



GM External Solutions Ltd

Foam Insulation GM External Solutions Ltd

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Foam Insulation GM External Solutions Ltd

We have over 15 years of experience in the construction sector. Our company have tremendous experience in curtain wall, windows, and doors installation so we know exactly how important it is improving the energy efficiency by applying appropriate insulation to your home. Foam Insulation GM External Solutions is made up of friendly team with a lot of knowledge and experience.

Our insulation can be use on new building, retro-fit, domestic, commercial and agricultural.

Foam that we use are provided by ECON Polyurethanes who are the exclusive in UK and Ireland distributor of BASF construction polyurethanes. From offices in Dublin and Ashford ECON coordinates the specification and application of BASF manufactured polyurethane spray, injection, and specialist coatings through a network of accredited contracting companies.

We have team fully trained as **The WALLTITE® Approved Contractors scheme (FOAM MASTERS)** and we are fully compliant with British Standards, Code of Practice and Building Regulations.

Key benefits of BASF spray foam systems are:

- Energy efficiency – it is speedy , efficient solution coupled with significant lower U-values then other conventional insulation material
- Air tightness – the continuous spray leaves a minimal amount of surface area without insulation resulting in an airtight building envelope of low permeability, and without the need for supplementary material.
- Sustainability – by virtually elimination air leakage. WALLTITE® with its closed cell structure helps control the movement of vapour and moisture through the building, reducing the risk of condensation and mould.
- Design freedom – provides the specifier with complete design freedom as the spray foam adapts to the shape of the substrate providing an ideal solutions for insulating difficult area such as profiled and curved roofs.
- Occupier comfort – WALLTITE ® makes a significant contribution to a comfortable indoor climate by creating a draft free environment that prevents the infiltration of pollutants, toxins and allergens.
- Reliability – WALLTITE® is only installed by BASF-trained professionals.



GM External Solutions Ltd

We are using following products:

ENERTITE® – this is a low-density open cell spray that is ideal for roof, timber frame, wall and floor applications. Applied as a liquid, this water blown system expands to many times its original size completely filling all voids helping to provide a continuous thermal and airtight building envelope.

