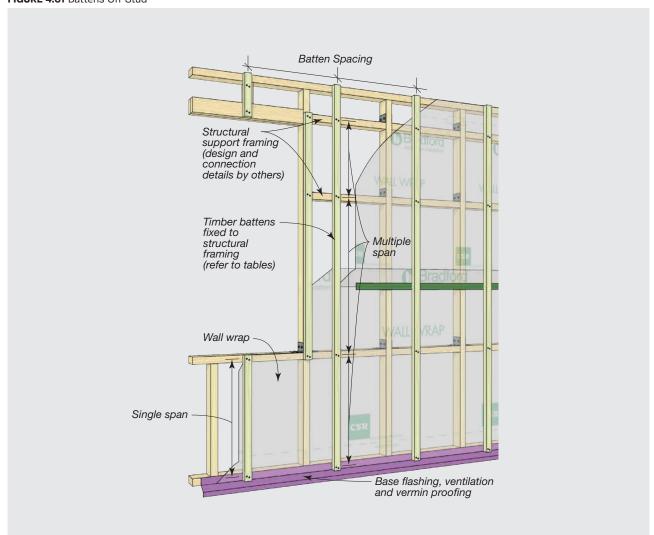
⁽³⁾ Limited by batten spacing

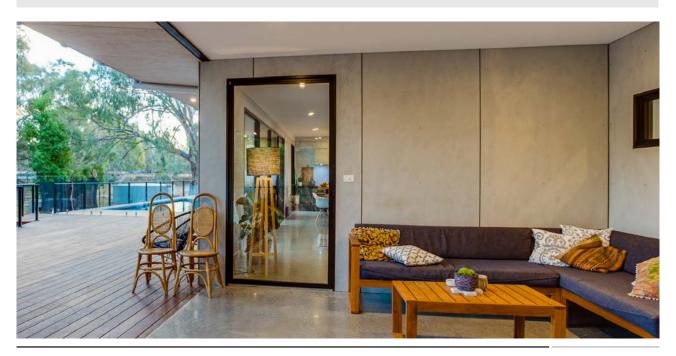
② CORNER ZONES - Wall areas less than 1200mm from an External Building Corner for Buildings satisfying the AS 4055 geometry limits.

SYSTEM DESIGN



FIGURE 4.01 Battens Off-Stud





INSTALLATION

FIGURE 5.01 Horizontal Sheet Fixing

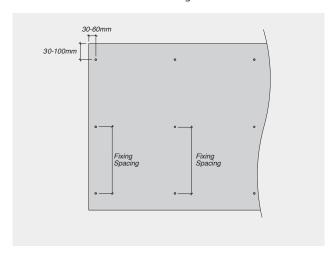
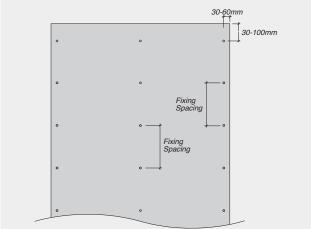


FIGURE 5.02 Vertical Sheet Fixing



Installation Procedure

Step 1 - Install air barrier as per Cemintel Air Barrier Installation Guide.

Step 2 - Install windows.

Step 3 - Fix base flashing to base of wall over air barrier, taping top edge of flashing to air barrier.

Step 4 - Fix timber battens, using packers where necessary to ensure accurate alignment. Fix battens vertically to wall framing as per Tables 4.01, 4.02 and 4.03.

Step 5 - Prepare panels. Cut panels as required. A minimum 200mm panel width is recommended to maintain adequate fastener spacing and edge distances. Run a fine sandpaper block along the edge of the cut panel (taking care not to scratch the panel surface). Seal cut edges with Cemintel Edge Sealer to protect against moisture entering the panels.

Step 6 - Drill panel holes with Cemintel drill bit. This should be done prior to lifting panels into place and can be done off site. DO NOT use hammer/impact setting whilst drilling, and fully support the back of the sheet to avoid blowout of the panel. DO NOT use countersink screws, only the specified Cemintel Timber Fix Stainless Steel screws with EPDM seal so as not to void warranty.

