benx

Installation Guide

Supertech Weatherboard

Supertech Plank is a fibre-cement cladding solution designed for exterior, non-loadbearing applications vertical timber, metal supports and aluminium supports installed over blockwork, timber frame and masonry.

Supertech Weatherboard, manufactured from refined cellulose fibre cement, provides outstanding impact resistance, superior weather durability, and a minimum service life of 30 years. Its lightweight structure and low-maintenance requirements allow for versatile use, similar to traditional timber, enabling the creation of visually striking façades in a range of colour options. Suitable for both horizontal and vertical installation, Supertech Weatherboard presents an appealing alternative to timber or PVCu cladding. It is favoured by architects, builders, and homeowners alike due to its factory-applied finish and flexible design capabilities.

The anticipated performance of **Supertech** Weatherboard exceeds 30 years, ensuring dependable longevity—making it a preferred choice for specifiers and clients seeking alternative facade systems. Moreover, the product complies with the relevant provisions of NHBC Standards Part 6 and 6.9, extending its applicability within insurer-backed domestic dwelling projects.

This third-party accreditation underscores the rigorous testing standards satisfied by **Supertech** Weatherboard, which include assessments of strength and stability, fire behaviour, weathertightness, and long-term durability. Collectively, these credentials assure a consistently high level of performance, supporting confidence in specifying **Supertech** Weatherboard for your project.

Supertech Weatherboard

Installation Guide

Contents:

Product Features

- Excellent fire performance
- Easy to cut and install
- Low maintenance
- Resistant to rot, fungus and insects
- High levels of weather resistance
- UK factory applied product

Dimensions and Properties

Dimensions

Length	3660mm
Width	190mm
Thickness	7.5mm
Weight of product (painted/stained)	11.25kg

Properties

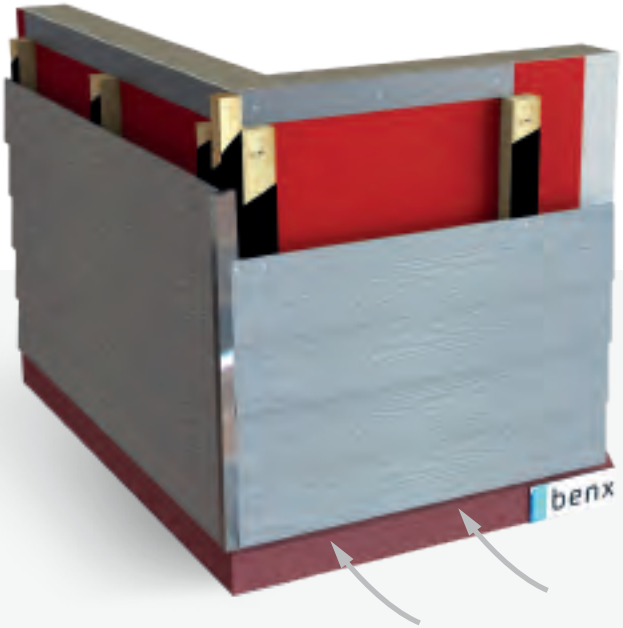
Density	1375 kg/m^3
Bending strength	10.5 N/mm^2
Moisture Content:	≤8%
Moisture Movement:	0.06-0.08%
Density at Oven Dry:	1.33-1.42 g/cm^3
Water Vapour resistance factor (Q):	70
Water Absorption:	8%
Modus of elasticity	6365 N/mm^2
Thermal conductivity	0.30 W/mk
Reaction to fire	EN 13501-1 class A1-s1,d0 Non Combustible

System Principle

Supertech Weatherboard is designed for use as part of a ventilated cladding system. This means airflow is key. A continuous ventilation path must be created, drawing air in at the base and allowing it to escape at the top of the elevation.

To ensure this, a minimum 38mm cavity must be maintained behind the boards, along with a cavity drainage and ventilation gap should be provide openings, base and soffit with a minimum ventilation area of 500 mm2 per metre run along the base and head of any rainscreen wall. Inadequate ventilation can lead to moisture build-up and potential system failure. These ventilation gaps allow airflow to travel through the cavity and expel any trapped moisture, critical for system performance and longevity. A 10mm ventilation is a guide only but specific guidance should be sourest form the principle designer. Inadequate ventilation can lead to moisture build-up and potential system failure.

