

2011 Edition

ACTIS  
THIN MULTIFOIL INSULATION

# A COMPREHENSIVE GUIDE TO THIN MULTIFOIL INSULATION

Product Catalogue



EUROPEAN TECHNICAL  
APPROVAL IN PROCESS  
Registration N° 12.01/12

ROOFS  
ATTICS  
FLOORS  
WALLS

**ACTIS**  
TOMORROW'S INSULATION TODAY

# ACTIS, THE BENCHMARK FOR THIN REFLECTIVE MULTIFOIL INSULATION

Since 1980 ACTIS has been the benchmark for thin reflective multifoil insulation, **which now comprises 15% of the French insulation market and 6% of the UK insulation market.**

ACTIS invests 5% of its company turnover in Research and Development, collaborating closely with several laboratories and research establishments to ensure that the company keeps abreast of technology and produces new products that consistently satisfy its customers' requirements.

To measure the thermal performance of its products, ACTIS conducts comparative tests under real conditions. Once installed, ACTIS products live up to their performance expectations.

ACTIS places significant emphasis on the quality of its products. Certified ISO 9001 since 2005 for the design, manufacture and marketing of its products as well as for testing in real conditions, ACTIS recently achieved the international Environmental Management Standard ISO 14001.

Operating in 8 European countries with the support of a distribution network of 10,000 points of sale (specialist insulation distributors, builders merchants and DIY superstores), ACTIS currently owns 65% market share of the European thin reflective multifoil market: over 70 million m<sup>2</sup> of ACTIS product has already been installed in Europe and over 10 million m<sup>2</sup> in the UK to the considerable satisfaction of its users.

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Choosing effective insulation today is an important decision which will make a considerable difference to your comfort and to the durability of your property.

**The purpose of insulation is to create a barrier against the transmission of cold or heat through walls, floors or roofs.**



## A few reminders about heat loss

- Heat transfer always occurs from a hot zone to a cold zone.
- Heat transfer only occurs when there is a temperature difference.
- Heat transfer can be represented physically by a thermal flux.
- The purpose of insulation is to reduce thermal flux through walls, floors or roofs.

### In winter

Because the temperature inside the building is higher than the temperature outside, the heat produced by the heating system tends to escape outside: this is known as heat loss.

**The purpose of insulation is to reduce that heat loss.**



### In summer

In full sunlight, roof tile temperature can reach 60°C and roof slate temperature can rise to 90°C. The roof covering emits a considerable amount of thermal radiation towards the inside of the dwelling, which has an adverse effect on the thermal comfort of its occupants.

**The purpose of insulation is to block the passage of this radiant heat.**



**Thermal insulation is therefore desirable for several reasons:**

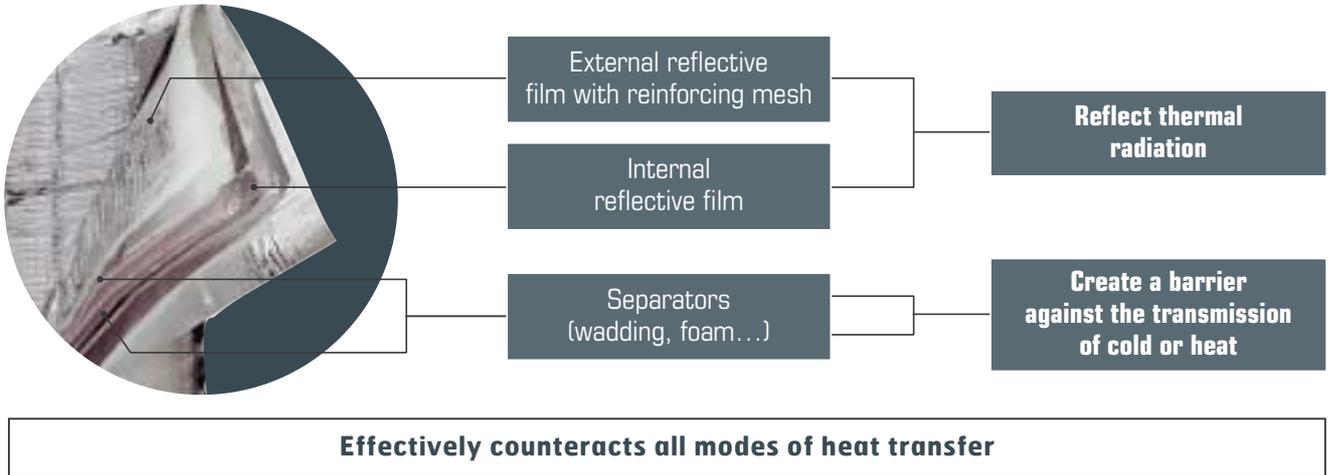
- to improve the occupants' thermal comfort in summer as well as in winter, whatever the temperature changes;
- to save energy;
- to help reduce greenhouse gas emissions;
- to preserve the durability of buildings and in so doing, enhance the longevity of properties.