Step 8 - Fix panels from top to bottom. Hold or clamp the panel into position. Insert the EPDM seal with attached screw screws fully embed into the batten. Insert the horizontal

Step 7 - Install EPDM Vertical Gasket band to all battens for

as required to hold in place until panels are installed. Use a

single length of gasket for each framing member.

the full extent of panels. Use only single strips of EPDM Vertical Gasket band and do not double over. Fix with nails or screws

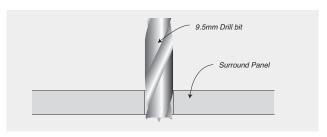
into the pre-drilled hole and tighten with screw gun, ensuring angled backing strip prior to complete tightening of perimeter screws.

Joint widths - Panels are generally installed with a nominal 8-10mm wide horizontal and vertical expressed joint. Joints up to 20mm can be formed provided additional care is taken during installation to ensure that screws have sufficient edge distance into the battens.

Fitting Tip: Fit panels from top to bottom. This allows:

- simple alignment of panels, using a batten beneath the panel as support
- the scaffolding can be dismantled at the same time as the façade is fitted

FIGURE 5.03 **Drilling Panels**





SECTION	DESCRIPTION	FIGURE REFERENCE	PAGE NUMBER
Fixing Details	Panel Fixing At Intermediate Batten	6.01	15
	Panel Fixing At Vertical Joint	6.02	16
	Panel Fixing At Control Joint	6.03	16
Corner Details	Internal Corner Detail	6.04	17
	External Corner Detail	6.05	17
Off-Stud Framing	Off-Stud Framing Detai	6.06	17
& Base Details	Base Detail With Drainage	6.07	17
Eaves/Soffit Details	Eaves With Timber Trim	6.08	18
	Eaves With Territory Trim	6.09	18
	Soffit Detail	6.10	18
Horizontal Junctions	Horizontal Expressed Joint	6.11	18
	Inter-Storey Junction Detail	6.12	19
Roof/Parapet Details	Raked Roof Intersection	6.13	19
	Parapet Detail	6.14	19
	Skillion Roof Detail	6.15	20
Window/Door Details	Typical Window Head, Jamb and Sill	6.16	20
Meter Box Details	Meter Box	6.17	21

