

CEMINTEL[®]

DESIGN AND INSTALLATION GUIDE



TEXTURE COATING SYSTEM
Residential Exterior Cladding and Applied Finish System

CSR

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DESCRIPTION

Cemintel Fibre Cement Texture Base Sheet is an autoclaved, cellulose fibre reinforced cement sheet.

Texture Base Sheet is light blue in colour and features a recess on the two long edges which facilitates concealed joint construction.

Once installed a proprietary coating system is applied to provide a seamless finish that is weatherproof, strong and durable.

APPLICATIONS

Cemintel Texture Base Sheet provides a solid substrate for applied decorative finishes.

Combined with the Cemintel Jointing and Coating System, it is suitable as a wall cladding for new homes, re-cladding of existing homes, extensions and upper storey additions for residential buildings.

Appropriate installation details are provided for wind loadings included in the scope of AS4055. For other applications please contact the CSR designLINK™ Technical Support Service.

ADVANTAGES

TEXTURE BASE SHEET

- Immune to permanent water damage
- Fire resistant
- Termite resistant

COMPLETE SYSTEM

- Lightweight construction
- Reduced construction time
- Seamless finish
- Provides a tough, durable system
- Accepts a wide range of colours
- Warranted jointing and coating system

MATERIAL PROPERTIES

Cemintel Texture Base Sheet conforms to the requirements of AS2908.2 : 1992 'Cellulose-cement products Part 2: Flat sheets'.

MANUFACTURING PROPERTIES

| | |
|--------------------------------|------------------------|
| Mass 7.5mm thickness (nominal) | 11.0 kg/m ² |
| Length | +0 to -4mm |
| Width | +0 to -3mm |
| Thickness | ±0.25mm |
| Diagonals Difference (max) | 3mm |

FIRE RESISTANCE

In accordance with the Building Code of Australia, Part 3.7.1.2, Cemintel fibre cement sheets can be used wherever non-combustible material is required by the code.

Early Fire Hazard Indices for Cemintel Texture Base Sheet are given in the following table.

FIRE HAZARD INDICES

| | |
|----------------------------------|------------------------|
| Ignitability | 0 |
| Spread of Flame | 0 |
| Heat Evolved | 0 |
| Smoke Developed | 0 |
| Group Number | 1 |
| Average Specific Extinction Area | <250m ² /kg |

COMPONENTS

CEMINTEL TEXTURE BASE SHEET

Cemintel Texture Base Sheets are supplied with a recess on two edges to assist concealed joint construction, and are available in the following range of sizes.

| 7.5mm Cemintel Texture Base Sheet | | |
|-----------------------------------|--------------------|------|
| Sheet Length (mm) nominal | Width (mm) nominal | |
| | 900 | 1200 |
| 2440 | ✓ | ✓ |
| 2725 | – | ✓ |
| 3000 | ✓ | ✓ |

FASTENERS

To guarantee performance, only approved fasteners should be used in these systems.

- **Cemintel Fibre Cement Nails:** Hot-dip galvanised for softwood and hardwood framing. (Not suitable for coastal areas).



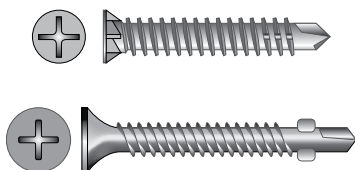
| Order N° | Product | Qty vv |
|----------|--------------|--------|
| 77257 | 2.8mm x 30mm | 2kg |

- **Stainless Steel Nails:** 2.8 x 30mm for softwood and hardwood frames. (Supplied by others).

For use in high corrosion zones, such as coastal areas. Refer to 'Design Considerations'.

- **Screws for fixing Cemintel Texture Base Sheet to Steel Framing:**

| Order N° | Product | Qty |
|----------|--|--------------------|
| 118224 | 10G-18x30mm FibreTEKS CSK Rib Hd | Pk 1000 (collated) |
| 125614 | 10G-18x30mm FibreTEKS CSK Rib Hd Class 4 | Pk 1000 (loose) |
| 125651 | 18x25mm FibreTEKS Class 4 10G M4.8mm | Pk 1000 |
| 26626 | 35mm WingTEK CSK Rib Hd Class 3 | Pk 1000 |
| 118225 | 9-18x25mm FibreTEKS CSK Rib Hd Class 4 | Pk 1000 (collated) |



WALL WRAP/SARKING



| Order N° | Bradford Product | Classification | Water Classification | Quantity |
|------------------|--|--------------------------|----------------------|--|
| 107458 10576 | Thermoseal™ Wall Wrap | Non-permeable Reflective | High | 1350mm x 30m roll 1350mm x 60m roll |
| 116531 116532 | Thermoseal™ Resiwrap | Non-permeable Reflective | High | 1350mm x 30m roll 1350mm x 60m roll |
| 120923 | Enviroseal ProctorWrap™ Residential (RW) | Permeability High | High | 1500mm x 50m roll |
| 118593 | Enviroseal ProctorWrap™ Commercial (CW) | Permeability High | High | 1500mm x 50m roll |
| 86166 | Thermoseal™ 733 | Non-permeable Reflective | High | 1350mm x 60m roll |

INSULATION

Quality Bradford™ glasswool insulation to meet regulatory requirements and environmental and cost efficiency energy targets.



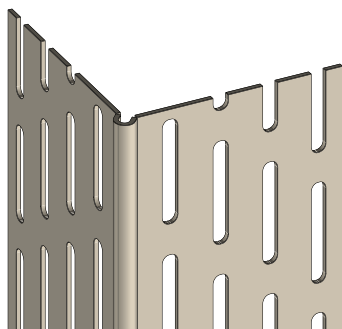
| Order N° | Bradford™ Product | Size (mm) | Quantity Batts per Pack |
|----------|---|------------|-------------------------|
| 113938 | Bradford Gold Wall Batts – R1.5 (75mm) | 1160 x 430 | 22 |
| 113939 | Bradford Gold Wall Batts – R1.5 (75mm) | 1160 x 580 | 22 |
| 153643 | Bradford Gold Wall Batts – R2.0 (HP) (75mm) | 1160 x 420 | 12 |
| 153648 | Bradford Gold Wall Batts – R2.0 (HP) (75mm) | 1160 x 570 | 12 |
| 153646 | Bradford Gold Wall Batts – R2.5 (HP) (90mm) | 1160 x 420 | 8 |
| 153651 | Bradford Gold Wall Batts – R2.5 (HP) (90mm) | 1160 x 570 | 8 |
| 153647 | Bradford Gold Wall Batts – R2.7 (HP) (90mm) | 1160 x 420 | 5 |
| 153652 | Bradford Gold Wall Batts – R2.7 (HP) (90mm) | 1160 x 570 | 5 |

JOINTING & FINISHING PRODUCTS

• Trim-Tex Skim

Coat Corner

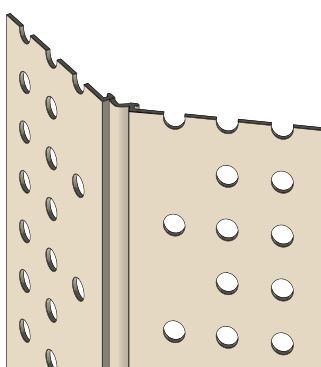
Bead: Slotted PVC bead with UV stabilised coating. Used to reinforce external corners.



| Order N° | Qty |
|----------|------|
| 12254 | 3.0m |

• Trim-Tex Magic Corner™ Internal Corner Bead:

Perforated PVC bead with expansion control for internal corners.



| Order N° | Qty |
|----------|------------|
| 112261 | 900 x 76mm |

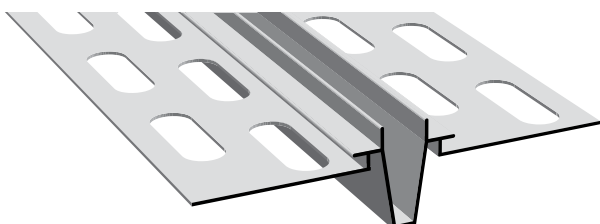
• Rondo EP17 Finishing Bead:

For use at edges around windows or door frames, the base of walls and where one wall intersects another. Corrosion resistant with a grey powder coat finish.



| Order N° | Qty |
|----------|------|
| 60455 | 3.0m |

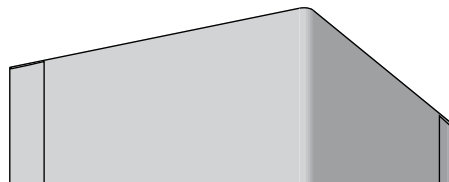
- **Trim-Tex PVC Control Joint (72-093V™):** PVC moulding for use at vertical and horizontal control joints. Flanges act as a trowel guide and tear off strips prevent filling of the joint during texture coating.



| Order N° | Qty |
|----------|------|
| 10350 | 3.0m |

• Internal Corner Backing

Metal angle flashing used at internal corners. Manufactured from steel with Galvalume AZ150 corrosion resistant coating. Size 50 x 50 x 3030mm.



| Order N° | Pack Quantity |
|----------|---------------|
| 111498 | 1 |

- **Backing Rod:** 10mm polyethylene foam bead for use with sealants.



| Order N° | Qty |
|----------|-----|
| 11177 | 50m |

• Cemintel Edge Sealer:

For sealing panel edges after onsite cutting.



| Order N° | Qty |
|----------|-------|
| 100166 | 200mL |

• Sikaflex Pro™ Sealant:

Polyurethane joint sealant for filling control joints and gaps around windows, doors and other penetrations.



| Order N° | Product |
|----------|----------------------------------|
| 11378 | Sikaflex Pro™ 310ml tube – grey |
| 39488 | Sikaflex Pro™ 310ml tube – black |

- **Bond Breaker Tape:** Tesa Multifoam Tape N°7492. 48 x 3mm polyethylene closed cell foam tape for use behind sealant at control joints.

| Order N° | Qty |
|----------|-----|
| 13172 | 25m |

- **Jointing Tape:** Cemintel External Jointing Tape is a 50mm wide PVC strip. It is used to create a strong joint at recessed edge joints of Texture Base Sheets.



