



expanded
polystyrene

Insulation that exceeds expectation

Walls





CONTENTS

External Wall Insulation

Structural Insulated Panels (SIPS)

**Cavity Wall Partial Fill and Full Fill EPS
Insulation**

Cavity Wall Insulation Bead

Identification Table

Specification Data

Green guide A+ rating

Our Accreditations



External Wall Insulation

Expandable polystyrene boards are used as part of a render system to provide an efficient and cost effective solution.

S and B EPS external wall insulation is an accepted way of adding thermal value to the outer face of most external walls.

Its versatility enable it to be used with a variety of finishes including plastic weather boarding, cladding, tile hanging and reinforced render systems.

S and B external wall insulation when used on the external face of a masonry wall maximises the natural thermal capacity of the wall and assists in the reduction of thermal fluctuations.

Given that heating and air conditioning interior rooms consume vast amount of energy and also accounts for approximately 80% of total energy consumption, with 30% being lost through uninsulated walls, external wall insulation offers a high cost effective solution to reducing your carbon footprint and money expended on climate control.

S and B offer various bespoke grades for thermal wall insulation; grades such as S and B External wall, S and B Lambdatherm which is a grey, low thermal valued board, plus EPS

70E and EPS 200E all containing a fire retardant additive. Thermal values ranging from .038 to .030 W/mk. Selected grades of EPS raw material are used for external wall applications to reduce any bowing and shrinkage of the EPS.

S and B EPS external wall boards are available in square edge, tongue and grooved boards, rebated boards to fit onto a rail system and specialised bespoke boards including an EPS radius board.

Square Edge Boards

S and B EPS square edge board is available in standard sizes from 1200 x 600 to more commonly 1000 x 500mm with the thickness being from 20mm up to 300mm.

They are mechanically or adhesive fixed to external walls.

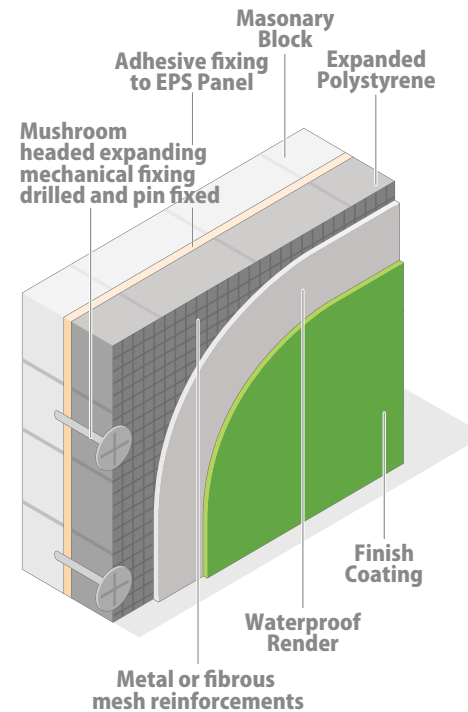
Rail System Boards

S and B Rail system boards come in standard dimension of 500 x 500mm ranging from 40mm up to 250mm in height. Boards are recessed and rebated on all four sides to fit a rail system that has been mechanically fixed on to an external wall.

Radius Board

S and B radius boards are bespoke cut boards suited to turn square edge buildings into radius arches and radius arches into square edge buildings.

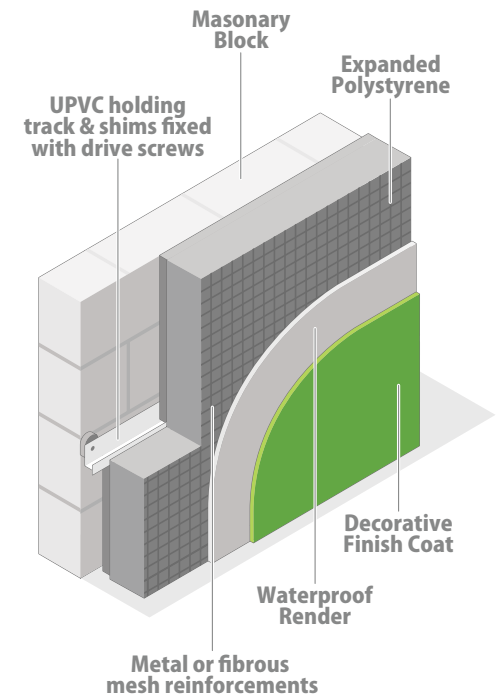
Adhesive Fix



Advantages

- Faster, more efficient single leaf construction can be used, creating additional internal space with improved thermal performance.
- Lightweight materials make this system suitable for tall constructions.
- S and B fill is both CFC [chlorofluorocarbons] and HCFC

Mechanical Fix



[hydrochlorofluorocarbons] free with none of these ozone depleting components being emitted whilst it is the manufacturing process or in situ.

