expanded polystyrene

Insulation that exceeds expectation

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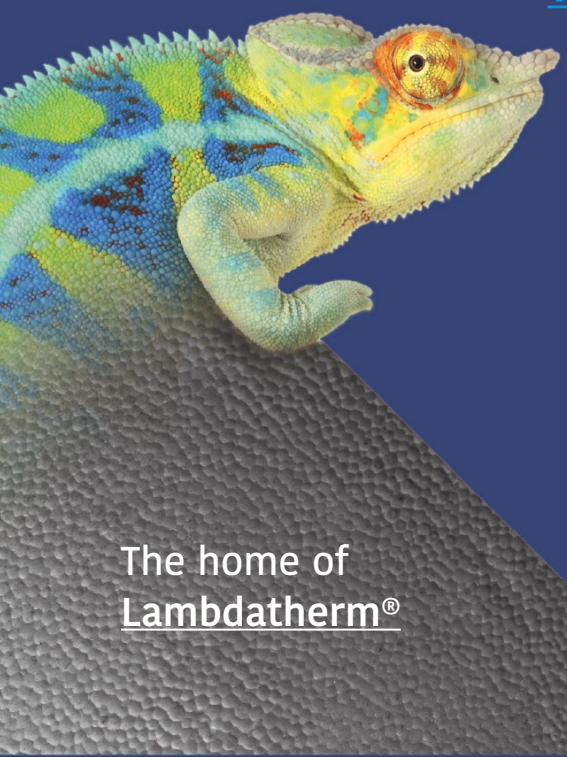


The home of
Lambdatherm®

expanded polystyrene

Insulation that exceeds expectation

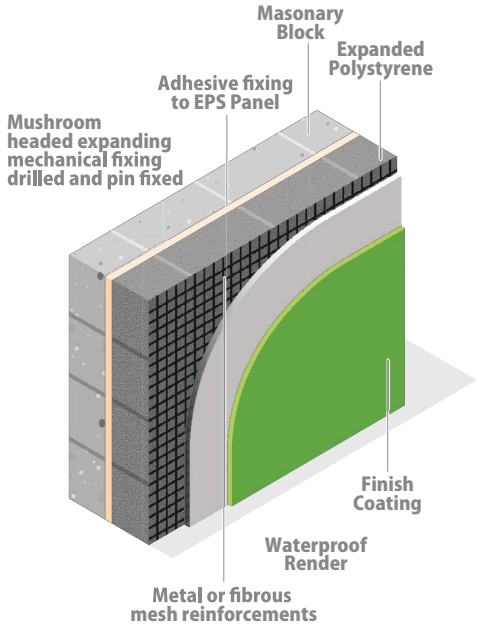
CONTENTS

S and B EPS Limited

Manufacturers of expanded polystyrene

External Wall Insulation Adhesive Fix

Technical Datasheet



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.
- 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.
- A+ green guide rating

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

External Wall Insulation - Specification Data

Features	Grades EPS				Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	70	100
Cross Breaking Strength kPa Min	115	150	200	250	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

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 consumes vast amounts of energy and also accounts for approximately 80% of total energy consumption, with 30% being lost through uninsulated walls, external wall insulation offers a highly 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 down 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.

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

Radius Boards:

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.

Recycling

EPS is 100% recyclable and any left over waste we can offer a 'Waste Recycling Scheme' ask one of our team.

Feel free to contact us

Ask about our waste Recycling scheme

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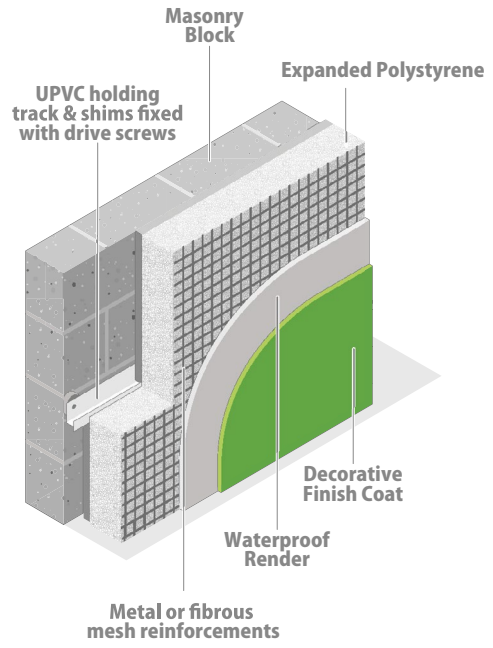
S and B EPS Limited

Manufacturers of expanded polystyrene

External Wall Insulation Mechanical Fix

Technical Datasheet



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.
- Its closed-cell structure inhibits water absorption and it is unaffected by the normal range of climatic conditions.
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External Wall Insulation - Specification Data

Features	Grades EPS				Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	70	100
Cross Breaking Strength kPa Min	115	150	200	250	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

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 consumes vast amounts of energy and also accounts for approximately 80% of total energy consumption, with 30% being lost through uninsulated walls, external wall insulation offers a highly 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 down 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.

