

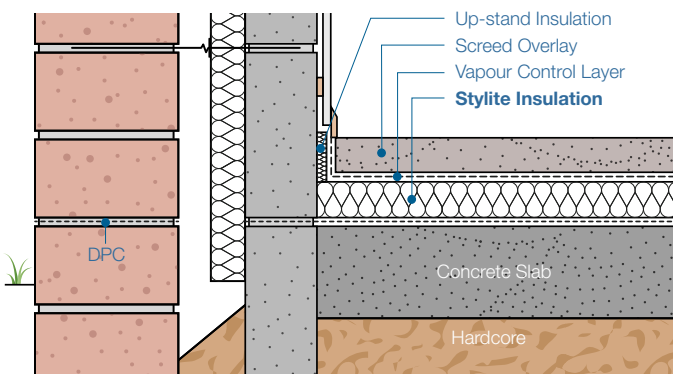
### Stylite Plustherm Flooring Insulation

- Lambda from 0.030 W/mK
- Enhanced performance
- Cost effective
- Can be used on all floor types
- No reduction in performance
- Use above or below DPM
- Use in commercial & residential property
- Minimal water absorption & permeability
- 100% recyclable
- No HFC's, CFC's or HCFC's

**Stylite Plustherm Insulation** contains graphite that considerably increases insulation performance and the reaction to fire rating. It can be used in a wide variety of floor applications, both domestic and industrial, to satisfy the current building regulations and U-Value requirements. The most common applications are below a concrete slab, a screed or chipboard floor finish. Stylite Plustherm insulation boards are available in a range of grades and sizes to suit your individual requirements.



#### Slab On Ground



#### Compatibility

EPS is compatible with cement, concrete, brick, masonry, mortars, plaster and bitumen based damp-proof membranes. It must not be used in contact with membranes or other building materials containing solvents. Stylite expanded polystyrene insulation is compatible with all types of screed.

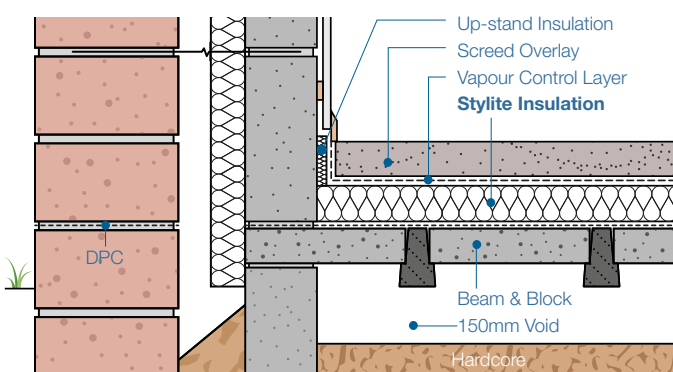
#### Durability

EPS is rot proof and durable, and will remain an effective insulation for the life of the construction.

#### Environmental Safety

EPS is not affected by bacteria, moulds or fungi, and will not provide nutrient value for insects or vermin. It is non-toxic, non-irritant and odourless. 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.

#### Suspended Beam & Block



#### Reaction To Fire Classification

Stylite will achieve reaction to fire Euroclass E. However, the classification achieved when installed in a build will be considerably better.



## Stylite Plustherm Flooring Installation

These installation guidelines have been developed in accordance with the Stylite BBA Certification. All considerations must be checked by your building surveyor to ensure they meet with the regulations of your specific build.

**Stylite Plustherm Flooring can be used in a wide variety of floor builds see our website or contact one of our in-house experts for more details on installation for different build types.**

The first steps ( until indicated ) may be applied to both screed and timber based overlay builds.

**Step 1** - A suitable damp proof membrane should be laid to resist moisture from the ground. Most DPM manufacturers specify that a 150mm overlap be left between sheets and sealed with tape.

