

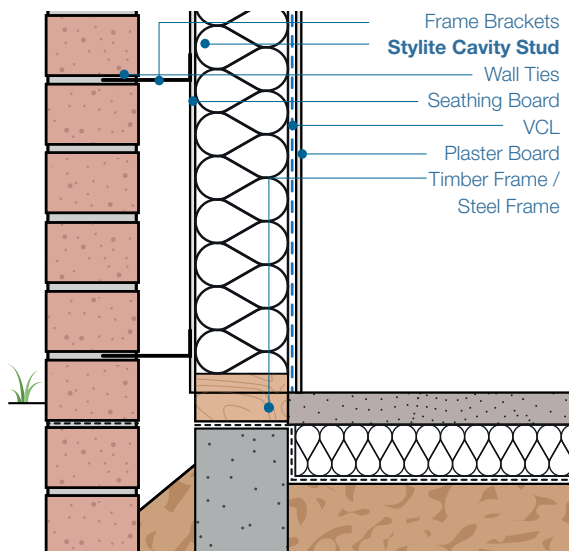
Stud Wall Cavity Insulation

- Available with or without foil face
- High cost to performance ratio
- Reduces cold bridging
- Lightweight
- Stops water penetration
- Quick & easy installation
- Use in commercial & residential property
- No water absorption
- Minimal water permeability
- **100% recyclable**
- **No HFC's, CFC's or HCFC's**



Stylite Stud Wall Cavity Insulation is to be incorporated in between a stud cavity of a new build or refurbishment timber / metal frame wall. The stud cavity boards are designed to minimise any cold air penetration, thermally protecting the inner leaf of the building. The foil creates a watertight layer over the insulation which is sealed at horizontal and vertical joints. **For more information on Stylite EPS call us now on 01274 691 777 or visit www.styrene.biz**

Typical Stylite Stud Wall Cavity build up



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, while never losing any thermal or compressive properties over its lifetime.

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.

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. The fire rating of a wall containing the boards will depend heavily on the type and attributes of the build up.

Stylite Stud Cavity Wall Installation

These installation guidelines have been developed in accordance with the Standard details for timber frame walls. All considerations must be checked by your building surveyor to ensure they meet with the regulations of your specific build.

Stylite Stud Wall Cavity Insulation can be used in a wide variety of wall builds see our website or contact one of our in-house experts for more details on installation for different build types.

Once Your timber frame is installed to your supporting wall via ties you may now begin to install you insulation inbetween the stud joists.

Step 1 - Measure the centres between your joists, to ensure you will get a tight fit. Centres are typically 400 or 650 mm wide, if needed trim your board to size.

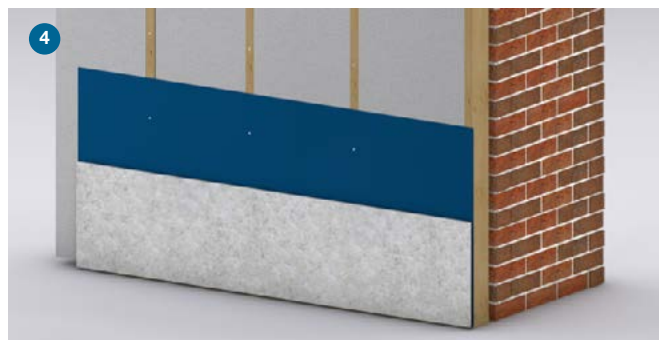
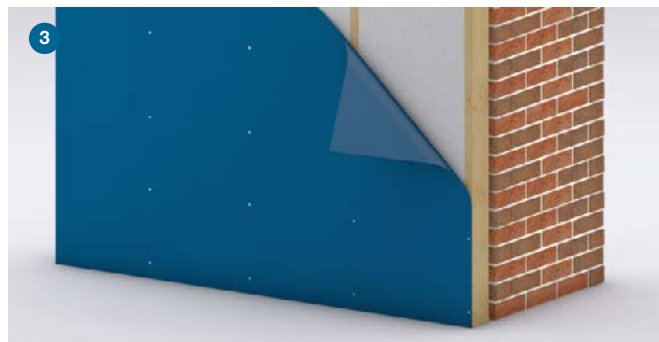
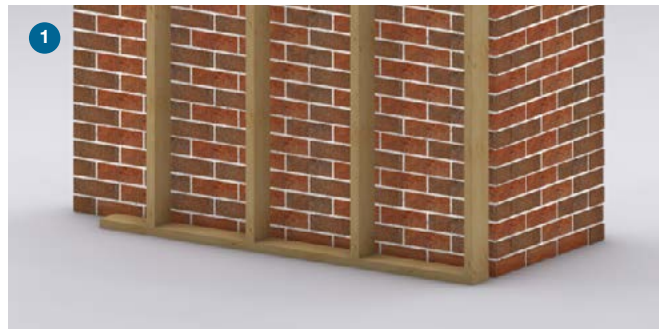
Please Note Stylite Expanded Polystyrene Boards do not require any specialty skills or tools to use. You can cut the boards with a hot wire or a fine toothed saw.

Step 2 - Once you are happy that the stud centres match your EPS dimensions you may begin to install your boards between your joists.

Step 3 - Once you have installed all your EPS boards you can now start to install your adequate vapour control layer directly into the stud frame.

Please Note an extra VCL may be required to the cold side of the insulation.

Step 4 - You can now install your wall finishing and complete the wall insulation installation.



