

CEMINTEL®

DESIGN AND INSTALLATION GUIDE



CONSTRUCTAFLOOR™ EXTERIOR FLOORING
Exterior Decking System

CSR

CONTENTS

| | |
|--|-------|
| DESCRIPTION | 2 |
| APPLICATIONS | 2 |
| ADVANTAGES | 2 |
| COMPONENTS | 2–3 |
| DESIGN CONSIDERATIONS | 4–5 |
| SYSTEM SELECTION | 6 |
| WATERPROOF SYSTEMS | 6 |
| SYSTEM TABLE | 7 |
| MORTAR BED WITH SEPARATING LAYER | 8–11 |
| LIQUID MEMBRANE & TRAFFICABLE MEMBRANE SYSTEMS | 12–15 |
| MAINTENANCE | 16 |
| SHEET PREPARATION | 16 |
| SAFETY, HANDLING & GENERAL CARE | 17 |
| WARRANTY | 17 |
| CONTACT DETAILS | 18 |

DESCRIPTION

Cemintel Constructafloor® Exterior flooring is an advanced, lightweight, fibre cement flooring sheet. Constructafloor Exterior flooring has a flat surface with a tongue and grooved joint to the two long edges of the sheet. These edges are coloured red for easy identification. Constructafloor Exterior flooring can be installed with power driven nails for ease of installation.

With mesh reinforcing to the underside of the sheet, Constructafloor Exterior Flooring is a strong and durable building product.

Constructafloor Exterior Flooring conforms to the requirements of AS/NZS 2908.2: Cellulose-cement products, Part 2: Flat sheets for Type A Category 3.

APPLICATIONS

Constructafloor Exterior Flooring provides a light weight but solid substrate for self contained dwellings. When combined with a suitable waterproofing system it can then be covered with your selection of tiles, decorative finishes, synthetic turf, outdoor carpets or suitable paint finishes. It is suited for a range of external decking applications, including:

- Upper and lower storey decks and balconies
- Tiled verandahs
- Trafficable roofs
- Swimming pool surrounds (non-saltwater)

Constructafloor Exterior Flooring may be installed to timber or steel floor joists at 600mm maximum spacings in accordance with the relevant Australian Standards.

ADVANTAGES

- Simple and quick to install using screw or gun-nail fixings
- Tough durable substrate for external areas
- Immune to permanent water damage
- Will not rot, warp or burn
- Immune to termite attack
- A suitable substrate for many forms of finishing

COMPONENTS

CEMINTEL CONSTRUCTAFLOOR® EXTERIOR SHEET

Constructafloor Exterior flooring is available in two thickness, 19mm and 22mm and the following sizes for exterior decking applications.

| Order N° | Product | Sheet Thickness |
|----------|---------------------------------------|-----------------|
| 115659 | Constructafloor Exterior 600 x 2700mm | 19mm |
| 115762 | Constructafloor Exterior 600 x 1800mm | 19mm |
| 193407 | Constructafloor Exterior 600 x 2400mm | 22mm |

| Property | Value |
|---------------------------------|--|
| Thickness (19mm & 22mm nominal) | -0/+0.3 mm |
| Mass (EMC 23°C, 50% Humidity) | 25.5 kg/m ² (19mm thick) 28.6 kg/m ² (22mm thick) |
| Width | -3 /+0 mm |
| Length | -3/+0 mm |
| Diagonal Difference (max.) | 3 mm |

FIRE RESISTANCE

In accordance with the NCC 2019, Volume 1, C1.9(e) and NCC 2019, Volume 2, 3.7.1.1, Constructafloor fibre cement sheet can be used wherever non-combustible material is required by the code.

COUNTERSINKING TOOL

A tungsten carbide tipped tool specifically designed for drilling and countersinking.

| Order N° | Description |
|----------|---------------------|
| 22116 | Countersinking Tool |



FLEXIBLE SEALANT

- Sikaflex PRO™ polyurethane sealant for sealing sheet joints.



| Order N° | Qty |
|----------|--------------------|
| 11378 | 310ml Tube (Grey) |
| 39488 | 310ml Tube (Black) |

Prime surfaces as recommended by the manufacture.

BACKING ROD

Polyethylene Foam Bead used to enable correct filling of joints with sealant.



| Order N° | Description |
|----------|-------------------|
| 11177 | 10mm Ø x 50m roll |

CONSTRUCTION ADHESIVE

To be used on all framing where Constructafloor sheets are nail fixed.



| Order N° | Product |
|--------------------|-----------------------------|
| 39378 | Sikaflex® II FC, 310ml tube |
| Supplied by others | Fuller Max Bond™ |
| Supplied by others | Fuller Max Bond Pro™ |

NOTE: The following system components are not supplied by CSR.

FASTENERS

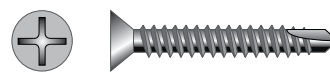
NOTE: In high corrosion zones, such as the coastal marine environment, Class 4 fasteners must be used.

- Nails for fixing Constructafloor Sheets:**
Power driven nails, 50mm D head, Class 3 or 4 finish.
- Screws for fixing Constructafloor Sheets:**

For timber framing, use countersunk head wood screws 10G x 50mm hot dip galvanised steel (class 3) or stainless steel. Pre-drill and countersink heads.



For steel framing, use Metal Tek's 10G x 16TPI x 30mm class 3 or 4, countersunk head screws. Pre-drill and countersink heads.



- Screws for fixing Drip Mould:**

N°8 x 15mm hot dip galvanised steel, countersunk head, metal thread self-tapping screws.

SLIP SHEET

0.2mm Polyethylene (Polythene) sheet to AS2870.

MEMBRANE

A flexible sheet or liquid membrane to AS4654.1 as required for the system (may incorporate joint reinforcing). The following third party waterproofing manufacturers have provided suitability of their waterproofing systems for use with Constructafloor Exterior flooring. Please contact these manufacturers for further information.

- ARDEX Australia Pty Ltd
- Bostik Australia Pty Ltd
- Crommelin
- Parchem Construction Supplies Pty Ltd.

MORTAR BED AND STEEL REINFORCEMENT

As required for the system, and in accordance with AS3958.1.

WALL/FLOOR JOINT FLASHING

PVC Angle Mould 4mm x 47mm x 47mm.

EDGE DRIP MOULD

Aluminium or PVC Angle 12mm x 12mm.

FLASHING

Alcor™ or equivalent.

PAINT FINISHES

Anti-slip exterior paint suitable as a trafficable wearing surface for fibre cement substrates.

MOISTURE BARRIER

Ardex WPM 300. For use with the water resistant decking system. A liquid sealer to be applied to the Constructafloor immediately prior to the installation of the surface finish.

DESIGN CONSIDERATIONS

This guide refers to good practice, though it is not intended as an exhaustive statement of all relevant information. It remains the responsibility of the building designer to verify that Constructafloor Exterior flooring is suitable for the particular requirements of any given project.

FRAMING

Constructafloor Exterior flooring can be fixed to either timber or steel floor joists at maximum 450mm and 600mm spacings, and joists and trimmers must have a fixing face width of 45mm or to floor joist manufacturer's requirements. All perimeters must be supported on framing.

As a minimum requirement, framing shall be in accordance with the following standard:

- AS1684 – Residential Timber-Framed Construction.
- AS1720.1-Timber Structures - Design method.
- AS/NZS4600 – Cold-Formed Steel Structures.
- The Building Code of Australia (BCA).

Timber shall be seasoned or have reached an equilibrium moisture content of 16% or less at the time of framing. Unseasoned timber is not recommended. Fixing to timber floor joists can utilize brad nails fired from a suitable pneumatic or gas fired nail-gun.

The design and construction of the steel frames should be considered in conjunction with the advice from the manufacturer. In highly corrosive environments, appropriate measures should be taken to protect the frame from corrosion. Fixings to steel joists are suitable up to a 2.0mm base metal thickness (BMT), contact CSR Cemintel™ for fixing information where steel BMT is greater than 2.0mm.

CONTROL JOINTS

Control joints in sheets must be provided at appropriate locations as specified in each system installation details.

Movement joints provided in framing should be aligned to joints in the sheets.

SHEET LAYOUT

Constructafloor Exterior Flooring sheets are fixed directly to the floor joists. Sheets are laid with tongue and groove joints perpendicular to the joists. Sheet ends must align with the centreline of joists, and may be staggered or aligned according to the system requirements. Sheet ends must be aligned at control joints. Sheets may be laid in either direction relative to the slope. All perimeters must be supported on framing.

Where sheets are cantilevered at the outer edge of a deck, sheet edges must not extend more than 50mm beyond the frame/support. Balustrades and other fittings must be connected to the structural framing.

LOADS

Constructafloor Exterior flooring has been designed to satisfy the live loads associated with activities outlined in AS/NZS 1170.1:2002 Table 3.1 and appropriate load combinations in AS/NZS 1170.0:2002. Not suitable for vehicle wheel loads. The 'Specific Uses' presented in Table 1 reflect the minimum imposed live load actions listed in Table 3.1 of AS/NZS 1170.1. Contact DesignLINK for further information on higher live load requirements.