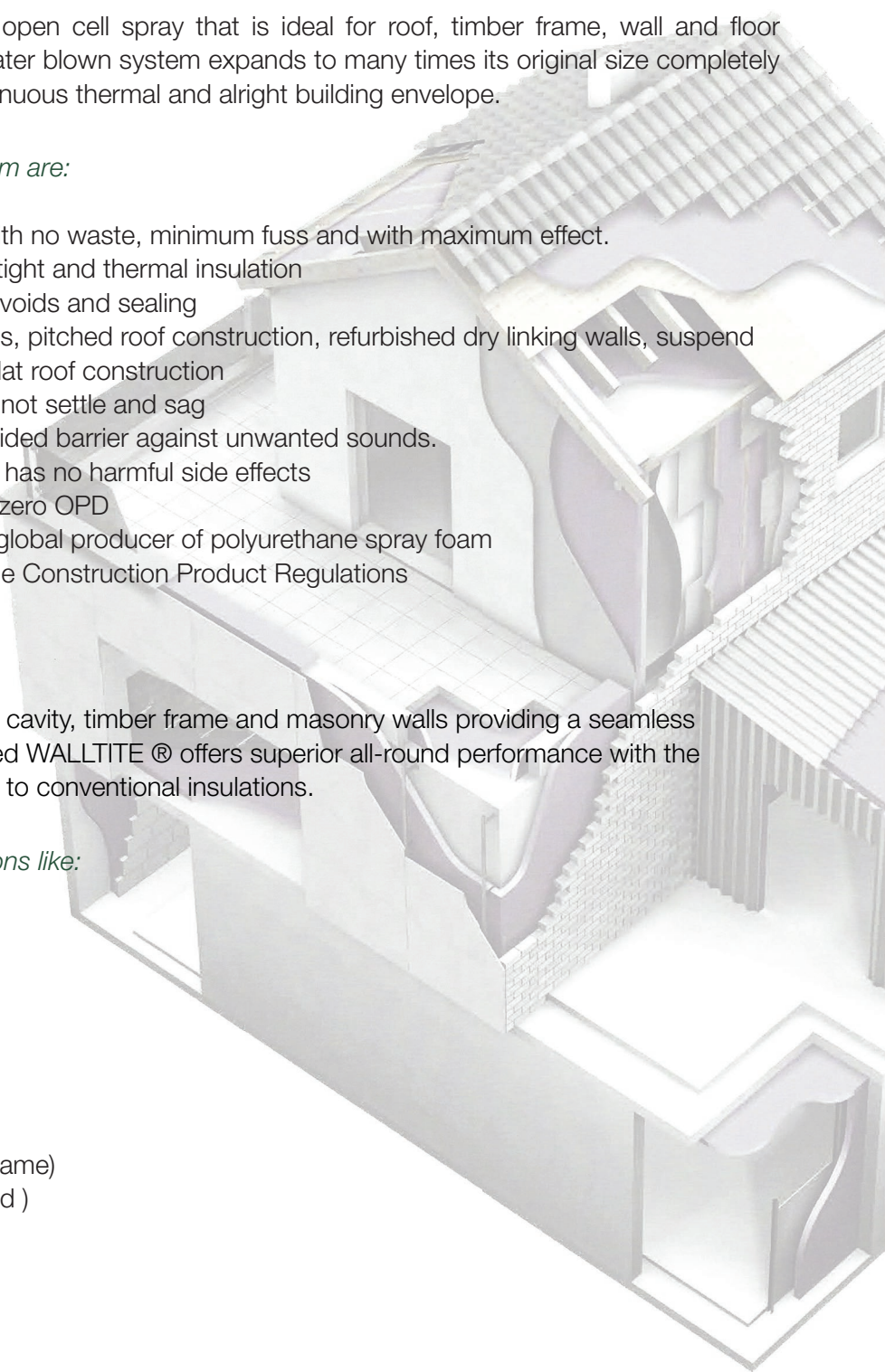
Main features and benefits of that system are:

- Quickly and economically applied with no waste, minimum fuss and with maximum effect.
- Cost effective option for superior airtight and thermal insulation
- Rapidly expands to 100 times filling voids and sealing
- Ideal for new build timber frame walls, pitched roof construction, refurbished dry linking walls, suspend timber floors, ceiling insulation and flat roof construction
- Will last lifetime of building and will not settle and sag
- Improves energy efficiency and provides barrier against unwanted sounds.
- No VOCs, CFCs, formaldehyde and has no harmful side effects
- The system has a low GWP (1) and zero OPD
- Manufactured by BASF the leading global producer of polyurethane spray foam
- Fully CE Marked and conforms to the Construction Product Regulations

WALLTITE® – closed cell insulation for cavity, timber frame and masonry walls providing a seamless airtight solution. Spray or injection applied WALLTITE® offers superior all-round performance with the added benefit of airtightness compared to conventional insulations.

WALLTITE® is ideal for many applications like:

- New pitched roof
- Existing pitched roof
- Room in a roof
- New timber frame wall
- Masonry cavity wall
- External Soffit
- External roof
- Refurbished masonry wall (timber frame)
- Refurbished masonry wall (steel stud)
- Concrete slab ground floor



enertite®

A low density open cell spray applied polyurethane foam insulation ideal for roof, timber frame, wall and floor applications.