| Order N° | Product | Qty |
|----------|--------------------|-------------------|
| 101508 | PVC Non-perforated | 1 Roll 50mm x 50m |
| 101509 | PVC Perforated | 1 Roll 50mm x 50m |

- **Cemintel External Jointing Compound:**

A smooth, acrylic drying type compound designed to provide a strong joint. It is used at external corners and, with Cemintel External Jointing Tape, in the recess joints of the Texture Base Sheet.



| Order N° | Qty |
|----------|-------------|
| 101548 | 15kg bucket |
| 101549 | 6kg bucket |

- **Hyde Jointing Knife:** Stainless steel 150mm trowel for applying the External Jointing Compound.



| Order N° | Qty |
|----------|-----|
| 11017 | 1 |

- **Cemintel Skim Coat:**

An acrylic drying type compound designed to remove imperfections around joints and fixings. It provides an evenly sealed surface for the subsequent Texture Coat. Available in Medium.



| Order N° | Product | Qty |
|----------|---------|------|
| 101543 | Medium | 20kg |

- **Ragni Trowel:** Stainless steel 280mm trowel for applying Skim Coat and Texture Coat.



| Order N° | Qty |
|----------|-----|
| 11056 | 1 |

- **Cemintel Texture Coat:**

A white, high build acrylic coating. It is designed to deliver a 'rendered look' to fibre cement monolithic façades. Available in Medium and Fine.



| Order N° | Product | Qty |
|----------|-----------------|------|
| 101546 | Kalahari Medium | 20kg |

- **Puraclene Trowel:** Polypropylene finishing float used to remove trowel marks and create a uniform texture.



| Order N° | Qty |
|----------|-----|
| 13073 | 1 |

DESIGN CONSIDERATIONS

FRAMING

Stud spacing shall be in accordance with Table 4. Studs must have a minimum fixing face width of 38mm at sheet joints, otherwise additional support framing is required. Refer FIG 9 and 10.

Timber framing must comply with AS1684 'Residential Timber Framing Construction'.

Timber with an equilibrium moisture content of less than 16% at the time of cladding application must be used. Unseasoned timber prone to shrinkage must not be used.

Metal framing must comply with AS3623 'Domestic Metal Framing', and have a BMT of less than 1.6mm.

Timber or metal battens shall be fixed over hot rolled steel or cold rolled purlins, before sheets are fastened. Refer to 'Components' for appropriate screw information.

SHEET TOLERANCES

Cemintel Fibre Cement sheets are made to specific tolerances, refer to page 3. Ensure sheet layout is not overly sensitive to these variations, and does not result in an accumulation of tolerances at certain locations.

CURVED WALLS

Cemintel Texture Base Sheet can be used to form curved walls. Sheets can be installed horizontally or vertically. Begin fastening at the centre of the sheet, working towards the ends. Refer to the following table for information on forming curved walls.

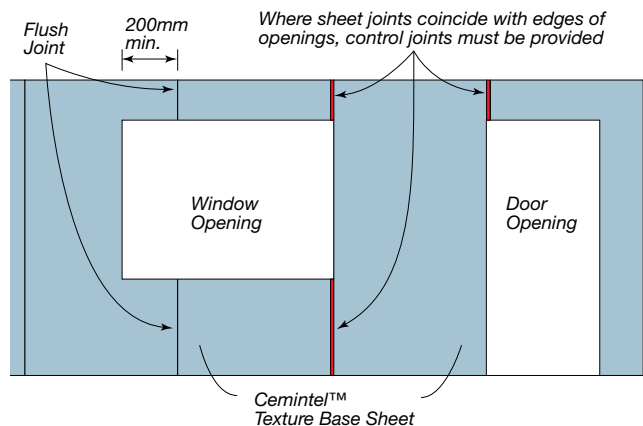
Table 1: Curved Wall Specifications

| Specification | Horizontal Sheeting | Vertical Sheeting |
|--|---------------------|-------------------|
| Minimum Bending Radii Concave Wall Face (mm) | 2400 | 6000 |
| Minimum Bending Radii Convex Wall Face (mm) | 1800 | 4000 |
| Maximum Height of Wall (mm) | 1200 | 3000 |
| Maximum Stud Spacing (mm) | 400 | 400 |
| Maximum Fastener Spacing (mm) | 200 | 200 |

CONTROL JOINTS

Where sheet joints coincide with the edge of an opening, provide a vertical control joint. Refer to FIG 13 and 14 for control joint construction.

FIG 1: Joints Coinciding with Openings



VERTICAL CONTROL JOINTS

Vertical control joints must be provided in walls at 5400mm maximum spacings and/or aligned with control joints provided in the structure. Where dark colours are used, (i.e. absorptance ≥ 0.75 , as defined in BASIX), control joint spacing should be reduced to 3.6m maximum. For further information, refer to 'Surface Finish' in this guide.

Control joints must extend the full height of the cladding, and must be constructed in accordance with FIG 13 and 14.

A control joint must also be installed when a masonry wall adjoins framed construction, and at the junction of framed additions, to allow for differential movement. Refer to FIG 15 and 16.

HORIZONTAL CONTROL JOINTS

To allow for shrinkage and movement of the framing, a horizontal control joint must be installed at floor joist level and also at the junction of wall framing and roof framing at gable ends. Refer to FIG 2, 17, 18 and 19.

When a decorative cover strip is used at a horizontal control joint, the trim must only be fixed to the upper sheet. Clearance must be maintained between the trim and lower sheet, and this gap must not be obstructed by the coating system.

FIG 2: Typical Sheet Layout and Control Joint Locations

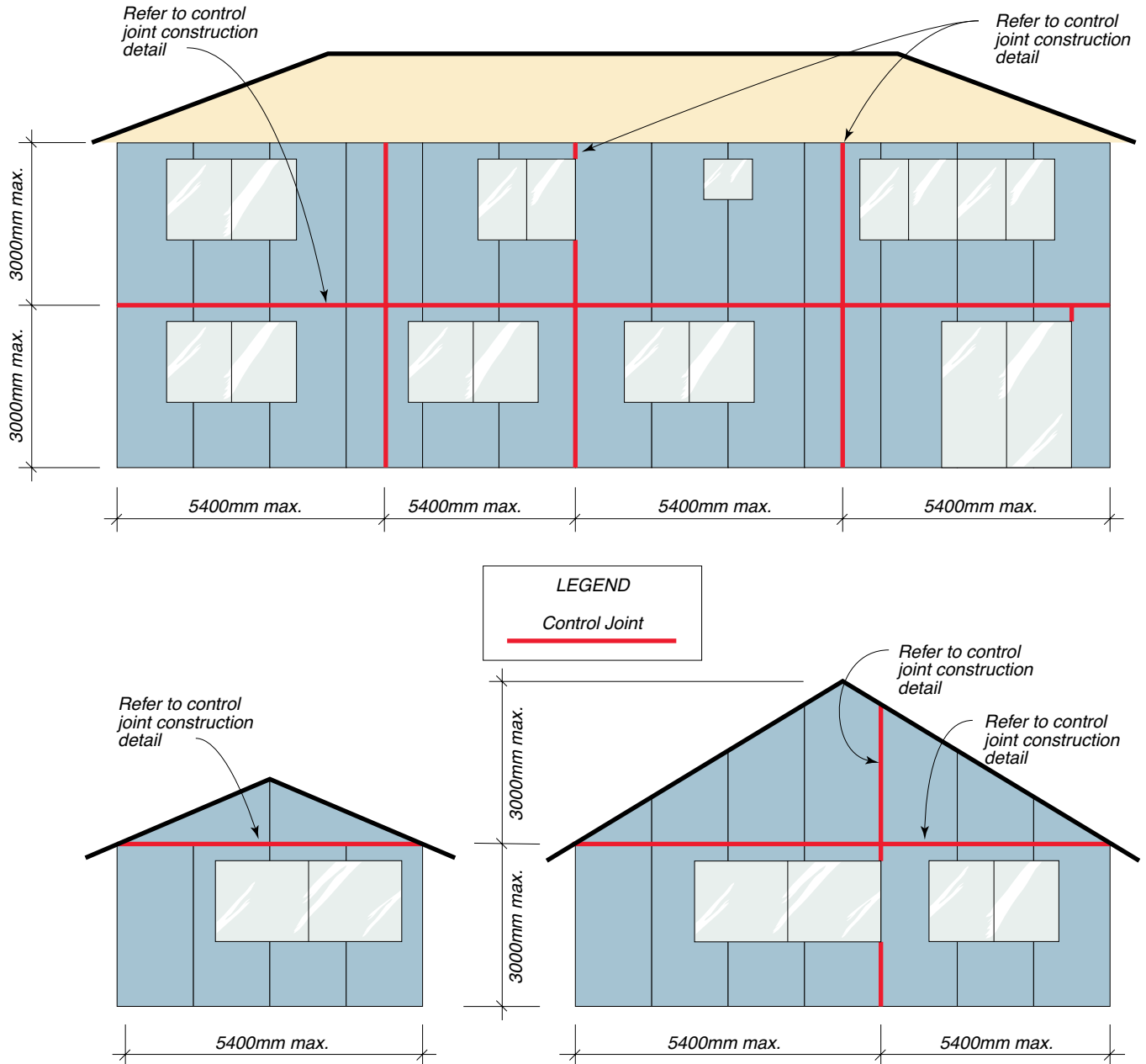
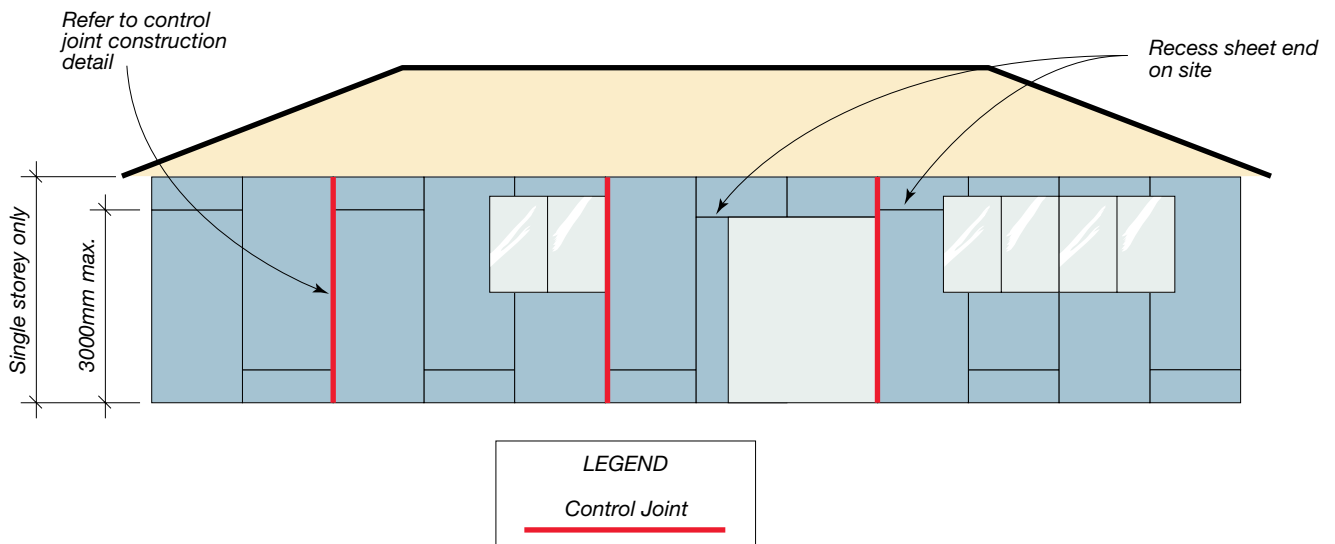