Table 1 presents the maximum allowable unfactored loads to satisfy a span/300 deflection limit under serviceability loading, appropriate load combinations in AS1170.0:2002 and a superimposed dead load of 1.2kPa for floor coverings (i.e., tiles, grout screeds, mortar beds, underlay etc.). The unfactored loads have been based on the Constructafloor sheeting having an Equilibrium Moisture Content (EMC) condition. It is the responsibility of the designer to specify the water proof membranes or sealants to prevent moisture ingress into the Constructafloor sheets to maintain the EMC condition. Contact DesignLINK for information on Constructafloor sheets at a saturated condition.

Constructafloor Exterior flooring must be installed over a minimum of 3 supporting joists. For single span sheeting, provide blocking and/or trimmers to ALL the edges of the sheeting.

MEMBRANES

Waterproofing membranes should be installed in accordance with AS 4654.2 Waterproofing membrane systems for exterior use - Above ground level Part 2: Design and installation.

Membranes may be required to resist a range of conditions, including chemical attack, ultra-violet light, heat aging, and temperatures from -15°C to +85°C. Low temperatures can result in reduced flexibility, and high temperatures can result in softening of the membrane.

The standard has specific details for the termination of membranes at vertical upward and downward locations. For decks up to 4m from the ground in wind classifications N1 to N3 and C1, the vertical upward termination height is 100mm. This increases for higher wind classifications and exposure conditions, and for greater deck heights.

The details include methods of sealing, anchoring and protecting the membrane terminations.

DRAINAGE

Regardless of whether the deck is to be waterproof, or not, decks must have a fall to facilitate drainage and prevent ponding. Decks must not be constructed level, and a fall of at least 1 in 100 is recommended. Where possible the fall should be provided in the framing, or as an alternative may be provided in a topping screed.

Whenever possible avoid draining into a sump as this can lead to water building up to a depth above flashings. If this is unavoidable, the mortar bed with separating layer system must be used. The use of a gutter at the edge of the deck can assist

Table 1: Cemintel Constructafloor® Exterior Flooring – ‘Double Span’ Sheet Installation, SDL = 1.2kPa

| Cemintel Constructafloor® | | Specific Uses | Maximum Allowable Unfactored Floor Loadings | | | |
|---------------------------|-------------------------|--|---|-----------|------------------------------|------------------|
| Sheet Thickness (mm) | Max. Joist Spacing (mm) | | Dead Load | Live Load | | |
| | | | | UDL (kPa) | Concentrated Point Load (kN) | |
| | | | | | P ₃₅₀ | P ₁₀₀ |
| 19 | 450 | Category A1 & A2 Domestic and residential activities – general areas, private kitchens, laundries, bedrooms, hospital wards, hotel rooms, toilet areas, balconies, roofs used for roof type activities | 1.2 | 4.0 | 1.8 | 2.0 |
| 22 | 400 | All categories in buildings and structures with a concentrated live load action less than 4.5kN | 1.2 | 7.5 | 1.8 | 4.5 |
| | 450 | All categories in buildings and structures with a concentrated live load action less than 4.0kN | 1.2 | 7.5 | 1.8 | 4.0 |
| | 600 | Category A1 & A2 Domestic and residential activities – general areas, private kitchens, laundries, bedrooms, hospital wards, hotel rooms, toilet areas, balconies, roofs used for roof type activities | 1.2 | 5.0 | 1.8 | 2.0 |

Notes:

SDL superimposed dead load, i.e., weight of the floor coverings, such as, carpet, underlay, grout, mortar bed and tiles.

UDL uniformly distributed live load, AS/NZS 1170.1:2002 Table 3.1.

P350 concentrated live load applied to a 350mm² bearing area. Refer to Note 1, AS/NZS 1170.1:2002 Table 3.1.

P100 concentrate point live load applied to a 100mm x 100mm bearing area (0.01m²). Refer AS/NZS 1170.1:2002 Cl.3.2(b).

$\Psi_s = 0.7$, for uniformly distributed loading. AS/NZS 1170.0:2002 Table 4.1.

$\Psi_s = 1.0$, for concentrated point loading. AS/NZS 1170.0:2002 Table 4.1.

Span/300 deflection limit under serviceability loading.

in the reduction of staining and prevent water tracking under the tiles and membrane.

The interior floor level at doors and other openings must be at a sufficient level above the finished deck surface to prevent water entering the building. The step should be at least 100mm, and equal to the membrane vertical upward termination height.

COASTAL AREAS

Constructafloor Exterior flooring is suitable for use in coastal areas – Corrosivity Category C3: Medium – defined as up to 1km from a surf beach, or more than 200m from the shore without breaking surf, i.e., sheltered bays. Consideration must also be given to local weather and topography features which can increase the distance that salt spray can travel, extending these nominal limits.

While the Constructafloor sheets are not subject to corrosion, the sheets need to be waterproofed and the fixings and steel framing must have suitable corrosion resistance for the location. The designer can consider timber framing, steelwork with additional treatment and higher corrosion resistance fixings to achieve a suitable level of durability. The waterproofing membrane must be maintained in accordance with the manufacturer's recommendations and any damaged areas replaced immediately.

FIXING

Fixings should finish below the finished level of the Constructafloor Exterior Flooring and any indentation should be filled with joint sealant.

Refer to the following details for jointing and fixing information.

FIG 1: Fastener Countersinking Detail

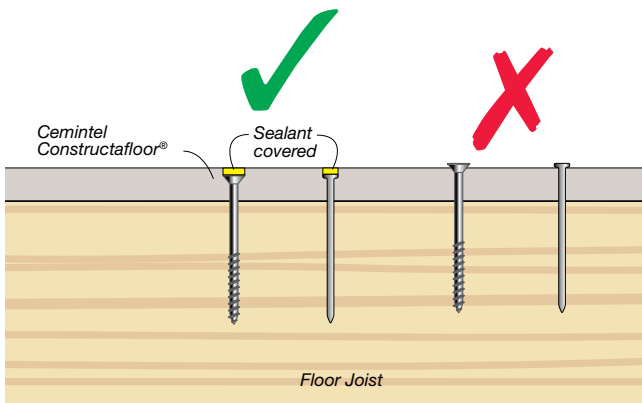


FIG 2: Constructafloor Fixing Detail – Nail Fixing

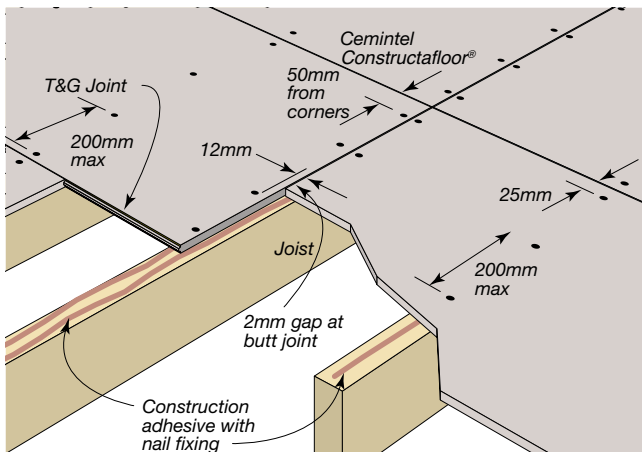
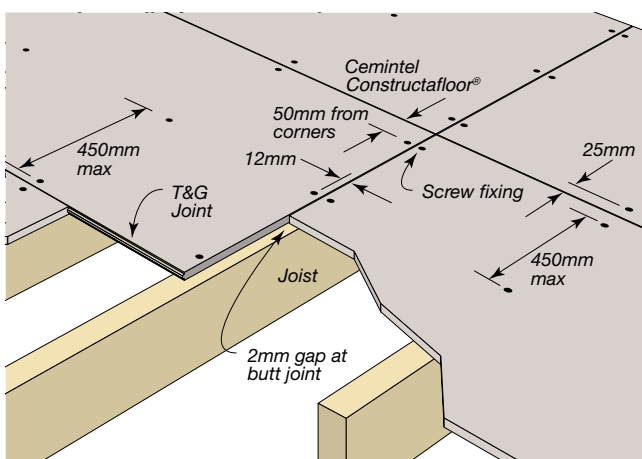


FIG 3: Constructafloor Fixing Detail – Screw Fixing



SYSTEM SELECTION

A number of systems are available for different applications, surface finishes and drainage conditions. Refer to Table 2 for details.

WATERPROOF SYSTEMS

Constructafloor Exterior flooring is a fibre cement product, and waterproofing systems should be chosen that are recommended by their manufacturer for fibre cement substrates. Components including sealers, membranes, mortars, adhesives and finishes should be considered for their compatibility with each other, as well as with the substrate, and their performance as a complete system.

Waterproofing systems information for use with Constructafloor Exterior flooring has been provided by ARDEX, Bostik, Crommelin and Parchem. Please contact these manufacturers to confirm project suitability. Further information is available at cemintel.com.au.

MORTAR BED WITH SEPARATING LAYER

Constructafloor Exterior flooring is laid directly on joists and covered with a waterproof sheet membrane. A separating layer or slip-sheet then separates the membrane from the mortar bed to accommodate minor movement.

Drainage to the deck edge may be provided by fall in the sheets or in the mortar bed, or the mortar bed may drain to a sump. Control joints in tiling need not correspond with sheet joints.