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CE

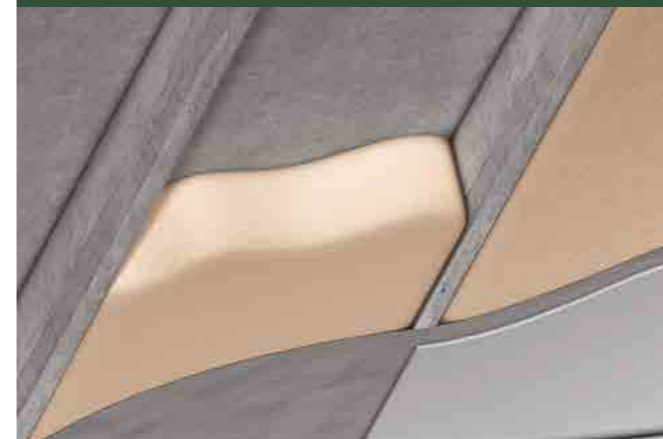
Features and benefits

- Quickly and economically applied with no waste, minimum fuss and maximum effect
- Cost effective option for superior airtight and thermal insulation
- Rapidly expands to 100 times filling voids and sealing
- Ideal for new build timber frame walls, pitched roof construction, refurbished dry lining walls, suspended timber floors, ceiling insulation and flat roof construction
- Will not settle or sag and will last lifetime of building
- Improves energy efficiency and provides a barrier against unwanted sounds
- No VOCs, CFCs, formaldehyde and has no harmful side effects
- The system has a low GWP (1) and zero ODP
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Applications

ENERTITE® is installed by trained BASF Foam Masters specialists, using custom-designed equipment. On application this two part system rapidly expands to fill the void, creating a continuous airtight thermal barrier, thereby providing superior performance. ENERTITE® is ideal for a wide range of applications including:

✓ Pitched roofs with counterbattens



✓ Pitched roofs with ventilation layers



✓ Timber frame walls



✓ Refurbished walls



✓ Attic floors



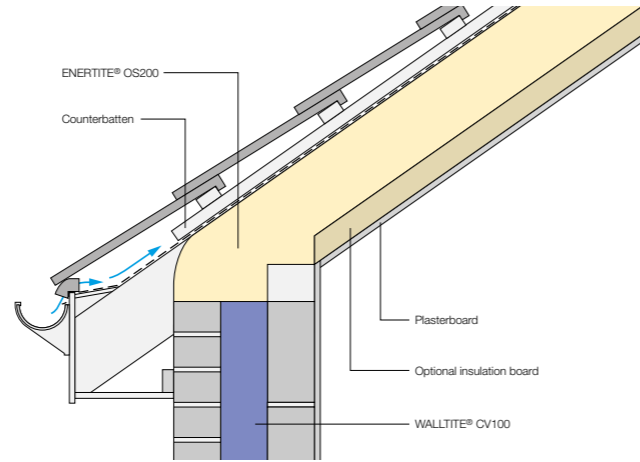
✓ Suspended floors



Typical details

Pitched roof with counterbattens

ENERTITE® is suitable for use in the sloping ceilings of a building where it is typically sprayed between the rafters at the required depths. Continuity of insulation from rafter to wall should be maintained at eaves level. For both non-breathable (HR) and breathable (LR) roofing felts it is recommended that the Foam Master, builder and designer satisfy requirements of BS 5250: 2011, Control of Condensation in Buildings and current Building Regulations for ventilation in buildings. Where necessary rafter slides must be installed between the rafters to maintain sufficient air paths between the membrane and insulation. For habitable rooms, installation of a vapour control layer and lining boards should be applied to the underside of the rafters.

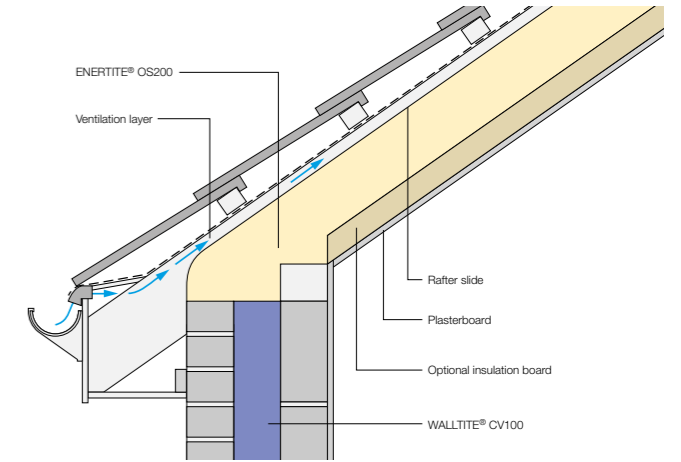


Typical U-values

Roof build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Pitched roof with roof covering, breathable membrane, ENERTITE® between rafter, VCL and plasterboard	100	0.41
	150	0.28
	200	0.22
	250	0.17
	300	0.15
Pitched roof with roof covering, breathable membrane, ENERTITE® between rafters and 38mm insulation and plasterboard below rafter	100	0.23
	150	0.18
	200	0.15
	250	0.13
	300	0.11