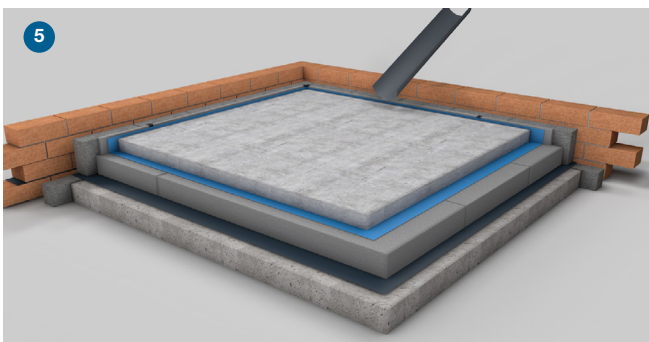
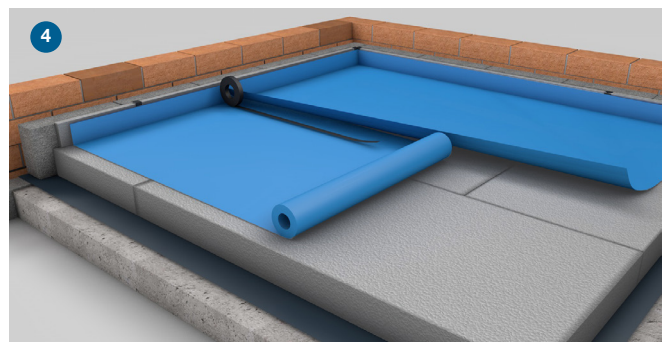
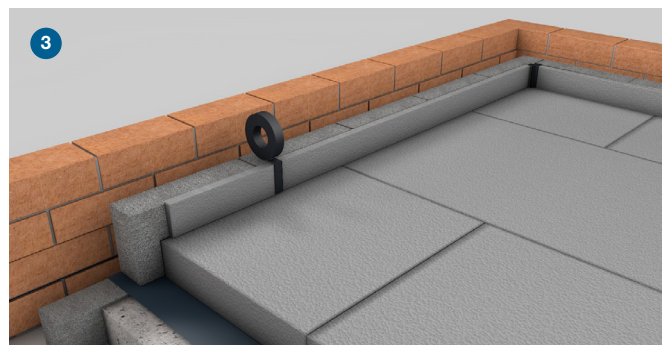
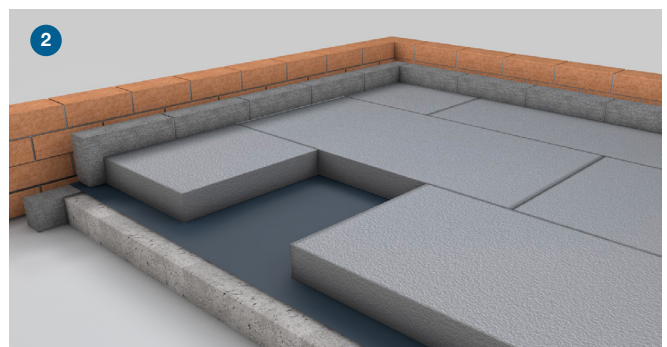
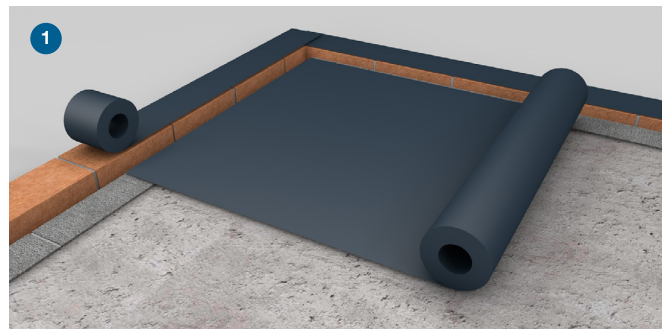
**Step 2 - Stylite Plustherm Boards** are laid with closely butted staggered cross-joints, ensuring complete coverage. The boards must be laid with all cut edges at the perimeter of the wall or some other feature, Eg. pipes & floor access.

### - For Screed and Concrete Overlay -

**Step 3** - Perimeter edge pieces are cut and placed around the edges and taped at joints.

**Step 4** - A polyethylene vapour control layer (min 500 gauge) is laid over the insulation boards with 150mm overlaps. This should be taped at the joints and turned up 100mm at walls.

**Step 5** - Now the appropriate screed or concrete can be poured and compacted ( min 65mm ) following the relevant clauses of BS 8204-1 : 2003.



### - For Timber Based Overlay -

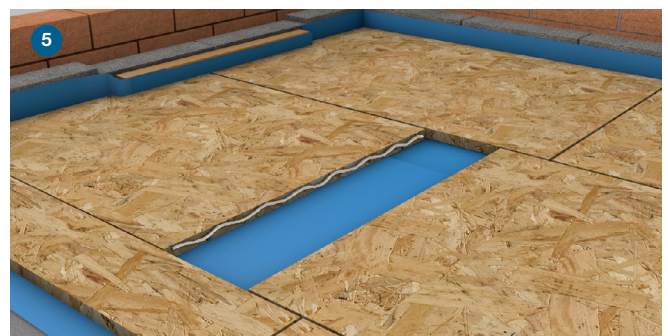
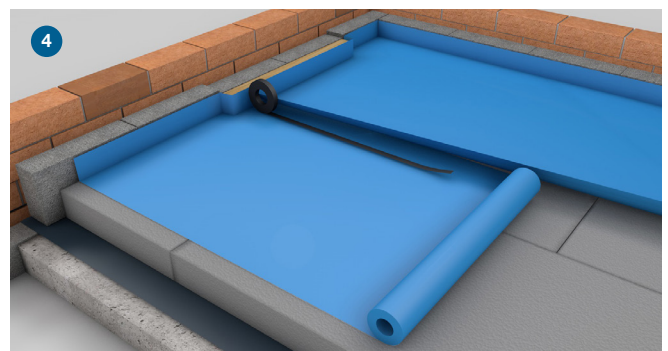
**Step 3** - Before laying the timber overlays, preservative treated timber battens are positioned at doorways and access panels.

