benx the future of façades RCM BUILDING BOARDS & FACADES

Technical Information

Renderflex Building Board

Product Description

RCM Renderflex is a high-performance cellulose fibre cement building board, offering excellent strength, weathering and stability properties when used in conjunction with polymer renders.

Material Composition	Cellulose fibre cement board.
Properties	Strong key between polymer basecoats and top coats giving it a high tensile strength for long term durability, and high resistance.
Environment	Can not be left permanently exposed. Able to withstand strong wind loading – see wind loading report for further information.
Appearance	Light pink in colour – Smooth face and textured face, the smooth face should be fixed outermost.

Dimensional Conformity Nominal Weight (Kg) – Standard Sizes					
Nominal Weight – Standard sizes		Length (mm)	Width (mm)	Thickness (mm)	Weight (kg/m²)
	6mm	2400	1200	6mm	8.3kg/m²
	9mm	2400	1200	9mm	12.4kg/m²
	12mm	2400	1200	12mm	16.6kg/m²
Dimensional Tolerance	Length = +1/-2mm Width = +1/-2mm Thickness = ±10%				

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Technical Information	Value/Unit	Applicable standard
Fire Classification	A2	BS EN 13501-1
Nominal Board Density (Oven Dry)	1375kg/m3	
Bending Strength (Modulus of Rupture)	10.5N/mm3	
Mechanical Resistance	Class 3	BS EN 12468
Moisture Content	EST. 8%	
Internal Bonding	N/A	
Biological Resistance	Highly resistance	
MoR (Oven Dry) – Across	19Mpa	
MoR (Oven Dry) – Along	11Mpa	
MoR (Saturated) – Across	14Mpa	
MoR (Saturated) - Along	7Mpa	
Water Absorption	30%	
Water Content and EMC	8%	
Thermal Conductivity (Estimate at 20°C)	0.12 W/Mk	
Moisture Movement	0.06-0.08%	

Surface Condition	
Front	Smooth
Back	Textured
Dimensional Tolerance	
Length	+1/-2mm
Width	+1/-2mm
Thickness	±10%

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Limitations of Use

Installation

- Renderflex must be installed in accordance with this Certificate and the Certificate holder's instructions.
- Reasonable precautions must be taken to ensure the board is not damaged during installation.
- When cutting the board, power and hand tools should be used with care and in accordance with the Certificate holder's recommendations. Power tools should only be used by individuals who have been instructed and trained to use them safely. Appropriate personal protective equipment (PPE) should be used and monitoring of exposure levels during this activity should be considered.
- It is important to observe appropriate health and safety legislation when working on site. The Certificate holder should be consulted for material safety data sheets and advice. When working in enclosed areas, precautions should be taken to ensure dust levels are controlled in accordance with the current issue of EH40/2005.

Water Protection

- When tested for water impermeability in accordance with BS EN 12467: 2012, no water droplets formed on the lower surface within 24 hours; the board, therefore, conform to the requirements of Category A as defined in the same Standard. The board is not suitable for use where it may be in contact with water for prolonged periods.
- In wet area lining such as bathrooms, tiled finishes are applied in accordance with the manufacturer's instructions. The joint between the boards and the floor must be protected to prevent water penetrating the adjoining space. In the tile backer board application, the board is for use with waterproof tile adhesive and grout in shower and wet areas (excluding floors).

Fixings

- Wall-mounted fittings (outside the scope of this Certificate) must be fixed through the board into the steel or timber studs, using suitable fixings. The recommendations of the manufacturer must be followed.

Applications

- In dry wall liner applications, the position of fixings should be staggered on adjacent boards. The recessed edge allows the joint to be masked using perforated paper tape; flush-jointing compound is applied to give a seamless smooth finish.

Standard Jointing

Non fire rated walls
Tape over board joints using DAFA UV tape or ME315 tape.

Fire rated walls
Fill board joints with NULLIFIRE fire rated silicone sealant.

Air tightness
Apply the joint seal kit over the joints – for fire rated walls use NULLIFIRE within joints as referenced above.

REFER TO RENDERFLEX K11 FOR FURTHER INFORMATION

Technical Information

Installation/Fixing

Fixings:

- Steel Frame use 4.5mm x 41mm RKW fixing.
- Timber Frame use 4.5mm x 41mm RKC fixing.

Screws should be a minimum of 12mm from board edges and spaced.

Install sequence 1: Boards to be installed in a brick bond pattern in accordance with RCM recommendation. Line and level the first board and fix in accordance with the fixing drawing. Follow the same process with the next board leaving consistent joints as shown in the standard fixing detail drawing.

Install sequence 2: Deflection joints will be maintained at floor levels, boards will be installed as per the engineering design drawings/details. All abutments, openings or penetrations will be neatly cut around and trimmed. EPDM Tape applied to deflection joints.

Install sequence 3: All board cutting is to be completed on a bench or trestles and cutting machines will have full dust suppression in operation at all times. Measure and mark the boards before cutting ensuring a straight edge is formed. In L shapes around the windows and openings. Ensure new board line works with window head and cill arrangements.

Install sequence 4: Boards to be secured with the required fixings, in accordance with the fixing patterns provided in Benx Typical board's fixing details drawings.

Install sequence 5: Once the system is installed and the fixing arrangement has been inspected, all joints will be sealed following the standard jointing paragraph from this document, Ensure tape is applied to all joints. Finish must be smooth and avoid creases where possible.

Install sequence 6: Repeat the process around the elevation. Each area is to be inspected and recorded.

Inspection: Complete visual inspections to ensure the product is installed correctly.

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Commonly used Components

Board fixing for SFS - RKW– 4.5 x 41mm

Board fixing for Timber frame - RKC – 4.5 x 41mm

Board jointing tape – generic scrim tape

Board jointing sealant - NULLIFIRE Fire rated silicone sealant

Disclaimer of Liability

The information supplied in this Technical Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

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