# WHAT IS THIN MULTIFOIL INSULATION?

ACTIS thin multifoil insulation is made up of multi-layered reflective films, only a few microns thick. These layers, which are separated by wadding or foam are sewn together to form a thin insulating blanket.

**It is three to five times thinner than traditional thick insulation (including air spaces) but performs to the same level.**

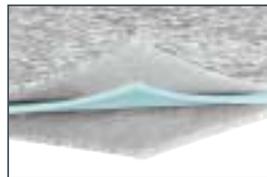
These products are perfectly suitable for insulating residential, commercial and industrial buildings, in roofs, attics, walls and floors.



The strength of ACTIS insulation products is founded on the intrinsic quality of the individual components of the product and the way that they are put together.

## There are two types of thin reflective insulation products:

- **Bubble wrap** based insulation products, used as additional insulation because of their limited thermal efficiency.



- **Multifoil insulation** products used as a stand-alone insulation because they have a thermal performance similar to that of thicker traditional insulation.

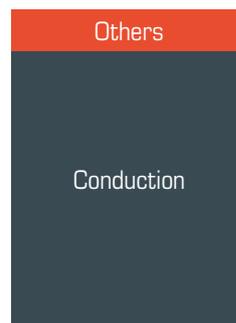


The multi-layered insulating complex allows an airtight installation by stopping air infiltration from the outside to the inside and vice-versa. All the layers put together act as an insulant and help to prevent condensation.

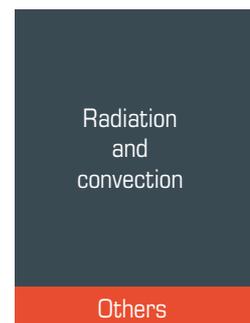
## How does ACTIS thin reflective multifoil insulation work?

Thin reflective multi-layered insulation products simultaneously counteract **all forms of heat loss** (radiation, conduction, convection...).

Unlike traditional thick insulation - which mainly works to prevent heat exchange through conduction - **the specific nature of thin multifoil insulation, combined with its application between two air gaps, forces energy to be transmitted via radiation rather than by conduction or convection.**



Effect of traditional thick insulation



Effect of thin reflective multifoil insulation

# HOW DOES THIN MULTIFOIL INSULATION ACT AGAINST HEAT LOSS?

Heat is a form of energy which is transmitted from a hot zone to a cold zone, due to a temperature difference. Heat is transmitted in 4 different ways, these are also forms of thermal loss: radiation, convection, conduction and phase change (humidity/wind).



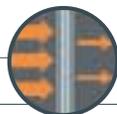
## RADIATION:

Thermal transfer **without physical contact**.

**E.g.** you can feel the heat being given off by a fire when you sit near to it.

### How ACTIS insulation acts against radiation:

The external reflective foils of ACTIS insulation are extremely effective at reflecting infrared radiation back towards the source of heat (heating systems in the winter, and solar radiation in the summer). Each internal reflective foil acts as an additional barrier to thermal transfer by radiation.



## CONDUCTION:

Heat transfer **via physical contact** between solids, liquids or gases.

**E.g.** an electric hob in contact with a saucepan transmits heat by conduction.

### How ACTIS insulation acts against conduction:

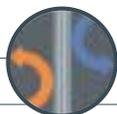
The low density separators (wadding and foam) between the reflective foils of ACTIS insulation products create insulating air gaps, which are also barriers against conduction (same principle as double glazing).

#### • Outside the multifoil insulation:

Installing the multifoil between 2 air gaps – so it is **not in contact** with the surface to be insulated – significantly reduces thermal transfer by conduction (the only conduction occurs between the insulation and the air – which acts as an insulator).

#### • Within the multifoil insulation:

Very little conduction occurs given that the foils are separated by materials which create small air gaps which act as barriers to conduction.



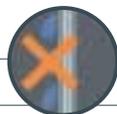
## CONVECTION:

Movement of warm air due to a difference in temperature and volume : hot air rises and heat escapes.