FIGURE 6.01 Panel Fixing At Intermediate Batten

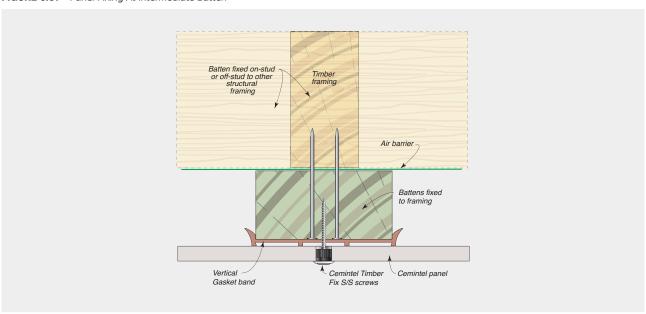






FIGURE 6.02 Panel Fixing At Vertical Joint

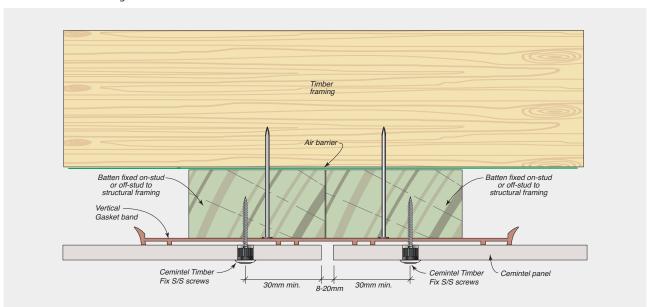


FIGURE 6.03 Panel Fixing At Control Joint

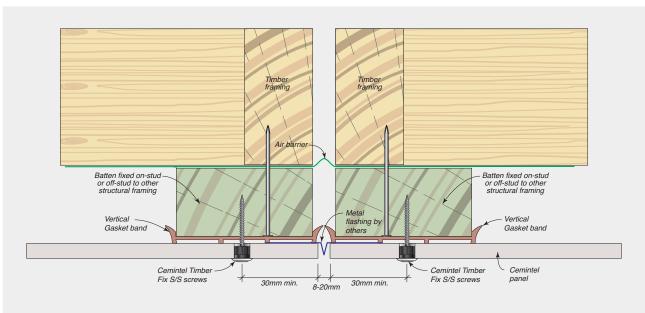




FIGURE 6.04 Internal Corner Detail

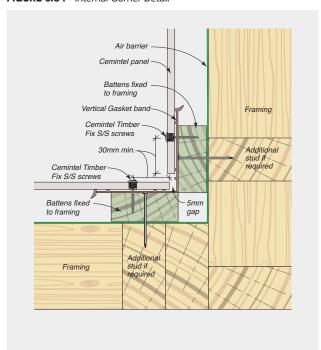


FIGURE 6.05 External Corner Detail

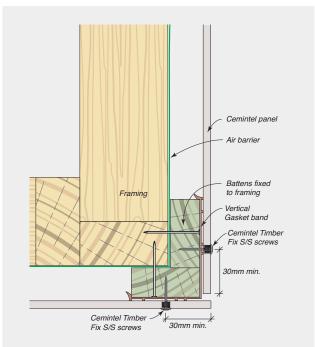


FIGURE 6.06 Off-Stud Framing Detail

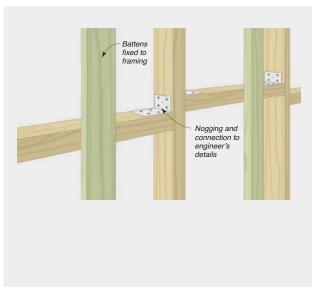
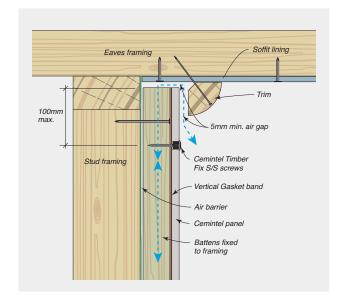


FIGURE 6.07 Eaves With Timber Trim





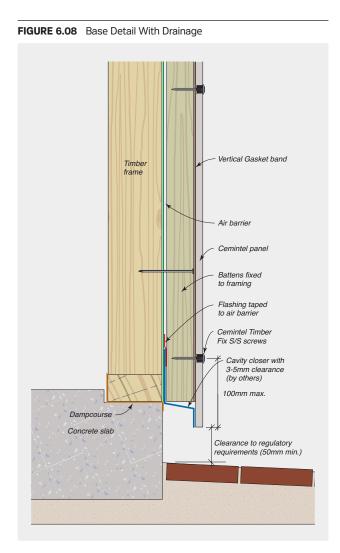


FIGURE 6.10 Soffit Detail Vertical Gasket band Air barrier Cemintel panel Battens fixed to framing Framing Cemintel Timber Fix S/S screws 100mm max Cavity closer with 3-5mm clearance. Battens fixed to framing By others Soffit lining Trim cladding Air barrier to suit Ventilation flow -