Pitched roof ventilation layer

ENERTITE® is suitable for use in the sloping ceilings of a building where it is typically sprayed between the rafters at the required depths. Continuity of insulation from rafter to wall should be maintained at eaves level. For both non-breathable (HR) and breathable (LR) roofing felts it is recommended that the Foam Master, builder and designer satisfy requirements of BS 5250: 2011, Control of Condensation in Buildings and current Building Regulations for ventilation in buildings. Where necessary rafter slides must be installed between the rafters to maintain sufficient air paths between the membrane and insulation. For habitable rooms, installation of a vapour control layer and lining boards should be used on the inside of the rafters.

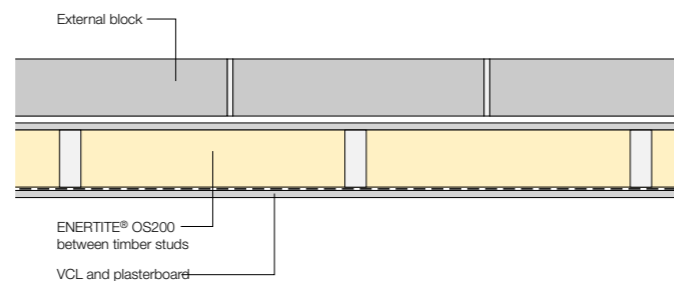


Typical U-values

Roof build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Pitched roof with roof covering, breathable membrane, ENERTITE® between rafter, VCL and plasterboard	100	0.41
	150	0.28
	200	0.22
	250	0.18
	300	0.15
Pitched roof with roof covering, breathable membrane, ENERTITE® between rafters and 38mm insulation and plasterboard below rafter	100	0.23
	150	0.18
	200	0.15
	250	0.13
	300	0.11

Timber frame walls

ENERTITE® is the perfect insulation material for use in any timber frame wall application. The foam is applied to the open surface of the substrate before the finished wall covering is fixed. While ENERTITE® spray foam is completely airtight when sprayed between the timber studs, additional airtight materials may be required for timber to timber, and timber to concrete details.

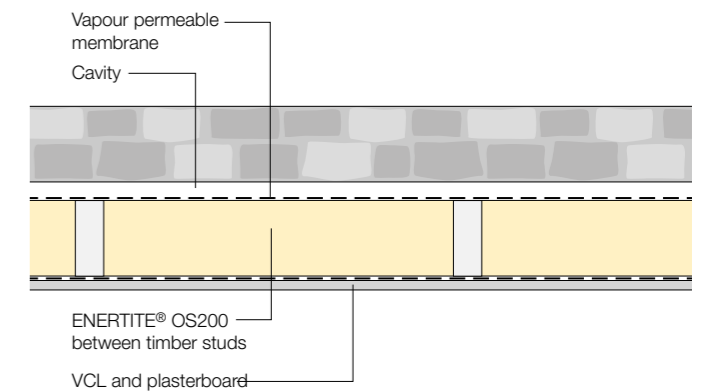


Typical U-values

Wall build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Timber frame with exterior racking board and breathable membrane with ENERTITE® between studs, VCL and plasterboard	100	0.38
	140	0.29
	200	0.22
Timber frame with exterior racking board and breathable membrane with ENERTITE® between studs, 38mm insulation and plasterboard fixed to stud	100	0.22
	140	0.19
	200	0.15

Refurbished masonry walls

ENERTITE® is suitable for use as a thermal insulation barrier on refurbished masonry walls. It is recommended that the open cell product should not come in contact with the external cold wall surface. A cavity should be formed between the back of the timber or metal stud and the internal face of the external wall. A vapour control layer and lining board should cover the ENERTITE® on the warm side of the insulation.



