

# Non-Combustible Sheathing Board

for Steel Frame applications



BDA Expert Centre

BDA Agrément® BAW 18-085/01/A



# Non-Combustible Sheathing Board

For Steel Frame applications.

## Features and benefits of Versaliner

- Impact resistant
- Air Tight Panel
- A1 Fire performance to EN 13501-1
- Easy 'Score and Snap' workability

Fire extinguishers, fire alarms, sprinklers, fire exit signs and clearly marked assembly points: these are the visible aspects of building fire safety. But equally crucial are the invisible components of fire safety, the products that are built in to the fabric of every safe building.



### Application

- Versaliner is a non-combustible board and has been developed for modern construction methods
- Versaliner helps provide a solution to the construction industry where cost effective structural fire resistant panels are required
- Versaliner offers a major move forward in building board technology and has a track record of enhancing construction systems
- Versaliner can provide benefit and value to steel frame systems

# Versaliner Information

Versaliner is Class A1 Reaction to Fire - EN 13501-1.

Versaliner has been tested in a range of fire resisting applications for various periods and has independent third party accreditation.

## Specifications

Versaliner has a smooth finish to one side, with a textured reverse and is off-white in colour.

Versaliner is a substrate that offers an excellent and easy surface for finishing in a wide range of treatments.

## Technical Data

### Product Range

- Standard Sizes: 2400 x 1200mm,  
Special Sizes: 2700 x 1200mm,  
3000 x 1200mm available on request
- Standard Thickness: 9mm & 12mm



Density (dry at 40°C) (EN 322:1993)	900kg/m <sup>3</sup> (+/- 10%)
Modulus of Elasticity E Flexion (BS EN 310:1993)	3596 N/mm <sup>2</sup> (9mm board)
Thickness Tolerances	±1mm
Length Tolerances	±2mm
Width Tolerances	±2mm
Squareness on panel diagonal difference	±2mm
Breaking Strength (MOR) (BS EN 310:1993)	4.97N/mm <sup>2</sup> (9mm board)
Tensile strength (Thickness) (BS EN 319:1993)	1.64N/mm <sup>2</sup> (9mm board)
Softbody impact (partition system) (BS 5234-2:1992)	Severe duty ask for details
Thermal Conductivity	0.27 W/m <sup>2</sup> K
Compression Strength (min)	7.07N/mm <sup>2</sup>
Moisture Content (ex production) (EN 323:1993)	12% ± 5 by weight
Reaction to Fire (EN 13501-1)	A1
Thickness Swelling (EN 317)	0.6%
Dimensional Stability	<0.1%
Acoustic Absorption	aw=0.10
Water Vapour Permeability	9mm - 0.0149 gm/MNs 12mm - 0.0124 gm/MNs
Vapour Resistivity	9mm - 67 MNs/gm 12mm - 80 MNs/gm
Vapour Resistance	9mm - 0.7 MNs/g 12mm - 1.0 MNs/g

Figures are ultimate performances

# Working with Versaliner

## Delivery & Storage

Boards should be received in a dry state with pallets protected from weather with plastic sheeting or similar.

Boards should be stored on flat, dry pallets elevated on skids/battens sufficiently from ground level to prevent board wetting.

If boards are stored on site for a long period of time they should be kept under cover / indoors if possible.

## Mounting

Versaliner should be fixed using Euroform EMF self-drilling screws.

Versaliner has been tested for wind pressure serviceability to CWCT standards with vertical supporting SFS studs at 600mm centres. Please ask for full details.

Board	Thickness	Distance between vertical supports
Versaliner	9mm	600mm
Versaliner	12mm	600mm

## Fixing Technique

- Pre-drilling is not necessary when using a suitable pneumatic screwdriving machine with EMF fixings
- Screws must be positioned as shown in the diagram on page 5

