
insulation
that exceeds
expectation
sb
expanded
polystyrene
Product Handbook
Underfloor
Heating Systems

Contents

Crios System Board

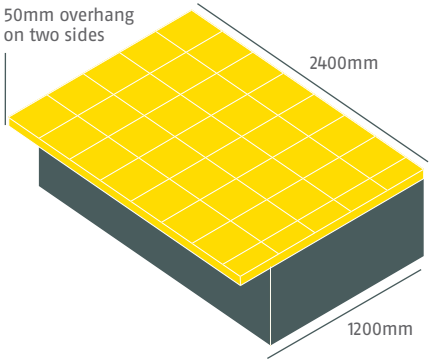
S and B EPS Crios system boards have been specially designed to assist in the laying of underfloor heating systems. It is a combination of an EPS board bonded to a coated split woven membrane that is blue in colour with a 50mm grid pattern to allow straight runs to be simply achieved and as with all other S and B EPS products is both CFC and HCFC free.

S and B work with design engineers and installers to make the complete package.

Standard sizes of S and B EPS Crios system boards are 2.4 x 1.2m with a 50mm film overhang on one of the 2.4m lengths allowing taping to form a continuous seamless surface with standard thickness being from 20mm to 200mm with other thicknesses available on request.

S and B EPS Crios system boards are available in the following grades: EPS 70, EPS 100, EPS 120, EPS 150, EPS 200 and Lambdatherm.

S and B EPS Crios system boards are compatible with all types of screed and readily accept all preparatory fixings ensuring that pipes remain in position until they are encased in the floor screed.



- EPS board
- Coated split woven membrane with 50mm square grid

Quality standards

Advantages of Crios Boards

Gridwork provides an easy guide for installers allowing quick and accurate placing of pipe runs down to a minimum spacing of 50mm

Split woven membrane activly prevents pipe clips from pulling out of the material holding the pipework securely in place whilst screed is poured.

The 50mm overlap allows for easy taping or the joints which prevents screed for entering joints between boards.

Crios boards are quick and easy to install when compared to standard boards covered with a seperate membrane.

The split woven membrane helps to protect the surface of the eps boards during installation.

Crios Boards are available in a variety of thicknesses to allow most u values to be achieved.

Excellent price to performance ratio.

The waste EPS produced during manufacture is reground and recycled back into the manufacturing process. Any additional waste can be easily recycled or used in a variety of products.

S and B EPS Contour Board

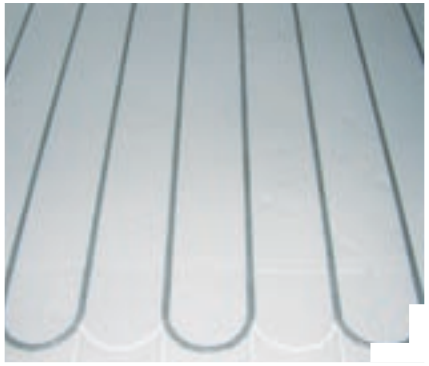
S and B EPS Contour board is a two part hybrid system especially developed for the under floor heating market made from CFC & HCFC free polystyrene available in grades EPS 100, EPS 120, EPS 150, EPS 200 and Lambdatherm.

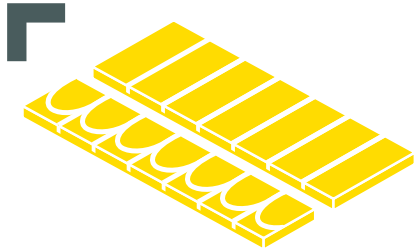
Board 1: A universal 1200 x 1200mm board with straight grooved slots at either 200 or 300mm centres to suit 16, 20 &22mm diameter pipes.

Board 2: A 800 x 300mm board with radius grooved return slots at 200mm centres to suit 16, 20 and 22mm diameter pipes.

Board 3: A 600 x 300mm board with a radius grooved return slots at 300mm centres to suit 16, 20 and 22mm diameter pipes.

The minimum thickness of S and B EPS Contour board is 30mm and thereafter can be increased in 5–10mm increments.





S and B EPS Contour Board

- EPS 120 board

S and B Contour Boards are compatible with all other S and B EPS Flooring grade products that can be used to make up different floor zones as required.

S and B EPS Contour Boards are light to handle easy to install and can be cut to suit individual floor requirements.

S and B EPS Contour Boards can be supplied with factory bonded aluminium de-fuser plates

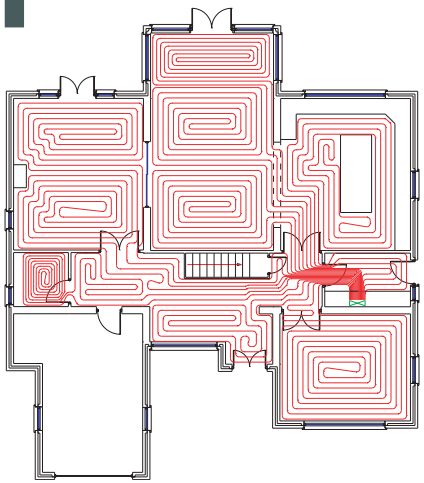
S and B EPS Contour Boards are manufactured in accordance to EN 13163 and CE marked as standard.

S and B EPS S1 Castellated Underfloor Insulation Panel

S and B EPS S1 castellated underfloor insulation panels are a thermoformed high-impact EPS with a polystyrene film [HIPS] bonded to its upper face that protects the board from mechanical damage during its installation and acts as a vapour barrier.

S and B Contour Board is designed to simplify the procedure of preparing the floor for laying UFH pipes reducing installation time with the profile panel assisting in quick and easy positioning of pipes with no further fixings required. The board's interlocking profile eliminates cold bridging whilst its integral moulded skin acts as a vapour barrier eliminating the necessity to lay and tape polythene sheets.

Board size: 1200 x 700 x 45, 50 and 60mm [14 per pack]



Example system using S and B Castellated Underfloor Insulation Panels

Advantages

Reinforced boards

Able to take all standard pipe diameters

Zero cold bridging due to profiled edges

Quick and easy installation of pipes

No need to lay and tape polythene

Heating pipes simply walked into position

Reduced installation time

Environmentally friendly CFC and HCFC free with a zero OPD.

S and B Flooring
Identification Table

New Identification / colour coding of products manufactured to BSEN 13163		
EPS 70	2 x brown stripes	
EPS 70E	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	

Specification Data

Property	Conditions	Grades					Lambdatherm	
		EPS 200	EPS 150	EPS120	EPS100	EPS70	90	70
Water [tabulated values]								
Vapour diffusion resistance factor μ 1		40–100	30–70	30–70	30–70	20–40	30–70	20–40
Vapour permeability δ mg [pa.h.m]		0.004 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
Heat								
Thermal conductivity [K] value W/mk Max	10°C mean	0.034	0.035	0.036	0.036	0.038	0.031	0.032
Strength								
Compressive strength kPa Min	at 10% compressive strength	200	150	120	100	70	90	70
Cross breaking strength kPa Min		250	200	170	150	115	150	115
Safe working load kPa	at 1% nominal compression	90	70	45	45	21	45	21

For further information on these products and others within the S and B EPS range please get in touch.

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