

RCM (Roofing and Cladding Materials Ltd)

PRODUCT Supertech

Date prepared:

08 June 2021



Version 2

ISO No.

5160

General Description

Supertech Weatherboard is a simple to install, fully ventilated rainscreen cladding system which has an appearance similar to that of traditional timber cladding but the durability and strength of cellulose fibre cement. A single facet autoclaved cellulose fibre reinforced cement plank, Supertech Weatherboard is lightweight, requires little maintenance, is rot free, can be used in the same way as wood and allows you to create truly stunning facades.

General Applications

Key applications
 - Ventilated rainscreen cladding
 - Over-cladding for existing buildings
 - New build facades
 - Feature detailing
 - Sheds and summer houses

Product Appearance

Light grey.

Supertech Weatherboard has a unique colour palette and comes in a standard range of painted colours. Whether your project is rural or urban, it is important that the building blends seamlessly into the landscape. As a result, just in case we don't have the colour you require in our standard collection, we are able to match Supertech Weatherboard to any RAL, BS or NCS colour. Minimum quantities required.

The striking and beautiful painted collection - The painted collection is made up of 18 of the most popular RAL colours used for weatherboard in the UK. With a range spanning from white to black, there is a colour to suit your landscape and create your dream project. We offer small minimum quantities and short lead times as standard.

Composition

Supertech Weatherboard is lightweight, requires little maintenance, can be used in the same way as timber and allows you to create truly stunning facades. Offering two ranges of finishes, natural timber effect stained and natural timber effect painted, Supertech is an attractive alternative to traditional timber boarding and plastic effect PVCu cladding. Supertech Weatherboard can be installed either horizontally in a traditional lapped style (most popular way) or vertically in a lapped, undulated or flat way. Used by architects, national house builders, homeowners and contractors Supertech Weatherboard is factory finished and provides substantial design opportunities.

General Technical Properties

General Technical Properties	Unit	Value	Applicable Standard
Nominal Density (Oven Dry)	kg/m ³	1375	
SoundInsulation	dB	N/A	
Avg. Bending Strength {Modulus of Rupture}	N/mm ²	10.5 (saturated)	
Internal Bonding		N/A	
Thermal Conductivity		N/A	
Biological Resistance		Highly resistance	
MoR (Modulus of Rupture)	N/mm ²	15.85	
MoE (Modulus of Elasticity)	N/mm ²	6365	
Thermal Conductivity λ	W/mk	0.3	
Moisture Content	%	≤8	
Moisture Movement (Saturated to EMC)	%	0.06-0.08	
Density at Oven Dry	g/cm ³	1.33-1.42	
Water vapour resistance factor (Q)		70	
Water Absorption (by dry weight)	%	8	

Surface Condition

Front	-	Front face: Woodgrain
Back	-	Back face: Textured

Dimensional Conformity

		Natural	Painted
Nominal Thickness	mm	7.5	7.5
Weight	kg/m ²	10.95	11.1
Standard board size	mm	3660 x 190	
Special order	mm	3660 x 230	

Dimensional tolerance

Length	mm	+3/-3
Width	mm	+2/-2
Thickness	mm	+0.6/-0.2

Calculation of board quantity

mm	190mm - Board coverage 0.59m ² per board @ 30mm over lap.
mm	230mm - Board coverage 0.73m ² per board @ 30mm over lap.

Durability

Moisture Resistance

Class

A

Sheets which are intended for applications where they may be subjected to heat, high moisture and severe frost

BS EN 12467 : 2012

Weathertightness

The product is not weathertight and when used on timber-frame walls must be backed by a suitable breather membrane acting as a vapour-permeable barrier, incorporated behind the cladding under the supporting battens.

Reuse and recyclability Soak-dry performance

The plank can be readily recycled.
n/a

Fire Resistance

Unloaded

Integrity
Insulation

contact RCM Technical Support
contact RCM Technical Support

BS EN 1364-1:2015

Loaded

Integrity
Insulation

contact RCM Technical Support
contact RCM Technical Support

BS EN 1365-1:2012

Classification

A1

BS EN 13501-1

Certification

CE marked

Yes

Certification

Yes

BBA

Life expectancy / Durability

The durability and service life of the product will depend upon the building location, immediate environment and intended use of the building.
When installed and maintained in accordance with this Certificate and the Certificate holder's instructions, and subjected to normal exposure conditions in the UK, the product will have a service life in excess of 30 years.
Pass heat and rain durability test as per EN12467.