FIG 3: Sheet Layout for Single Storey Over 3000mm Height



STRUCTURAL BRACING

Cemintel Texture Base Sheet, when fixed vertically in accordance with this brochure, provides substantial bracing resistance. For further details contact CSR DesignLINK.

Continuous packing strips may be used on studs to match the thickness of other sheet bracing material if required.

TERMITE PROTECTION

There is a wide variety of methods for managing termite entry to buildings, and selecting the appropriate method for any structure depends on specific risk factors and the form of construction. Measures for termite management have not been addressed in this guide.

Refer to your local pest management service, the BCA, AS3660, or your local building authorities for more information about the requirements for the design of a suitable termite management systems.

COASTAL AREAS

The Cemintel Texture Base Sheet system may be used in coastal areas, defined as up to 1km from a surf beach, or less than 50m from a shore without breaking surf. Consideration must also be given to local weather and topographical features that can cause an increase in the distance that salt spray can travel, extending these nominal limits.

To resist corrosion in these areas, salt laden air must be excluded from the cavity, for instance by lapping and sealing the flashing at corners and joins. All walls must be sufficiently exposed from above so that rain can perform natural wash down of the wall. Walls that are protected by soffits above must be washed down twice per year, to remove salt build-up. Ensure the correct fasteners are used. Refer to 'Components'.

Prior to the application of the external coating, wash down walls with clean fresh water to remove salt spray build-up from sheets and fixings. Sheets must be allowed to dry before coating.

WALL WRAP/SARKING SELECTION

To ensure occupant comfort and protection of the building frame, the following factors should be considered during the selection of the correct wall wrap/sarking.

- **Condensation Risk:** This is a complex problem and can occur under a variety of conditions (not just in cold and tropical climates) so selection of the right wall wrap/sarking needs to consider the local climate, building use and orientation, material R-Value of the insulation, as well as the degree and location of ventilation.
- **Weather Barrier:** Wind loads can produce lower air pressures within buildings than on the outside, forcing water through small gaps in the building envelope around penetrations and joints, even at low wind speeds.

Careful selection of a wall wrap/sarking with the appropriate level of vapour permeability or vapour resistance is one key factor in reducing condensation risk. The following table provides guidance on recommended wall wrap/sarking selection. Key selection characteristics for a suitable wall wrap/sarking are as follows:

- The wall wrap/sarking must have a 'high' water barrier classification – an 'unclassified' rating is not suitable.
- Wall wrap/sarking must meet the requirements of AS/NZS4200.1: Pliable building membranes and underlays – Materials, and be installed in accordance with AS/NZS4200.2: Pliable building membranes and underlays – Installation requirements.

Whilst the requirement to seal joins and penetrations may vary depending upon BCA and/or state requirements, CSR recommends sealing the external wall wrap/sarking to maintain vapour performance and draught proofing effectiveness, as well as to ensure water barrier integrity. As there are a number of factors that need to be considered in assessing and managing condensation risk, it is recommended that designers undertake a condensation risk analysis prior to wall wrap/sarking selection as part of the building design. Additional literature on this subject is available from CSIRO/BRANZ/ASHRAE/ABCB and CSR DesignLINK can help with this assessment.

INSULATION

Energy efficiency requirements for buildings are set out in the BCA as performance requirements and acceptable construction practices, and are dependant on geographical climate zones. To meet the requirements, it is recommended that CSR Bradford insulation be installed in the wall framing. Check with local building authorities for minimum insulation requirements.

It is recommended that insulation values above the minimum be chosen for energy conservation and occupant comfort. Insulation also improves the acoustic performance of the wall against outside noise.

The level of insulation provided in a wall is described by its R-value. The higher the R-value the greater the insulation provided.

R-values for some systems are given in the Thermal Performance Selection Table.

Refer to 'Components' for product information.

COLD CLIMATES

In cold climates where condensation in the wall cavity is possible, a vapour barrier is also recommended between the internal linings and the framing.

Cemintel Texture Base Sheet is not designed to be in contact with snow or ice build-up for extended periods, such as is experienced in alpine areas subject to snow drifts.

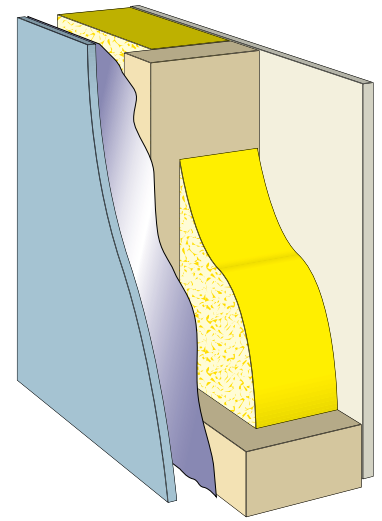
Table 2: Guidance on Wall Wrap/Sarking

| Climate | Guidance on wall wrap/sarking to be used behind the cladding | Performance Criteria | Recommended Product |
|--|--|---------------------------------|---|
| Cold Climates* | In cold climates where the risk of condensation is high, vapour permeable membranes should always be installed on the cold external side of the insulation. | Vapour Permeability > 2.5µg/N.s | Enviroseal ProctorWrap RW or CW |
| Temperate and inland climate zones | It is recommended to use vapour permeable membranes to avoid creating a seasonal moisture trap and to allow drying in either direction – interior or exterior. | Vapour Permeability > 2.5µg/N.s | Enviroseal ProctorWrap RW or CW or |
| Warm humid coastal and tropical climates | Where vapour flow is typically inward, such as where the building is air-conditioned, membrane should be non-permeable. | Vapour Resistance > 7MN/g | Thermoseal Resiwrap or Thermoseal Wall Wrap or Thermoseal 733 |

* For alpine areas and buildings that have high internal levels of humidity (such as indoor swimming pool areas), please contact CSR Bradford for project specific technical advice.

Table 3: Thermal Performance Selection

| CEMINTEL TEXTURE COATING SYSTEM | | | |
|---|--|---------------------------|---------------------------|
| <ul style="list-style-type: none"> 1 layer Cemintel Texture Base Sheet to the outside of wall framing. Timber or (Steel Studs with thermal break) 90mm at 600mm maximum centres. Wall wrap/sarking and insulation as per table below. 1 layer x 10mm GYPROCK™ Plasterboard CD to the inside of framing. | | | |
| Insulation | Wall Wrap/Sarking | Winter Total Wall R-Value | Summer Total Wall R-Value |
| (a) BRADFORD 70mm Gold Wall Batts R2.1 | Bradford Thermoseal Wall Wrap or Enviroseal ProctorWrap RW | 2.4 | 2.2 |
| (b) BRADFORD 90mm Gold Wall Batts R2.5 | Bradford Thermoseal Wall Wrap or Enviroseal ProctorWrap RW | 2.9 | 2.6 |
| (c) Bradford 90mm Gold Wall Batts R2.7HP | Bradford Enviroseal Proctorwrap RW or CW | 3.1 | 2.8 |
| (d) Bradford 90mm Gold Wall Batts R2.7HP | Bradford Thermoseal Wall Wrap or Resiwrap | 3.1 | 2.8 |
| (e) NIL | Bradford Thermoseal 733* | 1.0 | 0.9 |



NOTES: Values calculated in accordance with AS4859.1, and are based on an un-ventilated cavity and using Bradford Thermal Calculator v1.2.

* Bright side of foil facing stud cavity. Bradford Thermofoil 733 is wall wrap/sarking with reflective finish both sides. Using an alternative product with anti-glare finish will REDUCE the stated R-value performance.

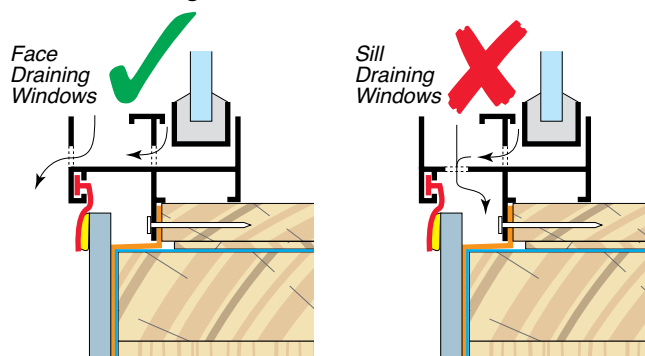
WINDOW SELECTION

The Cemintel Texture Base Sheet system is designed to accept standard aluminium or timber framed windows. Aluminium windows **MUST NOT** have sill drain holes which can direct water behind the cladding. Windows with face draining format **MUST** be used.