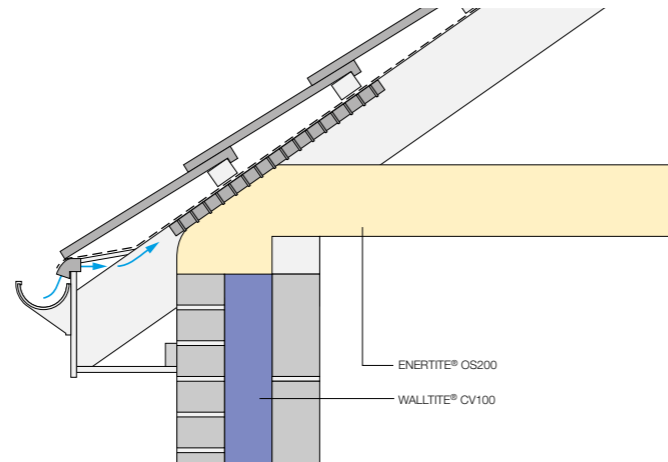
Typical U-values

Wall build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Internal framing not fixed to solid wall with ENERTITE® sprayed between studs onto membrane, VCL and plasterboard internally	75	0.43
	100	0.35
	125	0.29
	150	0.25
	175	0.22
Internal framing not fixed to solid wall with ENERTITE® sprayed between studs onto membrane and 38mm insulation board VCL and plasterboard internally	75	0.24
	100	0.21
	125	0.19
	150	0.17
	175	0.16

Typical details

Attic floors: insulation at ceiling level

ENERTITE® is sprayed in between ceiling joists and onto the attic lining board. Additional counter joists may be required for construction of walk ways if ENERTITE® exceeds the depth of the joist. Eaves ventilation must be maintained in line with Building Regulations and BS5250 :2011, Code of practice for Control of Condensation in Buildings.

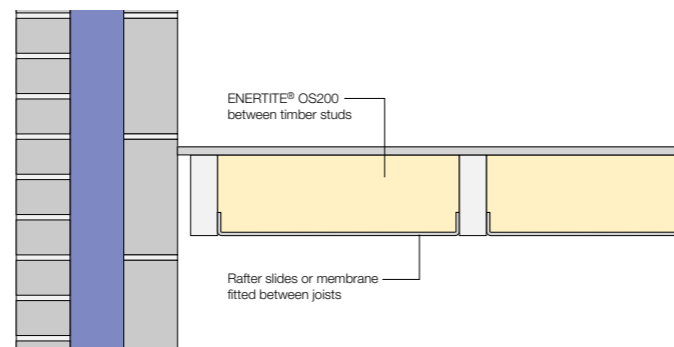


Typical U-values

Roof build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Ceiling joists with ENERTITE® sprayed between joists, VCL and plasterboard	100	0.39
	125	0.33
	150	0.28
	175	0.24
	200	0.22
Ceiling joists with ENERTITE® sprayed between joists and additional 150mm of ENERTITE® above joists, VCL and plasterboard	100	0.16
	125	0.15
	150	0.14
	175	0.13
	200	0.12

Suspended timber floor

ENERTITE® is suitable for installation between the floor joists in suspended timber floor construction. This should be installed by the Foam Master from above the floor or under the floor provided clear access can be gained. Ventilation slides can be fixed between floor joists to prevent foam from falling below joists. ENERTITE® foam should not come in contact with the ground below and the ventilation path under the floor joists must be maintained.