Product Testing and Certification

EN13501-L class A2
BS EN tSO 1716
EN 12467 :20L2
85476 Part 6&7
EN 13823

Limitations of Use

Installation

Designers should refer to the relevant national Building Regulations and guidance for alternative approaches and detailed conditions of use, particularly in respect of requirements for substrate fire performance, cavity barriers, fire stopping of services and combustibility limitations for other materials and components used in the overall wall construction, for example, sub-frames and thermal insulation.

There are a number of different ways to install Supertech Weatherboard however the overall principle is the same. Fix the weatherboard to preservative treated vertical timber battens of at least 50mm wide that are spaced with a maximum of 600mm centres across the buildings elevation. All weatherboard should be fixed to a minimum of three battens. If this is not possible and it can only be fixed to two, then batten spacing should be reduced to 400mm centres. If your building is subject to high wind loading then your timber battens may need to be reduced to 400mm centres. In order to ensure ventilation, a minimum of a 38mm clear cavity is required behind the weatherboard. At the base and head as well as the window and door heads and sills a 10mm continuous opening should be left.

Workability

Our Supertech Weatherboard can be cut, drilled and nailed with conventional woodworking tools in a similar fashion to timber. For cutting the product in any volume, we recommend the use of an RCM Poly Crystalline Diamond Dart Blade to avoid excessive wear on other blades. Alternatively, RCM offer a complete fabrication service, please contact our technical department for details. Please adhere to health & safety guidance when cutting Supertech Weatherboard.
Supertech Weatherboard is installed using screws or nails in a secret fix method. There is no requirement for pre-drilling when using recommended fixing centres. For the top and bottom planks, where fixings are visible, we are able to supply colour-matched fixings.

Water protection

EPDM joint tape — available in various widths, used between the planks and the sub-frame to provide additional eather protection.

Fixings

Our A1 Supertech Weatherboard, which is coated at our production facility in Staffordshire, is then simply screwed or nailed through the EDPM gasket onto the subframe using the appropriate RCM supplied fixings.

Applications

Weathertightness — the product, when installed, is not weathertight, and in sheathed framework applications must be used in conjunction with a suitable breather membrane

Wall breather membrane — UV durable to BS EN 13859-2 : 2014, used in conjunction with sheathing on framed applications

Health & Safety

see separate msds vaialable at

www.buildingboards.co.uk

Handling & Storage

Handling

The product is supplied covered with polythene on timber pallets and can be offloaded either by mechanical handling equipment or by manually removing individual planks. Each pallet bears a label including the load number, product name, product size, quantity and the BBA logo incorporating the number of the Certificate. Each plank is marked with a unique manufacturing and reference code.
The planks must be stored on a firm, flat and level surface with sufficient support to prevent bowing. To prevent efflorescence, the planks should be stored under cover and kept ventilated and dry prior to fixing. If the planks become wet, they must be sufficiently dried prior to use.
Manual off-loading of the planks should be carried out with care to avoid unnecessary strain and injury.
The product includes crystalline silica and reference should be made to the current version of EH40/2005. In particular, when cutting, drilling or sanding in confined areas, dust levels should be controlled using suitable extraction equipment.

Cutting

Supertech can be cut, drilled and nailed with conventional woodworking tools in a similar fashion to timber. There are a number of different cutting methods to choose from depending on the quantity of material to be cut. RCM offers a complete fabrication service for Supertech Weatherboard, please contact our technical department for details. Cutting and drilling should be carried out in a dry and well-ventilated area with all cuts being wiped to remove dust with a clean, dry cloth.

Handsaw: We recommend the use of a hardened point saw which should only be used for small quantities.

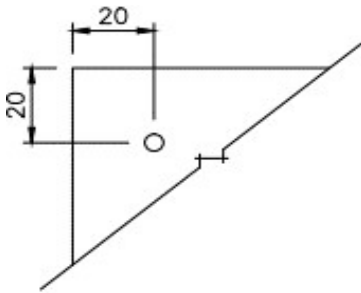
Electric jigsaw: When cutting Supertech Weatherboard with an electric jigsaw, it is our advice that you turn the weatherboard over to ensure a clean finish on the front side of the board.

Hand-held circular saw: A hand-held circular saw with blades suitable for cutting fibre cement products is ideal for cutting large quantities.

For cutting the product in any volume, we recommend the use of an RCM polycrystalline diamond Dart Blade to avoid excessive wear on other blades. Please contact RCM sales.