FIGURE 6.09 Eaves With Territory Trim

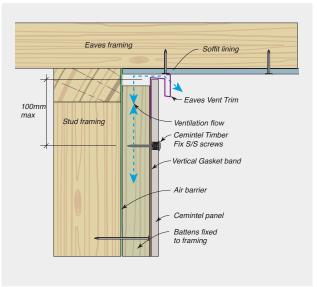


FIGURE 6.11 Horizontal Expressed Joint

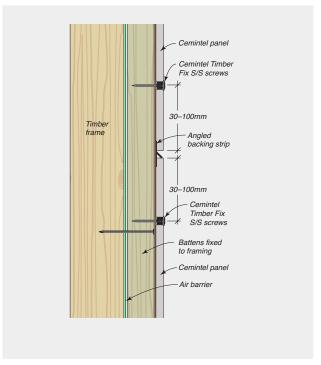




FIGURE 6.12 Inter-Storey Junction Detail

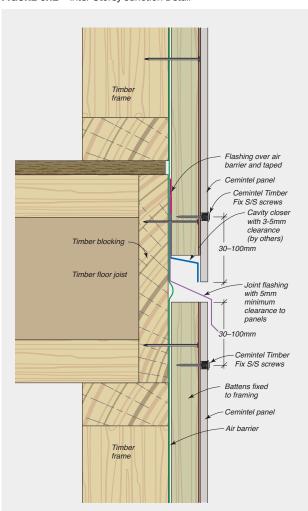


FIGURE 6.13 Raked Roof Intersection

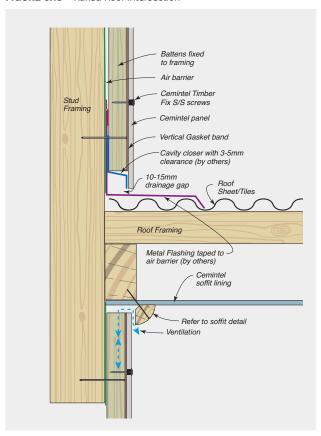


FIGURE 6.14 Parapet Detail

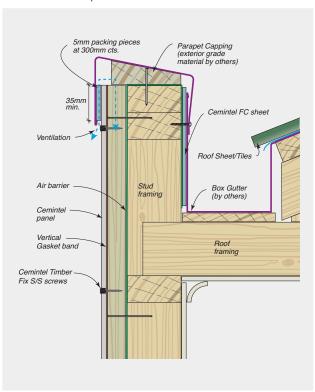




FIGURE 6.15 Skillion Roof Detail

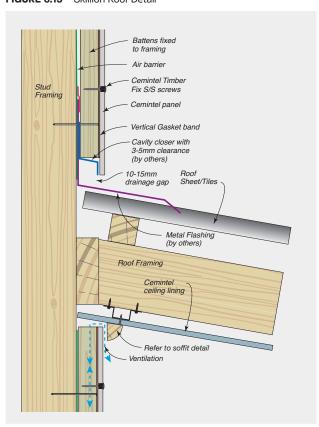


FIGURE 6.16 Typical Window Head, Jamb and Sill

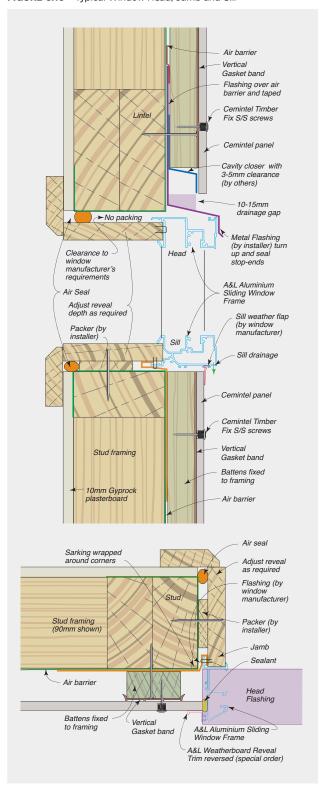
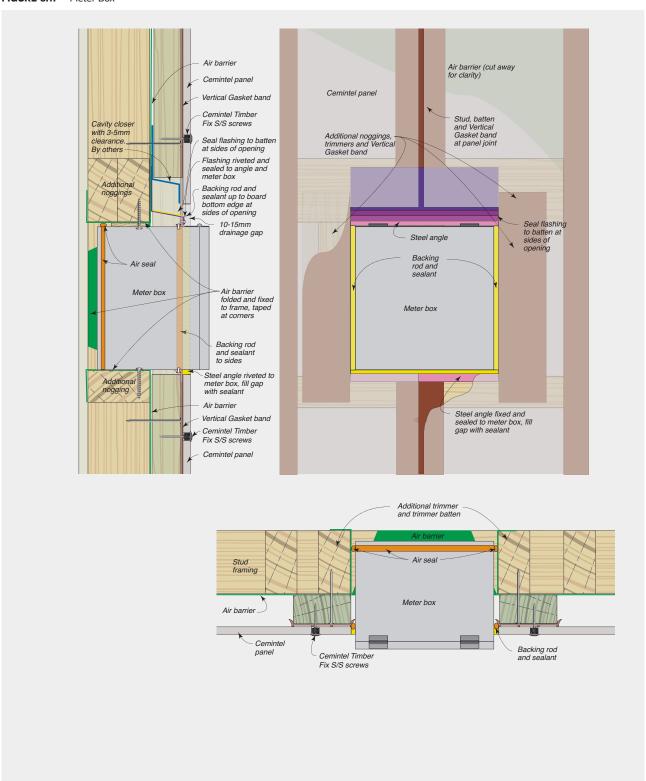