Note: Guidance on recommended cavity widths is given in NHBC Standards 2022, Chapters 6.2, 6.9 and 6.10.18.



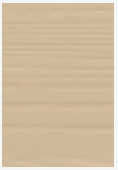
Leave a minimum 10mm ventilation gap beneath window heads, cills, and soffit lines to maintain full airflow. Inadequate ventilation can lead to moisture build-up and potential system failure subject to final project design.

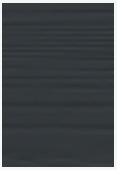
The **Supertech** Collection

Traffic White

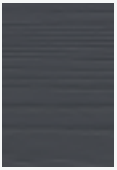

Light Grey

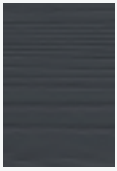

Oyster White


Cobblestone


Antracite Grey


Jet Black


Slate Grey


Iron Grey


Dark Grey


Khaki Brown


Dark Brown


Lavender Blue


Pastel Blue


Lilac Blue


Sand Yellow


Red


Pine Green


Blue Grey


Grey Brown


Grey Green

Supertech is available in either a grained or smooth finish.

Grained Finish

Smooth Finish

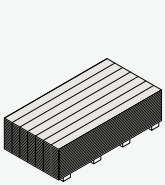
Storage and Handling

Storage

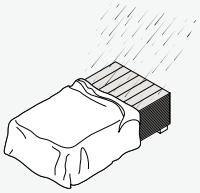
Supertech Weatherboard must be stored under cover and off the ground on the pallets it is supplied with. Remove any outer wrap used for transport to allow trapped moisture to escape, then re-cover with an opaque tarpaulin for continued protection.

It's vital to keep the reverse side of the boards dry during storage and installation. Always replace the protective interleaving sheets when re-stacking to prevent damage.

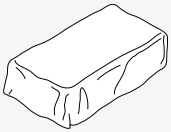
Boards should be protected from mud, wet trades, or any other site contaminants that could cause surface staining.



Ensure sufficient bearers, stack on a level surface and never stack against a wall



Must be protected from the weather



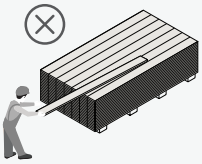
Store under cover, ideally inside

Handling

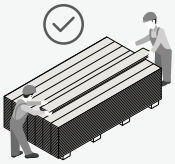
Handle Supertech Weatherboard with care, particularly when the boards are stored flat, as they can break if not fully supported. Always ensure they rest on purpose-designed pallets that support their full length.

When lifting, turn the board onto its sidre and carry it. Two-person handling is recommended to provide support along the full length and prevent stress on the material.

Never drag or slide the boards across any surface, as this can damage the finished face. Refer to the handling and storage labels on each pallet for further guidance.



Do not drag planks off the stack

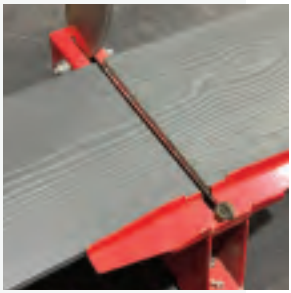


Planks must be lifted off the stack

Carry on edge but do not store on edge

Health & safety

When processing Supertech Weatherboard dust can be released which can cause irritation to airways and eyes. Long term exposure to any dust can be harmful to health. The correct PPE including gloves and footwear must be worn at all times.



General Fixing Information

Cutting

Supertech Weatherboard can be cut, drilled, and nailed using standard woodworking tools, similar to timber.

For best results:

- Use a guillotine.
- Hand-held circular saw with blades designed for fibre cement is recommended for larger volumes.
- To extend blade life and achieve a clean cut, we recommend the RCM polycrystalline diamond Dart Blade or guillotine.
- Always turn the board over before cutting to protect the finished face.
- Test cuts are advised before proceeding.
- Cut and drill in a dry, well-ventilated area or with dust extraction, and wipe down all edges with a clean, dry cloth to remove dust.
  Always wear appropriate PPE and use dust extraction when cutting.

Screwing (Recommended Method)

When fixing Supertech Weatherboard to the support structure:

- Position screws at least 20mm from the top edge and 50mm from board ends.
- If a fixing is needed within 50mm of an edge, pre-drill the hole.
- Pre-drilling is not usually required under normal fixing conditions.