Jamb flashing is required in all cases, and for ease of installation, these should be included when ordering windows.

The Cemintel Texture Base Sheet system can accept many standard window types. One example is provided on page 16 of this guide. Other window types can be installed in a similar manner by varying the timber reveal depth to suit the overall wall thickness.

Window Drainage



HANDLING AND STORAGE

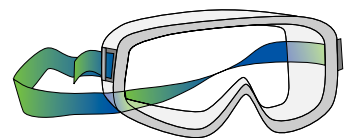
All Cemintel sheeting must be stacked flat, off the ground, and supported on a level platform. Care must be taken to avoid damage to edges, ends and surfaces. Material must be kept dry, preferably by being stored inside the building. Where it is necessary to store sheets outside, they must be protected from the weather.

Sheets must be dry prior to fixing, jointing and finishing.

SAFETY

When cutting or grinding fibre cement sheets using power tools, always ensure the work area is well ventilated.

Cemintel recommends using a dust extraction system. An approved dust mask (AS1715 and AS1716) and safety glasses (AS1337) must be worn. CSR recommends that hearing protection be worn where appropriate.



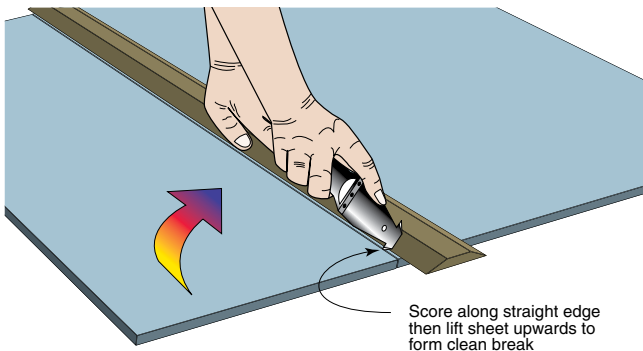
SHEET PREPARATION

CUTTING

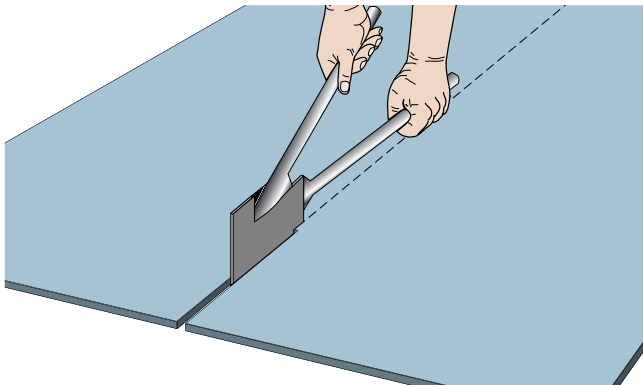
Cemintel Fibre Cement Sheets may be cut on-site using any of the following methods:

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.

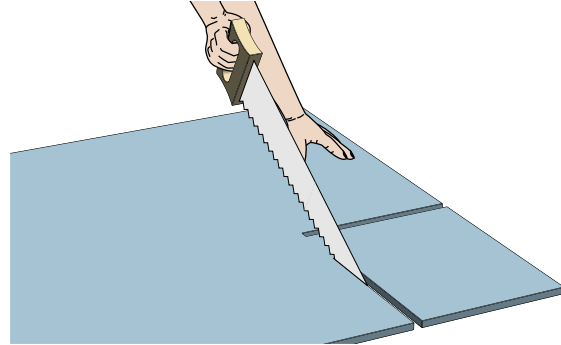


Hand Guillotine



Hand Saw

Preferably use an old handsaw. A quick jabbing action is best. Work with sheet face up to prevent burrs forming on the face.



ON-SITE RECESSING

Where it is necessary to produce a ground recess on-site, a dustless angle grinder should be used. CSR recommends using the Hitachi Easy Bevel with vacuum extraction system, which fits most 125mm grinders, and produces a superior finish.



The recess should be approximately 2mm deep and 35mm wide.

Where edges have been site recessed, priming may be required if Cemintel Texture Coating is not used. Always follow the texture coating manufacturer's recommendations.



Hitachi Easy Bevel Attachment with Dust Extraction System fitted to a grinder.

Recommended Cutting Tools

| Product | Description | Size | Quantity | Product Code |
|---|---|-------------|----------|--------------|
|  | Makita Plunge Saw Kit (1300W) includes 1400mm guide rail and bonus 165mm fibre cement saw blade – excellent for cutting cement based sheets | 165mm | 1 | 165485 |
|  | Makita 165mm Fibre Cement Saw Blade – ideal for use with the Makita Plunge saw and other 165mm circular saws fitted with vacuum extraction systems | 165mmx20x4T | 1 | 165486 |

FRAMING

It is important to inspect the frame carefully for bowed, warped, or twisted studs, and for alignment of all framing members, including noggings. Check alignment of all framing with a long straight-edge. The maximum out of alignment should not exceed 4mm over 3000mm, 3mm over 1200mm or 2mm over 600mm, when checked both horizontally and vertically.

Correct any member alignment which exceeds this recommendation as Cemintel Texture Base Sheet cannot compensate for excessively misaligned framing and may still show an uneven surface after the coating has been applied.

Studs must have a minimum fixing face width of 38mm, and be spaced at maximum 600mm centres to ensure they match sheet widths.

Sheets may be fixed vertically or horizontally. If sheets are to be fixed horizontally, noggings must be positioned directly behind all sheet joints, and all sheet edges must be supported by framing members. Ensure all noggings are flush.

Correct design of the framework and careful consideration of the sheet layout to minimise joints will contribute to the long term success of the jointed wall system.

SHEET FIXING

Ensure sheets are dry before fixing.

Vertical sheeting is generally preferred as it can provide the following benefits:

- May provide structural bracing.
- Joints are generally less obvious after coating.
- Minimises sheet wastage.
- Noggings may be staggered.

Prior to fixing ensure that all joints will be supported by a framing member. Plan sheet layout so that wherever possible, full sheets are used and straight joints are formed using two recessed sheet edges.

Sheets must not be fastened directly to hot rolled steel sections, or purlin/girt sections, as this may result in joint failure. Refer to 'Design Considerations'.

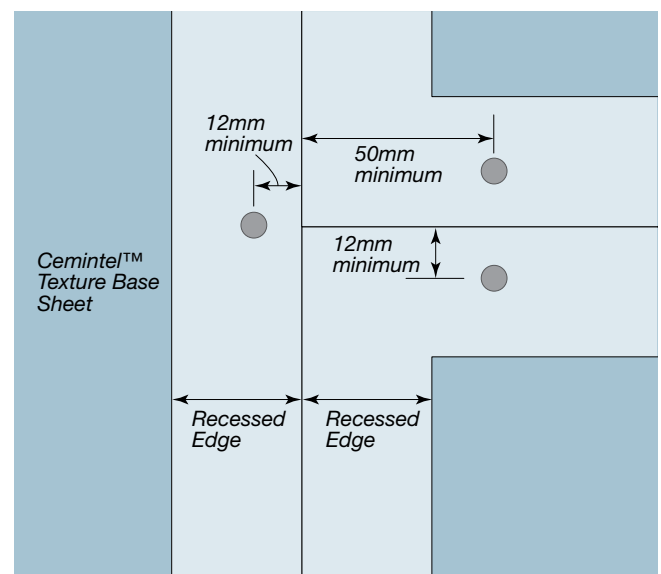
Sheets should be fitted edge to edge and tightly butted together.

IMPORTANT: For coatings other than the Cemintel Texture Coat system, the suitability of this joint configuration must be confirmed with the chosen coating systems manufacturer/installer prior to sheet installation.

FASTENER PLACEMENT

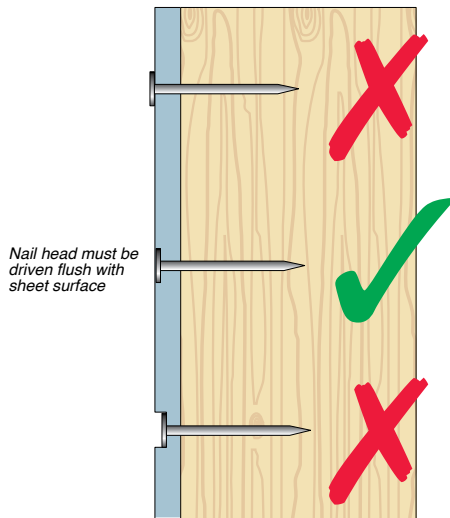
Fasteners must be positioned 12mm minimum from all sheet edges, 50mm minimum from all sheet corners as detailed in FIG 4.

FIG 4: Fastener Placement



Fastener heads must be driven flush with the sheet surface.
Refer FIG 5.

FIG 5: Fastener Driving



Position fasteners at maximum spacings in accordance with Table 4 and FIG 6 and 7.

Table 4: Fastener Spacing

| Wind Category | Within 1200mm of Building Corner | | |
|---------------|----------------------------------|-----------------------|-----|
| | Stud Spacing max. (mm) | Fastener Spacing (mm) | |
| | | 'E' | 'F' |
| N1 & N2 | 600 | 200 | 200 |
| N3 & C1 | 600 | 200 | 200 |
| N4 & C2 | 600 | 200 | 150 |
| N5 & C3 | 450 | 200 | 150 |
| C4 | 300 | 200 | 125 |

| Wind Category | Elsewhere on Building | | |
|---------------|------------------------|-----------------------|-----|
| | Stud Spacing max. (mm) | Fastener Spacing (mm) | |
| | | 'E' | 'F' |
| N1 & N2 | 600 | 200 | 200 |
| N3 & C1 | 600 | 200 | 200 |
| N4 & C2 | 600 | 200 | 200 |
| N5 & C3 | 600 | 200 | 200 |
| C4 | 450 | 200 | 150 |

NOTE:

Factored Nett External Pressure Coefficients are in accordance with AS4055 Table B1 and B2.

