

Stylite

Bespoke and standard **Flooring Insulation**- Plustherm & White EPS

Construction - Insulation & building materials

Technical information

V3_16

Pr_25_71_63



TECHNICAL

Stylite Flooring Insulation Boards

60

90

110

130

150

1200

Lambda From 0.030 W/mK

For use with any floor application

Lightweight

Can be cut to any size

No Reduction in performance

Quick & easy install

Minimal water absorption & permeability

Achieves BRE Green Guide A+

100% recyclable

No HFC's, CFC's or HCFC's

STYLITE EXPANDED POLYSTYRENE

From the idea to point of delivery SPI will guide you through the process making it easy for you to get the expanded polystyrene you want when you need it.

Offering technical and design advice on every aspect of your order from product specifications developed by our experts to delivery of your product organised by our dedicated transport department. For more information on the full process from sample production to bespoke product modelling download our full brochure from our website.



Quality

With our expert production and sales team we can offer you quality service and products at some of the cheapest rates available.



Expanding

SPI is always investing in new technologies and products to stay at the forefront of the industry.



Technical

Our sales and technical team are always on call to answer all your EPS queries.



Bespoke

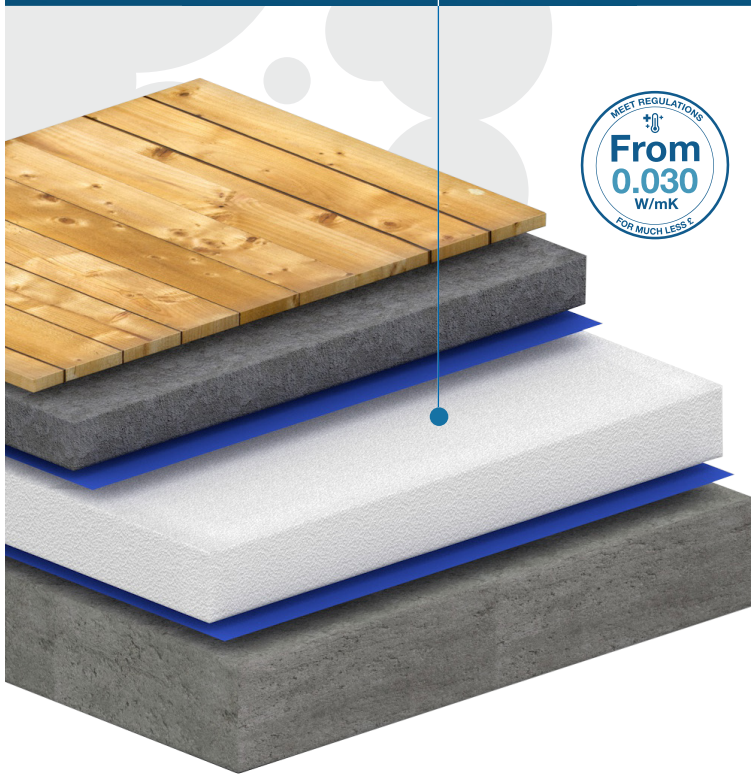
SPI will guide you through any bespoke project, moulded or contour cut, from start to finish.

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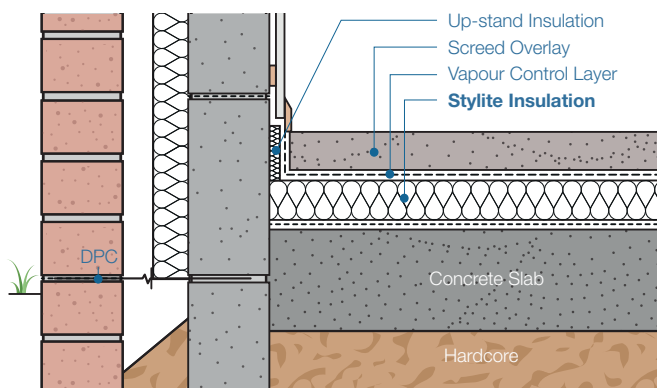
Stylite Expanded Polystyrene Insulation