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.

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

Recycling

EPS is 100% recyclable and any left over waste we can offer a 'Waste Recycling Scheme' ask one of our team.

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any questions or queries.

Ask about our waste Recycling scheme

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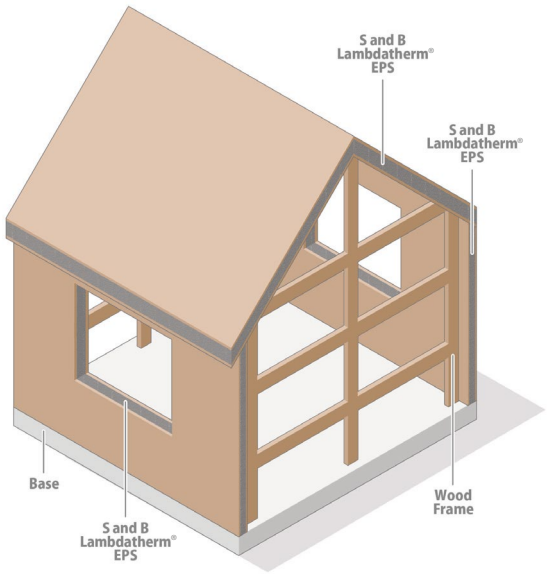
S and B EPS Limited

Manufacturers of expanded polystyrene

Structural Insulated Panels

Technical Datasheet



Advantages of S and B Structural Insulated Panels:

- Lightweight & easy to handle
- Water resistent
- Quick and easily to install
- 100% Recyclable
- A+ green guide rating

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

S and B Structural Insulated Panels are available in the following grades:

Features	Grades EPS					Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	EPS250	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.033	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	250	70	100
Cross Breaking Strength kPa Min	115	150	200	250	350	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	100	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

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.

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

More 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 EPS 250E 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 that are able to accommodate any required thickness.

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any queries.

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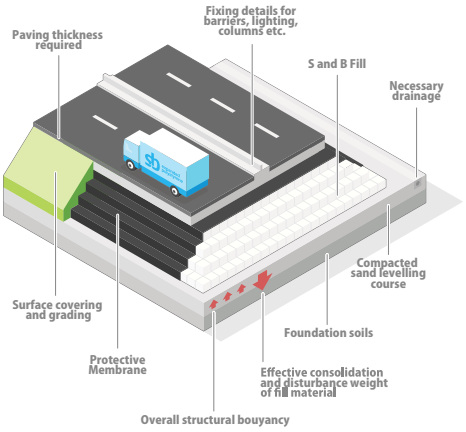
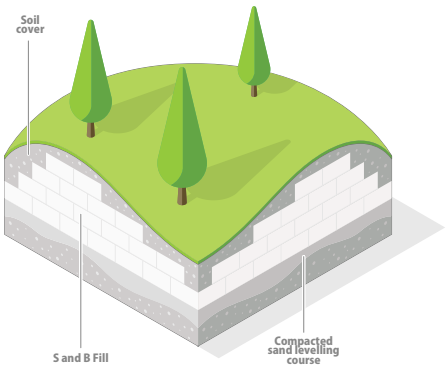
S and B EPS Limited

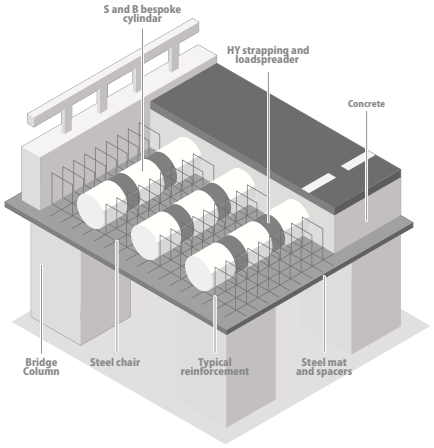
Manufacturers of expanded polystyrene

Civil Engineering Solutions

Technical Datasheet







Road & Rail Embankments

With its high strength-to-weight ratio and ability to withstand mechanical loads, S and B fill can assist in reducing the pressure on soils when taking into account the high unacceptable loadings that can be present, whilst offering a proven economical alternative to piled construction.

S and B fill offers a cost effective lightweight solution that takes away the problem of unacceptable stresses encountered when using traditional fill materials and reduces the probability of settlement.

Traditional fill materials can be liable to unacceptable settlement when used on railway embankments.

Noise Bunds & Landscaping

S and B fill offers a fast cost effective method of building noise bunds to eliminate sound transfer by means of erecting a barrier between road traffic noise and housing, whilst offering the advantage of a 1% weight ratio to that of traditional materials.

S and B fill when used in landscaping, with its high strength-to-weight ratio, can elevate the pressures on underlying structures and services in both soft and hard landscaping.