Designed for: $C_{pe}KL = 1.3$ within 1200mm of building edge, and 0.7 elsewhere.

FIG 6: Vertical Fixing of Sheets to Framing

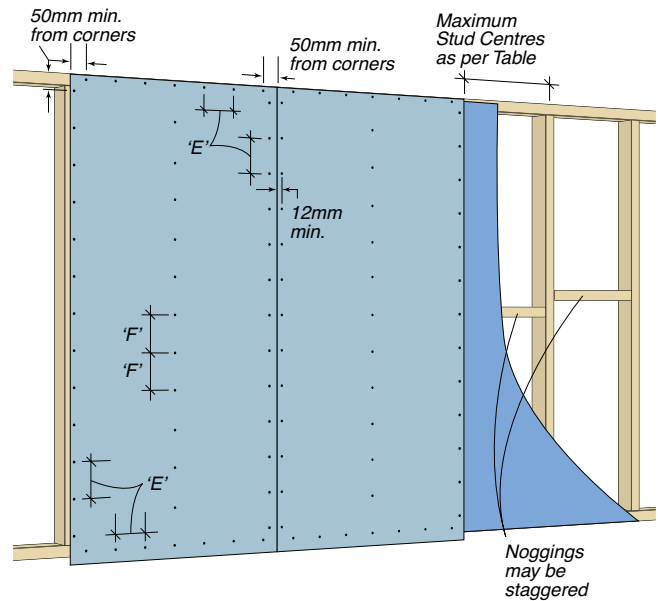
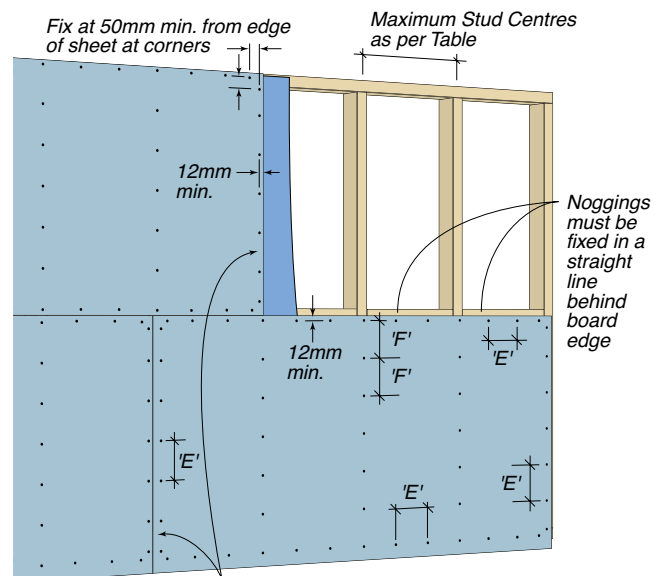


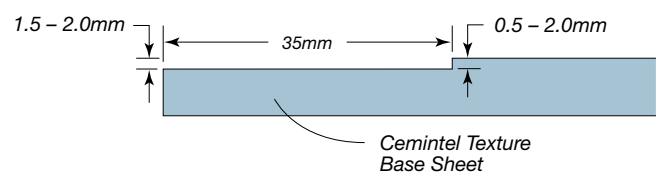
FIG 7: Horizontal Fixing of Sheets to Framing



SITE-FORMED RECESSES

Site-formed recesses should be ground as detailed in FIG 8.

FIG 8: Preparation of Site-formed Recess



CONSTRUCTION DETAILS

SHEET JOINTS

FIG 9: Vertical Sheet Joint on Single Stud

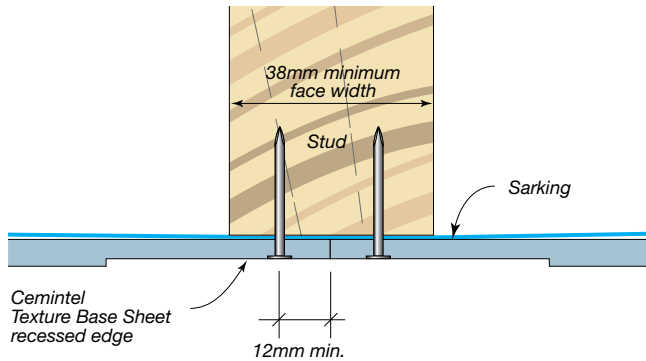
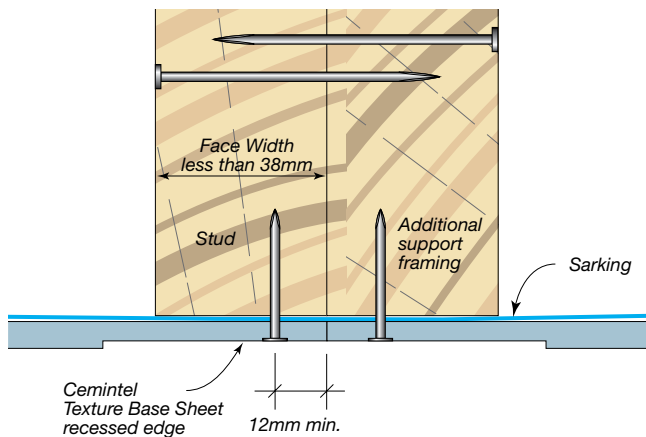


FIG 10: Vertical Sheet Joint with Additional Support Framing



CORNER DETAILS

External corners must be reinforced with corner beads. Fix corner beads as detailed in the Jointing and Coating section of this guide.

Internal and external corners are to have PVC or metal flashing installed over wall wrap/sarking for additional water resistance.

Refer to FIG 11 and 12 for corner details.

FIG 11: Internal Corner

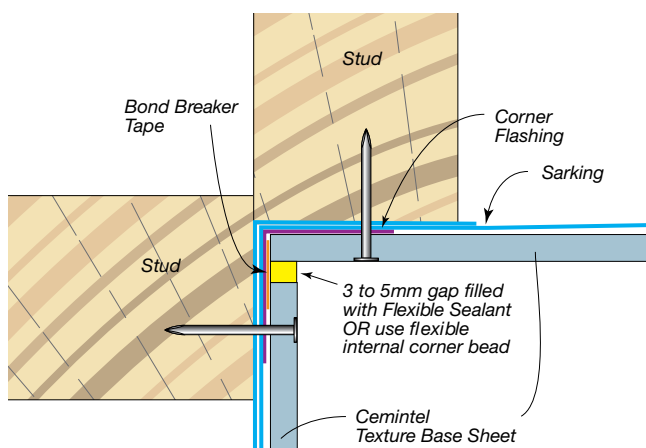
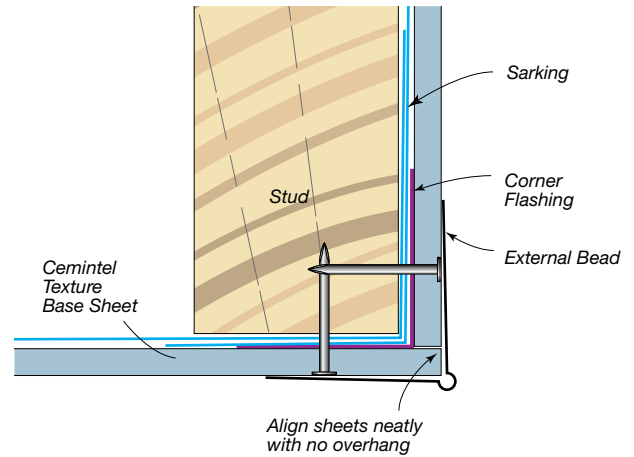


FIG 12: External Corner



CONTROL JOINTS

Control joints are to be constructed with double studs to allow for expansion and contraction of the framing and the cladding. Refer to FIG 13 and 14.

FIG 13: Control Joint

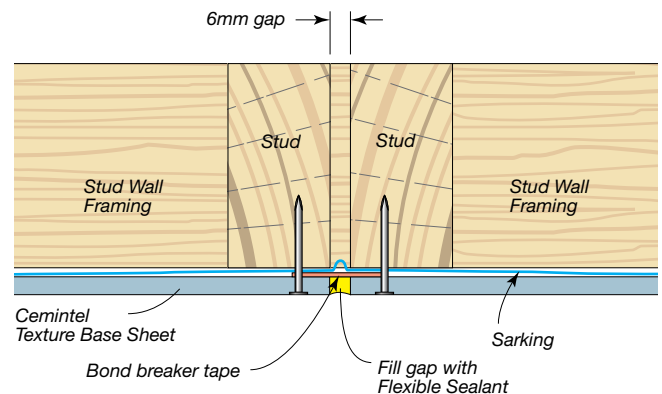
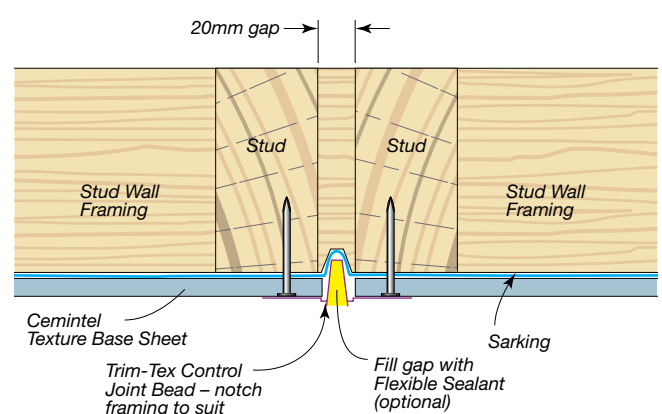


FIG 14: Control Joint with Trim-Tex Bead



JUNCTION WITH MASONRY WALL OR BUILDING ADDITIONS

When a masonry wall adjoins framed construction or at the junction of framed additions, a control joint must be installed to allow for differential movement.

