

Internal insulation system  
for solid walls

**ultr****therm**<sup>®</sup>


# Insulate your home with minimum fuss and disruption

Ultratherm is an internal insulation system for solid walls. It allows walls to be insulated without costly alterations to skirting boards, windows, covings and radiators.

Although only 12mm thick, Ultratherm typically improves the thermal resistance of solid brick walls by 40%, creating a more comfortable living environment and reducing energy bills.

Ultratherm meets Building Regulations for use where it is not functionally or technically possible to install thicker insulation systems.

With an expected service life in excess of 25 years, Ultratherm offers a long-term and practical solution to energy efficiency.



Ultratherm is installed over existing plaster and retains the character of your property. Flexible tiles allow even the most awkward shapes and curves to be insulated.

Ultratherm can be plastered using various base coat plasters to increase impact resistance or simply skim coated to minimise loss of space. Once plastered, Ultratherm creates a smooth wall surface ready for decoration.

Ultratherm can also be used in conjunction with other insulation systems, allowing you to design the ideal insulation system for your home.

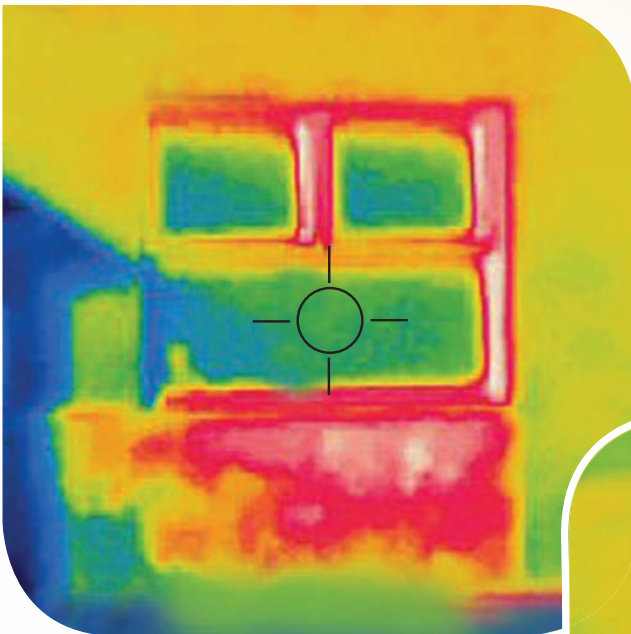
Innovative, insulated trim beads are used against door and window frames to reduce the problem of cold bridging. Specially designed reveal tiles allow Ultratherm to be installed with minimal impact on doors and window openings.

Ultratherm can also be installed with or without removing skirting boards and decorative coving by using plaster trim beads.



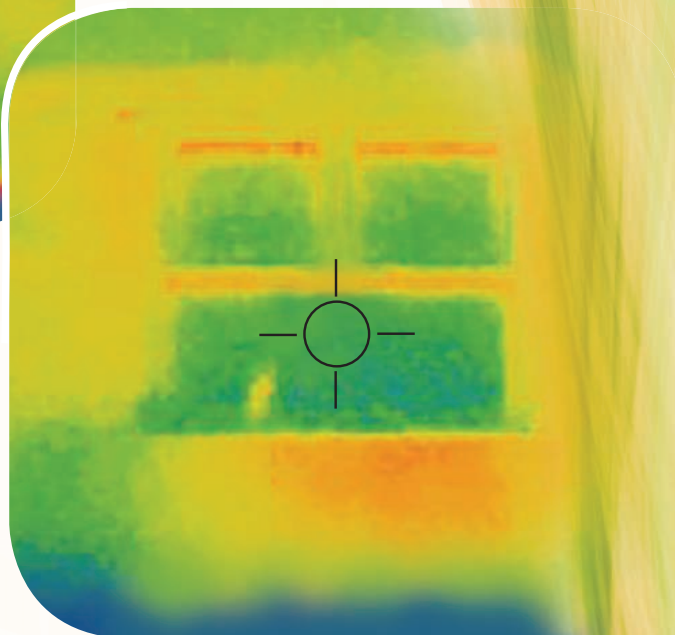
# Increase the comfort of your home and reduce energy bills

Installing Ultrotherm provides immediate benefits. Unwelcoming, cold rooms are transformed into comfortable, warm spaces. Warmer rooms also provide a healthier environment and reduce the risk of unsightly mould.



Heat loss through an un-insulated solid wall

The same wall following application of Ultrotherm





Each year costly energy escapes through un-insulated walls. Turning up the heating carries an increasingly high financial burden and the trend is likely to continue with soaring energy prices.

Installing Ultrotherm allows you to turn down your heating thermostat and reduce the cost of heating your home.

#### *Cost Savings in typical properties*

		Fuel Cost Savings (£ p.a.)	
Property type	Bedrooms	Gas	Electricity
End terrace house	2	136	444
Semi-detached house	3	115	376
Detached house	4	414	1350

#### *Typical energy cost for gas and electricity*

Fuel	Cost (p/kWh )
Electricity	14.5
Gas	4.45

Obtained from DECC, National Statistics Publication (2012).  
Figures based on 9" solid brick walls.

All calculations provided by  
The University of Nottingham  
Environmental Technology Centre





# Caring for the environment by reducing carbon emissions

Insulating solid walls increases their thermal resistance and reduces heat loss. Carbon savings are achieved through the reduced use of heating including gas and electricity.

Poorly insulated walls allow heat to escape into the atmosphere, adding to the problem of global warming.

Ultratherm is manufactured using existing technologies and recyclable materials.


## Carbon emission savings in typical properties

		Emission savings (kg CO <sub>2</sub> e p.a.)	
Property type	Bedrooms	Gas	Electricity
End terrace house	2	626	1806
Semi-detached house	3	530	1530
Detached house	4	1903	5493

## Carbon emissions from gas and electricity

Fuel	Emissions (kg CO <sub>2</sub> e/kWh )
Electricity	0.58982
Gas	0.20435

Carbon emissions obtained from DECC's GHG Conversion Factors for Company Reporting. Factors for 2012. Figures based on 9" solid brick walls.



Ultratherm is manufactured from breathable polyurethane foam using state of the art technology under an ISO 9001: 2008 certified quality management system.

Ultratherm has undertaken stringent fire testing at the Building Research Establishment and has been awarded a Class 0 fire rating.

Installing Ultratherm is installing peace of mind.

**bre**

BS 476: Part 6 1989 + A1:2009 (Fire propagation) - Class 1

BS 476: Part 7 1997 (Surface spread of flame) Building Regulation Approved Document B - Class 0

The foam used in the manufacture of Ultratherm also meets the following British Standards:

BS5852 Ignition source crib 7

BS6853 Annex B.2 – Toxic fume

BS853 D8.5 – Smoke density (3metre cube test)





[www.safeguardultrotherm.com](http://www.safeguardultrotherm.com)

The Ultrotherm logo is a registered trademark  
Ultrotherm is a European Community Registered Design 001992983- 0001/2/3/4  
Patent Pending

T: +44(0) 1403 210204

F: +44(0) 1403 217529

E: [info@safeguardeurope.com](mailto:info@safeguardeurope.com)