Cylinderical Void Fillers

S and B fill, with its versatility, can be cut into many bespoke shapes including cylinders that are a major feature of voided concrete structures such as elevated motorways and bridges.

It is widely used to produce sloping ramps in the construction of car parks, for flotation and barriers in marinas raised floors, sloping auditoriums, shuttering, pile locators, pile in-fills, curved or circular walls etc.

S and B Grade	Fill 21	Fill 45	Fill 70	Fill 90	Fill 100	Fill 190
To BS EN 14933:2007						
Compress Strength at 1% compression [kPa]	21	45	70	90	100	190
Compress Strength at 10% compression [kPa]	70	100	150	200	250	500
Cross breaking strength bending strength [kPa]	115	150	200	250	350	750
Sheer strength [kPa] in correlation to bending strength	55	75	100	125	170	375
Nominal density [kg/m³]	15	20	25	30	35	55
Other Physical properties						
Compress Modulus [Mpa]	2.0	4.5	7.0	9.0	10.0	19.0
Compress Modulus [kN/m³] at 1% compression	2,000	4,500	7,000	9,000	10,000	19,000
Thermal conductivity value [W/mk]	0.038	0.0360	0.0350	0.0340	0.0330	0.0330
Max depth of concrete [mm]	830	1,875	2,915	3,750	4,165	7,915

Recycling

EPS is 100% recyclable and any left over waste we offer a 'Waste Recycling Scheme' ask one of our team.

Contact Us

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Ask about our waste Recycling scheme

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BBA ISO 9001 Registered Company QMS CERTIFICATION 0930001

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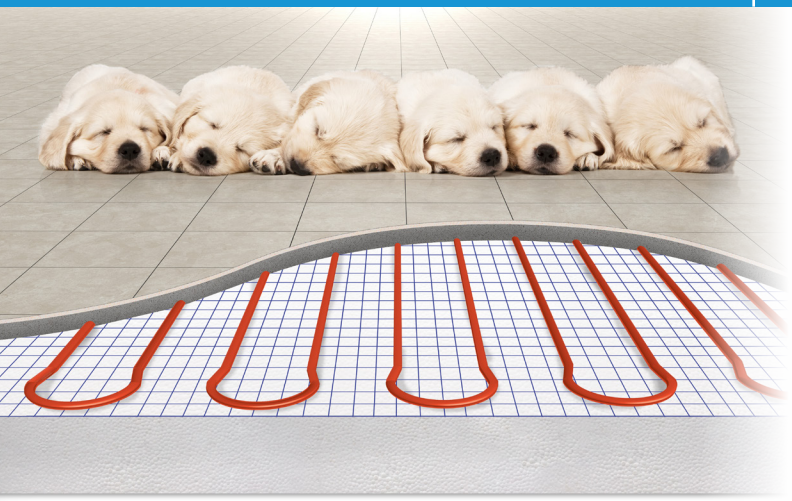
S and B EPS Limited

Manufacturers of expanded polystyrene

Underfloor Heating Crios System Board

Technical Datasheet



Advantages of Crios board:

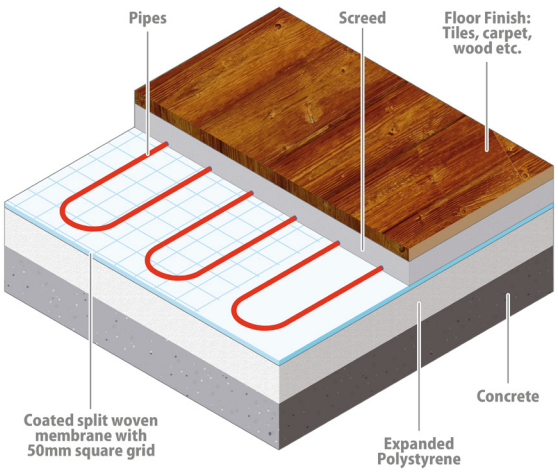
- Can accept all screeds
- 50mm printed gridlines for ease of pipe alignment
- 2.4m x 1.2m for speed of laying
- 50mm overhang on two sides allowing ease of taping joint
- Woven membrane prevents clips from pulling
- Bespoke thickness from 20mm - 140mm
- Excellent price performace ratio

S and B EPS Crios system boards are available in the following grades:

Features	Grades EPS					Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	EPS250	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.033	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	250	70	100
Cross Breaking Strength kPa Min	115	150	200	250	350	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	100	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

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 it is both CFC and HCFC free. Standard sizes of S and B EPS Crios system boards are 2.4 x 1.2m with a 50mm film overhang on two of the sides allowing taping to form a continuous seamless surface with standard thickness being from 20mm to 140mm with other thicknesses available on request.

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



Recycling

EPS is 100% recyclable, A+ green guide rating.