TILES WITH LIQUID MEMBRANE

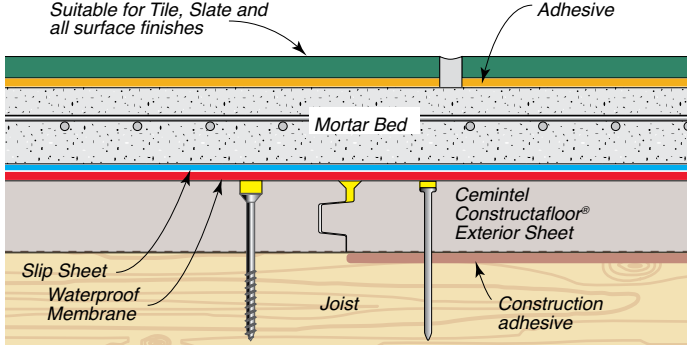
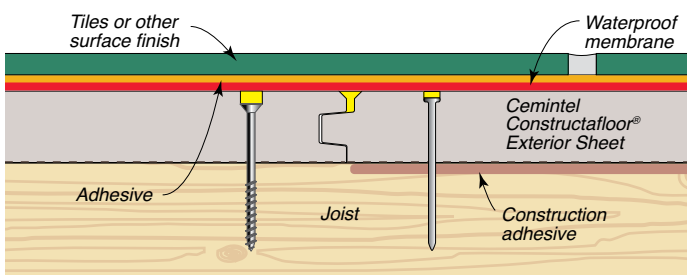
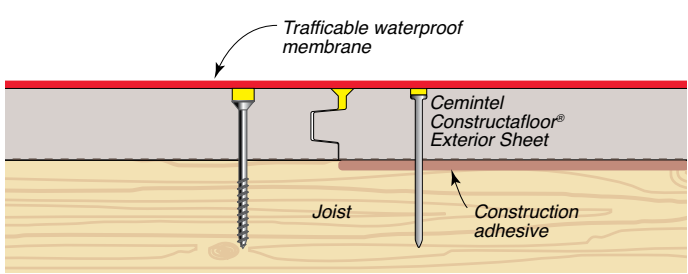
This system has an applied waterproof membrane directly over the Constructafloor Exterior flooring. Tiles are fixed over the membrane, and drainage is provided by fall in the sheets. Control joints in tiling must correspond with sheet joints.

TRAFFICABLE MEMBRANE

Membrane systems, laid directly over Constructafloor Exterior flooring, are available that are suitable for foot traffic.

SYSTEM TABLE

Table 2: System Selection

| MORTAR BED WITH SEPARATING LAYER | SYSTEM DESCRIPTION |
|--|---|
|  <p>Suitable for Tile, Slate and all surface finishes</p> <p>Adhesive</p> <p>Mortar Bed</p> <p>Slip Sheet Waterproof Membrane</p> <p>Joist</p> <p>Cemintel Constructafloor® Exterior Sheet</p> <p>Construction adhesive</p> | <ul style="list-style-type: none"> • Drain to edge of deck or sump. • Staggered or aligned sheet layout. • Screw or power nail and adhesive fix. • Control joints in sheets at maximum 4.5 x 12m centres. • Control joints in mortar bed and tile layers at maximum 4.5 x 4.5m centres. • Tile/mortar bed control joints need not correspond with sheet joints. |
| TILES WITH LIQUID MEMBRANE SYSTEM | SYSTEM DESCRIPTION |
|  <p>Tiles or other surface finish</p> <p>Waterproof membrane</p> <p>Adhesive</p> <p>Joist</p> <p>Cemintel Constructafloor® Exterior Sheet</p> <p>Construction adhesive</p> | <ul style="list-style-type: none"> • Drain to edge of deck. • Aligned sheet layout only. • Screw or power nail and adhesive fix. • Control joints in sheets at maximum 2.7 x 12m centres. • Control joints in tile layer at maximum 2.7 x 3.6m centres. • Tile control joint must correspond with sheet joints. |
| TRAFFICABLE MEMBRANE SYSTEM | SYSTEM DESCRIPTION |
|  <p>Trafficable waterproof membrane</p> <p>Joist</p> <p>Cemintel Constructafloor® Exterior Sheet</p> <p>Construction adhesive</p> | <ul style="list-style-type: none"> • Drain to edge of deck. • Aligned sheet layout only. • Screw or power nail and adhesive fix. • Control joints in sheets at maximum 2.7 x 12m centres. |

MORTAR BED WITH SEPARATING LAYER

This system has Constructafloor Exterior flooring fixed directly to floor joists, with a flexible membrane installed on top to provide waterproofing.

The flexible membrane is covered with a separating or slip sheet, and a reinforced mortar bed is then laid to support the tiles or other finish.

Control joints in the mortar bed/tiles do not have to coincide with sheet joints. This allows uninterrupted tile surfaces of up to 4.5m x 4.5m between control joints to suit the tile module.

INSTALLATION

SHEET & CONTROL JOINT LAYOUT

Constructafloor Exterior flooring sheets are fixed directly to the floor joists. Sheets are laid with tongue and groove joints perpendicular to the joists. Sheet ends must align with joists, and may be staggered or aligned. Sheet ends must be aligned at control joints. Sheets may be laid in either direction relative to the slope. Leave a 10mm gap at wall junctions.

Control joints in the sheets and mortar bed/finish layers do not have to coincide, and are to be provided at maximum centres as detailed in FIG 4.

FIXING CONSTRUCTAFLOOR SHEET

Tongue and groove joints must be butted tightly together prior to fixing. Refer to detail.

Butt joints must be fixed to the frame leaving a 2mm minimum gap between each flooring sheet to allow for joint sealant.

Control Joints must be installed leaving a 5mm minimum gap between sheets to allow for the installation of backing rod and joint sealant. Remove the tongue and groove where necessary and provide blocking to support sheet edges and backing rod. This gap is important to accommodate movement of the building materials and structure.

Screw fix sheets at 450mm centres maximum along sheet edges and in the body of the sheet. Alternatively, where sheets are to be nail fixed, apply a continuous bead of construction adhesive below the sheet and power nail at 200mm centres maximum along sheet edges and in the body of the sheet. Fixings must be kept a minimum of 50mm from corners. Refer to FIG 1, 2 and 3, and installation details.

Fastener heads must be countersunk below sheet surface. Screw holes must be pre-drilled using a counter sinking tool. Screw holes must be cleaned and filled with joint sealant. Once fasteners are in place, cover heads and fill all indentations with joint sealant.

Handy Hint: To prevent sealant spillage, place a strip of adhesive tape over the screw hole prior to drilling, then remove once screw is in place and covered with sealant.

FIG 4: Sheet & Control Joint Layout – Sheets Staggered
(Control joint locations of the sheeting and tile covering can be offset)