## Fixing Distances

### Screws

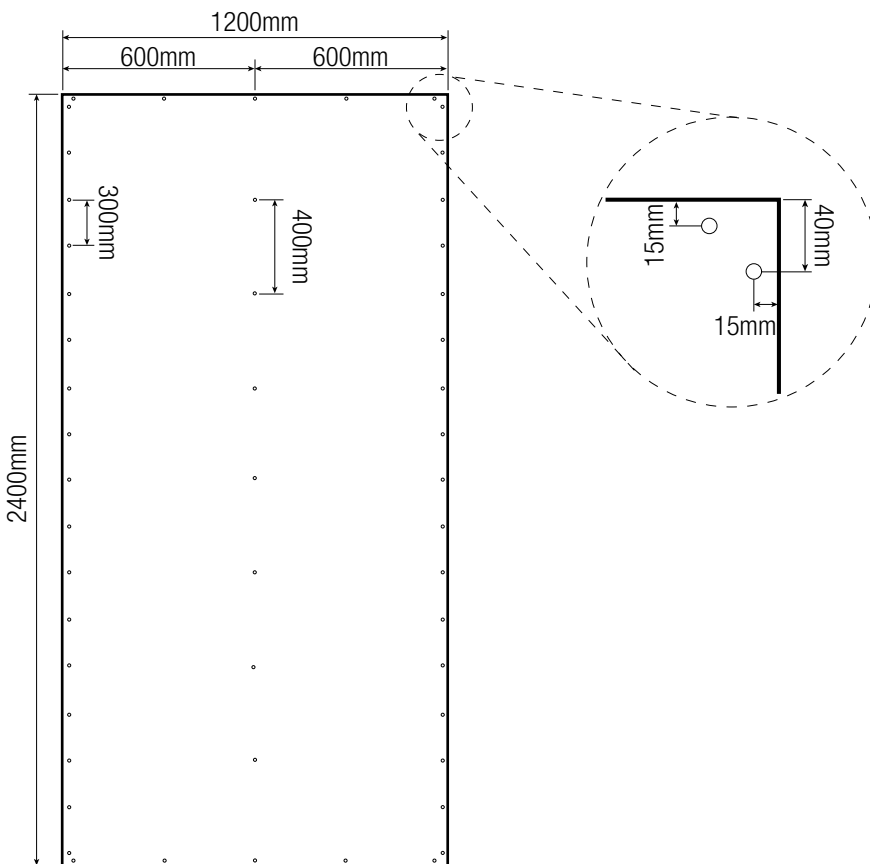
Maximum spacing of 300mm at the perimeter and 400mm to the intermediate studs.

### Corner fixings

Minimum 40mm from the corner and minimum 15mm from the edge as shown on the diagram.

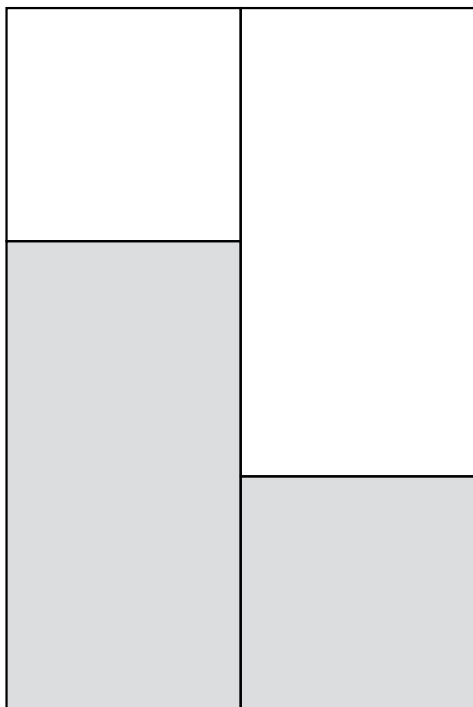
Euroform recommends and distributes the following fixings:

Type of Substrate Steel	Board Thickness	Screw Type
1.0 - 2.0mm	up to 12mm	EMF1 4.8 x 45mm
2.0 - 3.0mm	up to 12mm	EMF2 4.8 x 35mm
4.00 - 10mm	up to 12mm	EMF3 5.5 x 65mm



## Board Arrangement

We recommend that Versaliner should be installed in brick bond fashion as per the diagram, for further information please contact Euroform.



### NOTE:

- 4 way joints should be avoided
- Minimum board width should not be less than 600mm

## Water Proofing

Where boards are used below and within 150mm of DPC level a compatible waterproofing membrane should be applied.

## Use of Breather Membranes

A suitable breather membrane should be used when using Versaliner as a sheathing board.

The board should not be relied on to prevent moisture ingress.



## Screw withdrawal performance (pull-out)

Versaliner may be able to contribute to the securing of external wall insulation. Screw withdrawal (pull-out) tests should be carried out on site by a qualified consultant to determine board performance.

Number and type of insulation fixings should be determined by wind loading assessment to be carried out by an appropriately qualified engineer.

Any rails/profiles to be used to support cladding etc should be fixed back to pick up on supporting SFS studs.

# Processing



Versaliner can be scored and snapped.

## Sawing Equipment

It is recommended to use carbide tipped blades when cutting or processing Versaliner to reduce tool wear.

Product can be cut using:

- Cross cut hand saws
- Jigsaws for shaping product
- Circular saws with dust extraction

Diameter	250mm
Board thickness	9mm/12mm
Number of teeth	Z>48-60

## Edging and Jointing Detail

Versaliner can be affected by slight dimensional changes according to variations in relative humidity.

### For SFS sheathing applications

- 3-4mm movement joint between every single board edge

Joints to be filled with Versaseal or approved tapes.  
Contact Euroform for information.

A simulated wind pressure test report for 9mm board was carried out to CWCT standards and is available upon request.

Note: 4 Way board joints should be avoided


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