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BBA BRITISH BOARD OF AGREMENT No: 02/3943

Feel free to contact us

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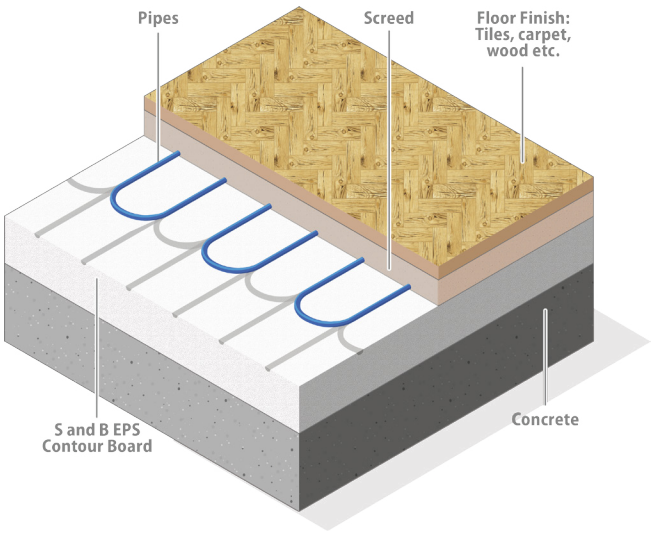
S and B EPS Limited

Manufacturers of expanded polystyrene

Contour Board Underfloor Heating

Technical Datasheet



Advantages of Contour board:

- Can accept all screeds
- Grooves for ease of pipe alignment
- Lightweight
- Speed of laying
- 100% Recyclable
- A+ Green Guide rating

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 150, EPS 200, EPS 250 and Lambdatherm®.

Board 1:

A universal 1200 x 1200mm board with straight grooved slots at a range of centres to suit various pipe diameters.

Board 2:

An edge board with returns to suit pipe centres.

Features	Grades EPS						Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	EPS250	EPS500	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.033	0.033	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	250	500	70	100
Cross Breaking Strength kPa Min	115	150	200	250	350	750	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	100	190	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	40-100	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

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

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. Light to handle easy to install and can be cut to suit individual floor requirements, boards are manufactured in accordance to EN 13163 and CE marked as standard.

Identification / colour coding of products manufactured to BSEN 13163	
EPS 70E	2 x brown stripes & 1 red stripe
EPS 100E	1 x black stripe & 1 red stripe
EPS 120E	2 x green stripes & 1 red stripe
EPS 150E	1 yellow stripe & 1 red stripe
EPS 200E	2 x black stripes & 1 red stripe
EPS 250E	1 violet stripe & 1 red stripe
EPS 500E	1 x black, 1 green & 1 red

Contact Us

Feel free to drop us a call or an email; one of our helpful staff will be happy to answer any questions or queries.

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BBA ISO 9001 Registered Company QMS CERTIFICATION 03/3001

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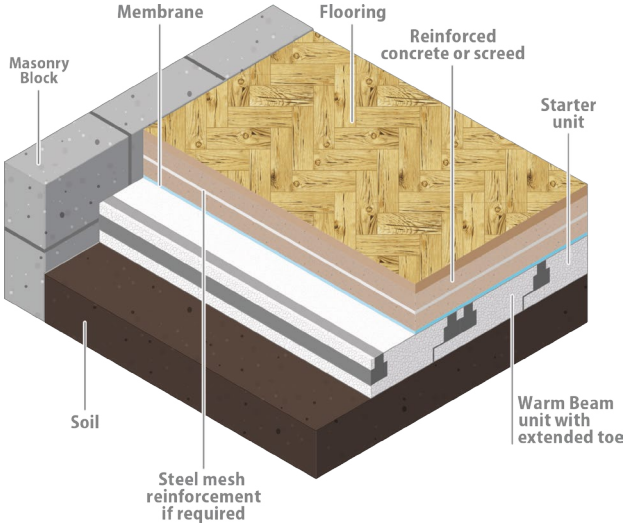
S and B EPS Limited

Manufacturers of expanded polystyrene

Warm Beam & Warm Beam Plus

Technical Datasheet



Advantages:

- Speed of laying application
- Thermal conductivity as low as 0.030 W/mk with Warm Beam Plus.
- Interlocking panels to stop cold bridging
- Can be laid in wet conditions
- Excellent thermal properties
- A+ green guide rating

We offer a wide range of bespoke rigid insulation modules manufactured from lightweight closed cell expanded polystyrene, which are laid between pre-stressed concrete beams finished with a self levelling concrete topping.

Given that EPS is rot, moisture and draft proof it eliminates the problems associated with part C of the building regulations relating to site preparation and resistance to contaminants and moisture.

S and B EPS suspended floor panels can be installed in conjunction with underfloor heating systems meeting the demand for more environmentally sound homes whilst reducing heating costs.

The use of S and B EPS suspended modules in conjunction with pre-stressed concrete beams are a highly effective, thermally efficient way of achieving and exceeding the thermal requirements of part L of the building regulations without the need for additional insulation.