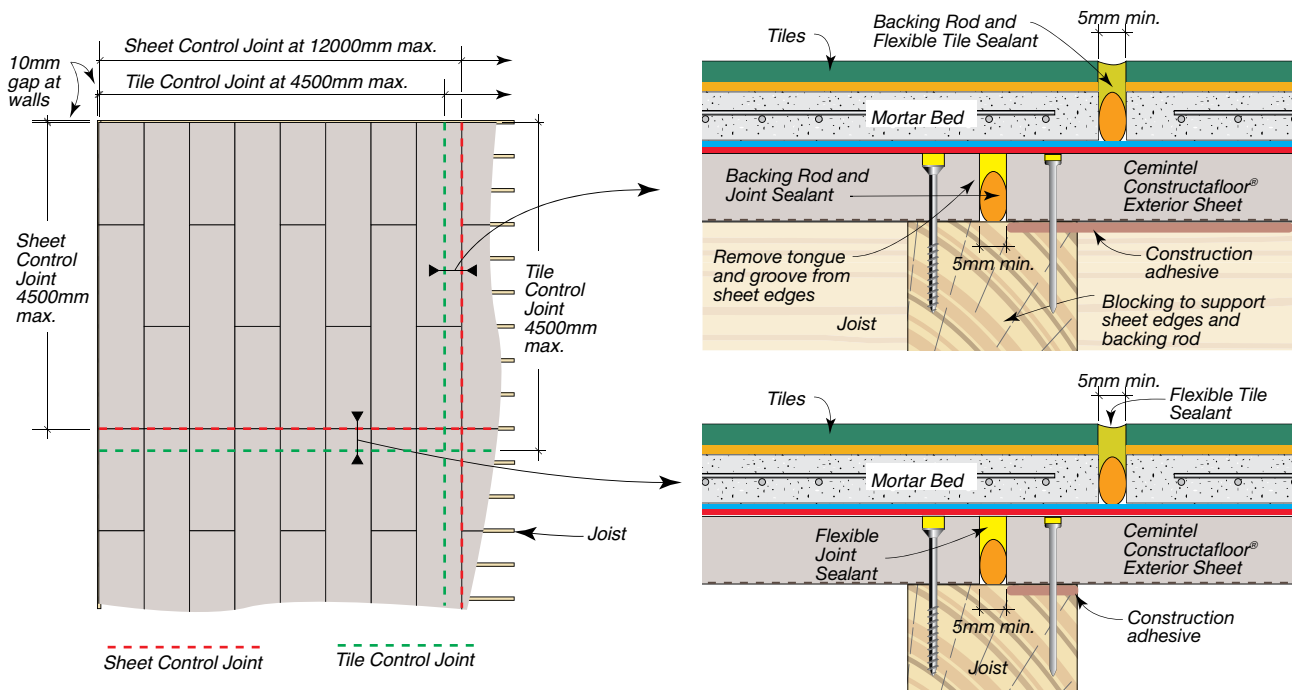
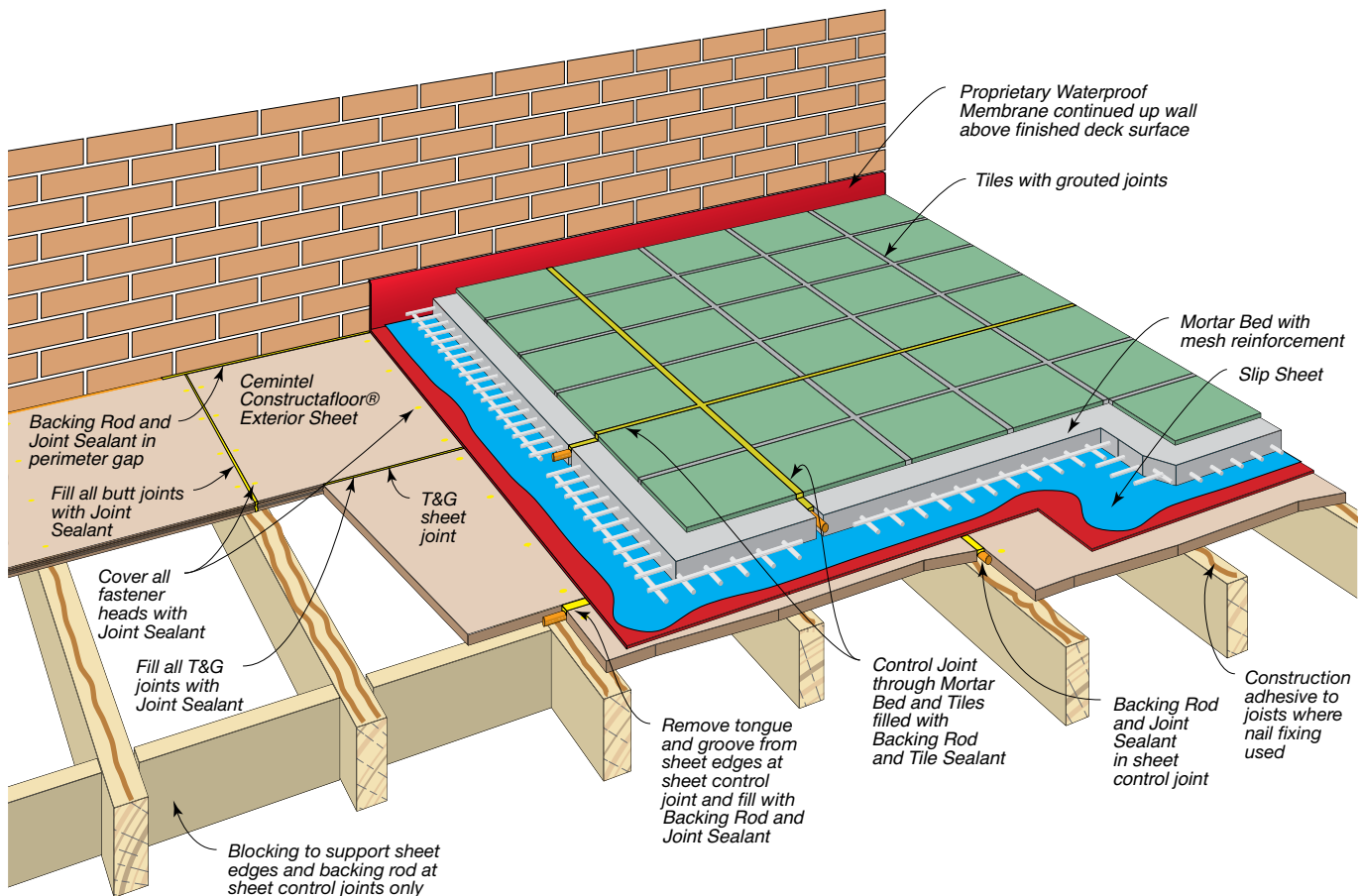


FIG 5: Constructafloor with Mortar Bed/Tiles and Slip Sheet

JOINTING

Sheets must be fixed in position ready for joints to be completed. Ensure joints are clean and clear of any dust that may prevent sealant adhering.

For control joints only, press foam backing rod into joint pressing down firmly against joist leaving approximately 6mm deep gap at top to suit sealant requirements.

Fill all joints with joint sealant, finishing level with the sheet surface. Joints must be smoothed within 10 minutes.

MEMBRANE

A proprietary membrane system must be used and should be installed by a specialist waterproofing contractor, and a waterproof guarantee provided.

The following third party waterproofing manufacturers have tested waterproofing systems for use on top of Constructafloor Exterior flooring:

- ARDEX Australia Pty Ltd
- Bostik Australia Pty Ltd
- Crommelin
- Parchem Construction Supplies Pty Ltd

Please contact these companies for further information.

SLIP SHEET

To protect the membrane during tiling, and to separate the movement of the substructure and the tiled surface, a heavy duty plastic sheet must be installed over the membrane.

MORTAR BED

A mortar bed is laid over the slip sheet to provide a suitable surface for tiling.

Control joints must be installed at 4.5m maximum spacings in both directions.

The mortar bed must be 40mm minimum thickness and reinforced with galvanised steel or stainless steel mesh.

The mortar bed should be allowed to cure for approximately 10 days before tiling commences.

TILING

Do not tile over control joints in the mortar bed.

When selecting tiles ensure they are suitable for external use. An appropriate adhesive recommended for external use must be used.

In all cases, the tile and tile adhesive manufacturer's instructions should be followed.

For further advice, refer to Australian Standard AS3958.1 'Guide to the installation of ceramic tiles'.

