

## TECHNICAL DATA SHEET

### RENDERFLEX LITE BUILDING BOARD

This data sheet provides information on the Calcium Silicate cement-based board – Renderflex Lite



Material Composition	Calcium Silicate cement-based board Lime Portland cement, sand, calcium silicate
Properties	A high-quality, flexible building board – used primarily as a fire rated sheathing/building board.
Environment	Can be left exposed for up to 12 months when board joints suitably sealed. Intended for applications where they may be subject to heat, high moisture and severe frost.
Appearance	Light Grey – Front face is smooth and back face is textured. Exposed face can be textured or not.
Exposure	6 months exposure – Edges and boards to be sealed with Nullifire silicone sealant 12 months exposure – Edges and joints to be sealed with silicone Nullifire silicone sealant and DAFA Tape

#### Dimensional Conformity Nominal Weight (Kg) – Standard Sizes

		Length (mm) ±3mm	Width (mm)	Thickness(mm)	Weight (kg/m <sup>2</sup> )
Nominal Weight – Standard sizes	9mm	2400	1200	9mm	12.21kg/m <sup>2</sup>
	12mm	2400	1200	12mm	12.57kg/m <sup>2</sup>
Dimensional Tolerance	Length = ±3mm Width ±3mm Thickness = ±0.02 to 0.05mm				

Technical Information	Value/Unit	Applicable standard
Fire Classification	A1	BS EN 13501-1
Nominal Board Density (Oven Dry)	1221g/cm <sup>3</sup> to 1257g/cm <sup>3</sup>	
Bending Strength (Modulus of Rupture)	1226 MPa to 1445 MPa	EN 12467:2012 + A2:2018
Mechanical Resistance	Class 3	EN 12467:2012 + A2:2018
Moisture Content	10%	
Biological Resistance	Highly resistance	
MoR (Oven Dry)	1226 MPa to 1445 MPa	
MoR (Saturated)	5280MPa to 7730MPa	
Water Absorption	30%	
Water Content and EMC	10%	
Thermal Conductivity (Estimate at 20 Degrees C)	0.195 W/Mk	
Moisture Movement	0.05-0.06%	
<b>Surface Condition</b>		
Front		Smooth
Back		Textured
<b>Dimensional Tolerance</b>		
Length		±3mm
Width		±3mm
Thickness		±0.02 to 0.05mm

## Limitations of Use

### Installation

Renderflex Lite 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.

### 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

The boards are fixed to the steel/timber studs using the specified screws, ensuring that the screws are flush-fitted (that is, not overtightened), and positioned at a minimum of 12 mm from the edges of the boards and a minimum of 50 mm from the corners. Once the first board is installed, a nominal gap up to 3mm can be left between adjoining carrier boards and filled with low modulus silicone sealant.

## STANDARD JOINTING

### Non fire rated walls

Tape 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. or fire rated walls use NULLIFIRE within joints as referenced above

## Installation/Fixing

### Fixings:

- Steel Frame use 4.8 x 38mm FIX006 fixing,
- Timber Frame use 4.2mm x 42mm FIX005 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 the 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.

Commonly used components	
	
Board fixing for SFS – FIX006 – 48 X 38mm	Board fixing for Timber frame FIX005 – 4.2 X 42mm
	
Board jointing tape – DAFA UV Tape	Board jointing sealant - NULLIFIRE Fire rated silicone sealant

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