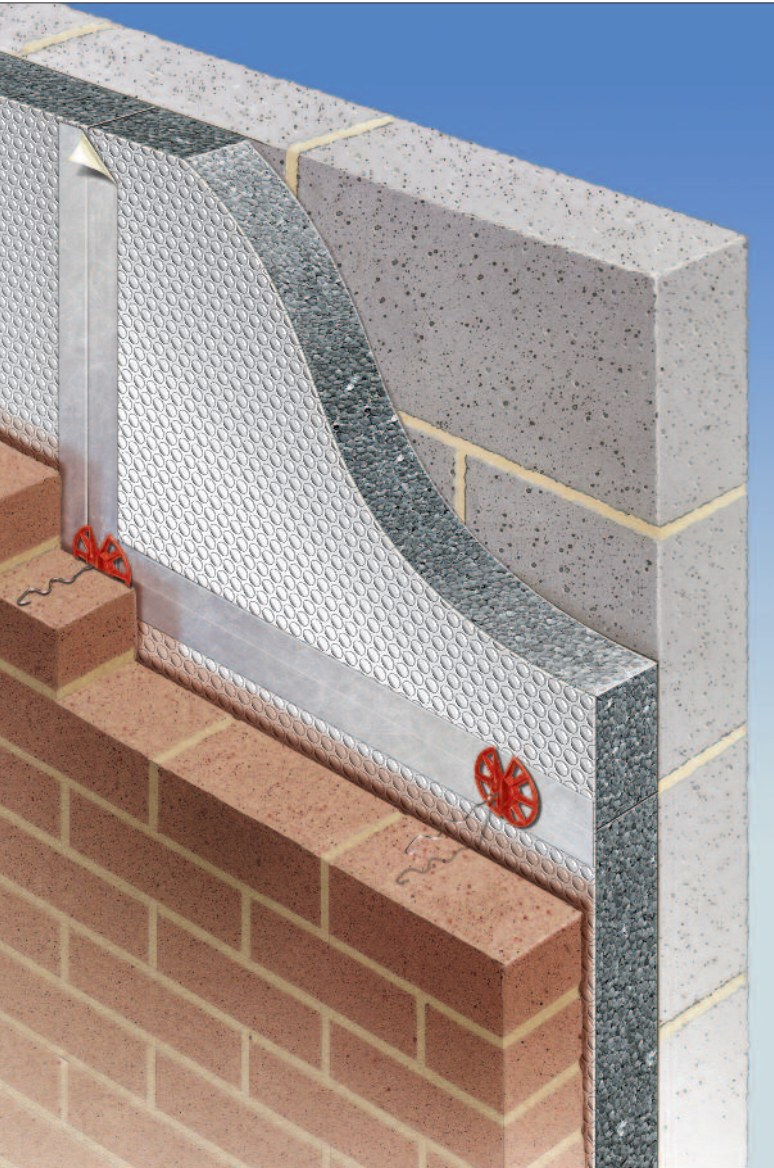


CAVITY WALL INSULATION - THERMAL



Approved Document
Part L 2013 Solutions



Technical Handbook
Section 6 2015 Solutions



Approved Document
Part L 2014 Solutions

Full-fill Cavity Wall Insulation & cavity rain barrier solution

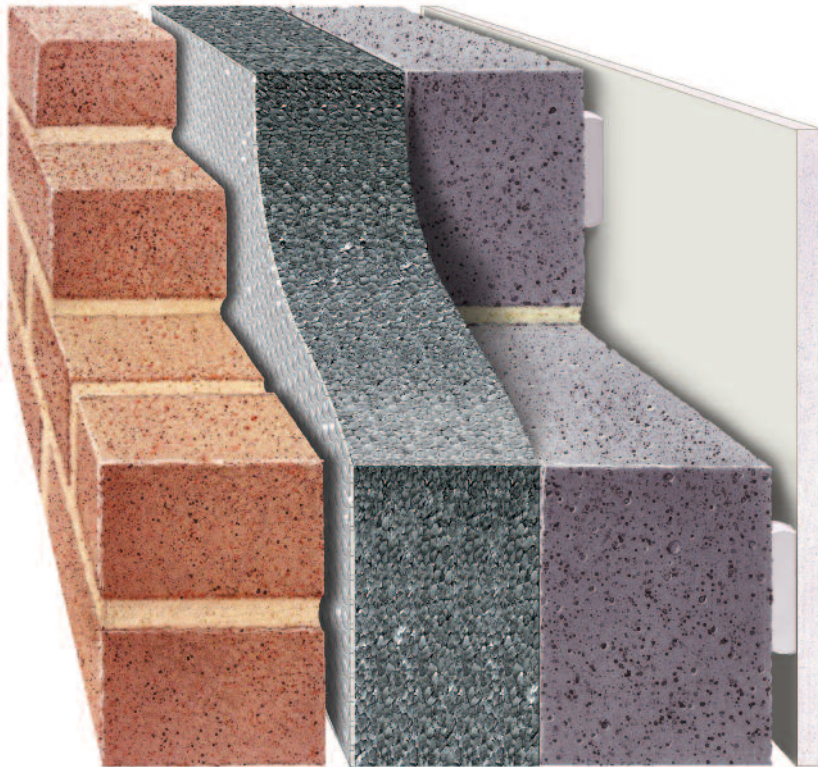
- Lower U-values
- Reduced cavities
- BBA Certified
- Dense block solutions



For help choosing the right product for your project please contact Thermal Economics
Technical Department on 01582 544255

For all our Acoustic & Thermal insulation products visit: www.thermal-economics.co.uk

The new 100mm cavity insulation solution



Providing lower U-values with reduced cavity sizes

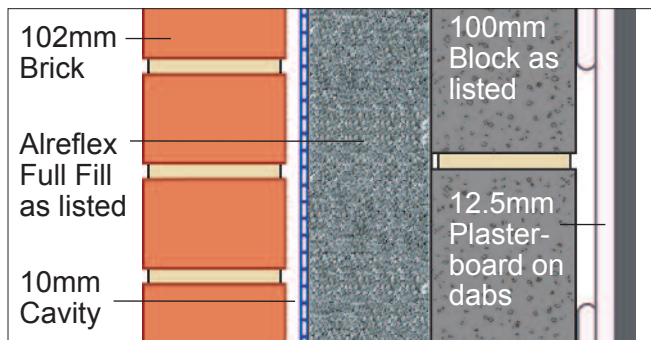
Alreflex Full Fill insulation provides an extremely cost effective way to achieve very low U-values and exceeds the requirements of Part L and Section 6, even when using dense blocks.

- 93/2861 BBA Certified insulation.
- Reduces thickness of wall providing cost savings in many areas.
- ODP = Zero
GWP = Less than 5

U-value examples

Typical wall constructions

The U-values in the table are based on a wall construction of:



Part L or Section 6 compliance is achieved when 90mm boards are used in a typical 100mm cavity.

- **England only**- Meets minimum requirements of A.D. Part L 2013.
- **England & Scotland**- Meets minimum requirements of A.D. Part L 2013 (England) & Section 6 2015 (Scotland).
- **All of UK**- Meets minimum requirements of all building regulations across the UK.

Building Regulations require new build walls to achieve the following area weighted averages:

Part L 2013 (England) -
0.30W/m²K

Section 6 2015 (Scotland) -
0.22W/m²K

Section 6 2015 (Wales) -
0.21W/m²K

		Alreflex Fullfill thickness (mm)			
		65	90	115	140
Block K-value (W/mK)	1.13	0.32	0.25	0.21	0.18
	0.49	0.31	0.25	0.20	0.17
	0.25	0.30	0.24	0.20	0.17
	0.19	0.29	0.23	0.19	0.17
	0.11	0.27	0.22	0.18	0.16