Stylite Stud Wall Cavity Insulation Typical U-Values

To ensure correct U-values the thickness of the cavity insulation boards have been calculated on a 50mm ventilated cavity. The following U-Value calculations are produced in accordance with the “conventions for U-Value calculations”. To ensure the validity of your calculations,

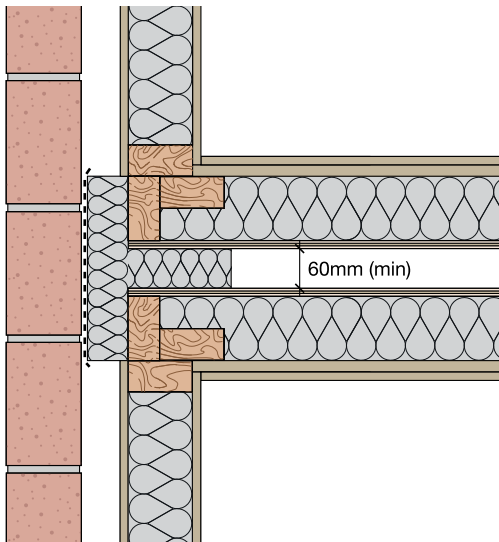
each U-Value should be generated according to [BS EN ISO 6946](#) , [BS EN 1996-3 : 2006](#). Default values of BRE 443
For a specific U-Value calculation or pricing information on stylite PStud Wall Cavity Insulation contact our technical and sales teams on 01274 691 777.

Stylite Stud Wall Insulation Typical Standard Details

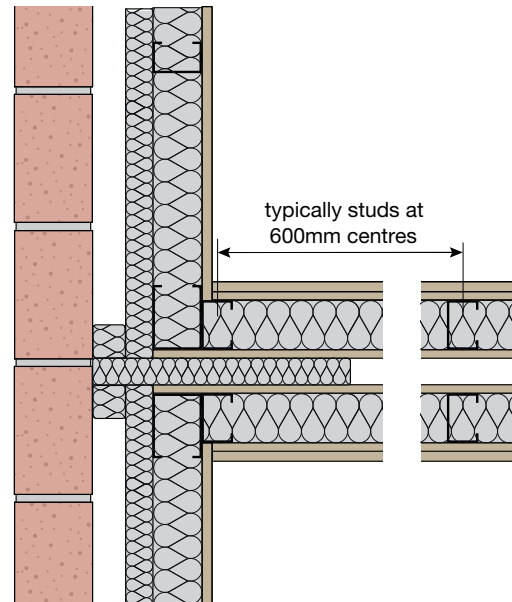
The robust standard details for both timber and metal frames, showing the typical methods used to install an external flanking wall and typical service installation.

For specific information regarding typical installation methods contact our technical and sales teams on 01274 691 777.

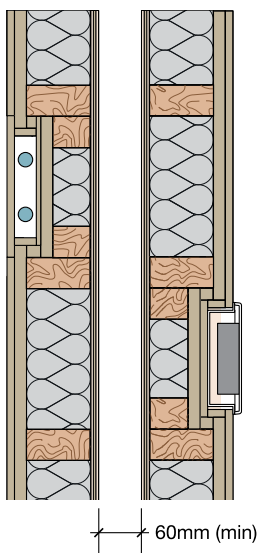
Timber Wall External Flanking Wall Junction



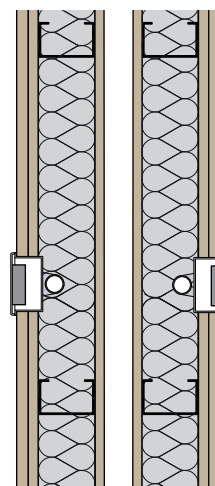
Metal Wall External Flanking Wall Junction



Timber Wall Typical services



Metal Wall Typical services



Technical Specification

Features	EPS 70 / SD FRA	Plustherm	Standard
Thermal Conductivity ($\lambda_{90/90}$)(Wm ⁻¹ K ⁻¹)	0.038	0.030	EN 13163
Length Tolerance	L1	L1	EN 13163
Width Tolerance	W1	W1	EN 13163
Thickness Tolerance	T1	T1	EN 13163
Planarity Tolerance	P2	P2	EN 13163
Squareness	S1	S1	EN 13163
Bending Strength (kPa)	BS115	BS150	EN 13163
Reaction to Fire	F	E	EN 13501-1
Water Vapor Permeability (mg/ Pa.h.m)	0.015 - 0.030	0.009 - 0.020	EN 13163
Water Vapour Diffusion Resistance Factor μ	20-40	30-70	EN 13163
Dimensional Stability	DS (N) 5	DS (N) 5	EN 1603
Compressive Stress @ 10% (kPa)	70	100	EN 13163
Compressive Stress @ 1 % (kPa)	21	30	EN 13163
Tensile Strength (kPa)	TR100	TR150	EN 13163
BREEAM Rating	A+	A+	BRE
Typical Dimensions	Length mm	Width mm	Depth mm
Stylite Cavity Partial-Fill	2400	1200	50 > 400

EN 13163 : 2012 | BS EN 13501 : 1 : 2007 | BS EN 6946

Uniclass Code
Pr_25_71_63_26

Recycling

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

SPI have real pride in the products we supply. We surpass all current regulations and independent certification that ensures a quality product. For full details of our certifications please visit our website at www.styrene.biz



Visit product webpage