Recommended fixings:

- Anti-corrosion steel screws (4.2mm x 42mm) with minimum 1000 hour salt spray resistance.
- Stainless steel screws can be purchased for coastal environments.

We supply colour-matched and self-coloured screws to suit your chosen Supertech finish.

A screw gun is recommended for consistent installation.

Nailing

Nailing By Pneumatic

Supertech Weatherboard can be fixed using pneumatic nail guns, with nails placed at least 50mm from the board edge.

Use:

- 2.5mm x 35mm A2 stainless steel annular ring shank nails, 7mm head diameterr
- To EN 14592-2008+A1-2012

Select nail guns carefully, avoiding those with narrow "T"-section heads. Guns must be adjustable to control depth and avoid over-driving or under-driving the nails.

Always perform a test fix to set depth, check placement distances, and ensure a flush finish.

Construction type	Design wind load resistance [3] (kPa)	Distance between vertical support rails/battens (mm)	Horizontal distance between fixing centres (mm)
7.5 mm Supertech Plank using nails on timber batten(4) sub-frame	1.2	600	300
7.5 mm Supertech Plank using screws on timber batten	1.4	600	300
7.5 mm Supertech Plank using wing tip screws on metal rail a sub-frame	1.8	600	300

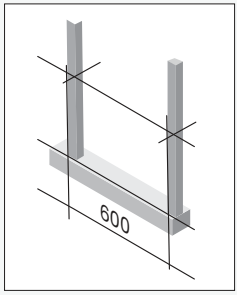
(1) Timber sub-frame: 38 mm depth x 47 mm width timber battens at 600 mm centre:
(2) Steel sub-frame: 1.2 mm thick x 100 mm base * 50 mm flange x 12 mm return metal studs at 600 mm centre-
(3) With a partial material factor of

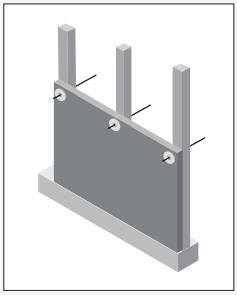
High wind loading or exceptional impact requirements

When installing **Supertech** Weatherboard, it is essential to have a comprehensive understanding of the wind loading on the structure to which the product will be applied. Should the wind loading exceed 1.0kN/m2, please contact the Benx technical team at 0800 612 4662 or refer to BBA Certificate 19/5708 Product Sheet 3, clauses 6.1 to 6.4.

In situations where **Supertech** Weatherboard may be exposed to exceptional impact loads—such as installation at low levels, high pedestrian traffic areas, schools, or leisure facilities—it is recommended to add additional timber battens between standard battens. This measure enhances both the substructure's performance and the impact resistance of the **Supertech** Weatherboard.

This is an example of wind loading guidance. See BBA Certificate 19/5708 Product Sheet 3 for more details.






Ventilation

Ventilation

To ensure optimal performance and prevent interstitial condensation, a ventilated cavity must be maintained behind Supertech Weatherboard.
We recommend using a minimum 38mm thick timber batten, which creates the required cavity depth. This setup should provide a continuous airflow with a minimum ventilation area of 5000mm² per metre run.
Using the 38mm batten will achieve this ventilation requirement.

Surface Mounted Features/ Penetrations

When installing items such as gutters, canopies, spot lights or other surface-mounted features., these must be fixed through the **Supertech** Weatherboard and into either:

> The primary structure,

> The main substructure, or

> Additional battens installed behind the weatherboard.

Ensure clearance holes are provided when fixing through the board to avoid stress on the material. When **Supertech** is cut, care must be taken to paint all exposed edges by applying a coat of touch up paint.

Important: **Supertech** Weatherboard must not be used to carry any structural load.