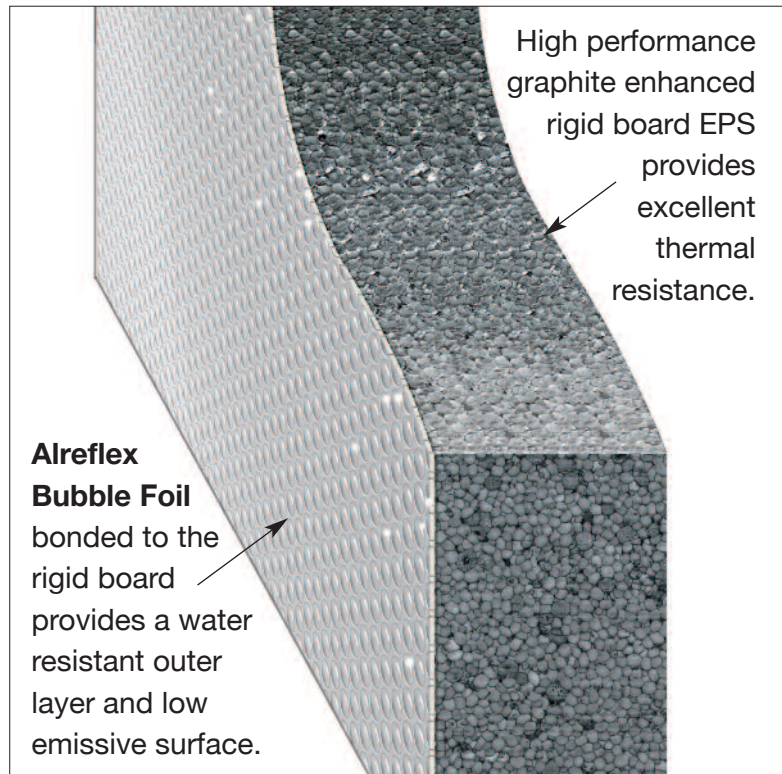
Lowering U-values & reducing cavity sizes

Although it is classed as a full fill product, our Alreflex Full Fill solution incorporates a minimal 10mm cavity between the boards and the outer leaf.

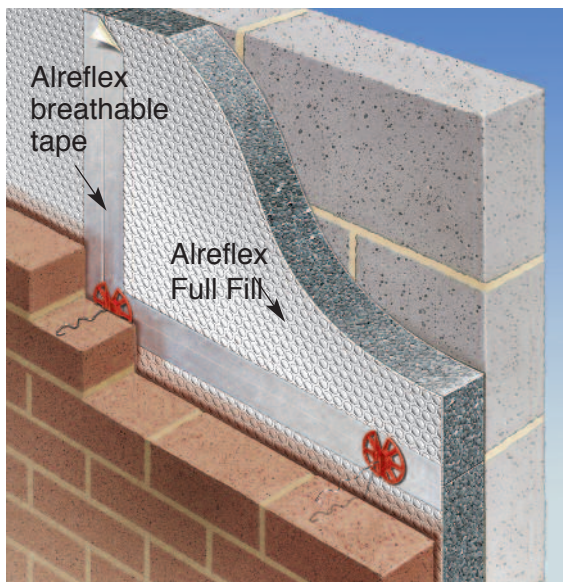
It is the first insulation of its kind to combine the insulating properties of Graphite Enhanced EPS and the insulating cavity rain barrier properties of Alreflex bubble foil.

Keeping the overall thickness of a wall to the minimum has many advantages including:

- Reduce footprint of dwelling.
- Increase sellable floor area.
- Reduce cost of lintels, wall ties, cavity trays etc.

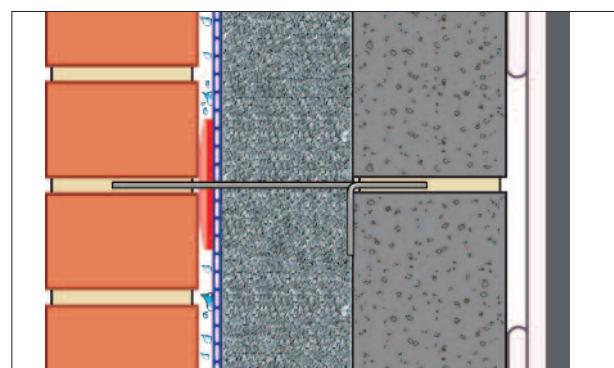
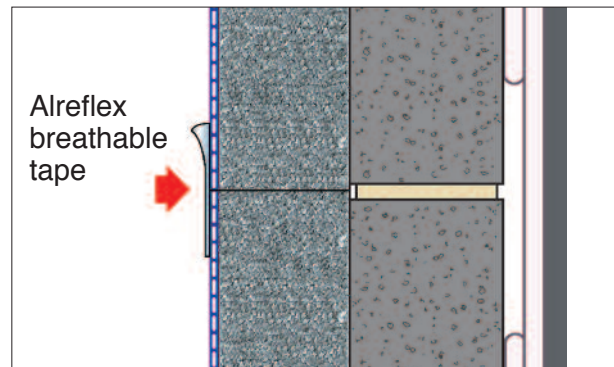


BBA tested for the prevention of water ingress



Alreflex Breathable Tape is used at board joints to create a waterproof surface that has been tested by the BBA to measure water ingress.