Features	Warm Beam Grades EPS			Warm Beam Plus Lambdatherm®	
	EPS70	EPS100	EPS150	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	70	100
Cross Breaking Strength kPa Min	115	150	200	115	150
Safe working load kPa at 1% nominal compression	21	45	70	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.015 to 0.030	0.009 to 0.020

Recycling

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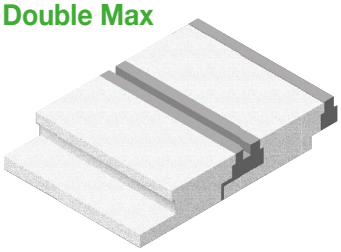
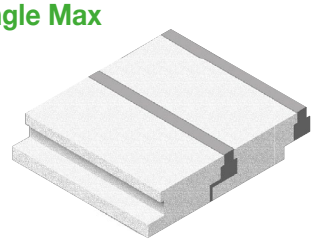
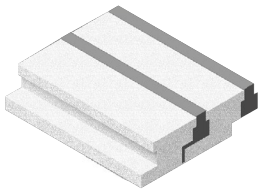
Double Max



Single Max



Single Narrow



Contact Us

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BBA ISO 9001 Registered Company QMS CERTIFICATION 09/9001

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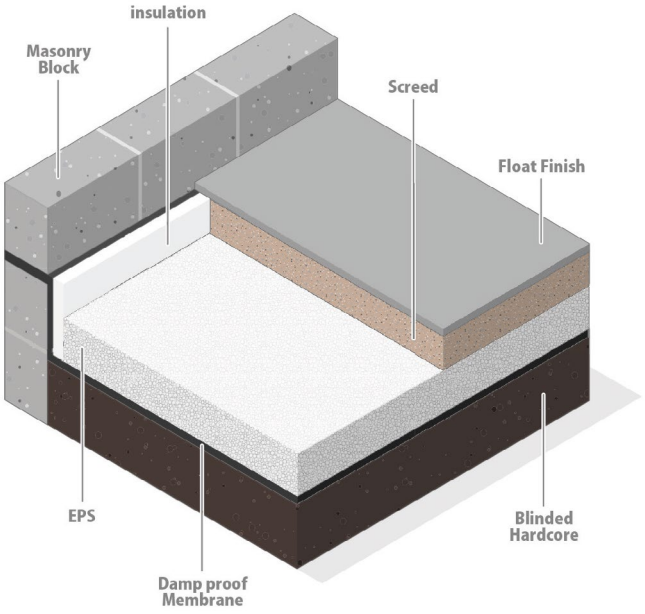
S and B EPS Limited

Manufacturers of expanded polystyrene

EPS Flooring

Technical Datasheet



Features:

- S and B EPS flooring offers excellent thermal performance providing savings in energy costs and higher comfort levels in dwellings.
- Maintains its thermal efficiency throughout the life of a building.
- Highly cost effective floors.
- Rapid construction: no specialised equipment or trades required.
- Saves up to a week in building time when used in an all-dry system with flooring grade chipboard.
- Can be used under screeds, in heated floor slabs, below suspended slabs or between joists.
- Available in a variety of thicknesses.
- Non-toxic, non-irritant, moisture resistant, easy to cut and fix.
- A+ green guide rating

S and B EPS Flooring boards are available in the following grades:

EPS70 **EPS100** **EPS150** **EPS200** **EPS250** **EPS500**

Lambdatherm® 70 | **Lambdatherm® *ELITE***

Features	Grades EPS						Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	EPS250	EPS500	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.033	0.033	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	250	500	70	100
Cross Breaking Strength kPa Min	115	150	200	250	350	750	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	100	190	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	40-100	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

S and B EPS flooring boards are designed for the insulation of ground floors in a variety of applications. The product is a CFC and HCFC free, lightweight, closed cell material which is easy to install. It has a high insulation value and allows for rapid dry construction methods to be used in new and renovated dwellings and is available in either square edge.

Identification / colour coding of products manufactured to BSEN 13163	
EPS 70E	2 x brown stripes & 1 red stripe
EPS 100E	1 x black stripe & 1 red stripe
EPS 120E	2 x green stripes & 1 red stripe
EPS 150E	1 yellow stripe & 1 red stripe
EPS 200E	2 x black stripes & 1 red stripe
EPS 250E	1 violet stripe & 1 red stripe
EPS 500E	1 x black, 1 green & 1 red

	Flooring 2400 x 1200mm		
	Qty / Pack	Cu-m per pack	Sq-m per pack
2400 x 1200 x 25mm	12	0.864	34.56
2400 x 1200 x 30mm	10	0.864	28.8
2400 x 1200 x 50mm	6	0.864	17.28
2400 x 1200 x 75mm	4	0.864	11.52
2400 x 1200 x 100mm	3	0.864	8.64
2400 x 1200 x 150mm	2	0.864	5.76