Installation

Step Installation Process

1. Fix battens to wall
2. Attach perforated closures to top and bottom of battens
3. Fix vertical profiles
4. Fix horizontal starter profiles
5. Cut and fix Supertech planks

Fit Breather Membrane

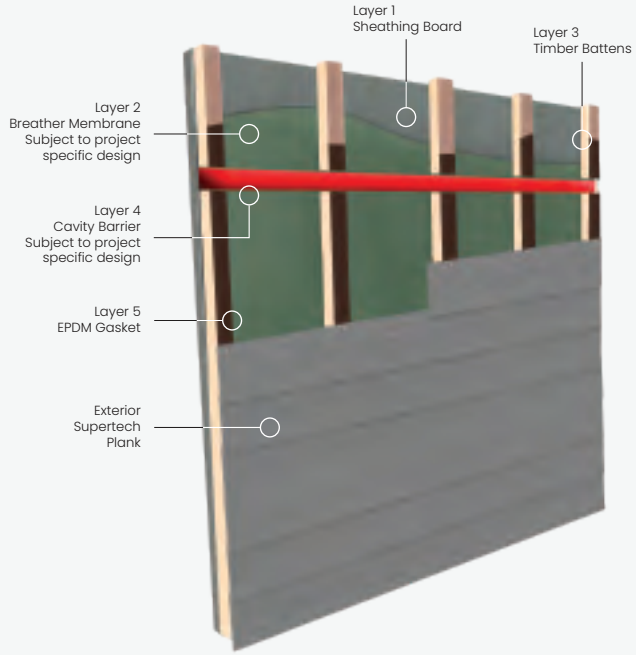
Where required, fix a breather membrane to the outer face of the sheathing board, following the manufacturer's overlap and installation guidelines.

Ensure the membrane is lapped to direct any water away from the building.

Fit Battens to Wall

Fix vertical timber battens to the wall at maximum 600mm centres (reduce spacing in high wind load areas). Battens must be plumb to avoid irregularities in the final finish.

- Minimum size: 38mm x 47mm, preservative-treated to BS EN 351-1:2007
- Timber to comply with BS 5534:2014
- See NHBC Standards 2019 Chapter 3.3 for guidance on preservation
- If using metal profiles, refer to the manufacturer's guidelines



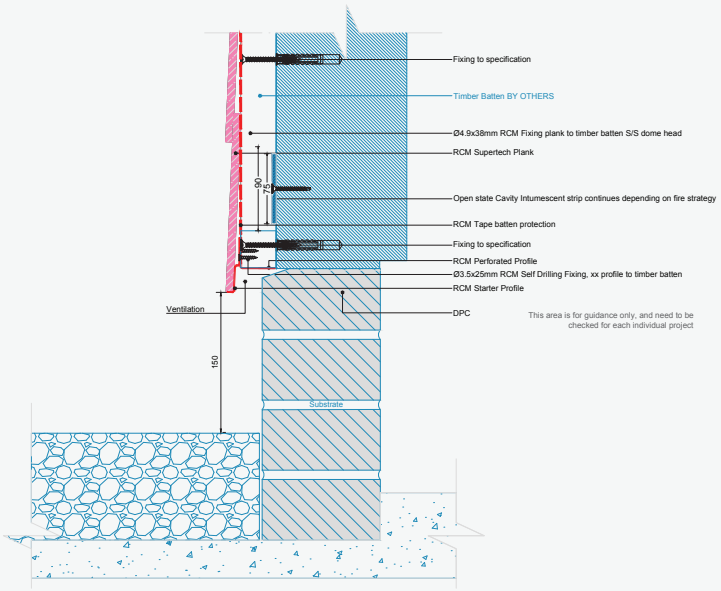
Fix Vertical Profiles

Install vertical trim profiles as required, in accordance with system design or detailing drawings.

Fix Horizontal Starter Profiles

Fix starter profiles level using nails or screws. These angle the first board into position, ensuring correct alignment throughout the installation.

Typical Detail to System Base Ventilation Profile



Apply Rail Tape to Battens

The presence of the EPDM gasket provides additional weather protection to the battens and prevents premature rotting.

The 50mm wide EPDM gasket should be installed to each batten by stapling to the top of the batten then allowing the gasket roll to drop, taking out any slack, then staple at regular intervals down the length of the batten and trim to size.

Care must be taken not to stretch the EPDM as this could result in it pulling away from the staple fixing.

EPDM gaskets can also be applied as an anti-rattle option to metal subframes.