The taped joint system was subjected to the BBA cavity wall water ingress test. The results showed that there was zero water penetration across the cavity.

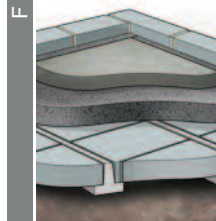


Thermal Solutions



ALREFLEX PLATINUM beamshield PLUS

High performance, BBA certified Beam & Insulated Block system for achieving very low ground floor U-values.



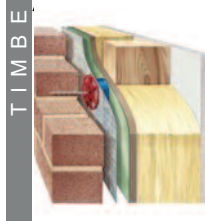
PLATINUM ground floor insulation

Extremely cost effective, BBA certified ground floor insulation. Provides significant savings over PUR/PIR boards with equivalent performance.



Therma breathe

The only spun bond, Class W1 insulating Breather membrane available in the UK. Designed to improve U-values without increasing structure thickness.



PERFO REFLEX

Vapour permeable, insulating membrane. Designed to improve U-values without increasing structure thickness. Ideal for Section 6 2015 compliance.



ULTRATHERM

High performance, BBA certified cavity wall insulation and rain barrier. Designed for achieving the very lowest wall U-values. Ideal for use where the structure thickness needs to be kept to a minimum.



RAFTER THERM

Cost effective, LABC approved pitched roof insulation system. Designed for use in non-ventilated roof structures.

Acoustic Solutions



Isorubber Base

6mm thick acoustic matting for use below screeds or timber floor finishes.

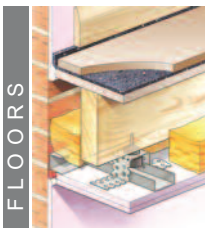
Robust Details:
E-FC-4
E-FC-14



Isorubber Top

3mm thick acoustic overlay for use over concrete or timber floors.

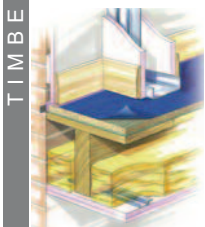
Robust Details:
E-FC-9
E-FC-10



Isonic Timberfloor

Acoustic system for timber floor constructions.

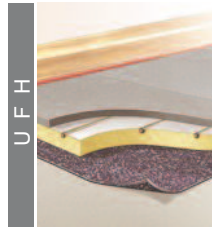
Suitable for new build or refurb projects.
Part E compliant



Isonic Platformfloor

25mm thick acoustic deck. Comprising 18mm T&G chipboard and a 7mm acoustic layer.

Suitable for use in new build and refurb projects.
Robust Detail: FFT5



Isorubber HP3

3mm thick acoustic matting for use below screeds or timber floor finishes.

Ideal for use with all types of under floor heating system.

Robust Detail: E-FC-12



Isorubber Top

Suitable for use below all types of vinyl floor finish including:

Tiles
Planks
Sheets

Independently tested for wear and lifting.

Technical Services

Thermal Economics highly qualified and experienced Technical Department can provide a range of calculations and assessments including:

SAP Calculations

PSi Assessments

Condensation Calculations

U-value Calculations

CSH / BREEAM Assessments

Energy Performance Certificates

We can design cost effective solutions that meet your needs and comply with the latest building regulations.

We can also help to provide bespoke, high performance solutions for planning requirements, CSH/BREEAM credits or to overcome project specific issues.

We have recently saved a house builder over £1000 per dwelling, by simply revising the thermal insulations being used. This equates to a £75,000 saving across the site.

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W: www.thermal-economics.co.uk



Visit our website for mobile friendly installation guides

**Thermal
Economics**
THERMAL & ACOUSTIC INSULATION TECHNOLOGY

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For help choosing the right product for your project please contact Thermal Economics Technical Department on 01582 544255

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