**E.g.** a radiator heats the air in contact with it (conduction) and the hot air escapes upwards (convection).

### How ACTIS insulation acts against convection:

ACTIS insulation reduces cold air infiltration in the winter, and warm air infiltration in the summer, both creators of thermal loss.



## PHASE CHANGE:

Heat transmission by changing of state: solids, liquids, gases (the transformation from a gas state to liquid loses heat).

**Example:** The condensation on the bathroom window is due to the water vapour from the heat that condenses on the cold glass.

### How does ACTIS insulation react to phase change?

ACTIS insulation is waterproof in case water penetrates the roof area.

Furthermore, its thermal performance prevents any internal condensation.

## How to choose the right insulation

	Thermal efficiency in summer	Thermal efficiency in winter	Gain in living space	Acoustic performance	Durability	Ease of installation	Value for money over time
Mineral wool	**	****	*	****	**	*	**
Polystyrene foam	**	****	*	**	**	**	***
Thin multifoil insulation	****	****	****	***	****	****	***

# HOW IS THE THERMAL EFFICIENCY OF THIN MULTIFOIL INSULATION MEASURED?

## 1 Traditional standard tests

In the 1960s a model for calculating the insulation of buildings was established by the scientific community.

This model uses measurements from the **guarded hot box or the guarded hot plate**, laboratory equipment initially designed to measure the performance of traditional thick insulation. These laboratory apparatus measure mainly, in a steady state environment, **the thermal conductivity** of insulation. This means its capacity to prevent heat loss **through conduction**.



Guarded hot plate

### Principle:

The method consists of placing an insulation product between two environments at different temperatures to generate a temperature difference ( $\Delta T$ ). Then, the amount of energy needed to maintain a constant temperature either side of the insulation is measured. Once the thermal flow has stabilised, the measurement can be taken. The quantity of energy equals the thermal flow passing through the product.

Unlike traditional thick insulation - which mainly works to prevent heat exchange through conduction - **the specific nature of thin multifoil insulation, combined with its application between two air gaps, forces energy to be transmitted via radiation rather than by conduction or convection.**

Heat exchange through conduction plays only a minor role in the way thin multi-foil reflective insulation works.

**This single measurement of heat conductivity is therefore not sufficient to characterize the overall thermal performance of thin reflective multifoil insulation.**

## 2 Tests conducted in real conditions (« In situ tests »)

In the absence of any suitable standards, ACTIS measures the thermal performance of its products *in situ*, in other words in real conditions of use.

### Principle:

Two identical and calibrated buildings are insulated with two different types of insulation:

- One building is insulated with a 'mineral wool' insulation product (20 cm,  $\lambda = 0.04$ ,  $R = 5$ ), whose thermal performance is known, and accredited by conventional methods.
- The other building is fitted with the ACTIS multifoil insulation product for which ACTIS wants to test the thermal performance.

The energy consumption required to keep the buildings at the same internal constant temperature, whatever the external weather conditions, is measured over a period of 12 – 14 weeks.

### Results:

The various results from in situ testing carried out in different European countries showed, across the board, that measured in real conditions the thermal performance

of multifoil insulation is three to five times higher than when measured with the guarded hot box or guarded hot plate method.

Measured under real life conditions the thermal performance of multifoil insulation is equivalent to that of traditional, thicker insulation.

This methodology has been defined by **BM TRADA Certification Ltd**, a member of the EOTA (European Organisation for Technical Approval).



Example of ACTIS *in situ* test cells, Limoux, France.

## 1 The route to a European standard

CE marking is a mandatory European requirement for the free circulation of a construction product within the European Union common market. It is normally granted by certification **based on European standards** or, if scientific and technical knowledge does not allow a standard to be developed, certification will be **based on a European Technical Approval**.

Directive 89/106/CE for “construction products” states that regarding CE marking: *“European Technical Approval may be granted for products for which there is neither a harmonised standard, nor a recognised national standard, nor a mandate for a European standard and for which the commission... consider that a standard cannot, or not yet be elaborated”*.

In April 2005 the European Commission accepted the opening of a European Technical Approval procedure (n°12.01/12) for the thin reflective multifoil insulation product family.

Furthermore, the European Commission for Standardization (CEN) decided on May 11<sup>th</sup> 2009 to establish a working group (WG13) with the objective of developing a standard based on *in situ* tests for insulation products.