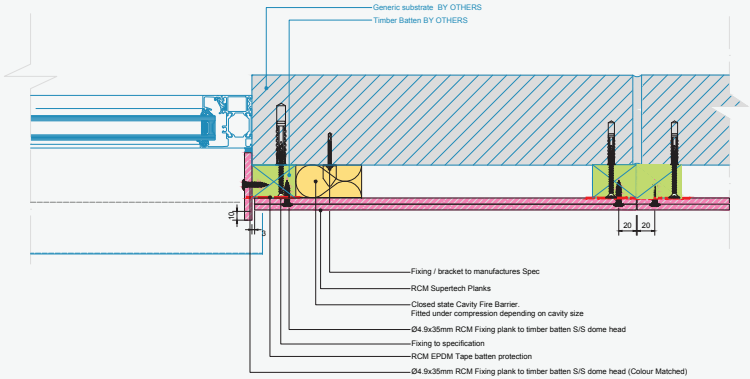
Fix Perforated Closures

Screw or nail perforated closures to the top and bottom of battens. These maintain airflow while preventing ingress from birds, rodents, and insects.

Closures should also be installed at:

- Window heads
- Door heads
- Sills

Typical Detail to Window Reveal

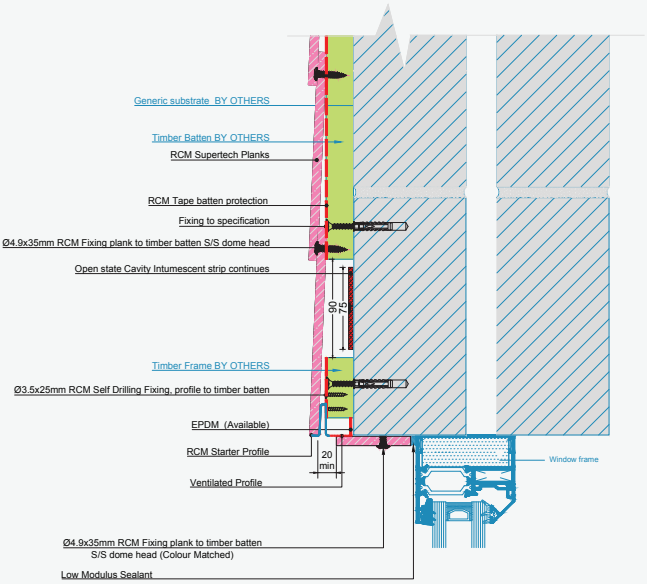


Cut & Fix Supertech Weatherboard Horizontal Installation

Choose a Laying Pattern

- Straight/butt jointed
- Free pattern (extra care at joints)
- Broken bond/semi-patterned

Typical Detail to Window Reveal

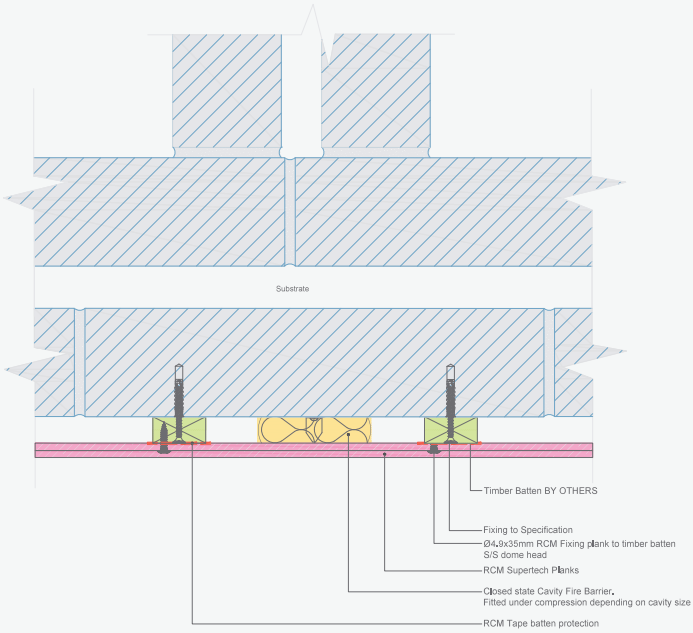


Cut & Fix Supertech Weatherboard Horizontal Installation

Board Fixing Guidelines

- Place the first board onto the starter profile
- Fix to every batten it crosses
- End of each board must align with a batten
- Boards over 400mm must be fixed to at least 3 battens
- Fixings: Minimum 20mm from top edge
- Overlap each board by 30mm
- Allow 150mm clearance between bottom edge of the board and ground
- Fix through upper edge of each board (no side overlaps—boards are butt jointed)

Typical Detail Plan View at Party Wall



Vertical Installation (Not BBA Certified)