FIG 6: Typical T&G Joint Detail

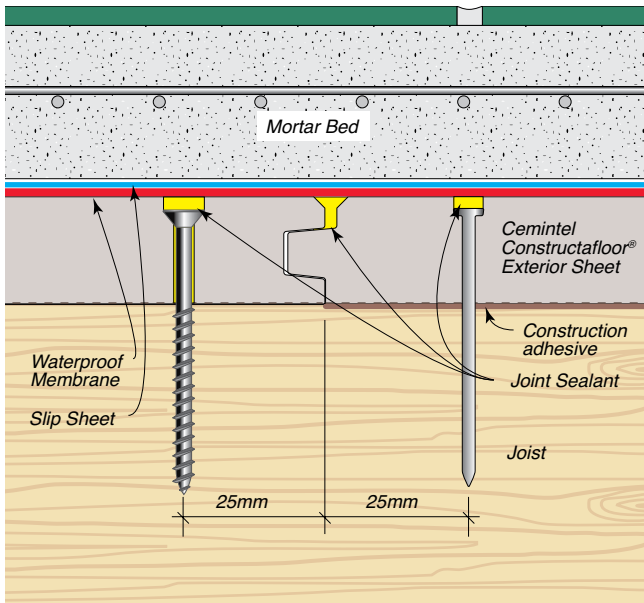


FIG 8: Control Joint at Butt Joint with Mortar Bed & Tiles

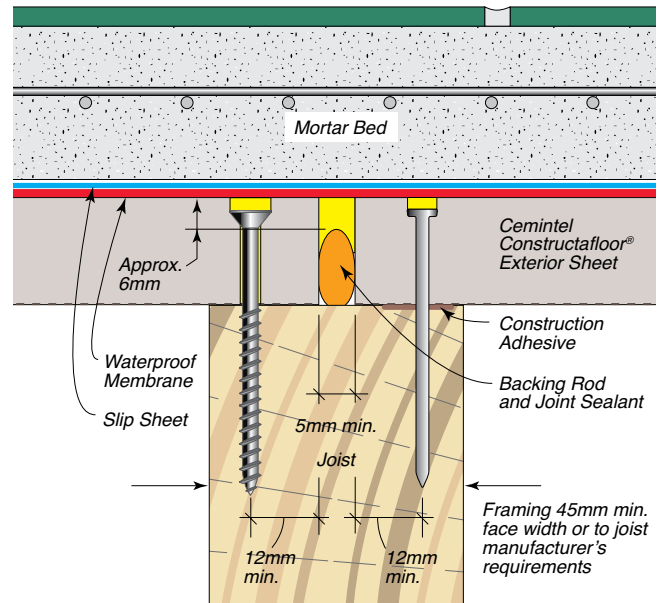


FIG 7: Typical Butt Joint Detail

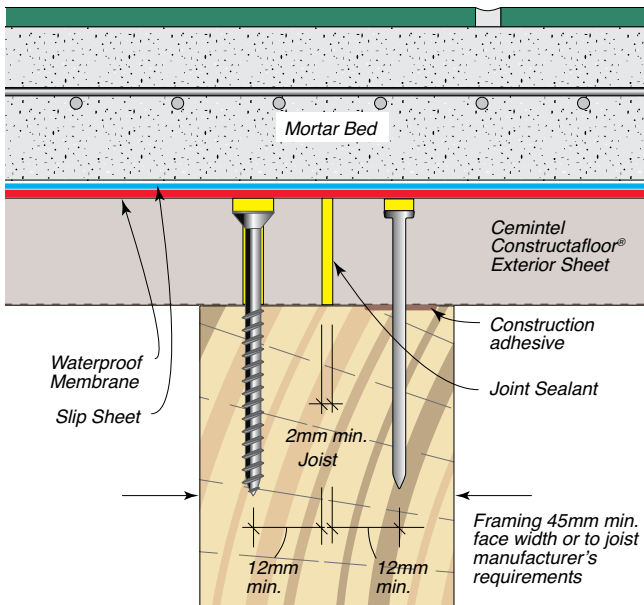


FIG 9: Control Joint at T&G Joint with Mortar Bed & Tiles

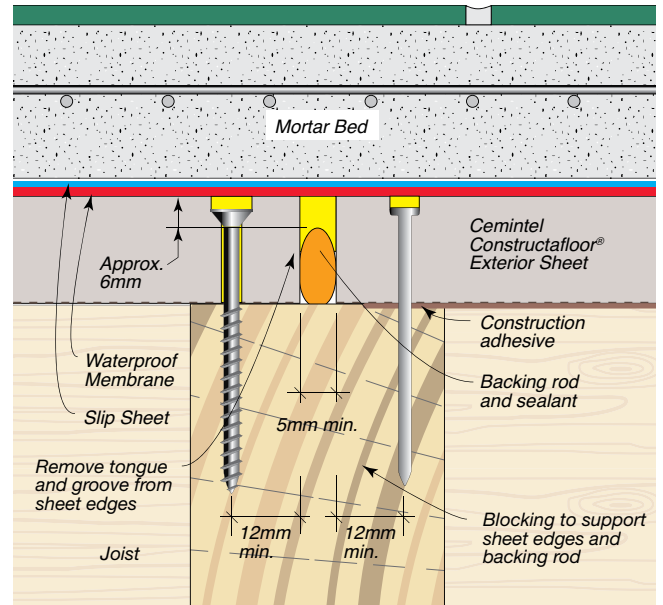


FIG 10: Control Joint Through Mortar Bed and Rigid Finish

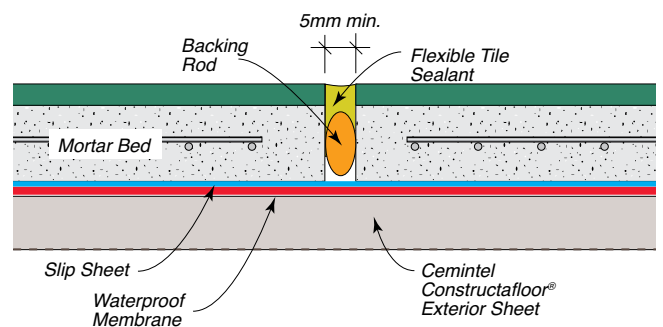


FIG 11: Wall/Floor Junction Option 1

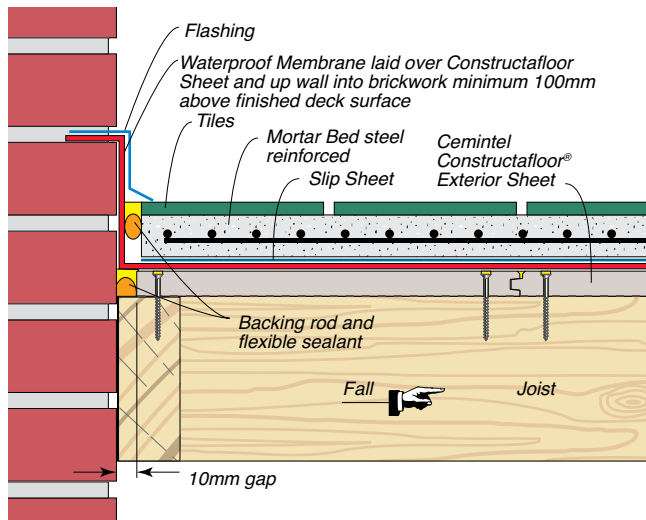


FIG 13: Edge Finish

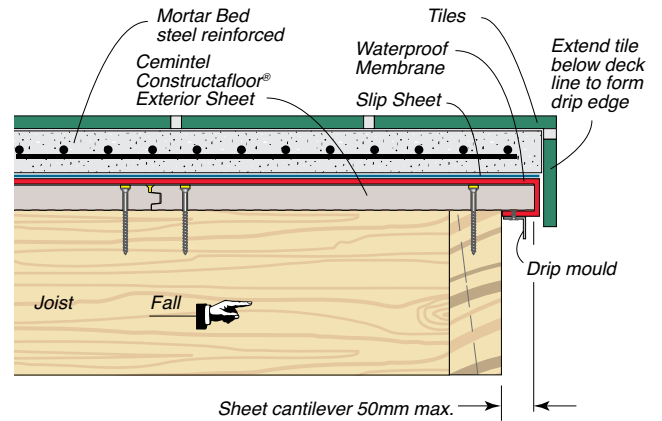


FIG 12: Wall/Floor Junction Option 2

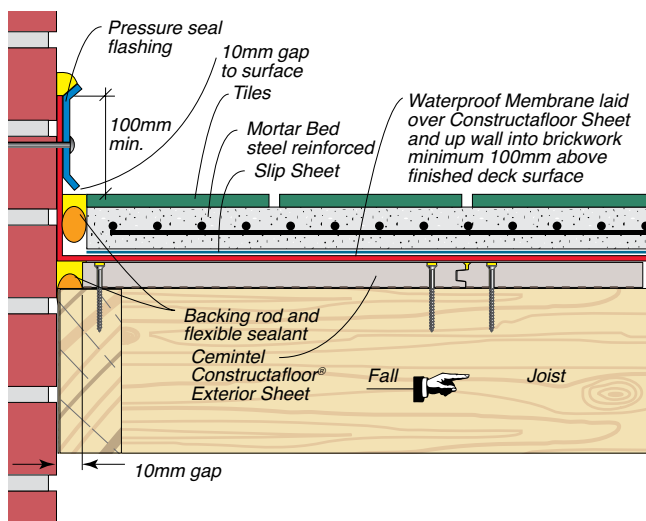
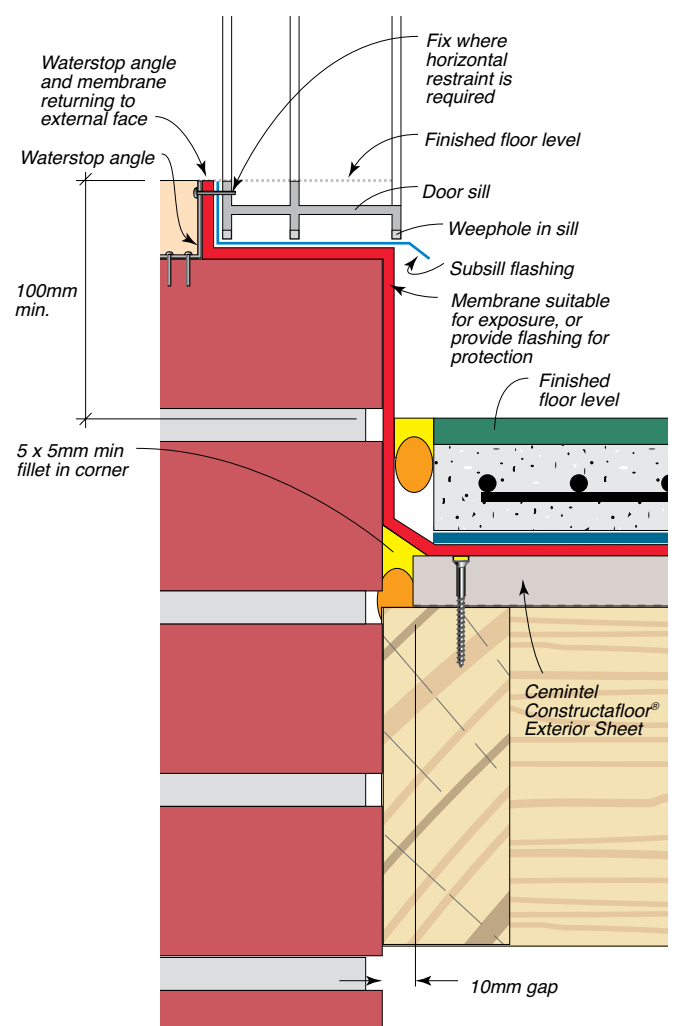


FIG 14: Door Sill



LIQUID MEMBRANE & TRAFFICABLE MEMBRANE SYSTEMS

These systems are treated together as they have similar sheet fixing and waterproofing details. With no mortar bed, these systems are of minimum thickness, which is an advantage where threshold step height is low, and are also light weight to reduce the load on floor joists.

INSTALLATION

SHEET & CONTROL JOINT LAYOUT

Constructafloor Exterior flooring sheet are fixed directly to the floor joists. Sheets are laid with tongue and groove joints perpendicular to the joists with sheet ends aligned. Sheet ends must align with joists. Sheets may be laid in either direction relative to the slope. Leave a 10mm gap at wall junctions.

Control joints in tiles must be aligned with control joints in sheets, and are to be provided at maximum centres as detailed in FIG 15.

FIXING SHEETS

Tongue and groove joints must be butted tightly together prior to fixing. Refer to detail.