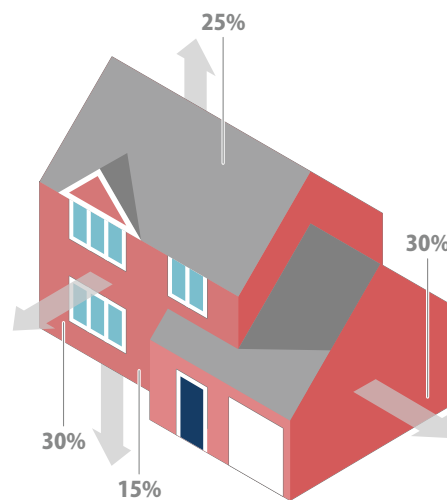
- Its closed-cell structure inhibits water absorption and it is unaffected by the normal range of climatic conditions.
- Unique thermal properties EPS is 98% air, therefore it is an excellent thermal insulator.



Why External Wall

Systems are proven to be the most efficient and effective solid wall insulation method.

Main area of heat loss on uninsulated house

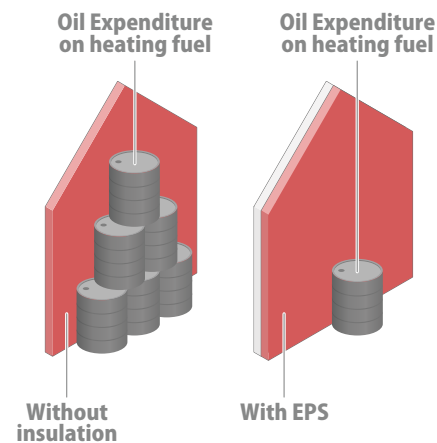


The benefits of EWI (External Wall Insulation) go beyond thermal performance, as it can also protect the fabric of your property. EWI systems offer a weather proof coating minimising the risk of weather damage to masonry and timber frames. They are also robust with impressive impact resistance.

EWI systems offer your home a fresh, attractive facade. Coupled with the increased energy efficiency, the development should also add significant value to your home.

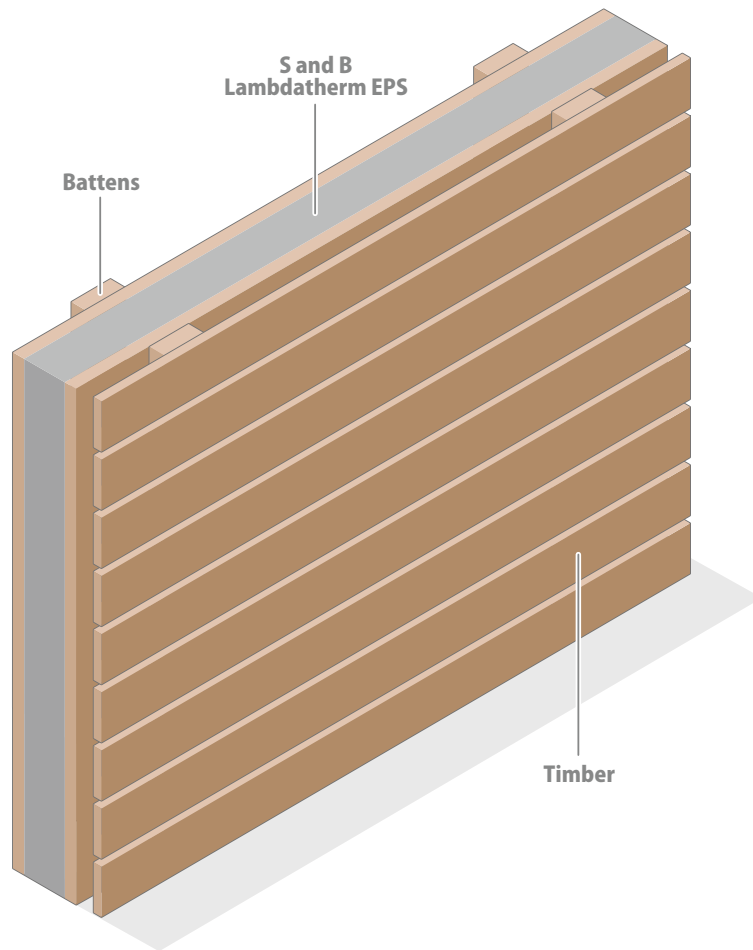
- Proven to be the most energy efficient solid wall insulation method.
- Protects the outer walls of your home from weathering and moisture penetration.
- Highly effective at dealing with condensation and cold spots.
- Available in a wide range of attractive finishes to improve the appearance of your home.
- Grant schemes are available for EWI developments.