Typical U-values

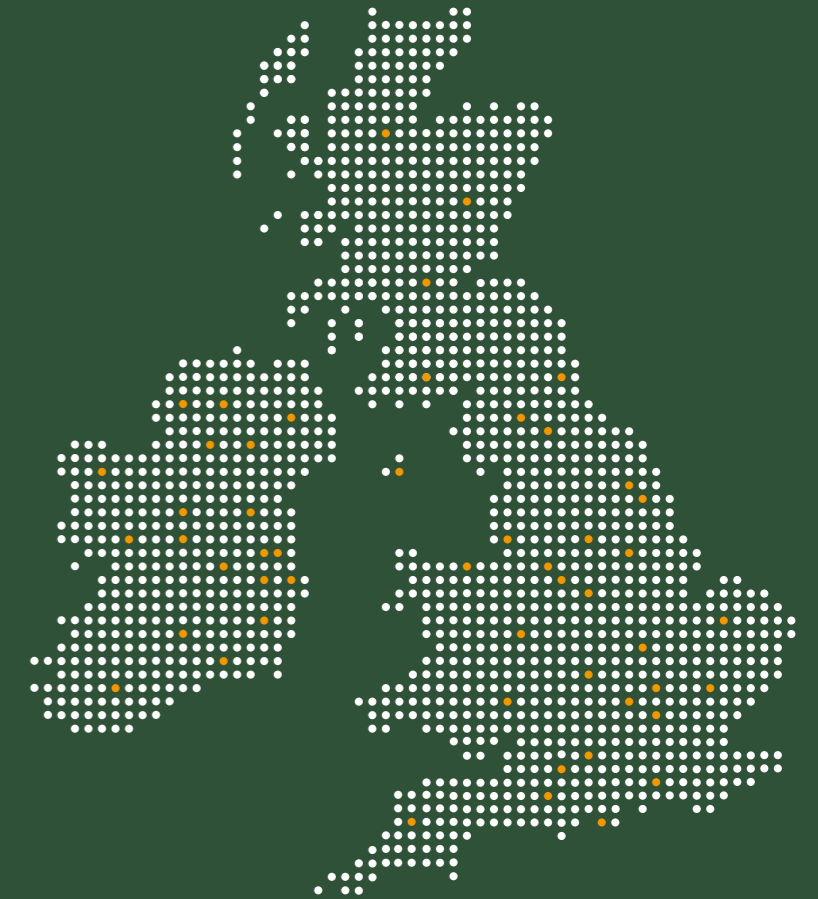
Floor build-up	ENERTITE® thickness (mm)	U-value (W/m²K)
Timber floor joists with ENERTITE® sprayed between joists Exposed perimeter/floor area = 20%	150	0.18
	200	0.15
Timber floor joists with ENERTITE® sprayed between joists Exposed perimeter/floor area = 40%	150	0.21
	200	0.17

Foam Masters

Approved Contractors

Every high performing system requires high performance installation to guarantee satisfaction. In order to ensure the highest standard application, BASF spray foam systems are installed by fully trained and qualified spray Foam Masters.

A Foam Master is part of a well established and growing consortium of independent local spray foam contractors across the UK, Ireland and the Channel islands.



FOAM MASTERS

Before receiving the Foam Masters accolade contractors must attend a rigorous training programme located at BASF's UK Training Centre in Alfreton. The training programme includes application techniques, building regulations, health and safety requirements and much more. Graduating from the Foam Masters academy takes time and commitment. Upon completion each contractor is issued with a photo identity card and included in the Foam Masters database.

Why choose a Foam Master?

Foam Masters have become highly skilled installers of the BASF spray foam product range, guaranteeing the client that the project will be completed to the highest quality and with the best product available. Each Foam Master is a local independent contractor with a local reputation to maintain and as part of the Foam Masters network, offers consistent level of service and quality throughout the UK and Ireland.

What they offer

- A comprehensive product range including cavity wall injection, closed and open cell foam manufactured by the leading supplier of polyurethane solutions for systems.
- Identify your needs and offer the most appropriate product to suit your application.
- Technical advice, U-value calculations and condensation risk analysis supported by both ECON and BASF.
- You benefit from the financial stability and quality assurance of the highly trained Foam Masters professional with a work and business profile that meets the stringent quality standards of a renowned global corporation.