Control Joints must be installed leaving a 5mm minimum gap between sheets to allow for the installation of backing rod and joint sealant. Remove the tongue and groove where necessary and provide blocking to support sheet edges and backing rod. This gap is important to accommodate movement of the building materials and structure.

Screw fix sheets at 450mm centres maximum along sheet edges and in the body of the sheet. Alternatively, where sheets are to be nail fixed, apply a continuous bead of construction adhesive below the sheet and power nail at 200mm centres maximum along sheet edges and in the body of the sheet. Fixings must be kept a minimum of 50mm from corners. Refer to FIG 1, 2 and 3, and installation details.

Fastener heads must be countersunk below sheet surface. Screw holes must be pre-drilled using a counter sinking tool. Screw holes must be cleaned and filled with joint sealant. Once fasteners are in place, cover heads and fill all indentations with joint sealant.

Handy Hint: To prevent sealant spillage, place a strip of adhesive tape over the screw hole prior to drilling, then remove once screw is in place and covered with sealant.

FIG 15: Sheet & Control Joint Layout – Sheets Aligned
(Control joint locations of the sheeting and tile covering align)

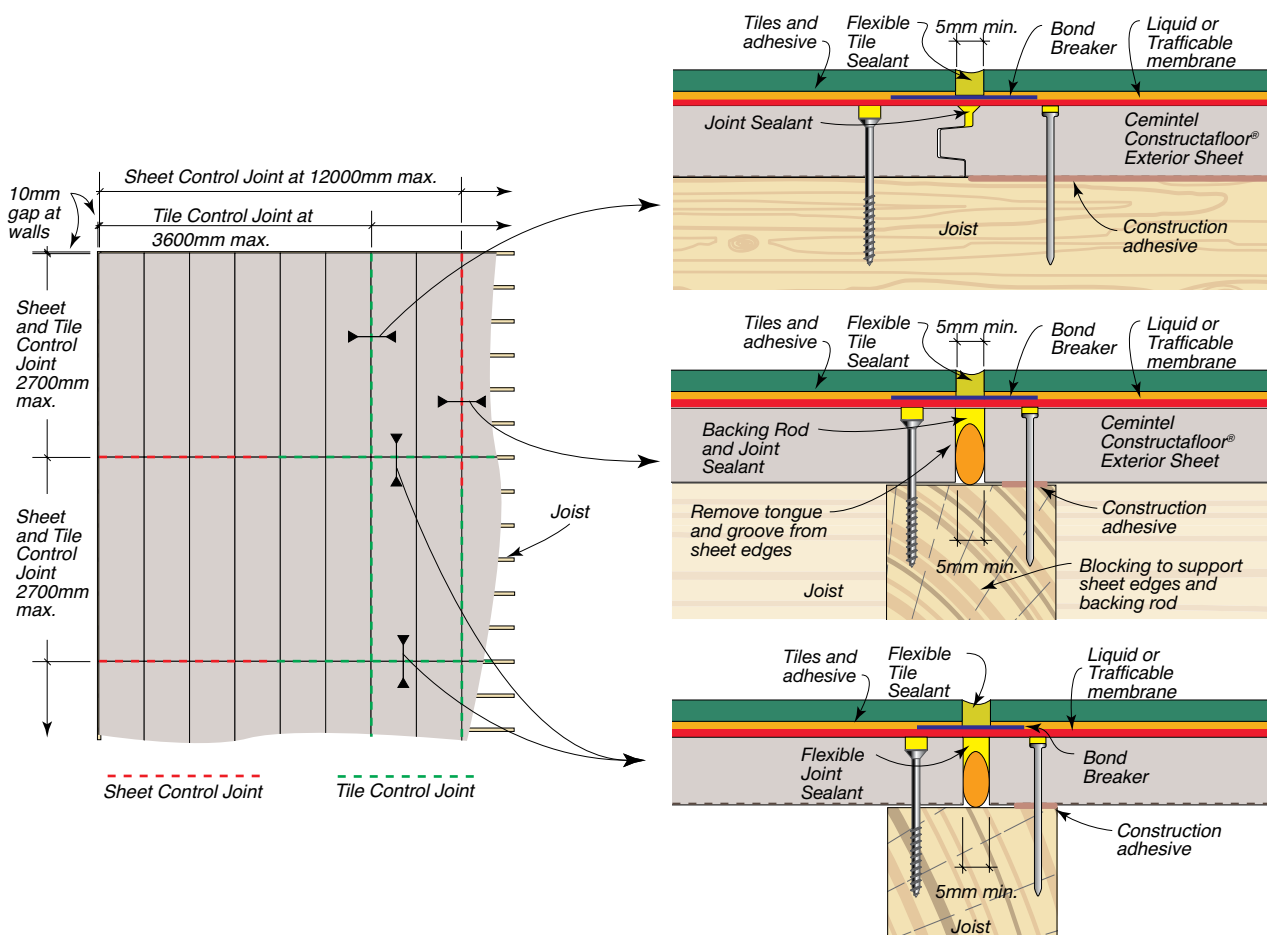
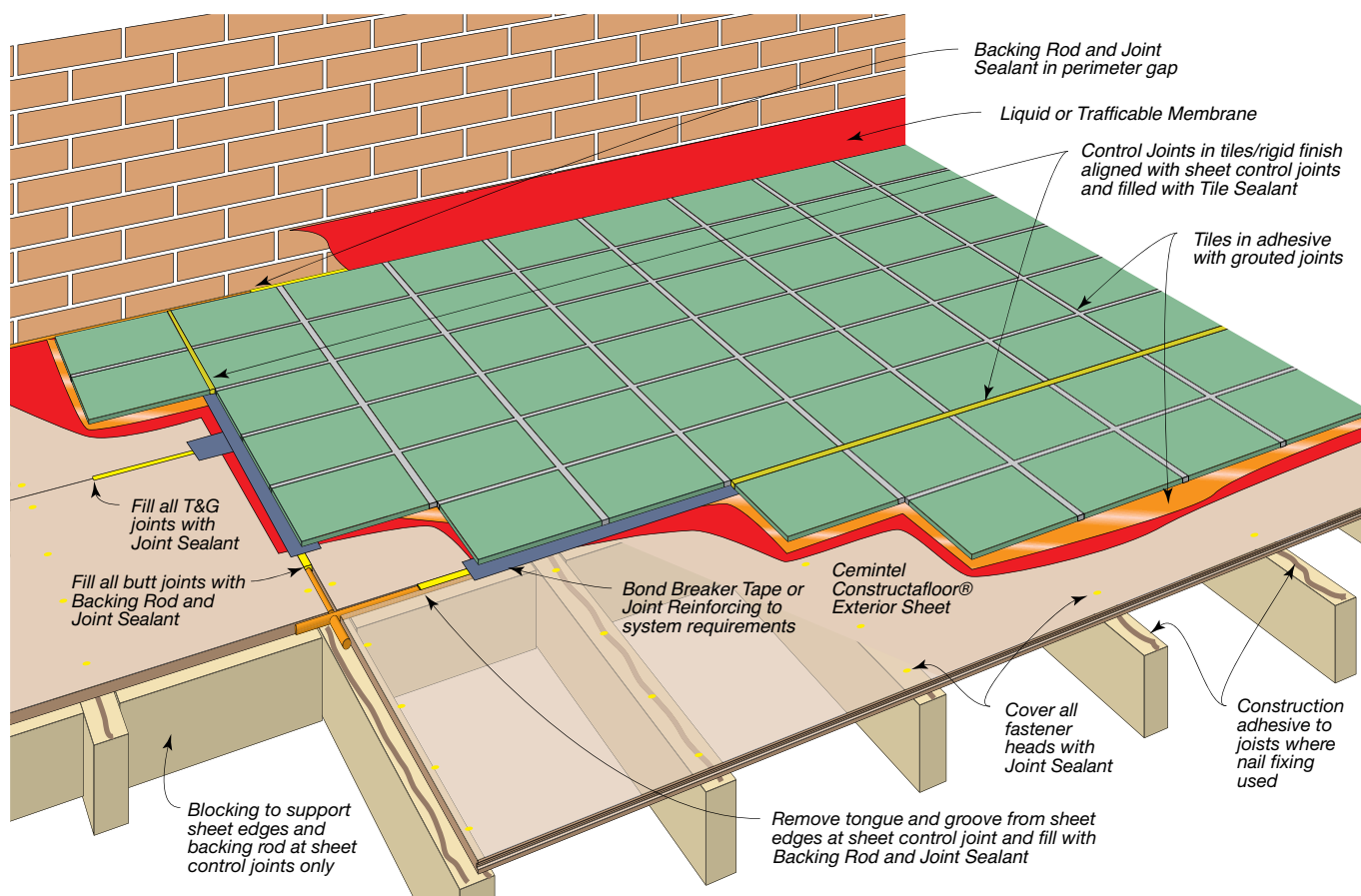


FIG 16: Construction of Liquid or Trafficable Membrane System

JOINTING

Sheets must be fixed in position ready for joints to be completed. Ensure joints are clean and clear of any dust that may prevent sealant adhering.

Place a strip of masking tape along both sides of the joint to ensure a neat finish is achieved.

For control joints only, press foam backing rod into joint pressing down firmly against joist leaving approximately 6mm deep gap at top to suit sealant requirements.