Choose from:

- **Lapped** - 30mm overlap, visible face fixings
- **Flat** - Fixed back to horizontal battens via level 'L' profile
- **Undulated** - Installed with a 30mm overlap

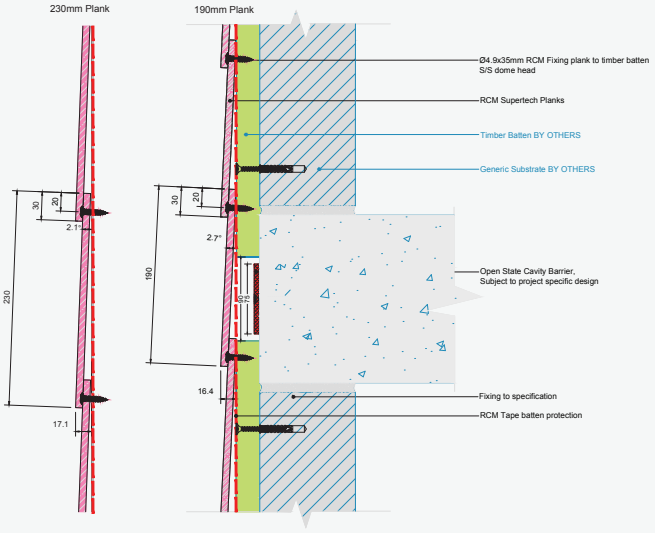
Use a cross-batten system (vertical and horizontal battens at max 600mm centres) for full airflow and secure fixing points.

Jointing Boards

When jointing two Supertech Weatherboards, fix both boards to one batten.

- Ensure the EPDM gasket is already installed to the batten to provide a protective strip against moisture ingress.

Typical Detail Section at Floor Junction



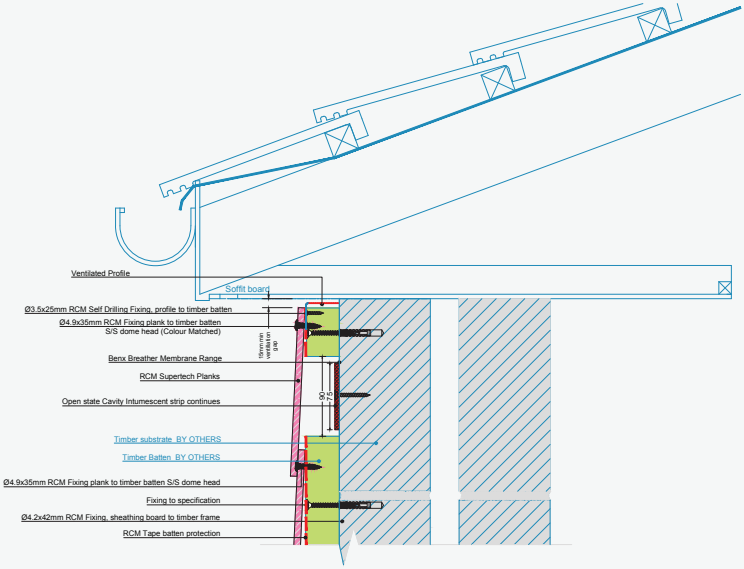
Finishing Top of Wall

Top board fixings will be visible.
Use colour-matched Supertech screws for a neat finish.

Abutments & Gables

- If no end trims are used, do not allow boards to overhang more than 100mm beyond the last fixing
- For gables, fix both top and bottom to battens running parallel to the roof slope to avoid curling

Typical Details to Eaves Ventilation Profile



Corner Options

Overlapping Corner

> Formed with two overlapping boards

> Cut edges must be painted to match the finish

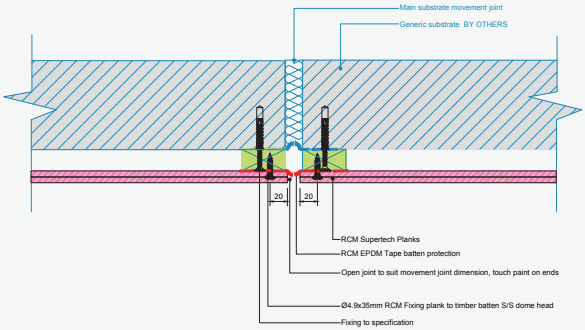
> Or use RCM external corner profiles (see Appendix Drawing 0002)