- **Lambda from 0.030 W/mK**
- **Lightweight**
- **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**

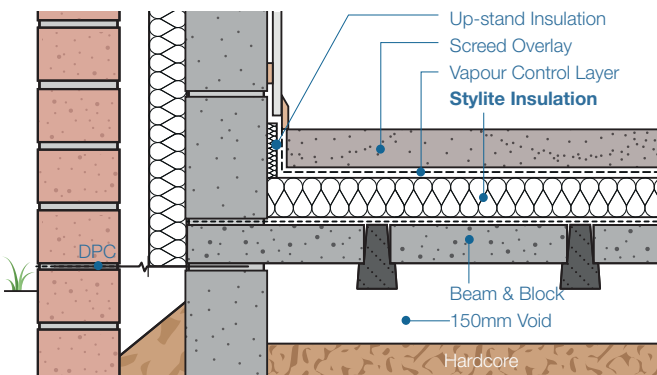
Stylite Floor Insulation can be used in a wide variety of floor applications, both domestic and industrial, to satisfy current building regulations and U-Value requirements. The most common applications are below a concrete slab, screed or chipboard floor finish. The insulation boards are easy to install without the need for special tools and are available in a range of grades and sizes to suit your individual requirements.



Slab On Ground



Suspended Beam & Block



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

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. 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.

Reaction To Fire Classification

Stylite will achieve reaction to fire Euro-class F. However, the classification achieved when installed in a build will be considerably better. We also supply an FRA grade which contains a Fire retardant additive and achieves reaction to fire Euro-class E.



Stylite Flooring Installation Guide

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 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.

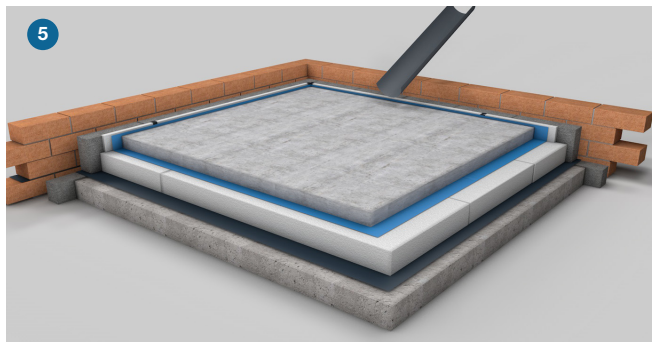
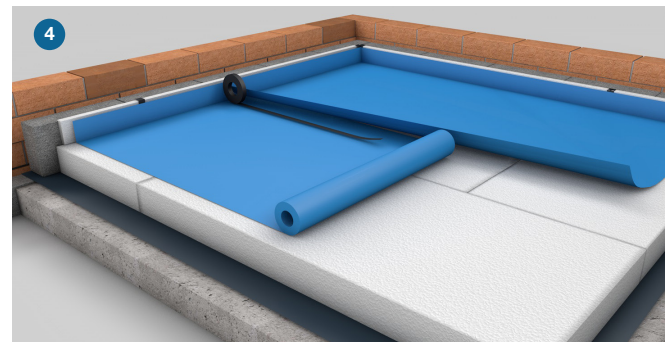
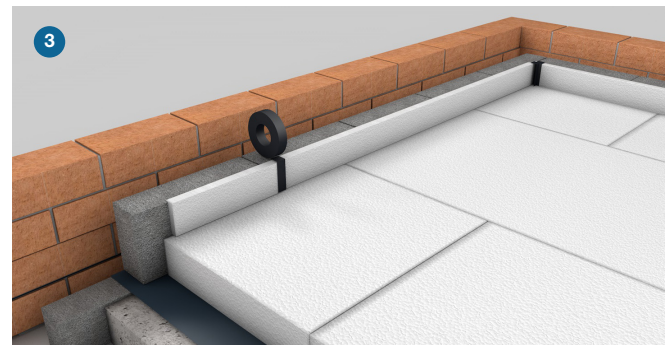
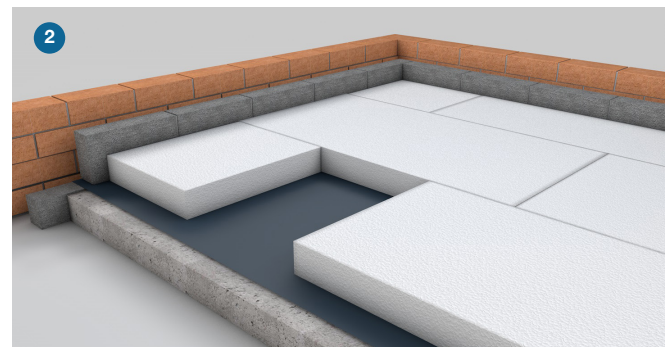
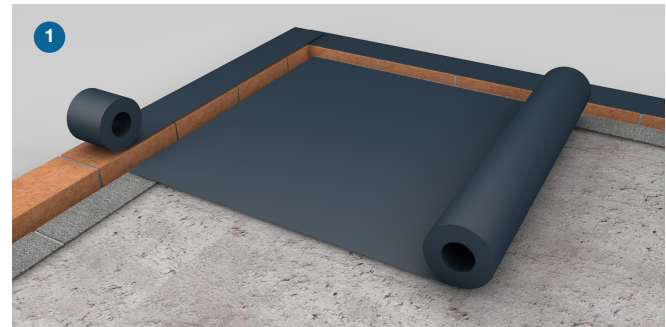
Step 2 - Stylite Boards are laid with closely butted staggered cross-joints, ensuring complete coverage. The boards must be laid with all cut edges at the perimeter of the wall or some other feature, Eg. pipes & floor access.

