TECHNICAL DATA SHEET

Y-Wall SHEATHING BOARD

This data sheet provides information on the calcium silicate based fibre cement sheathing board – Y-Wall

Material Composition	Calcium Silicate cement based board
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/Yellow – Front face is smooth and back face is textured.

Dimensional Conformity Nominal Weight (Kg) – Standard Sizes

		Length (mm)	Width (mm)	Thickness (mm)	Weight (kg/m²)
Nominal Weight – Standard sizes	**6mm**	**2400**	**1200**	**6mm**	**7.2kg/m²**
	9mm	**2400**	**1200**	**9mm**	**10.8kg/m²**
	12mm	**2400**	**1200**	**12mm**	**14.4 kg/m²**
	15mm	**2400**	**1200**	**15mm**	**18 kg/m²**
Tolerance of Length	**1200-2400mm±3mm**				

Technical Information	Value/Unit	Applicable standard
Reaction to fire	Class A1	BS EN 13501-1
Nominal Density	≥1200kg/m^3	
Bending Strength (Modulus of Rupture)	9-12MPa	BS EN 12467
Modulus of Elasticity (MoE)	4000MPa	
Mechanical Resistance	Class 3	BS EN 12467
Thermal conductivity	≤0.23W/mk	
Water content	≤10%	
Moisture movement	≤0.25%	
Moisture Resistance	Class A	BS EN 12467
Exposure	12 months (when suitably sealed)	
Heat-Rain Performance	Pass	BS EN 12467
Warm Water Performance	Pass	BS EN 12467
Freeze-Thaw Performance	Pass	BS EN 12467
Soak-Dry Performance	Pass	BS EN 12467

Fire Resistance Information
BS EN 1364-1 (Non loadbearing) Achieving 120 minutes Integrity & Insulation (Outside to Inside)
BS EN 1365-1 (Loadbearing) Achieving 120 minutes Integrity & Insulation (Outside to Inside) Achieving 120 minutes Integrity & Insulation (Outside to Inside)
BS 476: Part 22 (Non loadbearing) Achieving 60 minutes Integrity & Insulation (Outside to Inside) Achieving 90 minutes Integrity & Insulation (Outside to Inside)
FOR MORE INFORMATION ON THE FIRE TESTS PLEASE SEE FIRE SUBSTANTIATION REPORTS

Surface Condition	
Front	Smooth
Back	Textured
Dimensional Tolerance	
Length	±3mm
Width	±3mm
Thickness	±0.5mm

Limitations of Use

Installation

The board is designed to be installed by a competent builder, or a contractor, experienced with this type of product. A suitably qualified and experienced individual must check the design and method of installation of the boards. Y-Wall board can be cut with a fine tooth hand saw or power saw, ensuring suitable dust control measures are taken (e.g. protective safety glasses, gloves and respiratory masks) and observing all necessary health and safety regulations. Damaged boards must not be used. The level of supervision during installation of the board and the associated structure, must be sufficient to ensure the quality of workmanship. Framing grade timber studs or galvanized steel framework should be provided at a maximum 600 mm centres for single-layer partitions. The frame to which the panels are fixed must be structurally sound and constructed in accordance with the requirements of the relevant national Building Regulations and Standards.

Water Protection

The product should be treated as conventional sheathing board with regard to detailing and damp-proofing at openings, eaves and sole plate, and the fixing of wall ties. Where required by design, the addition of a breather membrane must be in accordance with BS 5250 : 2011. The outer weatherproofing should have adequate resistance to wind-driven rain, particularly in regions classified as severe exposure.

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, subsequent boards are installed with a 2-5mm gap between boards.

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 Y-WALL K11 FOR FURTHER INFORMATION

Installation/Fixing

Fixings:

- Steel frame; Ø4.8x38mm FIX006 self-drilling drill point winged.
- Timber frame; Ø4.2x42mm FIX005 self-drilling.
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RCM Multipurpose edge distance is 12mm except at the board corners where fixings should be moved up or down to achieve 50mm. Fixings should be fixed using a maximum 600mm x 300mm grid pattern, typical board fixing detail drawings available.

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. If possible, L 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 patters 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.

REFER TO Y-WALL INSTALL GUIDE FOR FURTHER INFORMATION

Commonly used components

	
Board fixing for SFS - FIX006– 4.8 X 38mm	Board fixing for Timber frame - FIX005 – 4.2 X 42mm
 	
Board jointing tapes - DAFA UV Tape and ME315 Tape	Board jointing sealant - NULLIFIRE Fire rated silicone sealant

DISCLAIMER OF LIABILITY

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