Fill all joints with joint sealant, finishing level with the sheet surface. Joints must be smoothed within 10 minutes.

Remove masking tape and allow sealant to dry for approximately 24 hours.

Joint reinforcement should be used over joints with trafficable membrane systems as recommended by the membrane manufacturer.

FINISHES

Do not tile over control joints.

When selecting tiles ensure they are suitable for external use and an appropriate adhesive is selected. In all cases the tile and tile adhesive manufacturer's instructions should be followed.

For further advice, refer to Australian Standard AS3958.1 'Guide to the installation of ceramic tiles'

LIQUID OR TRAFFICABLE MEMBRANE

A proprietary membrane system must be used. This should be installed by a specialist waterproofing contractor, and a waterproof guarantee provided.

The following third party waterproofing companies have tested waterproofing systems for use on Constructafloor

- ARDEX Australia Pty Ltd
- Bostik Australia Pty Ltd
- Crommelin
- Parchem Construction Supplies Pty Ltd

Please contact these companies for further information.

A bond breaker tape must be placed over the liquid membrane directly above all sheet control joints prior to tiling.

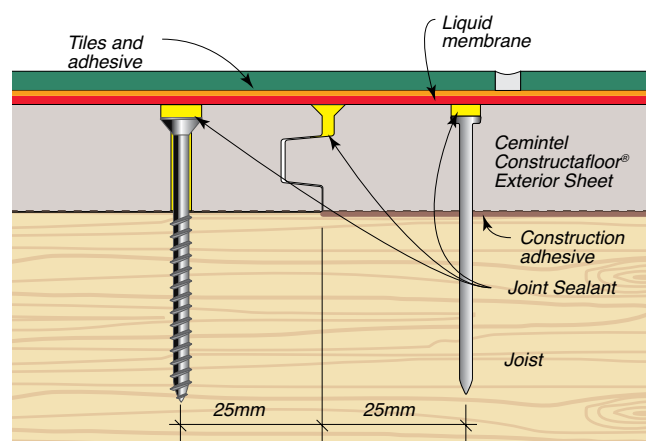
FIG 17: Typical T&G Joint with Membrane and Tiles

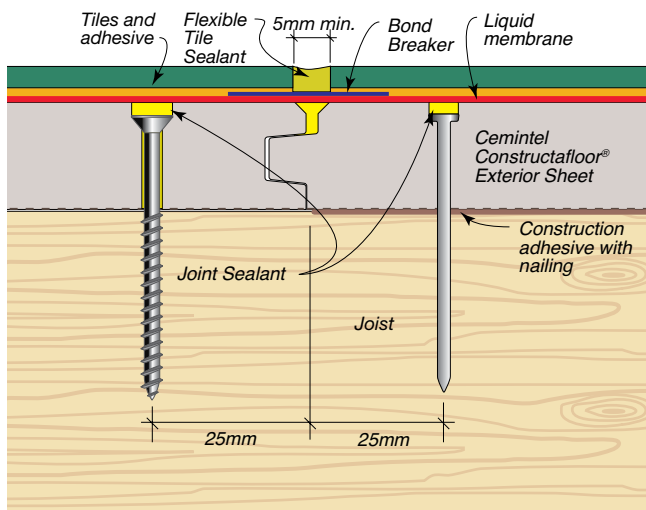
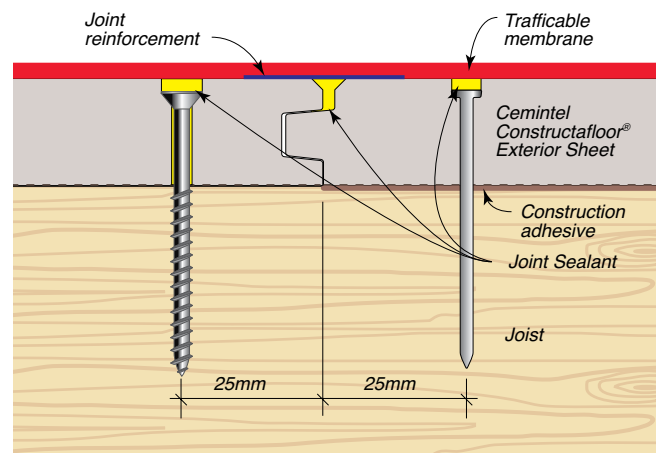
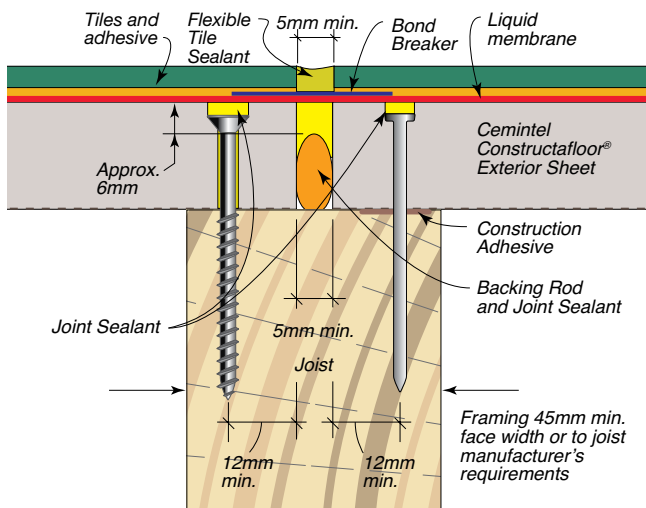
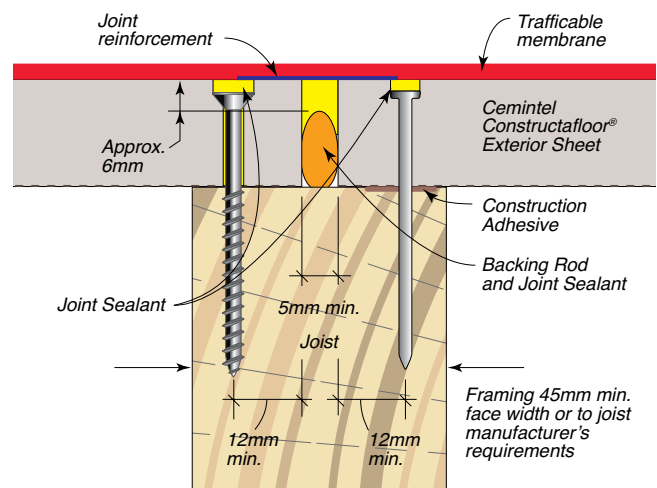
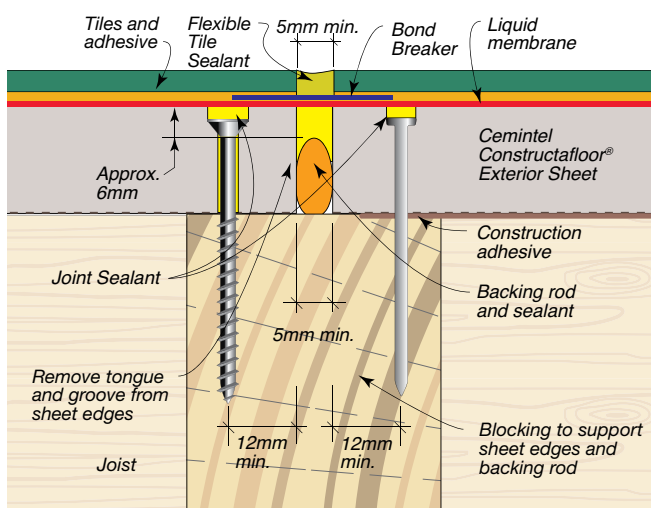
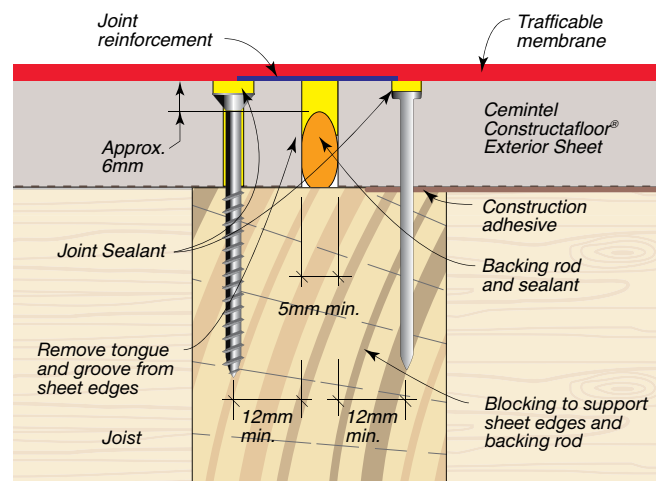
FIG 18: Tile Control Joint at T&G Joint with Membrane and Tiles**FIG 21: Typical T&G Joint with Trafficable Membrane****FIG 19: Sheet & Tile Control Joint at Butt Joint with Membrane and Tiles****FIG 22: Sheet Control Joint at Butt Joint with Trafficable Membrane****FIG 20: Sheet & Tile Control Joint at T&G Joint with Membrane and Tiles****FIG 23: Sheet Control Joint at T&G Joint with Trafficable Membrane**

FIG 24: Edge Finishing Detail
(Edge fall protection not shown)