- 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 -

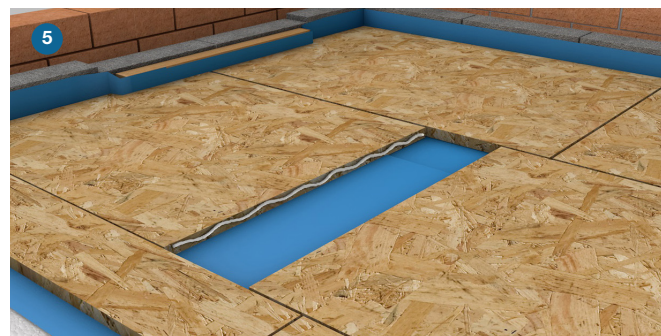
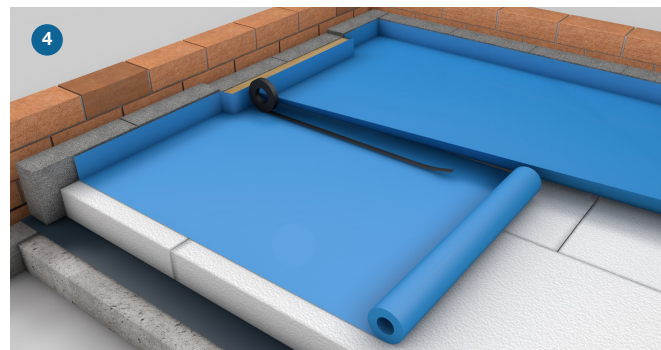
Step 3 - Before laying the timber overlays, preservative treated timber battens are positioned at doorways and access panels.

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.

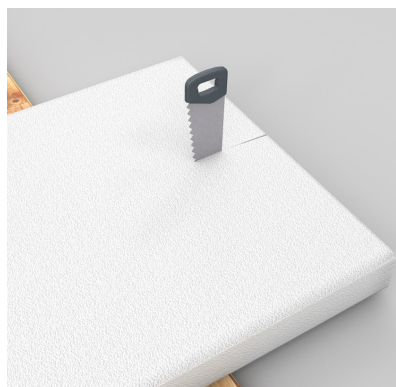
Step 5 - Your timber based overlay boards are laid with staggered cross joints according to BS EN 12871 : 2010. A 2mm expansion gap is left A PVA adhesive is applied to the board edges before secured.