FIGURE 6.17 Meter Box



SAFETY, HANDLING + GENERAL CARE







Health, Safety and Personal Protection Equipment (PPE)

Fibre Cement contain silicas that are harmful if inhaled. Protective clothing and breathing equipment should be worn when cutting products.

When cutting, drilling or grinding fibre cement panels using power tools, always ensure the work area is properly ventilated.

An approved dust mask (AS 1715 and AS 1716) and safety glasses (AS 1337) must be worn. Cemintel recommends that hearing protection also be worn.

Safety Data Sheet information is available at www.cemintel.com.au

Managing Respirable Crystalline Silica dust

Crystalline Silica is everywhere. It is found naturally in stone, rocks, sand, gravel and clay. Sand is one of the raw materials in Fibre Cement. Respirable Crystalline Silica dust is the fine dust that's created when you use power tools to cut, drill, grind, chip or sand materials and products that contain crystalline silica. This dust is of concern due to its size as it gets caught deep in your lungs and can cause long term damage.

IF YOU USE THE CORRECT SAFETY EQUIPMENT AND PPE, FIBRE CEMENT IS SAFE TO USE.

Cemintel Safety Requirements				
1 - Cut Outdoors*	The ventilation outdoors is greater than that indoors, and therefore should reduce exposure.			
2 - Use On-Tool Dust Extraction	Use on-tool dust extraction when using power tools to drill and cut Fibre Cement, with a vacuum that contains a HEPA M Class filter.			
3 - Correct Saw and Blade	Use a plunge saw with a specifically designed Fibre Cement blade			
4 - Don't Sweep, Vacuum instead	When completing your work vacuum with a HEPA M Class filter, rather than a broom as sweeping creates more dust.			
5 - Use Correct Respirator	Use a half face P1 or P2 respirator. It is essential that the respirators are Fit Tested and workers are cleanly shaven to obtain a good sea			

^{*} Even though not recommended, indoor cutting can be completed when using an onsite cutting room with exhaust ventilation and a M class filter at a minimum, on-tool dust extraction with a vacuum with a HEPA M Class filter, a Full Face P2 respirator and conducting local occupational and static air monitoring to validate effectiveness of control measures.

Safety, Handling, and Maintenance

Storage

All Cemintel panels must be stacked flat, clear of the ground and supported at 300mm maximum centres on a level platform. Panels must be kept dry, preferably stored inside the building. Panels must be dry prior to fixing, hence if it is necessary to store outside, the product must be protected from the weather.

Handling

Prefinished products and must be treated with care during handling to avoid damage to edges, ends and prefinished surface. Panels should be carried horizontally on edge by at least two people.

Consideration should be given to planning the order of other trades that might stain or damage the panels.

Any splashings of mud, cement, mortar and the like should be removed immediately.