## 2 ACTIS insulation products and the UK Conventions for U-value Calculations (BR443)

BR 443 was originally published in 2002 in conjunction with the introduction of new calculation methods for determining the U-values of building elements which were cited as being appropriate to demonstrate compliance with revised Building Regulations for the conservation of fuel and power. It provides guidance on the use of the calculation methods, indicating the methods of calculation that are appropriate for different constructional types, providing additional information about using the methods and providing data relevant to typical UK constructions.

It was amended in April 2006 to make specific reference to the testing of multifoil insulation products.

Before April 2006, the Building Regulations regime made it easier for Building Control Bodies to accept thermal insulation products which had been tested using methods other than the ‘hot box’, particularly if alternative test methods, and the results obtained from them, had been certified by reputable independent bodies.



However, the 2006 edition of BR 443 stated that the ‘hot box’ can be used to test the thermal performance of multifoil insulation.

ACTIS brought Judicial Review proceedings against the Communities and Local government (CLG, the organisation responsible for the amendments) and, on Friday 2 November 2007, the Administrative Court found in favour of ACTIS in these proceedings.

As a result of these proceedings, the provisions of the 2006 version of BR 443 which relate to multifoil products have been declared inapplicable and unenforceable.

**Building Control Bodies are entitled to use their discretion to accept or reject products tested using methods other than the hot box if they wish to do so.**

# WHAT ARE THE BENEFITS OF THIN MULTIFOIL INSULATION?



## HIGHLY EFFECTIVE THERMAL INSULATION ALL YEAR ROUND

These are the first insulation products on the market which insulate both in summer and winter:

- **In summer:** they reflect radiant heat outwards, which means a comfortable temperature even in the attic.
- **In winter:** they retain the heat within the building and prevent cold air from penetrating the building.



## DURABLE INSULATION

- ACTIS insulation does not weaken over time.
- Does not support the nesting of rodents because of its minimal thickness.



## SPACE SAVING

- ACTIS insulation products are max 30 mm thick.
- Particularly suited to renovation projects where space is limited.
- Enable period features, such as exposed beams, to be preserved.
- Many buildings that previously were left bare can now be insulated thus reducing energy costs.



## EASY TO INSTALL

- Rolls are light and easy to transport.
- Easily cut with ACTIS cutter or sharp scissors, and fixed by stapling.
- Flexible.



## ENERGY SAVINGS

As a result of using ACTIS insulation, energy consumption (heating and air-conditioning) is reduced, contributing to the reduction of the greenhouse effect.



## CLEAN AND NON-IRRITANT PRODUCTS

- Contain non-irritant fibres.
  - No protective clothing or equipment is necessary.
- Where the product is being installed in bright or sunny weather conditions, appropriate eyewear should be worn to protect against sunburn.

## 1 ACTIS endorses the quality of its insulation products

- Since January 2008 the ACTIS logo has been printed onto every roll of insulation\*. Each roll has a traceability number\* identifying the batch it came from.
- This traceability procedure enables ACTIS to track its insulation products **for 10 years** after they have been manufactured.



### ACTIS is able to commit to the quality of its products because:

ACTIS is ISO 9001 certified for the design, manufacture and marketing of its products, as well as for the tests that ACTIS conducts under real conditions of use to measure their thermal performance.



All ACTIS insulation products are designed by the ACTIS Research and Development department in order to obtain the best possible performance. The products meet very specific manufacturing requirements.



ACTIS branded rolls of insulation with traceability number.

- ACTIS manufactures all its products' components (wadding, foam, reflective films, etc).
- Before starting the manufacturing process, each batch of raw materials is subjected to a stringent control process to check it conforms with requirements.
- Finished products undergo a regular and programmed sampling process to confirm their characteristics and conformity to a technical specification sheet.
- Every roll of insulation\* is marked on one of its outside layers with a traceability number enabling ACTIS to identify the origin of each component and to tell which batch the roll came from.
- A sample of each batch is tracked and records of this are stored for 10 years.
- From the traceability number on each roll, ACTIS can trace the origin of each roll back to its constituent raw materials (LDPE, PES etc.).

\*Except TB80.

## 2 ACTIS endorses the thermal efficiency of its insulation products

As yet ACTIS is the only insulation brand to measure the thermal performance of its products according to an exclusive testing methodology **based on real conditions of use**.

The thermal values advertised by ACTIS **are therefore a true reflection of the actual performance of its products once they are installed**.



### ACTIS is able to commit to the thermal efficiency of its products because:



Building on over 30 years of experience, ACTIS fully controls its products' design (the intrinsic qualities of each component, the way they are put together to form an insulating complex, etc.). Moreover, ACTIS invests 5% of its turnover every year in Research and Development.