FIG 15: Junction with Masonry Wall

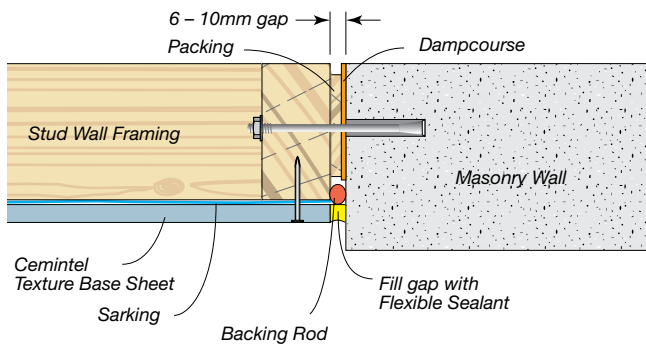
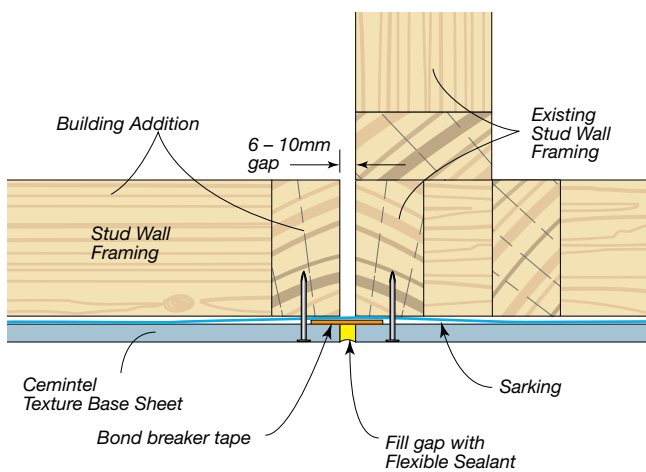


FIG 16: Junction of Framed Construction at Additions



CONTROL JOINTS FOR TWO STOREY CONSTRUCTION

Horizontal control joints must be provided in two storey construction to allow for the shrinkage that can occur when deep timber floor joists are used. Architectural profiles are used to cover this joint.

FIG 17: Horizontal Control Joint With Decorative Cover Strip

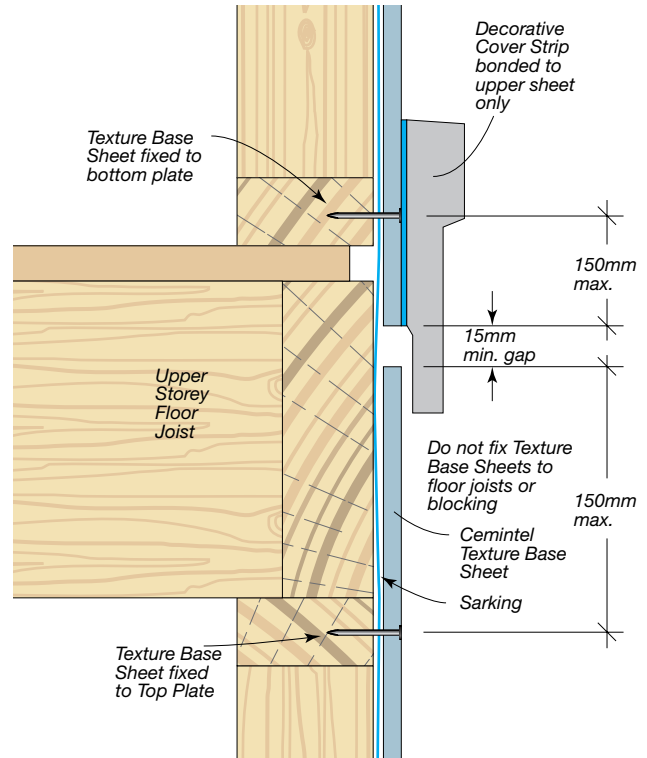


FIG 18: Horizontal Control Joint Without Cover Strip

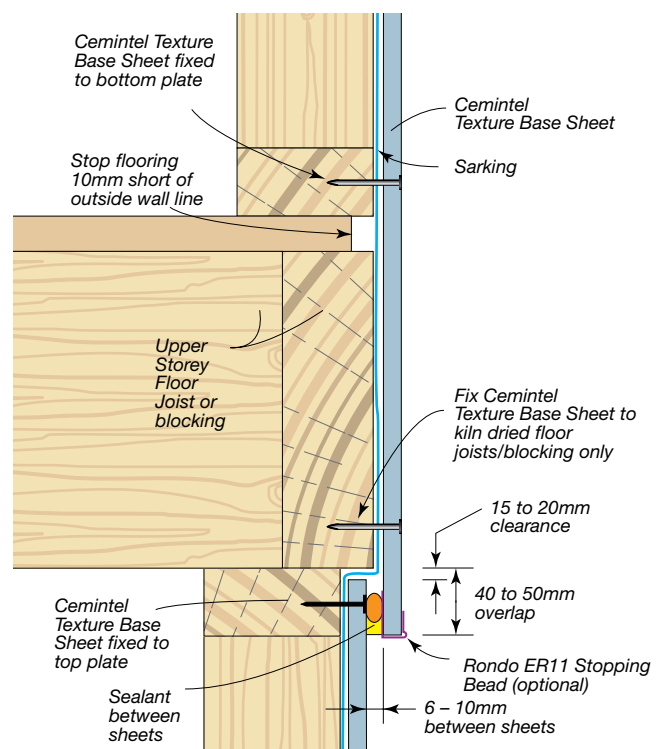
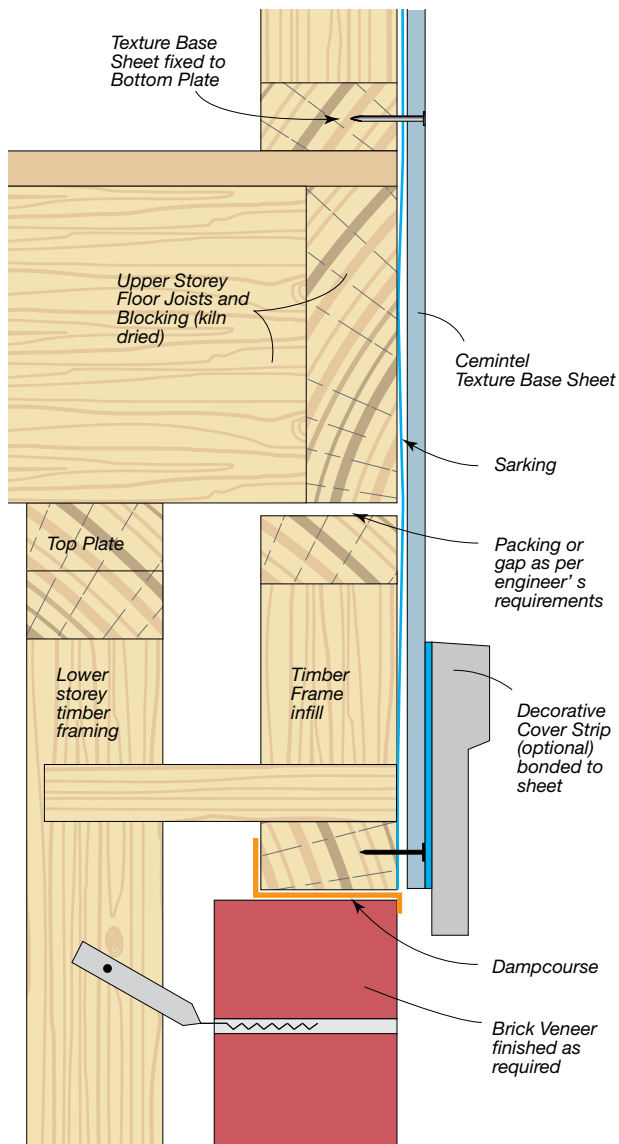


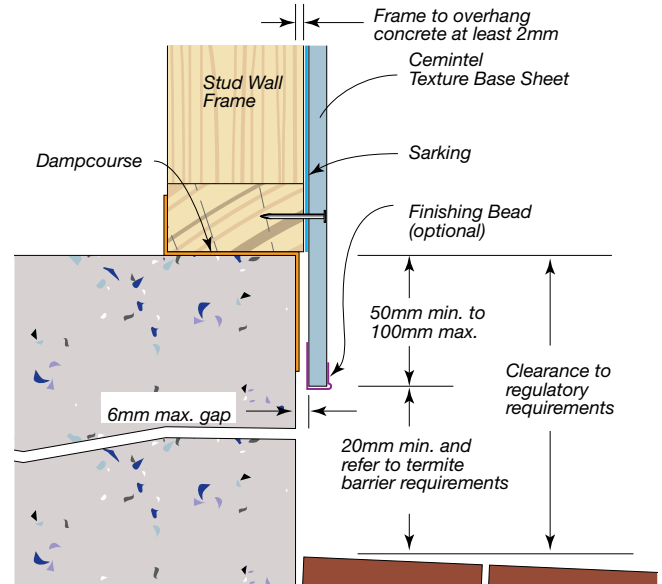
FIG 19: Typical Horizontal Junction with Brick Veneer Construction



FOOTINGS

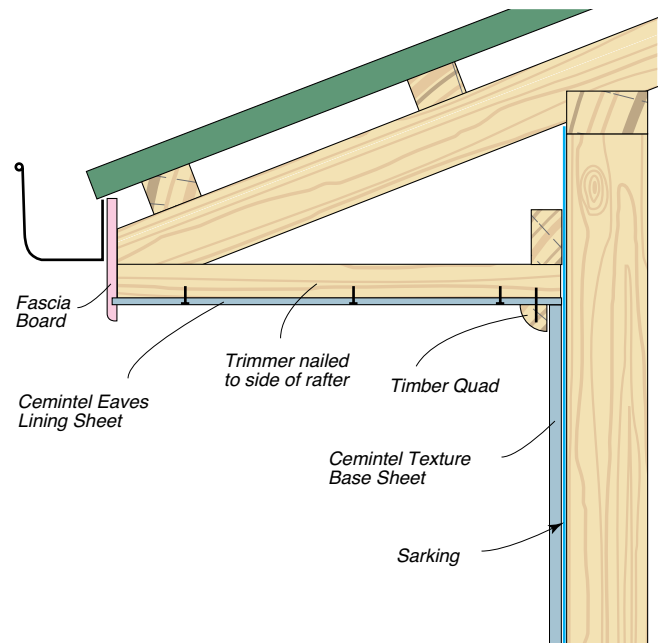
Sheets must overlap footings by 50 to 100mm and must be kept clear of the ground. Refer to FIG 20 for details.