**Step 4** - A polyethelene vapour control layer (min 500 gauge) is laid over the insulation boards with 150mm overlaps. This should be taped at the joints and turned up 100mm at walls.

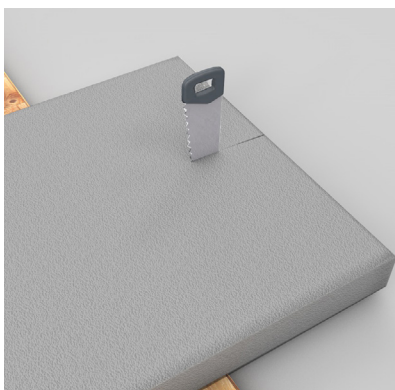
**Step 5** - Your timber based overlay boards are laid with staggered cross joints according to BS EN 12871 : 2010. A 2mm expansion gap is left A PVA adhesive is applied to the board edges before secured.

**Step 6** - Once the overlay boards have been laid, wedges are inserted between the boards and walls to ensure a tight fit while the adhesive dries. Once dried you may replace these with a suitable compressible filler eg. polystyrene.

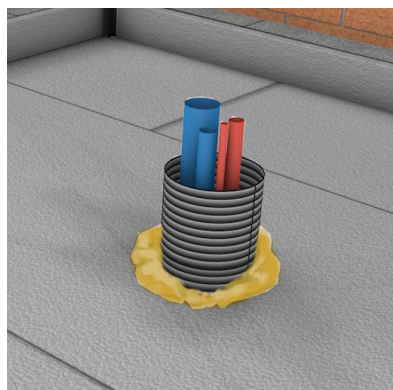
**Step 7** - You can now install your desired floor finish.



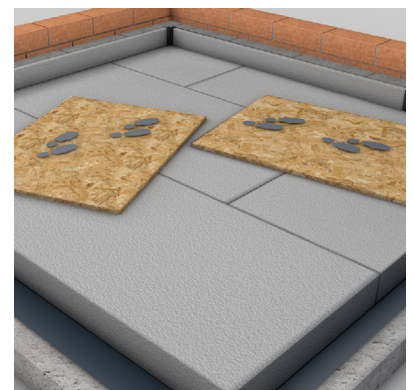
**Cutting Boards** - Boards may be cut to size using a sharp knife or fine tooth saw.



**Pipes** - Where possible pipes must be contained in suitable ducting. Insulation must not come in contact with any electrical or hot pipes.



**Spreader Boards** - Do not walk directly on the boards - ensure spreader boards are laid to protect insulation boards.



### Technical Specification

Features	Plustherm 70	Plustherm 100	Plustherm 150	Standard
Thermal Conductivity ( $\lambda_{90/90}$ )(Wm <sup>-1</sup> K <sup>-1</sup> )	0.030	0.030	0.030	EN 13163
Length Tolerance	L1	L1	L1	EN 822
Width Tolerance	W1	W1	W1	EN 822
Thickness Tolerance	T1	T1	T1	EN 823
Planarity Tolerance	P2	P2	P2	EN 825
Squareness	S1	S1	S1	EN 824
Bending Strength (kPa)	115	150	200	EN 12089
Reaction to Fire	F	F	F	EN 13501-1
- Virgin Bead	E	E	E	EN 13501-1
Water Absorption (mg Pa <sup>-1</sup> h <sup>-1</sup> m <sup>-1</sup> )	0.015 - 0.030	0.009 - 0.020	0.009 - 0.020	EN 13163
Dimensional Stability	DS (N) 5	DS (N) 5	DS (N) 5	EN 1603
Compressive Strength @ 10% (kPa)	70	100	150	EN 826
Compressive Strength @ 1 % (kPa)	21	30	45	EN 13163
BRE Rating	A+	A+	A+	BRE
Element No.	1315320016			BRE

Dimensions	Length mm	Width mm	Thickness mm
Stylite Plustherm Board	2400	1200	< 1200

EN 13163 : 2012 | BS EN 13501 : 1 : 2007 | BS EN 1603 : 2013 | BS EN 12089 : 2013

Classification code : Pr\_25\_71\_63

### Recycling

Here at Styrene Packaging & Insulation Ltd we provide a completely free, scrap EPS pick-up to help us recycle as much polystyrene as possible back into suitable products. Please download a copy of our recycling policy to find out how to get involved.

### 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](http://www.Styrene.biz)



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