The test method under real conditions used by ACTIS has been defined by **BM TRADA Certification Ltd**, a member of the European Organisation for Technical Approval (EOTA).

The method of testing under real conditions used by ACTIS is the **method proposed under the European Technical Approval, currently being evaluated for thin reflective multi-layered insulation**.

# ACTIS THIN MULTIFOIL PRODUCT RANGE

		STAND-ALONE INSULATION		SUPPLEMENTARY INSULATION
		TRISO-SUPER 10	TRISO-SOLS	TB 80
EUROPEAN TECHNICAL APPROVAL IN PROCESS Registration N° 12.01/12				
<b>THERMAL EFFICIENCY</b>		equivalent to <b>210 mm</b> of mineral wool*		
<b>APPLICATIONS</b>				
 • <b>Over rafter / roof structure</b>		•		
 • <b>Under rafter / roof structure</b>		•		
 • <b>Walls</b>		• <sup>1</sup>		•
 • <b>Floors</b>			• Hot water underfloor heating systems • Under a screed	•
<small><sup>1</sup> TRISO-SUPER 10 insulation is certified for use on walls around pitched roof installations such as dwarf walls, dormer walls and gable ends, as long as these constitute less than 40% of the overall insulated area.</small>				
<b>SPECIAL BENEFITS</b>		<ul style="list-style-type: none"> <li>• *Thermal performance equivalent to 210 mm of mineral wool (<math>\lambda = 0.04</math>) based on comparative tests conducted under real conditions by BM TRADA Certification Ltd. (Certificate no. BIPS-0102 dated 03 April 2009).</li> <li>• Space saving.</li> <li>• Quick and easy to install</li> </ul>	<ul style="list-style-type: none"> <li>• Ideal for renovation: preserves headroom (just 7 mm thick).</li> <li>• Uniformly reflects the heat from hot water underfloor heating systems back up into the room.</li> <li>• Eliminates thermal bridging at floor perimeter.</li> </ul>	<ul style="list-style-type: none"> <li>• Air tight supplementary insulation.</li> <li>• Components assembled by thermal welding.</li> <li>• Semi-rigid product, very easy to install.</li> </ul>
<b>FIRE CLASSIFICATION</b>		Not fire rated (Euroclass classification F)	Not fire rated (Euroclass classification F)	Euroclass fire classification : - E when tested on its own - B-s1 d0 when installed behind 10 mm platesboard
<b>COMPONENTS</b>		<b>19 components</b> <ul style="list-style-type: none"> <li>• 2 external reflective foils with reinforcing mesh.</li> <li>• 3 wadding layers.</li> <li>• 8 foam layers.</li> <li>• 6 internal reflective foils.</li> </ul>	<b>13 components</b> <ul style="list-style-type: none"> <li>• 1 polythene film with grid markings.</li> <li>• 6 foam layers.</li> <li>• 4 internal reflective foils.</li> <li>• 2 reflective foils with reinforcing mesh.</li> </ul>	<b>5 components</b> <ul style="list-style-type: none"> <li>• 2 external aluminium foils.</li> <li>• 1 foam layer.</li> <li>• 2 bubble films.</li> </ul>
<b>THICKNESS</b>		+/- 30 mm	+/- 6.5 mm	+/- 10 mm
<b>PACKAGING</b>				
Width x length (m)		1.60 m x 6.25 m or 1.60 m x 12.50 m	1.60 m x 12.50 m	1.50 m x 13.34 m
Surface area / weight		10 m <sup>2</sup> / 7 kg or 20 m <sup>2</sup> / 14 kg	20 m <sup>2</sup> / 10 kg	20 m <sup>2</sup> / 11.5 kg

[www.insulation-actis.com](http://www.insulation-actis.com)

## Installation Accessories



### ACTIS Cutter

A cutting tool specifically designed for cutting ACTIS insulation. It offers the practicality of cutting all the components simultaneously.

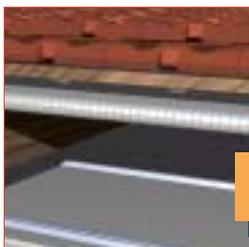


### ACTIS ADHESIVE TAPE

100 mm x 25 m  
Adhesive enabling a perfect airtight seal at the joints.

## 6

## ESSENTIAL RULES of installation



1

Ensure an air gap of 25 mm minimum on either side of the insulation.

