



TECHNICAL

Stylite Profiled Roofing Insulation

- Lambda From 0.030 W/mK
- Contour cut to match any profile
- Insulates new or existing roofs
- Ideal for metal or fibre cement panels
- No reduction in performance over time
- Lightweight, quick & easy install
- Available with tounge & groove or shiplap
- Minimal water absorption & permeability
- Achieves BRE Green Guide A+
- 100% recyclable
- No HFC's, CFC's or HCFC's

STYLITE EXPANDED POLYSTYRENE

From initial concept through to completion Styrene Packaging & Insulation (SPI) will work with you to ensure the smooth and timely delivery of your Expanded Polystyrene (EPS) product or project.

We offer you the very best in technical and design services for every aspect of your enquiry including, specifications, detail drawings and sample production. Once your product is manufactured we use our own



Quality

We hold the internationally recognised ISO9001 and ISO14001 certificates which demonstrate our long term commitment to providing high quality, sustainable products and services.



Innovation

As a leader and innovator in the EPS industry, we are continually investing in research and development, including new technologies and machinery to improve and streamline our manufacturing capabilities.



Technical

SPI have a dedicated and experienced sales and technical team ready to help answer all your EPS queries. They will work with you at every stage of your project to achieve your desired result.



Bespoke

If you have a bespoke requirement, we will work with you to produce specialist products and solutions by utilising moulded or contour cut technology to meet your exact needs.

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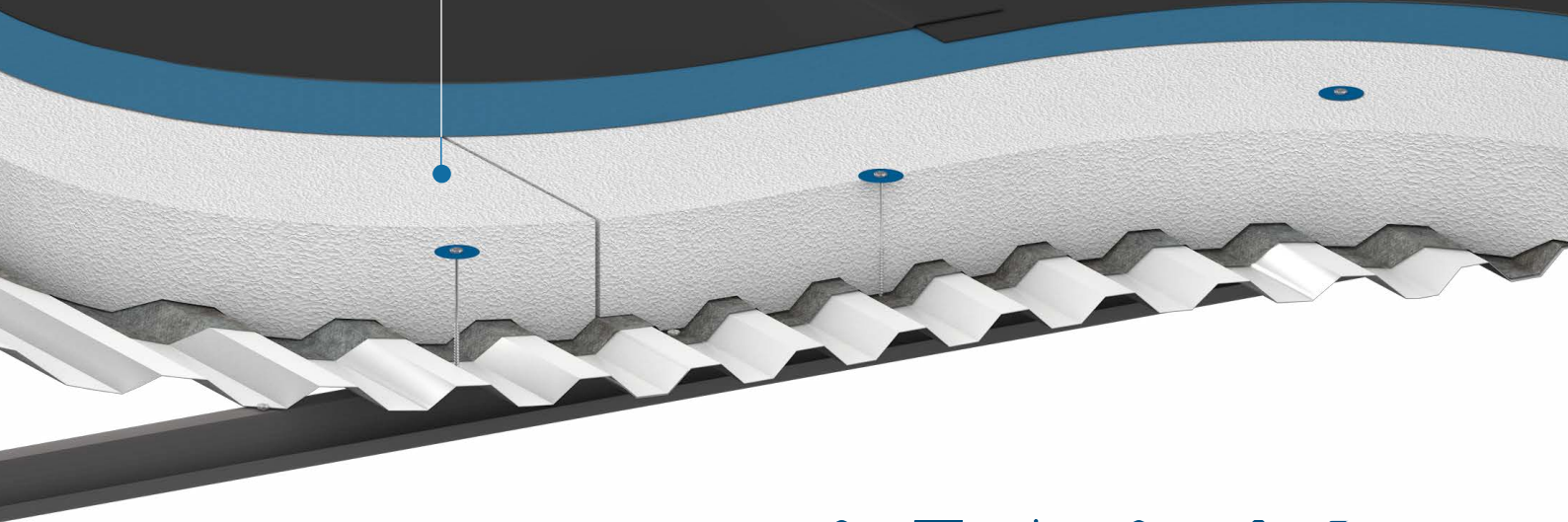
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Visit product
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Key Benefits

- **Lambda from 0.030 W/mK**
- **Contour cut to match any profile**
- **Insulates new or existing roofs**
- **Ideal for metal or fibre cement decks**
- **Lightweight**
- **Available with tongue & groove or shiplap**
- **Easy to install and cut on-site**
- **Minimal water absorption & permeability**
- **100% recyclable**
- **No HFC's, CFC's or HCFC's**

NBS Plus - Specification

Please visit our website for NBS Plus specifications and clauses www.styrene.biz

Profiled Roof Insulation

Matching profiles on corrugated roofing

Stylite Profiled Insulation Boards can be used as part of a new build roofing system or as an overlay solution for existing roofs without incurring the high cost of re-roofing.