Heating Fuel savings in houses and building using EPS Isulation



Structural Insulation Panels

The way we build houses is changing, with environmental concerns and issues likely to dominate all our lives for the foreseeable future.



As a result of this, the building industry is changing to adapt new technologies, resulting in the building of a brand new type of environmentally friendly, energy efficient zero carbon housing.

One method of construction that will be at the forefront of this building design and technology is SIPs panels.

We at S and B EPS embrace this technology and are pleased to be able to offer a CFC and HCFC free EPS core material giving the required flexibility to achieve any required U value.

Advantages

- S and B EPS SIPs core panels are manufactured from CFC and HCFC free polystyrene and are available in the following grades; EPS 70E, EPS 100E, EPS 150E, EPS 200E and Lambdatherm.
- S and B EPS SIPs core panels offer a wide range of sizes up to 5m in length and 1.2m in width and are able to accommodate any required thickness.



Cavity Wall Insulation Partial Fill and Full Fill

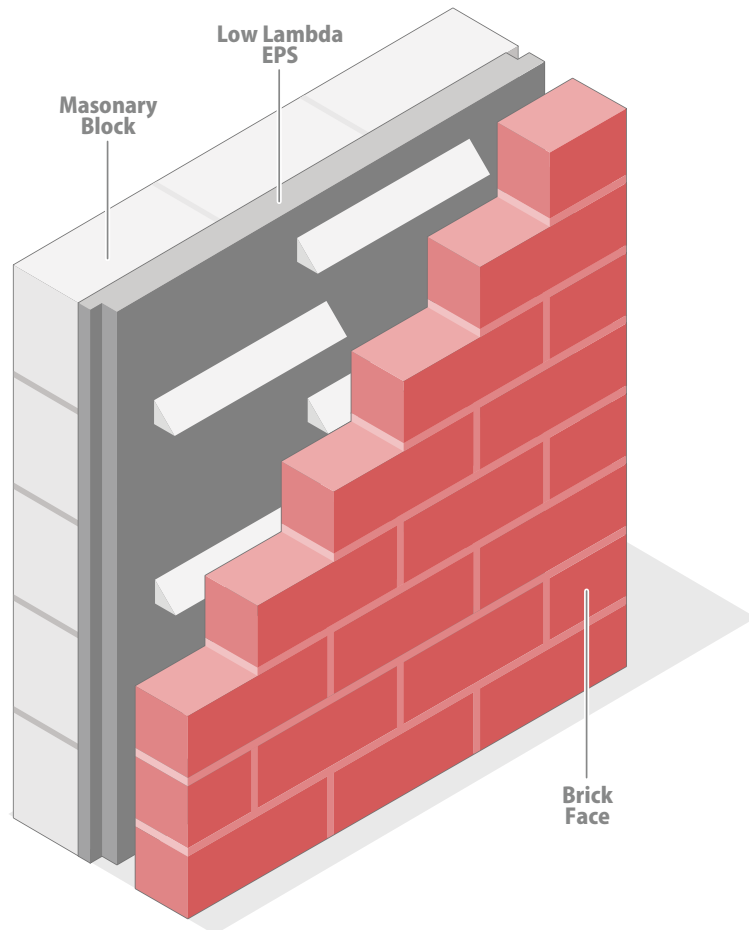
Designed for use in masonry walls, these choices are easily fixed to the leading leaf of the cavity normally with the use of wall ties.

Expandable polystyrene boards are supplied in a low thermal value material called Lambdatherm.