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.

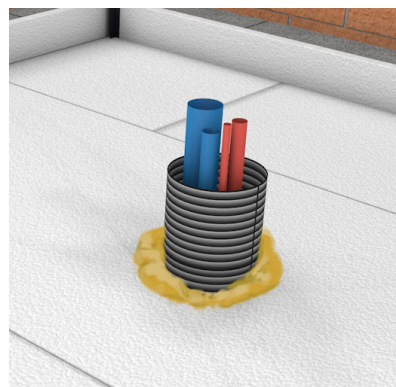
Step 7 - You can now install your desired floor finish.



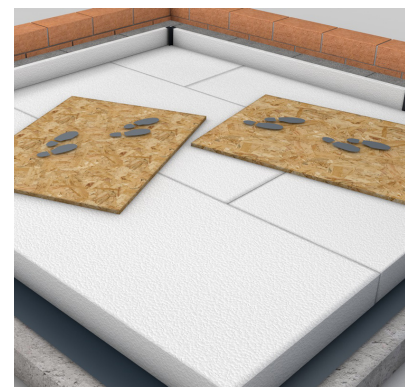
Cutting Boards - Boards may be cut to size using a sharp knife or fine tooth saw.



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	EPS 70	EPS 100	EPS 150	EPS 200	EPS 250	EPS 300	Plustherm	Standard
Thermal Conductivity ($\lambda_{90/90}$)(Wm ⁻¹ K ⁻¹)	0.038	0.036	0.034	0.034	0.034	0.034	0.030	EN 13163
Length Tolerance	L1	L1	L1	L1	L1	L1	L1	EN 822
Width Tolerance	W1	W1	W1	W1	W1	W1	W1	EN 822
Thickness Tolerance	T1	T1	T1	T1	T1	T1	T1	EN 823
Planarity Tolerance	P2	P2	P2	P2	P2	P2	P2	EN 825
Squareness	S1	S1	S1	S1	S1	S1	S1	EN 824
Bending Strength (kPa)	115	150	200	250	300	350	150	EN 12089
Reaction to Fire	F	F	F	F	F	F	E	EN 13501-1
- Virgin Bead	E	E	E	E	E	E	E	EN 13501-1
Water Absorption (mg Pa ⁻¹ h ⁻¹ m ⁻¹)	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	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	EN 1603
Compressive Strength @ 10% (kPa)	70	100	150	200	250	300	100	EN 826
Compressive Strength @ 1 % (kPa)	21	30	45	60	75	90	30	EN 13163
BRE Rating	A+	A+	A+	A+	A+	A+	A+	BRE
Element No.	815320022	815320023	815320024	815320025	N/a	N/a	1315320016	BRE

Dimensions	Length mm	Width mm	Thickness mm
Stylite 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 provide a 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



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Available Stylite Products

Building				Bespoke Cutting & Moulding
Floors Flooring insulation boards Suspended floor insulation Stylite Plustherm Underfloor heating boards Stylite Gridboard Void Fillers Ventilated Voidfillers	Walls External wall insulation EWI Railboards Cavity fill bead Cavity fill boards SIP's insulation Insulated plasterboard Stud cavity Insulation	Roofing Flat inverted Insulation SIP's insulation Tapered flat insulation Corrugated panels Rafter insulation Laminated Insulation Bonded Insulation	Civil Engineering Marine pontoon Stylite clayfill Voidfillers Special Laminates Laminate precut Laminate precut PVC	
Packaging				
Seed tray Produce box Fish box	Corner protectors Edge protectors Cradles	Channels Cut boxes Tubes	Wedge Flat pad 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

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Stylite Floor Insulation can be used in a wide variety of floor applications both domestic and industrial.