Cutting

Panels should be fully supported and cut from the back using a power saw. Cemintel recommends using the Makita Plunge Cut Saw with guide rail and appropriate blade, together with the appropriate dust extraction system. All exposed cut edges MUST BE SEALED WITH CEMINTEL EDGE SEALER TO PREVENT MOISTURE ABSORPTION.

Mitres

It is not recommended to mitre panel edges as this can cause delamination of the face.

Penetrations

Penetrations in panels may be cut or drilled prior to installation. Cut from the back or drill from the front. Mask, prime and fill gaps with sealant in accordance with recommended methods and products.

WARRANTY, CLEANING + MAINTENANCE



Wash Down Process

Panels have been coated with a factory finish. Consequently, where sufficiently exposed, rain can perform a natural wash down of the wall and ongoing maintenance should be limited to occasional rinse down or using a soft cloth or soft brush (like a dustpan brush). Walls which are protected by soffits above must be washed down twice per year to remove salt and debris build up particularly at joints.

Cleaning

- Normal dirt can be removed with a soft brush and warm water up to 50 degrees Celsius, to which a small amount of dishwashing liquid or soap has been added. The panels should be rinsed with clear water before they dry.
- Calcifications should be removed with a 5% sulfamic acid solution or with a commercial lime remover. The facade should be rinsed with clear water after cleaning.
- Panels discoloured by algal growth should be treated with an algicide without bleaching agents. This application should be allowed to take effect for several days. Afterwards, clean the panels using the normal-dirt procedure above.
- When rinsing down panels, use no more than 700 psi (50kh/cm²) of water pressure at a minimum of 3m distance from the face of the wall. Water pressure should be applied downward to avoid forcing water into joints.
- Use neutral detergent with a soft cloth or soft brush when removing dirty spots from a panel. When diluting the neutral detergent, follow the manufacturer's instructions and use the weakest solution possible.

Inspection, Repair and Maintenance

The durability of the Cemintel Barestone External and Surround ranges can be enhanced by periodic inspection and maintenance. Inspections should include examination of the coatings, flashings, and seals. Any cracked or damaged finish or seals which would allow water ingress must be repaired immediately by resealing the affected area, or by removing the panel and replacing sealant. Any damaged flashings, sheets or sealant must be replaced as for new work. Regularly inspect panel surfaces and follow washdown procedures when required.

Ensure ventilation and drainage gaps between panels and flashings are clear of any debris.

Warranty

Cemintel Barestone External and Surround panels have a product warranty of 10 years. The full product warranty is available for download at **cemintel.com.au**



Our Offices

Sydney

376 Victoria Street Wetherill Park NSW 2164

Adelaide

Lot 100 Sharp Court Mawson Lakes SA 5095

Darwin

Cnr Stuart Highway & Angliss Street Berrimah NT 0828

Melbourne

277 Whitehall Street Yarraville VIC 3013

Perth

19 Sheffield Road Welshpool WA 6106

Brisbane

768 Boundary Road Coopers Plains QLD 4108

Hobart

11 Farley Street Derwent Park TAS 7009

cemintel.com.au 1300 236 468

For Design and Technical Support: **DesignLINK** – 1800 621 117

Cemintel is a trading entity of CSR Building Products Limited (ACN 008 631 356).

The products referred to in this document have been manufactured by or on behalf of CSR Building Products Limited ("CSR") to comply with the National Construction Code of Australia (NCC) and any relevant Australian Standards. While any design or usage guidelines set out in this document have been prepared in good faith by CSR, they are of a general nature only and are intended to be used in conjunction with project specific design and engineering advice. It is the responsibility of the customer to ensure that CSR's products are suitable for their chosen application, including in respect of project-specific matters such as, but not limited structural adequacy, acoustic, fire resistance/combustibility, thermal, and weatherproofing requirements. All information relating to design/installation/application of these products is offered without warranty and no responsibility can be accepted by CSR for errors and omissions, or for any use of the relevant products not in accordance with CSR's technical literature or any other relevant industry standards. For current technical and warranty documentation relating to Cemintel's products, visit Cemintel's website at www.cemintel.com.au.