The board Dimensions are 1200 x 450mm with standard thicknesses of 75 and 100mm.

Key Advantages

- Simple to fix.
- Large boards allow for speedy installation.
- Low thermal value material.



Cavity Wall Insulation Bead

EPS is one of the best insulators on the market. Mechanically blown into external cavity voids, it can dramatically enhance the thermal performance of your home.

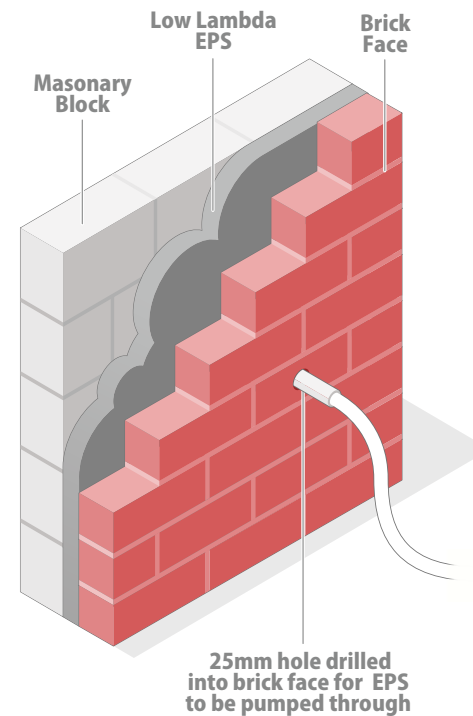
S and B EPS manufacture a range of expanded polystyrene beads for the cavity wall insulation market. It comes available in fire retardant grades such as low lambda grey bead and white.

Both of these choices are manufactured from polystyrene closed cell, inert, non toxic CFC and HCFC free material, and have a zero GWP (global warming potential) and ODP (ozone depletion potential).

S and B cavity wall bead is suitable for buildings 12m in height.















Key Advantages

- Reduced heat loss through the walls by up to two thirds.
- Reduced heating bills by up to one third.
- You get a warmer more comfortable home in winter and a cooler home in the summer.
- Application is fast and efficient.
- It's a cost effective solution.



S and B Walls

S and B Identification Table

New Identification / colour coding of products manufactured to BSEN 13163		
EPS 70	2 x brown stripes	
EPS 70 E	2 x brown stripes & 1 red stripe	
EPS 100	1 black stripe	
EPS 100 E	1 black stripe & 1 red stripe	
EPS 120	2 x green stripes	
EPS 120 E	2 x green stripes & 1 red stripe	
EPS 150	1 yellow stripe	
EPS 150 E	1 yellow stripe & 1 red stripe	
EPS 200	2 x black stripes	
EPS 200 E	2 x black stripes & 1 red stripe	
EPS 250	1 violet stripe	
EPS 250 E	1 violet stripe & 1 red stripe	
EPS 300	2 x violet stripes	
EPS 300 E	2 x violet stripes & 1 red stripe	

S and B Walls

S and B Specification Data

Property	Conditions	Grades							Lambdatherm	
		EPS300	EPS250	EPS200	EPS150	EPS120	EPS100	EPS70	90	70
Strength										
Compressive strength kPa Min	at 10% compressive strength	300	250	200	150	120	100	70	90	70
Cross breaking strength kPa Min		450	350	250	200	170	150	115	150	115
Safe working load kPa	at 1% nominal compression	120	100	90	70	45	45	21	45	21
Heat										
Thermal conductivity [k] value W/mk Max	10°C mean	0.033	0.033	0.034	0.035	0.036	0.036	0.038	0.030	0.032
Water (tabulated values)										
Vapour diffusion resistance factor μ1		40-100	40-100	40-100	30-70	30-70	30-70	20-40	30-70	20-40
Vapour permeability δ mg [pa.h.m]		0.007 to 0.018	0.007 to 0.018	0.007 to 0.018	0.010 to 0.024	0.010 to 0.024	0.010 to 0.024	0.018 to 0.036	0.010 to 0.024	0.018 to 0.036

To discover more about the benefits of S and B Wall Insulation, call today on **0191 250 0818**, or go to www.sandbeps.com

FIND US



At S and B EPS Ltd we take real pride in finding solutions to problems, so whatever your expanded polystyrene needs, you can call on us to deliver

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