FIG 20: Footing Detail



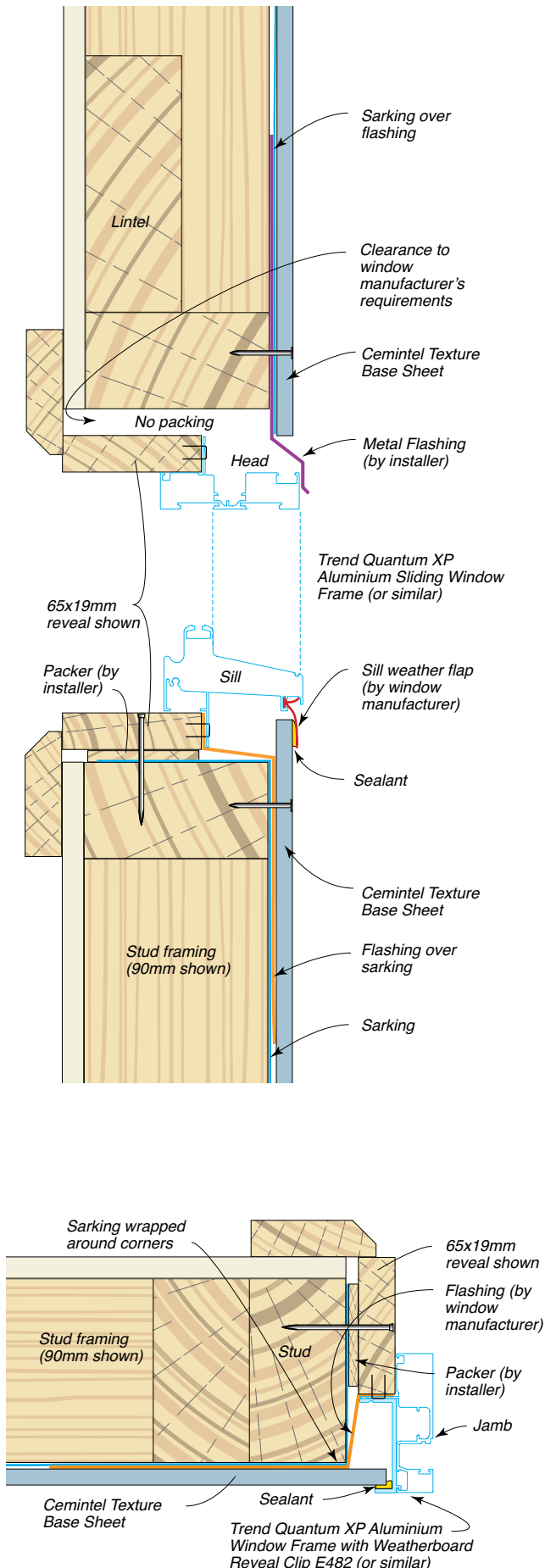
EAVES

FIG 21: Typical Eaves Detail



WINDOW INSTALLATION

FIG 22: Window Detail – Trend Quantum XP Aluminium Sliding Window with Weatherboard Reveal Clip E482



CEMINTEL TEXTURE COATING SYSTEM

PLANNING

Cemintel Texture Coating compounds must not be applied when the air or sheet surface temperature is below 10°C or above 30°C. In case of impending rain, coating application should be stopped in time to allow the product to cure adequately.

Application in extreme heat or windy conditions should be avoided. Where possible, stage the coating process to work in shaded areas. Cemintel compounds must be protected from rain and frost for the first 24 hours of application, longer in cold weather.

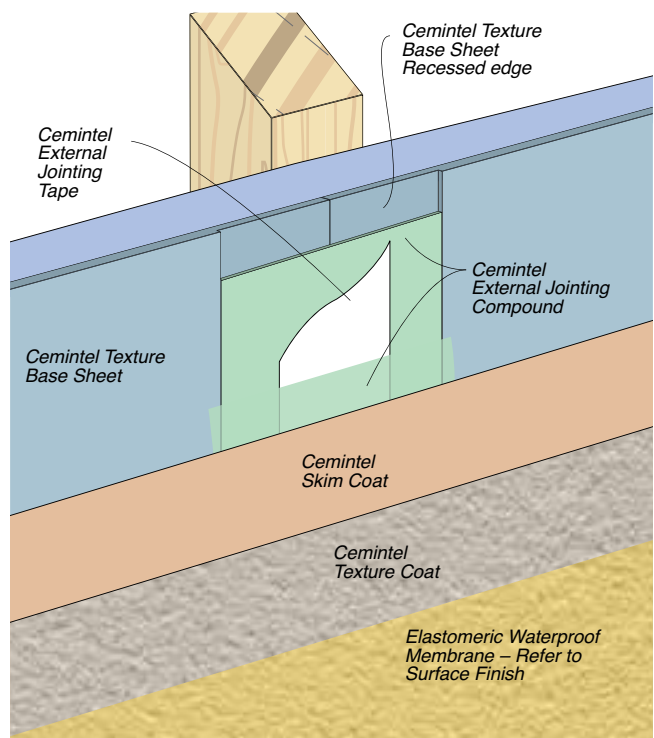
Always work safely, using suitable scaffolding on high walls.

PREPARATION

Ensure that the fibre cement surface is dry and free of dust, dirt, mould, and other contaminants. In coastal areas surface salt should also be removed. Inadequate cleaning may result in poor coating adhesion and low joint strength.

It is important that sheets are butted together and flush at all joints. Misalignment of sheets may result in unacceptable joint visibility. Ensure that all fasteners are embedded correctly, with the head of the fastener flush with the sheet, to ensure the smooth application of coating materials. Site formed recesses do not need sealing before applying Cemintel External Joint Compound.

FIG 23: Cemintel Jointing and Coating System



JOINTING

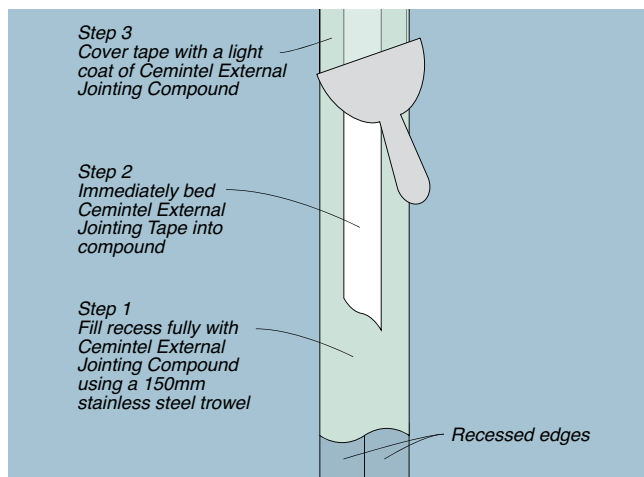
Fill the fibre cement sheet recesses evenly and fully with Cemintel External Jointing Compound, using a stainless steel 150mm broad knife. Immediately bed in Cemintel External Jointing Tape centrally over the joint, with the smooth side facing outwards.

Cemintel Jointing Tape must be clean, and where possible, used in one length in each joint. Tape must be straight and fully bedded into the compound. Cover tape with a light coating of Cemintel External Jointing Compound.

Cover all fastener heads, any surface imperfections and exposed end of sills with Cemintel External Jointing Compound.

Allow the jointing compound to fully dry before applying the Skim Coat. A minimum of 24 hours is recommended, depending on atmospheric conditions. Some shrinkage of the compound will occur as it dries, and under hot dry conditions, minor 'mud' cracking may appear. This is normal and will not affect the integrity of the joint

FIG 24: Recessed Joint Tape and Tape Coat



INTERNAL AND EXTERNAL CORNER DETAIL

The PVC corner bead is fixed to the fibre cement sheets using Cemintel External Jointing Compound. Apply an even layer of jointing compound to both sides of the corner using a 150mm broad knife. Push the corner angle firmly into position until compound extrudes from the holes. Smooth the excess compound over the corner angle and to 150mm each side of the corner. The sheet finishing strip and control joint bead may be adhesive fixed in a similar manner.

Allow the jointing compound to dry before commencing to skim coat. site formed recesses do not need sealing before applying Cemintel External Joint Compound.

FIG 25: External Corner Jointing

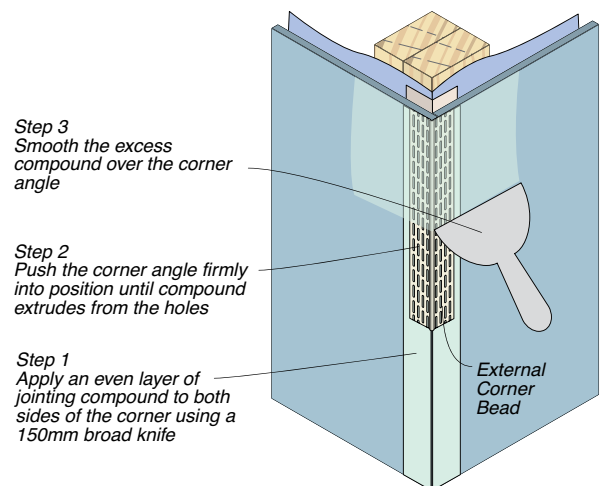
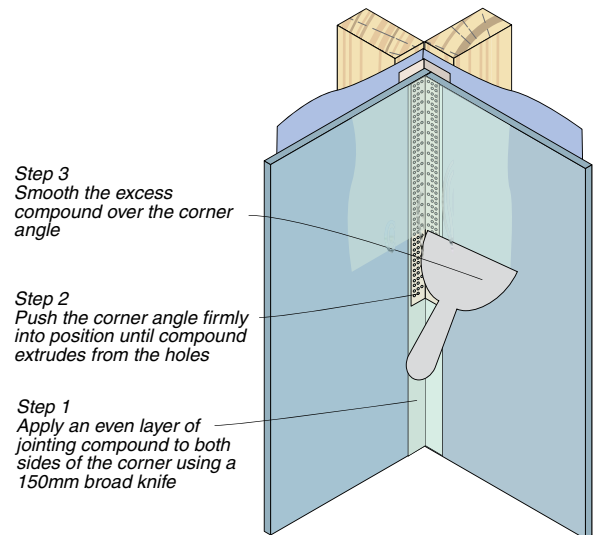