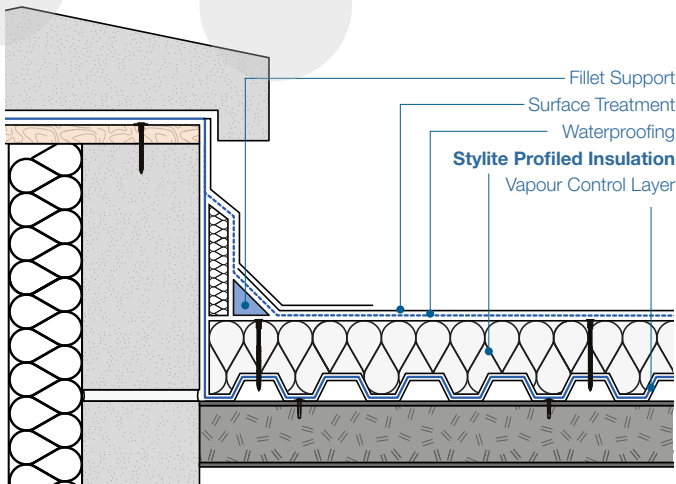
Manufactured from high density Expanded Polystyrene (EPS) they are designed to match any profiled roof deck and fit tightly into the profile to eliminate air gaps and condensation.

EPS offers the best cost to performance ratio of any insulation type. With thermal conductivity from as low as 0.030W/mK our Profiled Roof Insulation Boards can help designers achieve the current Building Regulation u-value requirements.

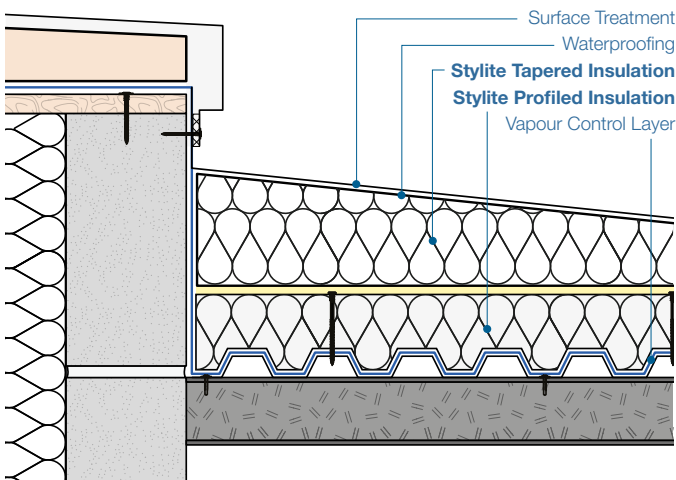
Once the Profiled Roof Insulation Boards are installed the waterproofing layer and surface treatment can be applied to complete the roof.

All Stylite Profiled Roofing boards can be cut to suit any profile Corrugated Sheet - Bespoke or standard profiles

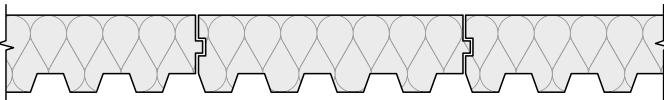
Typical Build Up - Single Ply - Parapet Detail



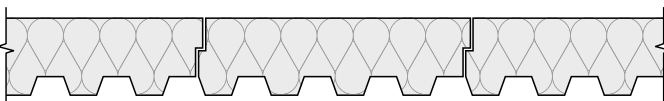
Typical Build Up - Cut To Fall - Flashing Detail



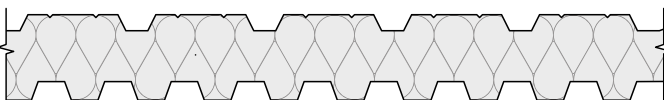
Tounge and groove edge



Shiplap edge



Double sided profiling



Typical Applications

Stylite Profiled roofing can be used in both new build and refurbishment applications.

Profiled roof sheets are predominantly manufactured from steel, aluminium and fibre cement which is an alternative to asbestos.

These corrugated sheets, commonly known as Profile 6 or Big Six, are through pinned to the purlins to create either flat or pitched roof decks.

Stylite Profiled Roof Insulation Boards are contour cut to fit perfectly over the deck and are either mechanically or adhesively fixed in place prior to the waterproofing and surface treatment layers being applied.

Cut To Fall - Stylite Profiled Roof Insulation Boards can be used in conjunction with our Cut To Fall Roof Insulation. The profiled boards are mechanically fixed to the existing deck and then tapered pieces of EPS are adhesively bonded to them.

This design provides sufficient fall to improve the drainage of water from an existing flat roof. For more information see our Cut To Fall Roof Insulation datasheet.