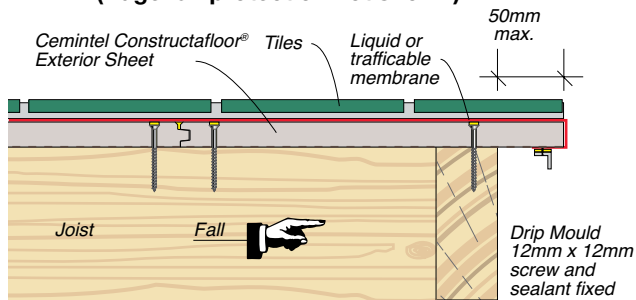


FIG 25: Wall/Floor Junction

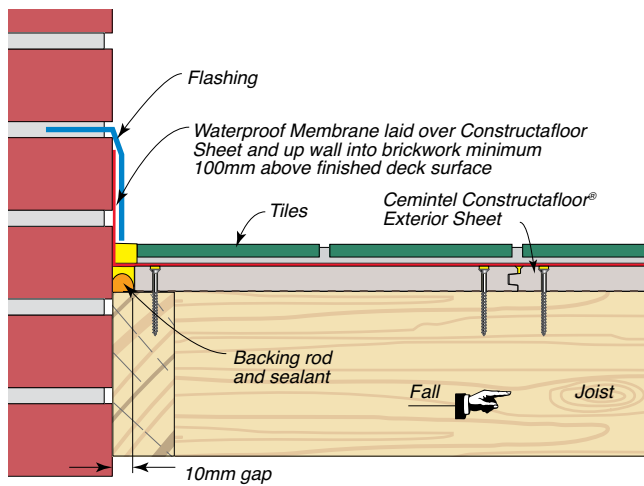


FIG 26: Wall/Floor Junction

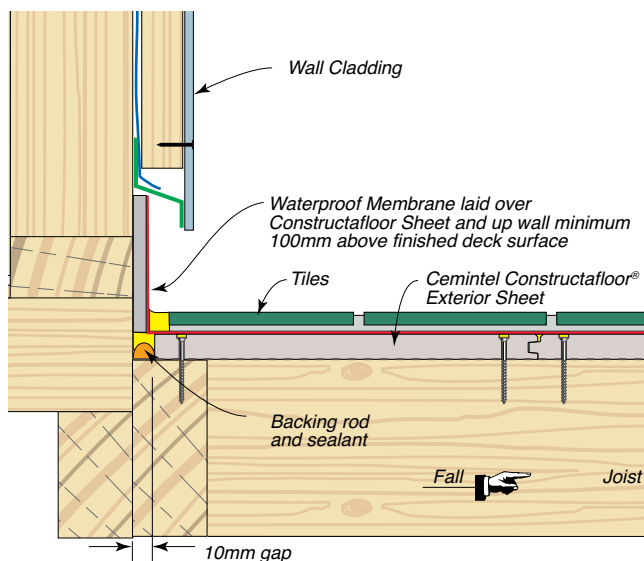


FIG 27: Metal Post Support

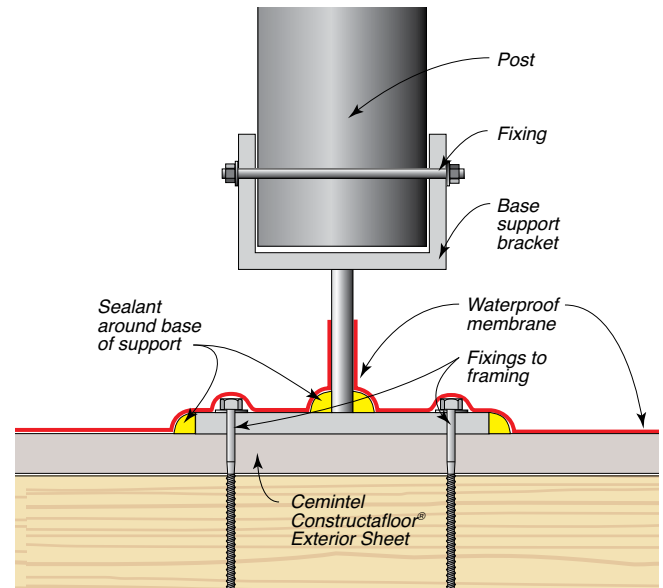


FIG 28: Pipe Penetration Detail

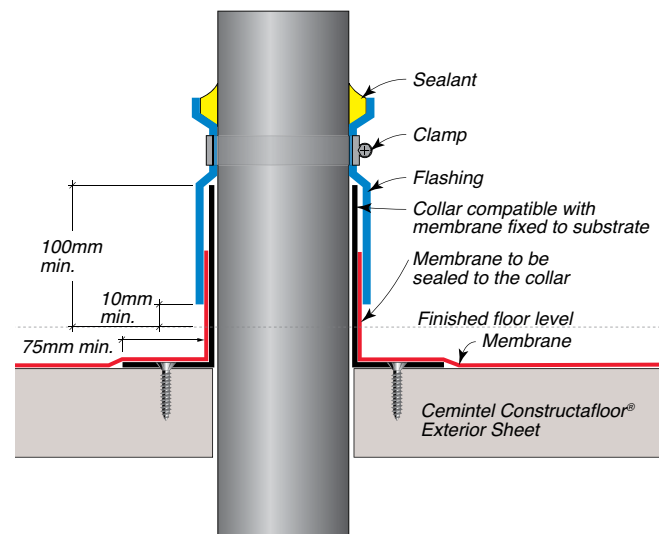
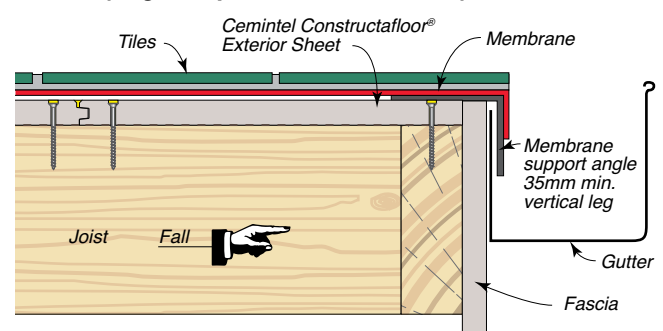


FIG 29: Gutter Detail
(Edge fall protection not shown)



MAINTENANCE





The durability of the system can be maintained by periodic inspection, including examination of the surface finishes, flashings, penetrations and membranes. Any cracked or damaged flashings or seals that would allow water ingress must be repaired immediately.

SHEET PREPARATION

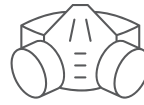
Cement based levelling products may be used. Sheets should not be sanded. Sheets should be cut from the back using a power saw. See table below.

Tools

*Cemintel recommends the cutting tools in the table below. Appropriate dust extraction methods should also be used.

| 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 |
|  | FESTOOL DSC-AGP 125 – Diamond Blade Cutting and Grinding Tool. Used to provide neat and accurate bevelled edges | 125mm | 1 | 107207 |
|  | FESTOOL TS 55 EBQ Plunge Cut Saw – with 1400mm Guide Rail. Precise plunge cuts in materials up to 55mm thick. | 160mm | 1 | 121400 |
| | FESTOOL Diamond Tipped Blade for TS 55 – for cutting all fibre cement sheet products | 160mm | 1 | 112647 |

SAFETY, HANDLING & GENERAL CARE



HEALTH, SAFETY AND PERSONAL PROTECTION EQUIPMENT (PPE)

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

When cutting, drilling or grinding Constructafloor sheets using power tools, always ensure the work area is properly ventilated. An approved dust mask (AS1715 and AS1716) and safety glass

(AS1337) must be worn. Cemintel recommends that hearing protection also be worn.

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

Recommended Safe Working Practices

| | |
|----------------------------------|---|
| Cutting Outdoors | <ol style="list-style-type: none"> 1. Position cutting station so wind will blow dust away from the user or others in the working area. 2. Use a dust reducing plunge saw equipped with a dust extraction system. |
| Sanding/Drilling/Other Machining | When sanding, drilling or machining, you should always wear a P1 or P2 dust mask and warn others in the immediate area. |
| Important Reminders | <ol style="list-style-type: none"> 1. NEVER use a power saw indoors. 2. NEVER use a saw blade that is not purpose-made for cutting fibre cement products. 3. NEVER dry sweep. 4. ALWAYS follow tool manufacturers' safety recommendations. 5. ALWAYS maintain tools in a clean condition. |

HANDLING & GENERAL CARE

Storage

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

Handling

Constructafloor sheets must be treated with care during handling so as to avoid damage to edges. Sheets should be carried horizontally on edge by two people.

Cutting

Sheets should be cut using a power saw. Cemintel recommends using the Makita Plunge Cut Saw and FESTO TS 55 EBQ Plunge Cut Saw with guide rail and appropriate blade, together with the appropriate dust extraction system.

Penetrations

Penetrations in sheets may be cut or drilled prior to installation. Cut from the back or drill from the front. Cut penetrations oversize by 8-10mm all around. Mask, prime and fill gaps with sealant in accordance with recommended methods and products.

WARRANTY

The Constructafloor flooring have a product warranty of 10 years.

The full Cemintel product warranty is available for download at cemintel.com.au



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