As above, we recommend that the board is turned over before cutting in order to avoid marking the front face of the product. A test cut is always recommended.

Screws



The Supertech Weatherboard range comes with a full collection of colour matched screws, aluminium profiles and accessories providing a complete cladding solution. Please refer to the Supertech Weatherboard installation guide for more information on the installation of profiles.

When fixing to the support structure it is our recommendation that fixings are at least 20mm away from the top edge and 50mm from the end of the board (screw gun required). Pre-drilling of Supertech Weatherboard is not required.

If a screw is required within 50mm of the board edge then pre-drilling and a countersink is required. Using anti corrosion treated steel screws 4.2 x 42mm, the minimum distances (displayed below) from the edge of the board to the screw or nail positioning are required.

Edge distance
D1 20mm
D2 20mm

Screws suitable for the installation of the Supertech Weatherboard are available from RCM and can be supplied self-coloured or colour matched to a chosen colour. Please contact sales on 0800 612 4662.

Joints

With normal UK weather conditions, Supertech Weatherboard does not require a great deal of maintenance to maintain its strength, properties and function. Environmental impacts may, however, influence the visual appearance. It is, however, best practice to complete an annual inspection of the façade to ensure the integrity of the ventilation gaps, fixings and joints and action any required maintenance to prolong overall life expectancy.

Nailing

When installing vertical systems we recommend that only screws are used and not nails.

By hand: When hand nailing there is no requirement for pre-drilling providing the nail placements are at least 50mm from the edge of the weatherboard. If the nail is to be fixed closer than 50mm, then pre-drilling is required. Holes should be pre-drilled 20mm from the edge of the board with a 3mm drill bit. Regular sharpening of HSS drill bits will ensure clean drill holes where required. Nails should be stainless steel ring shank, minimum size 2.8 x 45mm with 7-10mm head. Please take care when nailing Supertech Weatherboard.

Pneumatic: Supertech Weatherboard can be pneumatically nailed.

Stainless steel fixings of 45mm length and 2.8mm diameter should be used with ring shank nails preferred as they have a round head of 7mm diameter.

Care must be taken regarding the selection of the nail gun to be used. Nail guns with a narrow head (the nail looks more like a "T" section) are not acceptable.

You can use a "C" shaped head, however, they should have a minimum 7mm diameter head.

In order to calculate the depth of the fixing to ensure nails are left flush with the board front, a test should be carried out. This will also help to determine the minimum distances required from the edge of the board and provide a guide for placements.

In order to prevent nails being fired through the board, or being left standing proud of the face of the board, nail guns must be adjustable.

limitations

RCM Supertech is not intended for use below DPC.

The following recommendations and limitations are important to ensure the proper use and benefits of RCM Supertech.

Failure to strictly adhere to such recommendations and limitations may void the limited warranty.

RCM Supertech is resistant to normal weather conditions, but it is not intended for immersion in water. Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.

Avoid any condition that will create moisture in the air and condensation on the exterior walls during periods when the exterior temperature is lower than the interior. The use of forced air heaters creates volumes of water vapour which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of the supplier. Consult heater manufacturer for proper use and ventilation.

When Supertech is used in slanted wall applications, that portion of the wall must be temporarily protected from the elements by the use of a water-resistant barrier prior to application of the cladding. Do not allow water to pond or settle on sheathing. Also, exposed wall ends such as those that may be found in parapets must be covered to prevent water from infiltrating the cavity with EDPM.

Do not laminate RCM Supertech to masonry surfaces; use furring strips or framing.

For all installations, design details such as fasteners, sealants and control joints per system specifications must be

For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed.

Fixings should be flush to the face of the board, not countersunk.

When Supertechis used in facade construction, install boards so a board joint gap of 2mm is formed on both horizontal and vertical joints, finished with RCM FR- PRO sealant or RCM Joint Tape.

When installing the boards in close proximity to certain flue pipes or heat-producing appliances, the following provisions of the national Building Regulations.

Boards can be left permanently exposed.

DISCLAIMER OF LIABILITY

The information in this TDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This TDS was prepared and is to be used only for this product. If the product is used as a component in another product, this TDS information may not be applicable. Roofing & Cladding Materials Ltd nor any other subsidiary of the Benx Group will be held accountable for any damage resulting from handling or from contact with the above product. This data sheet and the information it contains is not intended to supersede any terms or conditions of sale and does not constitute a specification. Nothing contained herein is to be construed as a recommendation for use in violation of any patent or applicable laws or regulations.