Bespoke Edges - Stylite Profiled Roof Insulation Boards are available with tongue & groove or shiplap edges to help secure the boards during installation. These bespoke edges help to reduce the chance of wind uplift whilst also minimizing cold bridging and protecting the board joints.

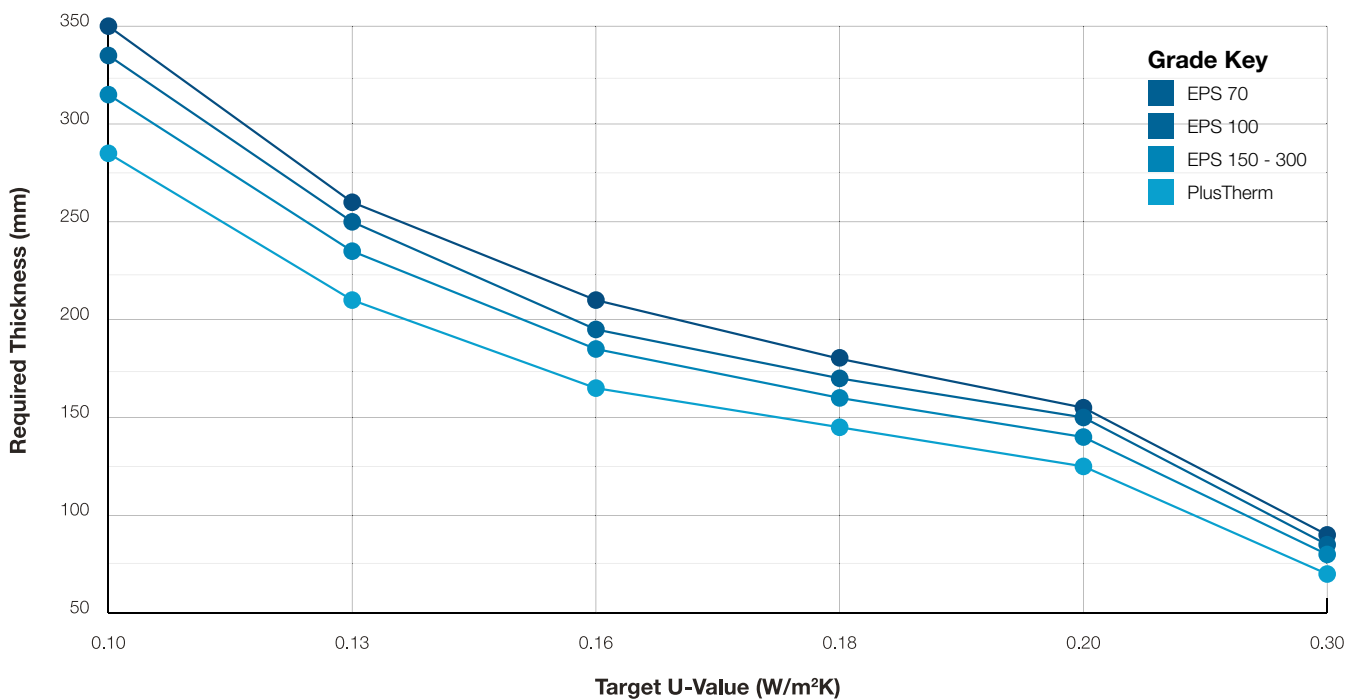
Double Sided Profiling - For some refurbishment projects it may be desirable to reinstall a profiled sheet after insulation has been installed. For these applications we can produce a double sided profile roof insulation board with either each side having the same or different profile to match the exact requirements.

Typical U-Values

The table below shows the thickness of Stylite Profiled Roof Insulation required in each different grade to achieve the required u-value for both new build and refurbishment applications. The roof deck may be of metal, fibre cement

or asbestos construction which have different thermal conductivity values but provide the same amount of thermal performance due to a standard thickness of 6mm throughout all build ups.

Average U-Values



Target U-Value (W/m²K)	EPS 70	EPS 100	EPS 150 - 300	PlusTherm
	Thickness Required			
0.10	350	335	315	285
0.13	260	250	235	210
0.16	210	195	185	165
0.18	180	170	160	145
0.20	155	150	140	125
0.30	90	85	80	70

All U Values above are calculated to the standard BRE buildup for profiled roof decks.

All = 1200mm rail spacing, 40mm rail width.

All decks - 6 mm corrugated (Profile6), 50mm Rail joint system (correction Level =1), Vapour control layer, Stylite profiled insulation, Waterproofing & EPDM Surface finish.