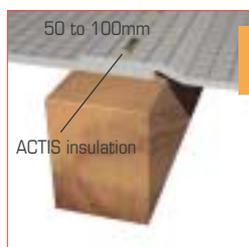
2

Ventilation:

- Vapour permeable underlay: ensure an air gap of 25 mm minimum between the insulation and membrane. The membrane should have a vapour resistance less than 0.25 MNs/g.
- Felted Roof: Ensure an air gap of 50 mm minimum between the insulation and the felt, with ventilation from eaves to ridge according to British Standards.

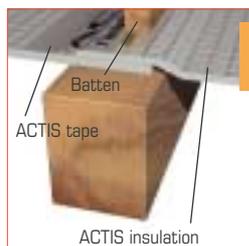
3

Pull the insulation taut and staple every 50 mm to the rafters or timber support using galvanised staples, 14 mm minimum. 20 mm stainless steel staples are recommended.



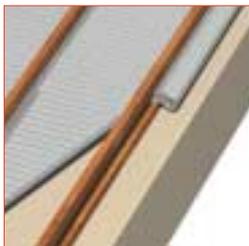
4

Overlap the insulation 50-100 mm at each joint and staple every 50 mm onto the rafter or timber support batten.



5

Cover all joints with ACTIS ISODHESIF tape to give an air tight finish.



6

Fold all finishing edges under by 50 mm minimum, staple every 50 mm, and secure with a final batten.

## How to get the most from your ACTIS product

**IMPORTANT:** in addition to the specific recommendations given by ACTIS below, your ACTIS product should be installed and used in compliance with good building practice; the most recent editions of any applicable regulations or relevant guidance and any British or European Standards relating to the installation and use of insulation products, particularly in relation to safety precautions.

### 1 Safety precautions to observe in relation to your ACTIS product.

#### • Fire precautions

Never expose ACTIS insulation to a direct heat source, sparks or a naked flame.

Keep blow torches well away from ACTIS insulation, even when using a flame guard or other protective device, and make sure that hot debris and sparks do not make contact with the insulation.

#### • Fireproof finishes and compartment walls

As recommended by current regulatory guidance, do not leave insulation exposed in habitable rooms. We recommend that ACTIS insulation is always covered with a fireproof finish such as plasterboard (see, for example, the fire safety provisions contained in Approved Document B, which provides practical guidance on the fire safety requirements of the Building Regulations 2000 (as amended) in England and Wales; or refer to the relevant provisions in Scotland and Northern Ireland, as amended from time to time).

To ensure that compartment walls achieve the requisite levels of fire resistance, the insulation should not be carried over junctions with such walls (again, please refer to the fire safety provisions contained in Approved Document B noted above, or to any applicable provisions in Scotland and Northern Ireland, as amended from time to time).

The European classification system for reaction to fire is called the Euroclass system. The system defines fire performance based on the following:

- Reaction to fire (classification from A to F).
- Smoke production: the emission of smoke and its opacity (classification from 1-3).
- Flaming droplets or particles (classification from 0-2).

#### **TRISO-SUPER 10 and TRISO-SOLS are not fire rated, and have Euroclass classification F.**

TB 80 has Euroclass classification E when tested on its own and Euroclass classification B-s1 d0 when tested under real conditions of use installed behind 10 mm plasterboard.

The classification B-s1d0 signifies:

- **B:** flammable products making very limited contribution to the spread of fire
- **s1:** no smoke
- **d0:** no flaming droplets or particles in 600 seconds.

#### • Chimneys, inserts, heat exchangers and other sources of heat.

Never use ACTIS insulation to insulate a chimney flue, an insert, heat exchanger or any other heat source above 80°C. Use a Euroclass A1 non-combustible insulation in compliance with British or European Standards. ACTIS advise leaving a minimum gap of 200 mm between the insulation and chimneys, inserts, heat exchangers and all other sources of heat above 80°C.

Please seek advice from ACTIS by calling the helpline on 01249 462 888 and check with your local Building Control officer before installing ACTIS insulation near any source of heat above 80°C.

#### • Down-lighters and recess lighting

The use of down-lighters or recess lighting in conjunction with ACTIS insulation is not recommended. Unless special precautions are taken, this poses an elevated fire risk.

However, if the use of such recess lighting in conjunction with ACTIS insulation is desired, encasing the down-lighter appropriately with a non-combustible material may provide adequate fire protection, but in all cases advice should be sought with the relevant Building Control officer who will give guidance on a case by case basis.