Window Options

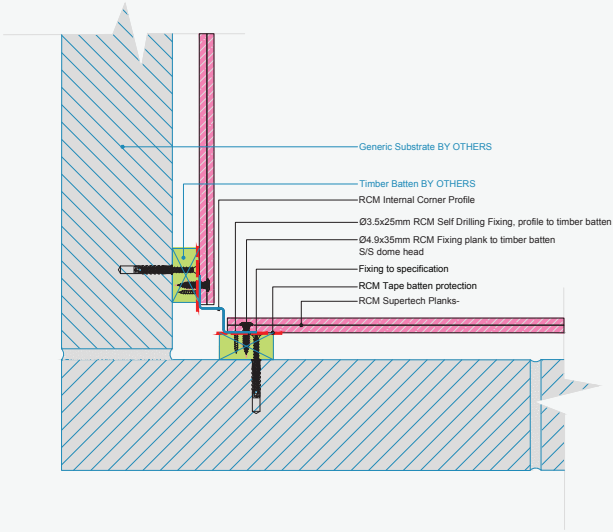
Deflection Zones

Maintain a gap equal to or greater than the designed deflection zone when installing vertical battens to accommodate movement.

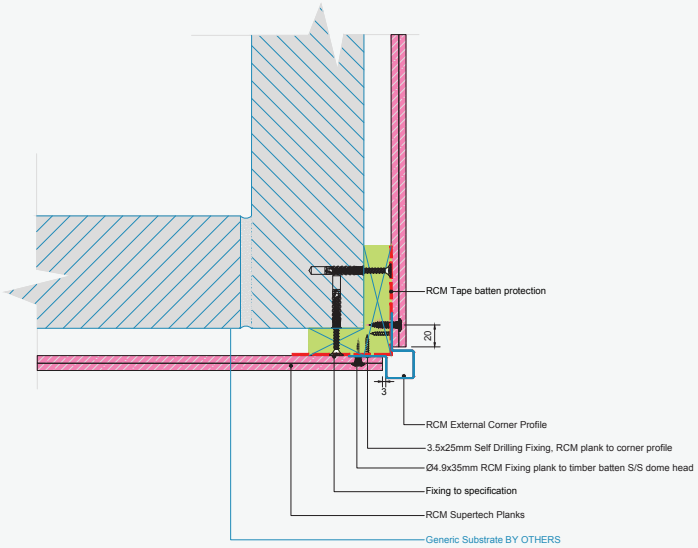
Typical Expansion / Movement Detail



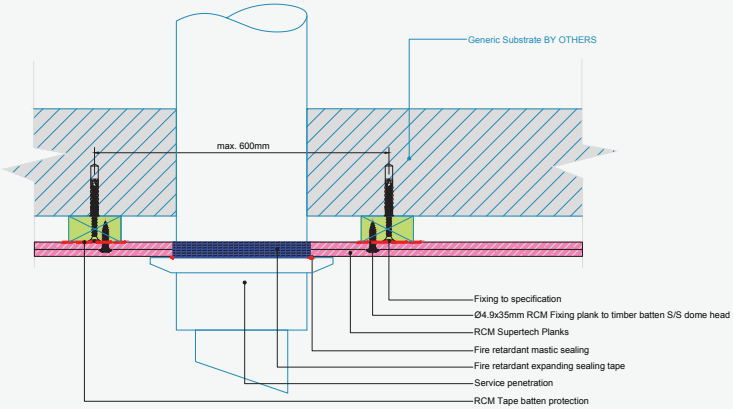
Typical Construction Detail - Internal Corner Detail



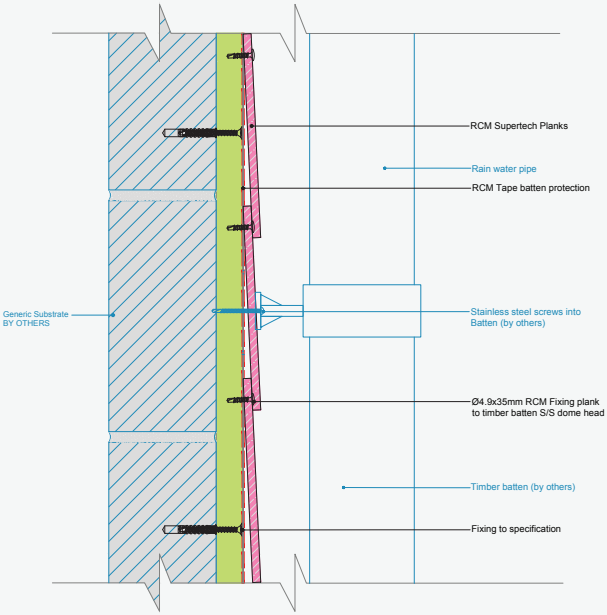
Typical Construction Detail - External Corner Detail