Technical Specification

Features	EPS 70	EPS 100	EPS 150	EPS 200	EPS 250	EPS 300	PlusTherm	Harmonised Standard
Thermal Conductivity (W/mK)	0.038	0.036	0.034	0.034	0.034	0.034	0.030	BS EN 13163
Compressive Strength @ 1% (kPa)	70	100	150	200	250	300	100	BS EN 13163
Compressive Strength @ 10% (kPa)	21	30	45	60	75	90	30	BS EN 13163
Nominal Density (kg/m ³)	15	20	25	30	35	40	20	BS EN 1602
Bending Strength (kPa)	115	150	200	250	350	450	150	BS EN 12089
Water Vapour Permeability (mg Pa.h.m)	0.015 - 0.030	0.009 - 0.020	0.009 - 0.020	0.006 - 0.015	0.006 - 0.015	0.006 - 0.015	0.009 - 0.020	BS EN 13163
Reaction to Fire - Standard EPS	F	F	F	F	F	F	F	BS EN 13501-1
Reaction to Fire - Fire Rated EPS	E	E	E	E	E	E	E	BS EN 13501-1
Length Tolerance	L2	L2	L2	L2	L2	L2	L2	BS EN 13163
Width Tolerance	W2	W2	W2	W2	W2	W2	W2	BS EN 13163
Thickness Tolerance	T2	T2	T2	T2	T2	T2	T2	BS EN 13163
Planarity Tolerance	P5	P5	P3	P3	P3	P3	P5	BS EN 13163
Squareness	S2	S2	S2	S2	S2	S2	S2	BS EN 13163
Dimensional Stability	DS (N) 5	DS (N) 5	DS (N) 5	DS (N) 5	DS (N) 5	DS (N) 5	DS (N) 5	BS EN 13163

Dimensions	Length mm	Width mm	Thickness mm
Stylite Profiled Roof Board	2400	1200	25 - 1200

BS EN 13163-2012+A1-2015 | BS EN 826:2013 | BS EN 13501-1:2007+A1:2009 | BS EN 822:2013 | BS EN 823:2013 | BS EN 824:2013 | BS EN 825:2013 | BS EN 826:2013 | BS EN 12089 | BS EN 1603:2013 | BS EN 1602:2013 | BS EN 1605:2013

Classification code : Pr_25_71_63_26

Recycling

Styrene Packaging & Insulation Ltd provide a waste EPS collection service to help recycle as much polystyrene as possible. Please download a copy of our recycling policy to find out how our recycling service can benefit you and the environment.

Certification

We have real pride in the products we supply that is why we go above and beyond to ensure that we surpass all current regulations and offer all the relevant certifications to stand by our expanded polystyrene products. For full details of our certifications please visit our website at www.styrene.biz

Compatibility

Expanded Polystyrene is compatible with most chemicals and materials. For more information about how EPS interacts with different chemicals check [www.styrene.biz/downloads/ SPI_Chemical_Behaviour.pdf](http://www.styrene.biz/downloads/SPI_Chemical_Behaviour.pdf)

Durability

EPS is rot proof and durable, and will remain an effective insulation for the life of the construction. EPS is not affected by bacteria, moulds or fungi, and will not provide nutrient value for insects or vermin.

Environmental Safety

EPS is non-toxic, non-irritant and odourless and It does not contain CFC's or HCFC's. EPS has a Global Warming Potential (GWP) of zero and an Ozone Depletion Potential (ODP) of zero.





Available Stylite Products

Building				Bespoke Cutting & Moulding
Floors Flooring Insulation Boards Suspended Floor Insulation Stylite PlusTherm Underfloor Heating Boards Stylite Gridboard Voidfillers Ventilated Voidfillers	Walls External Wall Insulation EWI Railboards Cavity Fill Bead Cavity Fill Boards SIPs Insulation Insulated Plasterboard Stud Cavity Insulation	Roofing Flat Inverted Insulation SIPs Insulation Tapered Flat Insulation Corrugated Panels Rafter Insulation Laminated Insulation Bonded Insulation	Civil Engineering Marine Pontoon Stylite Clayfill Geofill Special Laminates Laminate Precut Laminate Precut PVC	
Packaging				
Seed trays Produce boxes Fish boxes	Corner protectors Edge protectors Cradles	Channels Cut boxes Tubes	Wedges Flat pads Bottle packs	
Domestic - Commercial - Industrial - Agricultural - Horticultural - Educational				

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Stylite
 INSULATION SOLUTIONS

To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. Please consult your structural engineer directly for design details. The proper use and application for this product must be the responsibility of the user.

Styrene Packaging & Insulation Ltd is registered in England, Company No.1800539 | VAT Registration No.408763928

Stylite

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Manufactured from high density Expanded Polystyrene (EPS) they are designed to match any profiled roof deck and fit tightly into the profile to eliminate air gaps and condensation. Suitable for use on domestic or commercial roof decks constructed with profiled metal or fibre cement the Profiled Roof Insulation Boards provide excellent thermal performance whilst being quick and easy to install.

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