FIG 26: Internal Corner Jointing



SKIM COAT

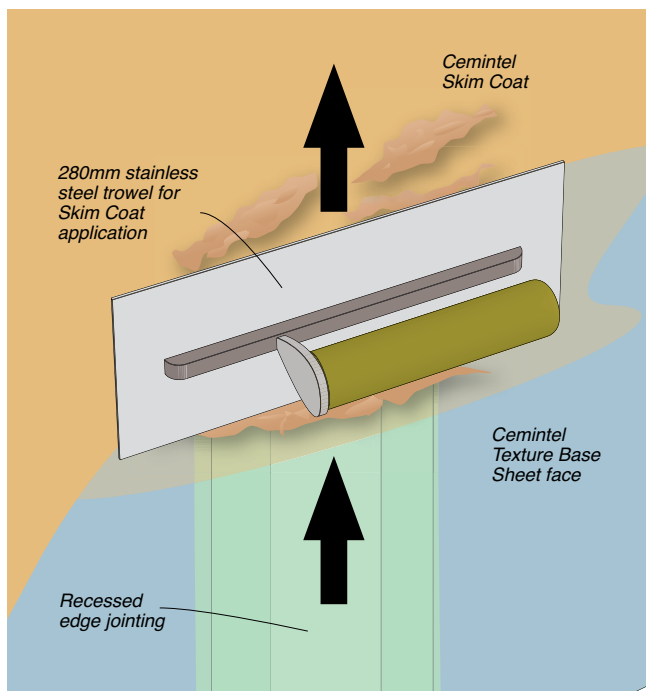
The Cemintel Skim Coat should only be applied after Cemintel External Jointing Compound is fully dry.

Apply a layer of Cemintel Skim Coat to the entire wall surface using a steel trowel. Begin at the top of the wall and work to the bottom with upward strokes of the trowel. Sufficient material should be used to ensure a uniform surface and to eliminate the outline of joints, fixings etc. If this is not achieved by a single coat, a second coat is recommended. For best results, apply the skim coat in the same direction as the joint to fill any gaps that occur.

Allow Cemintel Skim Coat to fully dry prior to the application of Cemintel Texture Coat. Allow at least 24 hours in warm, dry conditions, longer in cold or wet conditions.

Inspect the walls after skim coating to ensure the surface is flat. If there are any imperfections, these should be repaired with Cemintel Skim Coat. Cemintel Texture Coat may not adequately hide imperfections visible in the skim coat.

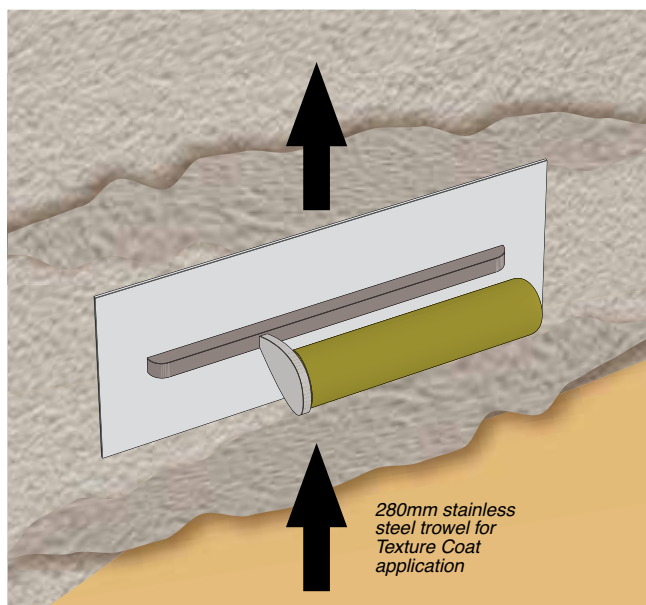
FIG 27: Applying Skim Coat



TEXTURE COAT

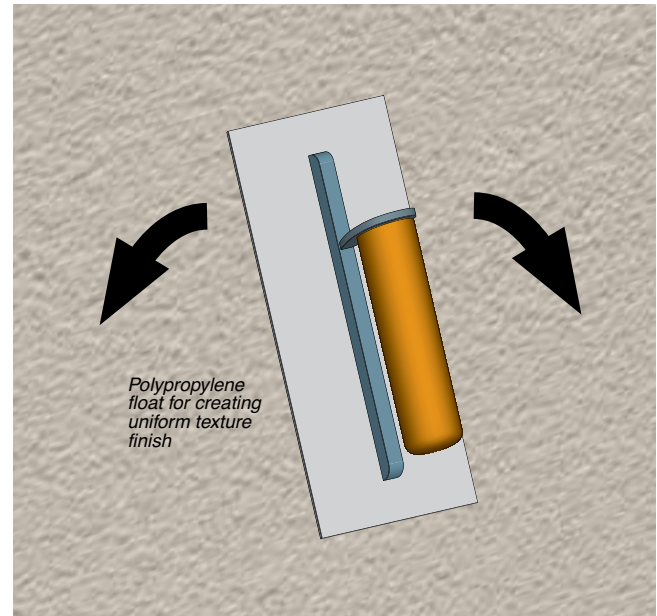
Cemintel Texture Coat is applied over the Skim Coat using a steel trowel. The Texture Coat contains graded particles that act as a guide to the required coating thickness. Apply a thin layer only, as excess material will cause the plastic float to stick, making it difficult to achieve a consistent finish. Begin at the top of the wall and work towards the bottom with upward strokes of the trowel. Work in strips about one metre high.

FIG 28: Applying Texture Coat



Once applied, the texture coat is floated in a curved motion with a plastic finishing float to produce a uniform texture. Ensure that all the coated areas are floated before the texture coat begins to dry, as touching up dried coating is not recommended. For optimum results, one applicator

FIG 29: Finish Floating Texture Coat



applies the Cemintel Texture Coat and a second applicator uses the finishing float.

Isolated areas should be completed in a single application to avoid join marks. Large areas can be broken into smaller workable sections, especially during periods of high temperatures or in windy conditions.

Applications that have commenced in an isolated area should continue uninterrupted. Rapid, uniform and continuous application is essential to maintain a wet edge, especially in warm weather.

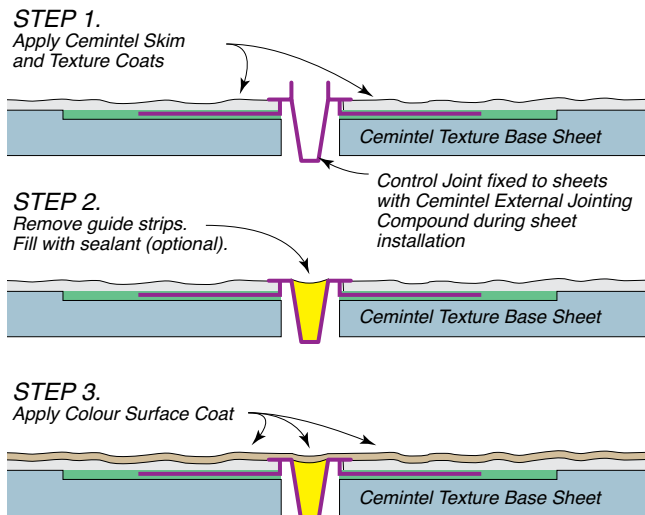
Cemintel Texture Coat should be touch dry in one hour at 25°C and 50% relative humidity. It should be fully dry and able to be painted after 72 hours, although lower temperature or higher humidity will increase the drying time.

Vibrations such as nail fixing the internal linings should be avoided until the texture coat is dry. This is to reduce the likelihood of the sheet fasteners protruding and the coating being damaged.

CONTROL JOINTS

For best results, control joints should be filled with Sikaflex PRO sealant after the Texture Coat has been applied.

FIG 30: Vertical Control Joint Finishing



SURFACE FINISH

It is recommended that Cemintel Texture Coat be coated with an 100% acrylic, high performance, elastomeric membrane weatherproofing coating, e.g Dulux AcraTex 955 AcraShield or Wattyl GranolImpact or similar.

It is recommended that dark colours (i.e. absorptance ≥ 0.75 , as defined in BASIX) be avoided on walls subject to long periods of sun exposure, to minimise joint stress. If dark colours are used, control joint spacing should be reduced to 3.6m maximum. Under glancing light conditions, where light shines close to parallel to the surface, sheet joints may be visible. Under normal light conditions, sheet joints should not be visible.

Two coats are recommended and an undercoat is not required.

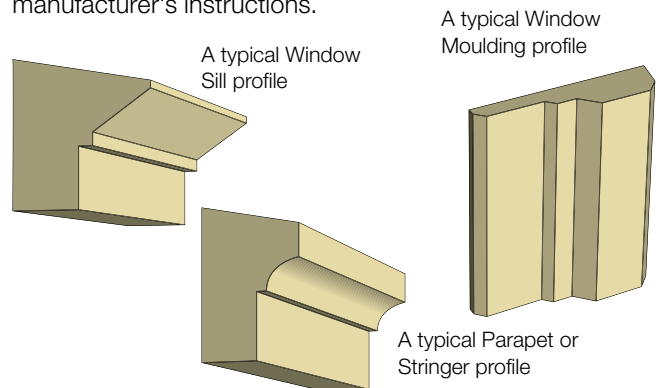
FIG 31: Applying Colour Surface Finish



SPECIALIST PROFILES

Preformed architectural profiles may be used to create a feature around window openings, doorways and the like. These lightweight shapes can be installed quickly and easily.

These profiles should be securely bonded to Cemintel Texture Base Sheet in accordance with the profile manufacturer's instructions.



Corbelling and Projecting Sills provide effective highlighting for corners, windows and eaves



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