#### • Contact between materials and compatibility between products

Avoid all contact between ACTIS insulation and lead, zinc, copper and its alloys as well as caustic products.

#### • Earthing

Some ACTIS insulation products contain high quantities of pure aluminium foils. Aluminium is an effective conductor of electricity, and so it is imperative that the insulation is either kept well away from the electrical network (plugs, switches, electrical cables) or that the insulation is earthed.

TB 80 contains pure aluminium foils. TRISO-SUPER 10 and TRISO-SOLS do not.

#### • Sun protection

When laying ACTIS insulation materials outside, remember that multi-foil insulation is highly reflective. Where the product is being installed in bright or sunny weather conditions, appropriate eyewear should be worn (such as sunglasses conforming to the most stringent requirements of BS EN 172, as amended from time to time) and protect against sunburn.

## 2 General guidance on installing your ACTIS insulation.

Insulation should take into account all elements of the building envelope which are susceptible to thermal loss, such as doors, windows, roofs, chimneys, walls and floors. Adequate ventilation should be provided where necessary, in compliance with good building practice and with the most recent editions of the relevant regulatory guidance and British and European Standards available.

ACTIS cannot compensate for heat loss due to defective or poorly insulated joinery, or thermal bridging due to poor construction.

**IMPORTANT: For guidance on how to install ACTIS insulation products so as to maximise thermal performance, please refer to the detailed 'Installation Guidelines' brochure available for the relevant product, which should be read in conjunction with this leaflet.**

**ACTIS makes no warranty, express or implied, as to the performance of its products if the relevant installation guidelines are not followed.**

### • Direction of laying ACTIS insulation materials

It is recommended that strips are laid horizontally but they can also be laid vertically, depending on the characteristics of the area to be insulated.

TRISO-SUPER 10 and TB 80 may be laid either side up without affecting the efficiency of the insulation.

TRISO-SOLS should be installed with the polythene film with grid markings facing upwards.

Reference should be made to the Installation Guidelines relevant to the product being installed.

### • Staples

We recommend using galvanized or stainless steel staples, 14 mm minimum (ideally 20 mm).

### • Television and mobile signals

It is advisable to have an external television aerial when using ACTIS insulation. Mobile signals may be affected by ACTIS insulation.

### • Protecting your ACTIS product from the elements before and after installation

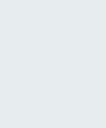
ACTIS insulation should be stored in its packaging under cover to protect it from the elements (such as rain or snow). During installation, ACTIS insulation should be protected from any prolonged exposure to rain or snow. Once installed, ACTIS insulation should not be left exposed to weathering for more than 3 days.

### • Installing other products with your ACTIS product

When using ACTIS insulation in conjunction with other products, such as a tiling underlay or breather membrane (as recommended by current regulatory guidance), or with supplementary insulation, precautions must be taken to avoid vapour or condensation issues. This can be avoided by ensuring adequate ventilation, but ACTIS also recommends that the product with the highest vapour resistivity be placed on the inside (the warm side), and would always suggest installing a vapour control layer to the back of the plasterboard where the insulation is being installed in a habited space. ACTIS cannot make any warranty, express or implied, as to the performance or safety of other products used in conjunction with its own products.

Please contact the ACTIS helpline **01249 462 888** or write to us at Unit 1 Cornbrash Park, Bumpers Farm Industrial Estate, Chippenham, Wiltshire, SN14 6RA with any further queries.





## ■ Respect for the environment

ACTIS products and manufacturing procedures are developed with sustainable development in mind and since August 2008 the company has been certified to the international Environmental Management Standard ISO 14001.



Achieving the standard has involved ACTIS identifying the impact of its activities on the environment and putting in place actions to reduce their impact as part of a continuous environmental improvement plan. It has also involved training and raising the environmental awareness of its staff and contractors.

Over the last five years the company has made many changes to its manufacturing process and now manufactures all the components of its innovative multifoil insulation products at its modern, fully integrated production facilities near Toulouse, France. This gives ACTIS full control over the environmental impact and quality of the manufacture of its products.

- **Energy management:** ACTIS insulation products contribute to reducing energy usage (heating and air conditioning) therefore helping to reduce greenhouse gas emissions.
- **Prevention of inherent dangers within the workplace:** ACTIS products do not contain irritant fibres. ACTIS products are light and easy to install, facilitating installation.
- **Recyclability:** ACTIS insulation products have a long lifespan and therefore the recycling needs are low.