Ask about our waste Recycling scheme

BBA ISO 14001 Registered Company QMS CERTIFICATION C1862013

BBA ISO 9001 Registered Company QMS CERTIFICATION 09/9001

CE

BBA BRITISH BOARD OF AGREEMENT No: 02/3943

Feel free to contact us

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company@sandbeps.com

Follow us on facebook and twitter

www.sandbeps.com

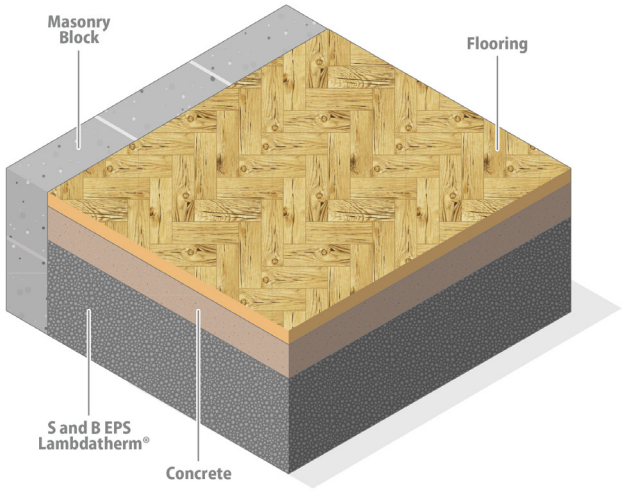
S and B EPS Limited

Manufacturers of expanded polystyrene

Lambdatherm®

Technical Datasheet

Lambdatherm® 70 | **Lambdatherm® *ELITE***



Features

- Grey Enhanced EPS
- S and B EPS Lambdatherm® offers excellent thermal performance providing savings in energy costs and higher comfort levels in dwellings.
- Maintains its thermal efficiency throughout the life of a building.

S and B EPS Lambdatherm® is a specially designed EPS that contains tiny chemically modified particles that reflect heat radiation and gives the material its grey colour.

These infrared absorbers and reflectors lower the thermal conductivity of the material offering a thickness reduction of about 20% against standard white EPS.

Applications:

External wall, ground floors and pre-stressed concrete beam, Flooring, Cavity wall, Structural insulated panels [SIPS].

Dimensions:

Standard board sizes 2400 x 1200 thickness 50, 60, 75, 90,100 and 150mm with non-standard sizes supplied to order. External wall board 1200 x 600 thickness 90 and 100mm with non-standard sizes supplied to order.

Lambdatherm® is available in the following grades:

Features	Lambdatherm®	
	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100
Cross Breaking Strength kPa Min	115	150
Safe working load kPa at 1% nominal compression	21	45
Vapour diffusion resistance factor μ1	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020

Compatibility:

Lambdatherm® S and B EPS flooring is compatible with timber, cement, concrete, brick masonry and mortars it is compatible with bitumen based membranes but should not be used with membranes based on coal tar pitches. Plasticised PVC electrical cables can react with EPS when in direct contact. This reaction does not affect the performance of the EPS or the insulation properties of the cables. However it is recommended that PVC cables be run in conduit wherever possible.

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any questions or queries.

Recycling

EPS/Lambdatherm® is 100% recyclable and for any left over waste we can offer a 'Waste Recycling Scheme' ask one of our team.

Ask about our waste Recycling scheme

BBA ISO 14001 Registered Company GMS CERTIFICATION C18/0213

BBA ISO 9001 Registered Company GMS CERTIFICATION 09/9001

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BBA BRITISH BOARD OF AGREMENT No: 02/3943

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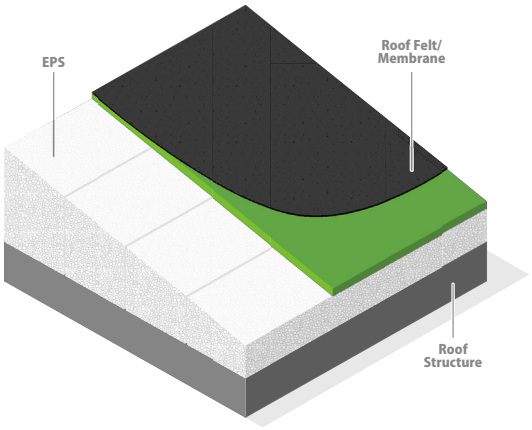
S and B EPS Limited

Manufacturers of expanded polystyrene

Roof Boards
Uniform Thickness and Cut-to-fall
Technical Datasheet



Advantages of S and B Roof Boards:

- Lightweight & easy to handle
- Water resistent
- Quick and easily to install
- 100% Recyclable
- A+ green guide rating

We manufacture a wide range of roofing insulation products to meet the various required applications. We work in conjunction with roof engineers and design teams to offer the complete design and supply package.