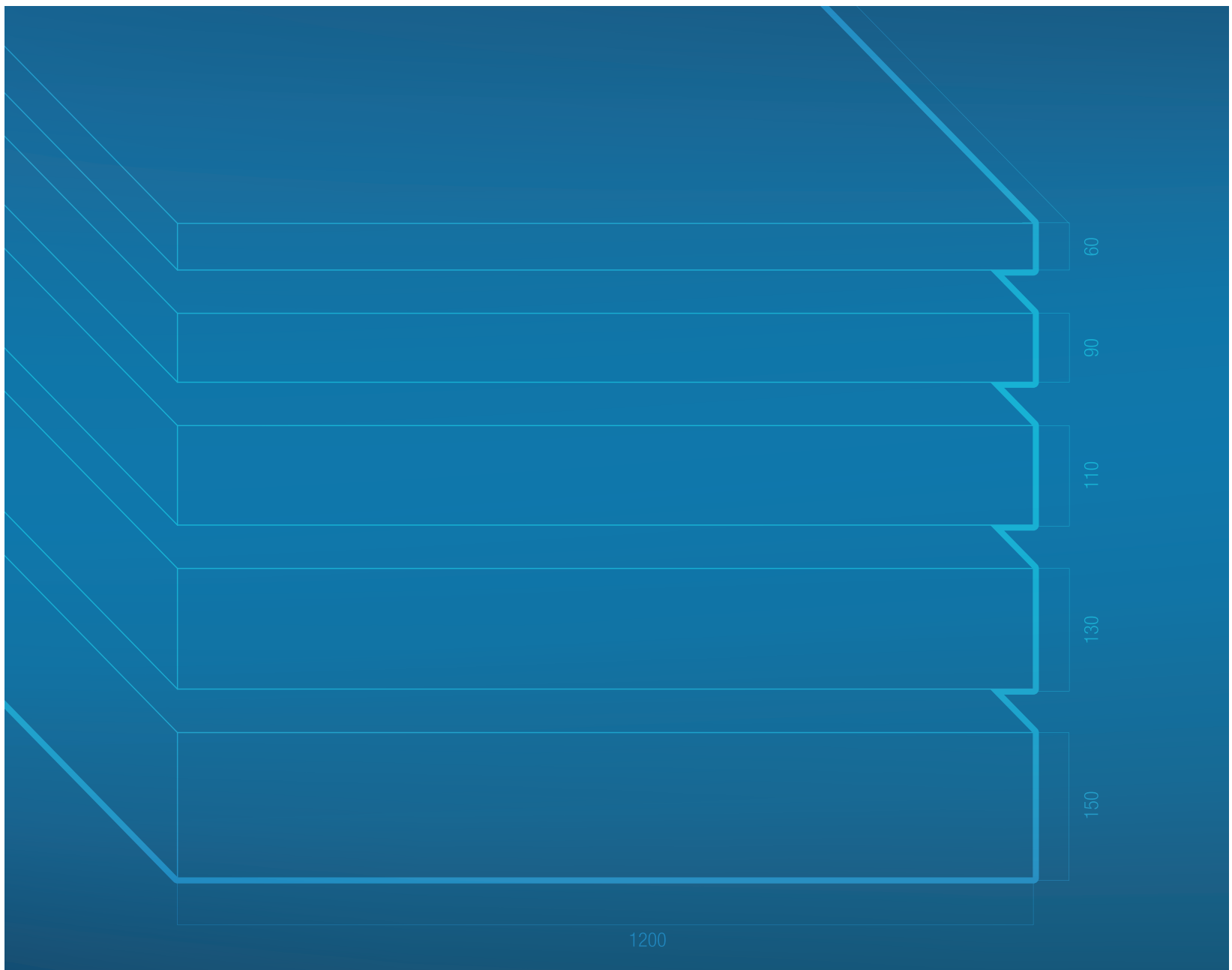
The most common applications are below a concrete slab, a screen or a chipboard floor finish. The insulation boards are extremely easy to install and are available in range of grades and sizes to suit your individual requirements. We can also provide you with a free consultation including U-value calculation to suit your specific floor configuration.

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