Typical Construction Detail - External Vent / Flue Detail



Typical Construction Detail - External Attachment



Maintenance

Supertech Weatherboard is low maintenance under normal UK conditions and retains its strength and performance with minimal upkeep. However, visual appearance may be affected by environmental exposure over time.

Annual Checks (Best Practice)

- Inspect ventilation gaps, fixings, and joints
- Address any issues promptly to prolong the system's life

Coastal Areas

In more aggressive environments (salt-laden air, wind-driven sand), conduct more frequent inspections, especially around:

- Corners
- Doors and windows
- Façade edges facing prevailing winds

Cleaning Guidance

- Use cold or tepid water with mild household detergent (no bleach or solvents)
- Apply with a soft cloth, starting from the top and working downward in sections
- Rinse thoroughly with clean water
- Always test a small, inconspicuous area first

Avoid high-pressure washers or strong chemicals as they may damage the surface.

Coastal Locations

In coastal areas, use additional stainless steel fixings to reduce movement risk.
Consult the Benx Technical Team for fixing recommendations.

Efflorescence

Efflorescence (lime bloom) is a temporary surface issue common to all cement-based materials. It does not affect the performance of Supertech Weatherboard, but may alter its appearance.

What Causes It?

Efflorescence occurs when water enters behind the boards, dissolves natural salts in the material, and draws them to the surface as the water evaporates.
Common causes include:

- Inadequate storage
- Installation in wet conditions
- Water trapped between boards

Following our recommended storage and handling guidance will significantly reduce the risk of efflorescence.

How Long Does It Last?

The duration depends on salt levels and weather exposure. Rain and wind will gradually remove the deposits over time.

Cleaning Efflorescence

To accelerate removal:

- Gently clean with warm water and a soft cloth or brush
- Avoid damaging the painted surface
- Do not use pressure washers

If needed, a 9.5% acetic acid solution may be used:

- Perform a small patch test first.
- Wipe affected areas with the solution—do not allow it to dry.
- Rinse thoroughly with plenty of cold water, avoiding runoff onto unaffected areas.
- Repeat if necessary.

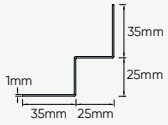
Always take extra care to protect the painted surface during cleaning.

Scratches, Damage & Touch Up

Edge Protection Paint

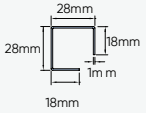
Edge Protection Paint is specifically formulated for application to exposed cut edges and for remedial treatment of minor surface defects. It is not suitable for use on extensive surface areas of the board face. Edge Protection Paint is available in 0.5 litre quantities.

Accessories & Trims



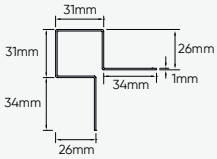
Internal Corner

To finish the corner where Cedral meets an internal corner forming a seal between the trim and the corner.



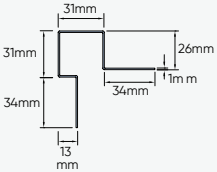
External Corner Junction

Used as a corner joining piece. Only available in black. 300mm length.



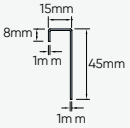
External Corner (Symmetric)

This universal trim can be used to provide protection on external corners and for stop profile applications.



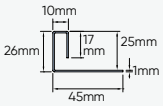
External Corner /Window Reveal (Asymmetric)

Used as an external corner on window reveals where detailing on a reveal is a single piece.



Connection Profile

End trim to finish Cedral when used as a single piece on a window reveal or soffit.



End Profile

To finish Cedral where installed in a lap configuration.

Notes

Installation Guide

Information

For samples call: 0800 612 4662
samples@benx.co.uk www.benx.co.uk

Version 12 - May 26
Benx ISO 5306