S and B EPS Roof boards are available in the following grades:

Features	Grades EPS						Lambdatherm®	
	EPS70	EPS100	EPS150	EPS200	EPS250	EPS500	70	*ELITE*
Thermal Conductivity [k] value W/mk (10°C mean)	0.038	0.036	0.035	0.034	0.033	0.033	0.032	0.030
Compressive Strength kPa Min (at 10% compressive strength)	70	100	150	200	250	500	70	100
Cross Breaking Strength kPa Min	115	150	200	250	350	750	115	150
Safe working load kPa at 1% nominal compression	21	45	70	90	100	190	21	45
Vapour diffusion resistance factor μ1	20-40	30-70	30-70	40-100	40-100	40-100	20-40	30-70
Vapour permeability δmg [pa.h.m]	0.015 to 0.030	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015	0.006 to 0.015	0.015 to 0.030	0.009 to 0.020

A main consideration for a specifier is to decide which weather proof finish is required and then build up a compatible system to accommodate this, coupled with the need to take into account the effect of heat on the construction both during construction and after completion.

Other important issues involve the selection of a compatible adhesive, sealant and or mechanical fixing to bond the weatherproof membrane plus the control of water vapour. S and B EPS offer a wide range of systems that are available in a wide range of densities and thicknesses with, a square edge, shiplap or tongue and grooved edge detail.

Cut-to-falls insulation offers the ideal solution to refurbishment and ponding problems on existing buildings. Uniform thickness boards are suitable for roofs which have an existing fall incorporated and are unaffected by bacteria, fungi or molds and maintain their thermal efficiency throughout the life of the building.

Identification / colour coding of products manufactured to BSEN 13163	
EPS 70E	2 x brown stripes & 1 red stripe
EPS 100E	1 x black stripe & 1 red stripe
EPS 120E	2 x green stripes & 1 red stripe
EPS 150E	1 yellow stripe & 1 red stripe
EPS 200E	2 x black stripes & 1 red stripe
EPS 250E	1 violet stripe & 1 red stripe
EPS 500E	1 x black, 1 green & 1 red

Compatibility:

S and B EPS roof insulation can be adapted to suit a wide range of applications including weatherproof roof membranes.

Unlaminated expanded roof boards are suitable for use under EPDM/ butyl rubber roofing and some plastic type single layer membranes.

Where the membrane is plasticised, a separating layer of fleece is required between the polystyrene and the membrane.

Pre-felted boards are suitable where built up felt or high performance roofing felts are used with mastic asphalt roofing, but care must be taken when laying in very high ambient temperatures (technical information available on request).

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any queries.

0191 250 0818
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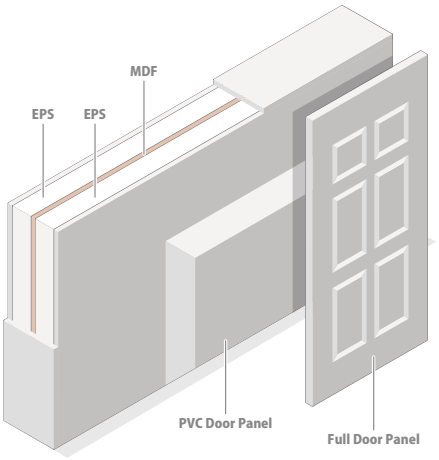
S and B EPS Limited

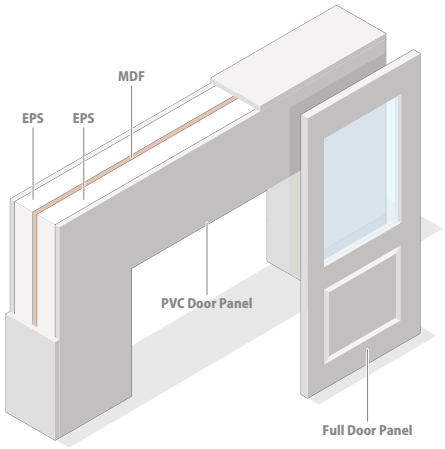
Manufacturers of expanded polystyrene

PVC Door Panels & Pre-cut Doors

Technical Datasheet

Advantages of PVC Door Panels & Pre-cut Doors:





- Lightweight & easy to handle
- Water resistent
- Quick and easily to install
- 100% Recyclable
- A+ Green Guide rating

S and B PVC door Panels & Pre-cut Panels are available in the following grades:

Features	Grades EPS				
	EPS100E	EPS120E	EPS150E	EPS200E	EPS250E
Thermal Conductivity [k] value W/mk (10°C mean)	0.036	0.036	0.035	0.034	0.033
Compressive Strength kPa Min (at 10% compressive strength)	100	120	150	200	250
Cross Breaking Strength kPa Min	150	170	200	250	350
Safe working load kPa at 1% nominal compression	45	45	70	90	100
Vapour diffusion resistance factor μ1	30-70	30-70	30-70	40-100	40-100
Vapour permeability δmg [pa.h.m]	0.009 to 0.020	0.009 to 0.020	0.009 to 0.020	0.006 to 0.015	0.006 to 0.015

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

S and B offer precision cut panels with a standard tolerance of +/- 1mm to the laminating panel manufacturer.

