



Benx Building Boards
Typical K11 Specification
Y-Wall
Rigid Sheet Sheathing



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Project:	Typical Specification
Project Reference:	n/a
Specification Number:	n/a
System:	Building Boards
Substrate:	Y-Wall
Composition:	Calcium silicate-based fibre cement
Thickness	6,9,12,15 mm
Method of Fixing:	Mechanical fixing
System Finish:	Metal- \varnothing 4.8x38mm FIX006 self-drilling drill point winged. Timber- \varnothing 4.2x42mm FIX005 self-drilling.
Accreditation:	BBA – Certificate Ref: 14/5109



Typical Y-Wall board

Key Contact Details

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Supporting Links [Technical Downloads](#)
[NBS Plus – SPS Envirowall](#)
[NBS Plus – RCM](#)

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 Prepared by: Benx Technical Services

Project Specification Revision Record (for use on project specific specifications)

Version Number	Date of Issue	Key Revision Amendments / Additions	Requested By	Prepared By	Checked By

Quality Assurance Note :-

The following specification should be read in conjunction with Benx Quality Assurance documentation, best practice, and installation guidelines.

Benx ISO CERTIFICATION

- ISO 14001 - ENVIRONMENTAL REGISTERED COMPANY CERTIFICATE No. SP240368
- ISO 9001 - REGISTERED COMPANY CERTIFICATE No. SP240367
- ISO 45001 - HEALTH & SAFETY CERTIFICATE
- ISO 50001 - ENERGY MANAGEMENT

K11 RIGID SHEET SHEATHING

GENERAL

Cross-reference

General: Read with NBS A90 General technical requirements (available under request)

PRODUCTS

Nonstructural rigid sheet materials (nonloadbearing)

Usage: Nonstructural use including underlayment, linings, and casings.

- Appearance class to BS EN 635
The exposed face of the sheets can be with or without texture. Variations of the surface appearance which do not impair the fitness for purpose of the sheets are permitted.
- Cement bonded particle board: To BS EN 634-2
General purpose boards and boards for interior fitments for use in dry conditions: Type OSB/1
Loadbearing boards for use in dry conditions: Type OSB/2
Loadbearing boards for use in humid conditions: Type OSB/3

Structural sheet materials

Usage: Structural use including wall sheathing.

Cement bonded particle board: to applicable standards for nonstructural use and to relevant standards and quality control procedures specified in BS 5268-2, and so marked.

EXECUTION

Wall sheathing

Substrate: provide necessary additional supports.

Long edges: Vertical, centre on supports.

Expansion gap between adjacent boards: 2-3 mm.

Fixing centres:

- Around board edges: To BS 5268-6.1.
- Along intermediate supports: 300mm max.

Fixing distance from edges: 25mm from bottom edge of board and 10mm min. from other edges.

Rigid sheet insulation fixed through wall sheathing

Setting out: Tongue uppermost, with no gaps.

Fixing centres: Around board edges and along intermediate supports: recommended by sheet manufacturer.

Underlay

Substrate:

- Condition: sound and acceptably level.
- Preparation: Gross irregularities removed or filled.
- Protruding fasteners: Remove or punch in.

Setting out:

End joints: Stagger.

- Joints in underlayment: offset from joints in substrate.

Fixing:

- Fixing centres: 150mm grid over each sheet commencing at centre.
- Centres around perimeter: 100mm max.
- Distance from edges: 12mm
- Fastener heads: set flush with sheet surface.

Wall linings

Substrate: Provide necessary additional supports.

Setting out lining: Run long edges across supports. Lay with a gap between adjacent boards.

Fixing lining to supports:

- Around board edges and along intermediate supports: 200mm max.
- Distance from board edges: 9mm min.

Cement bonded particle board fixing centres:

- Around board edges, along intermediate supports and distance from edges: Recommended by sheet manufacturer.
- Distance from long edges: 50mm min.

Installation generally

Timing: Building to be weathertight before fixing boards internally.

Moisture content of timber supports: 18% max.

Joints between boards: Accurately aligned, of constant width and parallel to perimeter edges.

Methods of fixing, and fasteners: As section Z20 unless specified otherwise.

Board Moisture content and condition

Moisture content of boards at time of fixing: Appropriate to end use.

Conditioning regime: Submit proposals.

Fixing generally

Boards/Sheets : Fixed securely to each support without distortion and true to line and level.

Fasteners : Evenly spaced in straight lines and, unless otherwise recommended by board manufacturer, in pairs across joints

- Distance from edge of board/sheet : sufficient to prevent damage

Open joints

Perimeter joints, expansion joints and joints between sheets: Free from plaster, mortar droppings and other debris.

Temporary wedges and packings: Removed on completion of board fixing.

Access panels

Size and position: Agree before boards are fixed.

Additional noggings/dwangs , battens, etc... Provide and fix as necessary.

Y-Wall Specification data - Fibre-reinforced cement boards

[Uniclass Pr_25_71_11_25 Fibre reinforced cement boards](#)

Standard	To BS EN 12467.
Fire rating	A1 in accordance with BS EN 13501-1: 2007. Behaviour in relation to fire: the board has a reaction to fire classification of A1 in accordance with BS EN 13501-1 : 2007. BS 476-4 non-combustible; one and two hour.
Weather resistance	BRE Test report P115139-1000 Issue2 9/08/2019 The mean water vapour transmission rate of Y-WALL board can be taken as 92.9 g/m ² /day Walls must have suitable weather protection on the outside, and a vented cavity. 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.
Thermal conductivity	≤0.23 W/mk
Nominal thickness	6 mm. 24 dB sound insulation. Nominal mass: 7.3 kg/m ² . 9 mm. 29 dB sound insulation. Nominal mass: 11.1 kg/m ² . 12 mm. 31 dB sound insulation. Nominal mass: 14.6 kg/m ² . 15 mm. Nominal mass: 18.2 kg/m ² .
Length	2400 mm. 2800 mm. 3050 mm. Special order. Non-standard. Consult manufacturer for details including minimum order quantity and lead time, and insert requirement.
Width	1200 mm. Special order. Non-standard. Consult manufacturer for details including minimum order quantity and lead time, and insert requirement.
Edges	Manufacturer's standard.
Colour	Yellow.
Modulus of Rupture	9–12 MPa.
Accessories	RCM fire seal mastic/airstop system FR PRO Nullfire fire seal mastic/airstop system FS703 Silicone Tape/airstop system DAFA Tape Tape/airstop system RCM 315 Illbruck tape RCM Joint sealant liquid

RCM Dafa EPDM
Illbruck EPDM
RCM015 Adhesive

Fixings

Recommended fixings:
For fixing into SFS framing, Ø4.8 x 38 mm self-drilling wingtip fixings suitably treated against corrosion should be used.
For fixing into timber framing, Ø4.2 x 42 mm self-drilling fixings suitably treated against corrosion should be used.
RCM Y-WALL edge distance is 12-15 mm except at the board corners where fixings should be moved up or down to achieve 50 mm. Fixings should be fixed using a maximum 600 x 300 mm grid pattern.

Third-party approval BBA Certificate 14/5109.