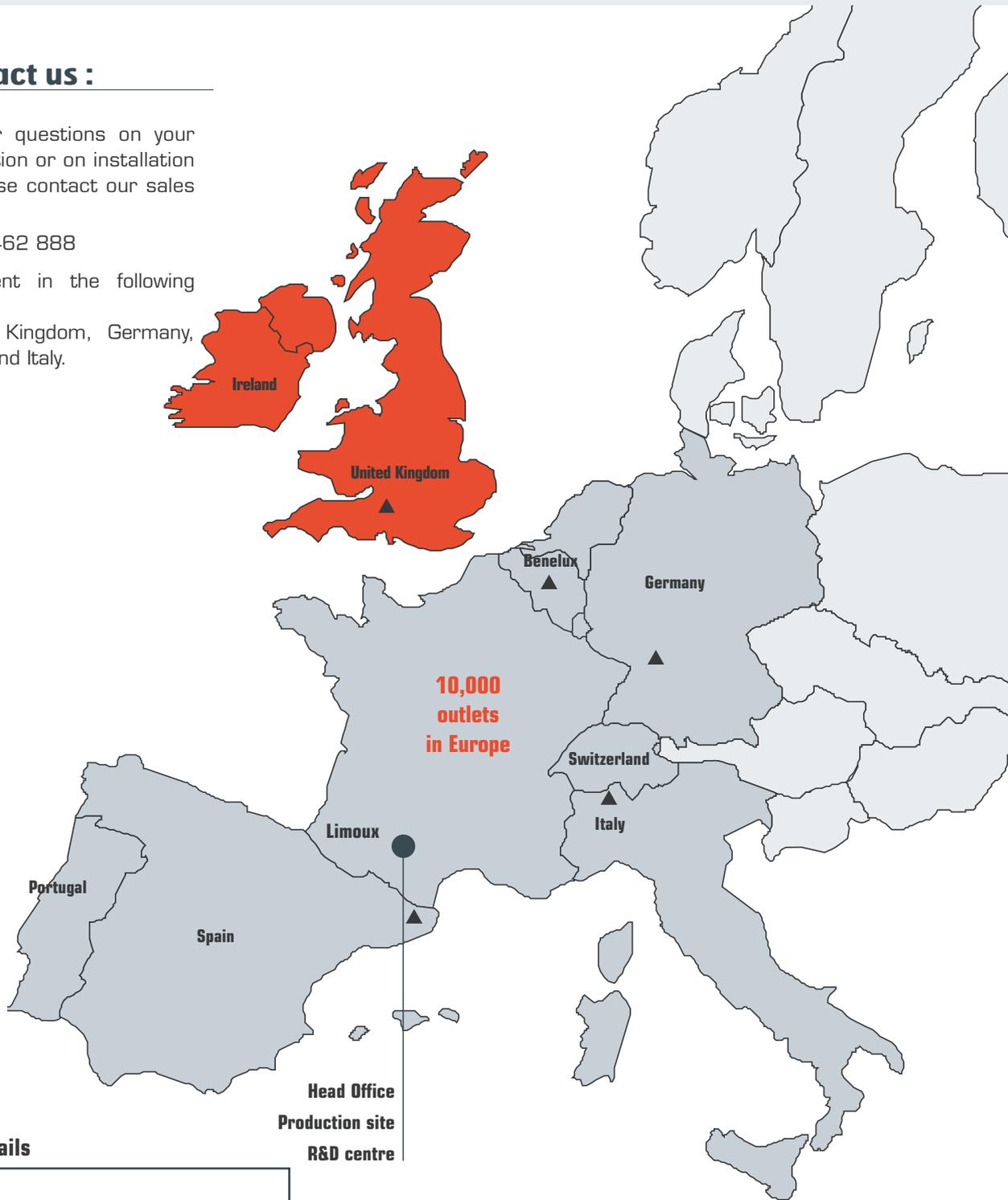
## To contact us :

To answer your questions on your choice of insulation or on installation techniques please contact our sales office on:

(+44) (0)1249 462 888

ACTIS is present in the following countries:

France, United Kingdom, Germany, Benelux, Spain and Italy.



### Distributor details

Head Office  
Production site  
R&D centre

▲ Points of sale



## Trade Association



ACTIS is a founder member of the EMM professional body representing the interests of thin multifoil manufacturers

ACTIS Unit 1 Cornbrash Park, Bumpers Farm Industrial Estate,  
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solutions@actis-isolation.com

For further information visit:

[www.insulation-actis.com](http://www.insulation-actis.com)