Highly specialised cutting technology enables S and B to slice sheets from 5mm and above with a high quality finish coupled with high compressive strengths.

Bespoke grades for the door panel market contain a fire retardant additive, EPS 100E, EPS 120E, EPS 150E, EPS 200E and EPS 250E an ultra high density material for specialist applications.

Sizes up to 5000mm in length and 1200 in width can be manufactured and are both CFC [chlorofluorocarbons] and HCFC [hydrochlorofluorocarbons] free, with none of these ozone depleting components being emitted during the manufacturing process or in situ.

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any queries.

www.sandbeps.com

BBA ISO 14001 Registered Company GMS CERTIFICATION C1E6213

BBA ISO 9001 Registered Company GMS CERTIFICATION GS/9001

BBA BRITISH BOARD OF AGREMENT No: 02/3943

0191 250 0818

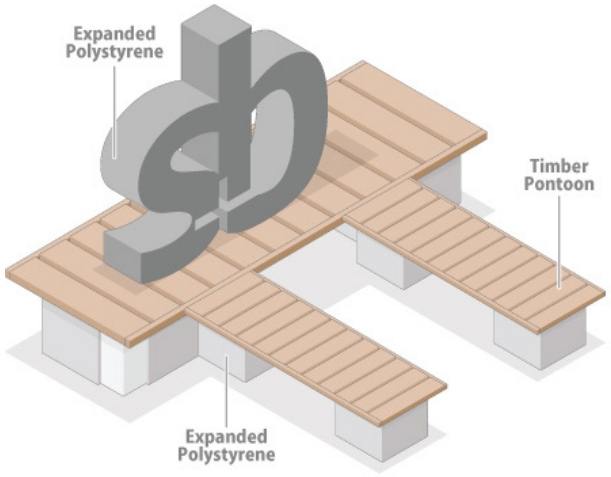
company@sandbeps.com

S and B EPS Limited

Manufacturers of expanded polystyrene

Conversion and Custom Shapes

Technical Datasheet



The versatility of expanded polystyrene and its water resistance lends itself to uses from a floating pontoon on a marina to a statue or column in a block buster movie.

Expanded polystyrene comes in all shapes and sizes with the latest CNC cutting technology any 2D shape can be made.

Graphics and Advertising Products:

Letters can be made up to 2400mm in height for advertising hoarding.

Blocks are formed with a fire retardant additive ready to be worked into 3D characters and objects for use in the Film studios and general public galleries.

General Conversion:

S and B supply general expanded polystyrene for the conversion market which includes ex-mould blocks ready for the converter to slice and also cut pads to a variety of sizes and thicknesses.

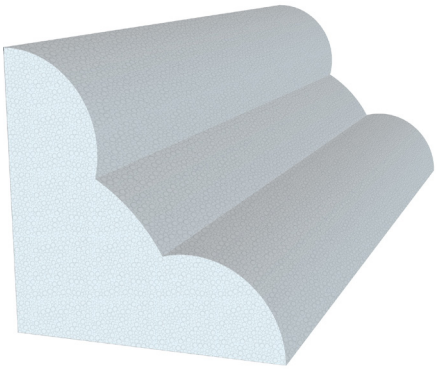
Density ranges from 10 g/l up to 50 g/l Expandable polystyrene Lintel in fills are supplied by the use of CNC machines. Expandable polystyrene beads are supplied for the bean bag market which come in 10 cubic feet bags

S and B EPS Safe Fall Blocks:

S and B EPS safe fall blocks is a specially formulated light weight polystyrene designed to minimise the risks to site operatives when working on scaffolding or roof rafters.

S and B safe fall blocks should be laid on a continuous supporting layer closely butted together with care to ensure that any gaps are kept away from the perimeter and not bridged by full blocks.

The use of S and B EPS safe fall enables contractors to meet the health and safety requirements that anybody should be able to fall less than two metres.
S and B safe fall blocks are available as standard size 1200 x 1200 x 600mm with a delivery time of two to three days.



Need our advice or help on somthing else?

If you need something that isn't covered here, please call us on 0191 250 0818 and we'll do our utmost to supply it.

The waste EPS produced during manufacture is reground and recycled back into the manufacturing process.

EPS70 EPS100 EPS150 EPS200 EPS250 EPS500

Recycling

EPS is 100% recyclable and any left over waste we can offer a 'Waste Recycling Scheme' ask one of our team.

Ask about our waste Recycling scheme

BBA ISO 14001 Registered Company QMS CERTIFICATION C18/5013

BBA ISO 9001 Registered Company QMS CERTIFICATION 09/9001

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BBA BRITISH BOARD OF AGREMENT No: 02/3943

Contact Us

Feel free to drop us a call or an email and one of our helpful staff will be happy to answer any questions or queries.

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