2010 Edition

ACTIS THIN MULTIFOIL INSULATION

# TRISO-SUPER 10

## DATA SHEET

ROOFS
ATTICS

EUROPEAN TECHNICAL APPROVAL IN PROCESS
Registration N° 12.01/12

ACTIS
TOMORROW'S INSULATION TODAY

# INSULATION FOR ROOFS AND ATTICS

## SPECIAL BENEFITS

TRISO-SUPER 10 has been tested under real conditions by TRADA Technology Ltd. and certified as equivalent to 210mm of mineral wool when installed in a pitched roof application by BM TRADA Certification Ltd. (Certificate no. BIPS-0102 dated 03 April 2009).

Please see the Special Notice on page 6 of this brochure for more information.

## OTHER ADVANTAGES

- Effective both in summer and winter:
  - in winter, it retains heat within buildings
  - in summer, it reflects radiation preventing overheating of attic rooms
- Space saving
- Clean and free from irritant fibres
- Durable-will not sag, moisture resistant
- Quick and easy to install: flexible, can be cut with scissors or ACTIS CUTTER, fitted by stapling

## TECHNICAL CHARACTERISTICS

**THERMAL EFFICIENCY: equivalent to 210mm of mineral wool***

*Thermal performance equivalent to 210mm of mineral wool ($\lambda = 0.04$) based on comparative tests conducted under real conditions by BM TRADA Certification Ltd. For more information on testing under real conditions and the equivalence of performance of this product with 210mm of mineral wool please see the Special Notice on page 6 of this brochure

**PRODUCT DESCRIPTION**

19 components:
- 2 external reflective foils with reinforcing mesh
- 3 wadding layers
- 8 foam layers
- 6 internal reflective foils

Number of reflective foils: 8
Surface weight: 600g/m²
Thickness: 30mm approx.

| MECHANICAL PROPERTIES | VALUE | REFERENCE STANDARD |
|---|---|---|
| **Tensile strength:** | | |
| Longitudinal force | > 500N/50mm | EN 12311-1 |
| Transversal force | > 400N/50mm | |
| **Nail tear resistance:** | | |
| Longitudinal | > 400N | EN 12310-1 |
| Transversal | > 300N | |

| PACKAGING | 10m² | 20m² |
|---|---|---|
| Width | 1.60m | 1.60m |
| Length | 6.25m | 12.50m |
| Weight (per roll approx.) | 7kg | 14kg |

**ACTIS ACCESSORIES:**

ACTIS ISODHESIF tape 

ACTIS CUTTER 

# INSTALLATION SUMMARY

## ESSENTIAL RULES OF INSTALLATION

**1**

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

**2** Ventilation:

- Vapour permeable underlay: ensure an air gap of 25mm minimum between the insulation and membrane. The membrane should have a vapour resistance less than 0.25MNs/g.
- Felted Roof: Ensure an air gap of 50mm 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 50mm to the rafters or timber support using galvanised staples, 14mm minimum. 20mm stainless steel staples are recommended.

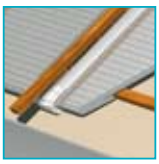
**4**


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

**5**

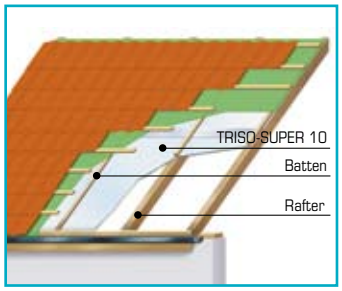

Cover all joints with ACTIS ISODHESIF tape to give an air tight finish.

**6**



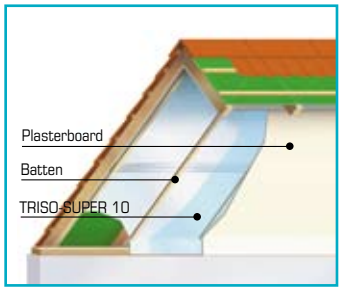
Fold all finishing edges under by 50mm minimum, staple every 50mm, and secure with a final batten

## OVER RAFTER APPLICATION




- Roll insulation horizontally, starting along the bottom of the roof
- Insert timber support (as noggin) between rafters, enabling joint to be stapled and taped securely:
  - Staple every 50mm (galvanised staples, 14mm minimum).
  - Overlap joints 50-100mm and staple the joints every 50mm.
  - Cover joints with 100mm ACTIS ISODHESIF foil tape.
- Fix vertical battens in line with the rafters ensuring an air gap of 25mm minimum between the insulation and the membrane.
- Fix membrane to manufacturer's instructions.

## UNDER RAFTER APPLICATION




- Roll insulation horizontally, starting along the top of the roof
- Insert timber support (as noggin) between rafters, enabling joint to be stapled and taped securely:
  - Staple every 50mm (galvanised staples, 14mm minimum).
  - Overlap joints 50-100mm and staple the joints every 50mm.
  - Cover joints with 100mm ACTIS ISODHESIF foil tape.
- At the bottom of the roof pitch staple the insulation directly onto the timber wall plate.
- Prepare for plasterboard by fixing horizontal or vertical battens ensuring an air gap of 25mm minimum between the insulation and the plasterboard.
- Fixing vapour checked plasterboard or a vapour control layer is recommended.

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.

**Please refer to the TRISO-SUPER 10 Installation Guidelines (PZ182) for more detailed information on installation.**

# SAFETY PRECAUTIONS AND RECOMMENDATIONS

## 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 (1) good building practice; (2) the most recent editions of any applicable regulations or relevant guidance and (3) any British or European Standards relating to the installation and use of insulation products, particularly in relation to safety precautions.

### 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).

TRISO-SUPER 10 is not fire rated and has Euroclass classification F.

**• 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.

**• 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.

## General guidance on installing your ACTIS insulation

Insulation should take into account all elements of the building envelope which are susceptible to thermal losses, 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 losses 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 may be laid either side up without affecting the efficiency of the insulation.
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 on 01249 462 888 or write to us at ACTIS Insulation Ltd, Unit 1 Cornbrash Park, Bumpers Way, Bumpers Farm Industrial Estate, Chippenham Wilts, SN14 6RA.

## SPECIAL NOTICE

Thermal efficiency is carefully measured 'in-situ' under real weather conditions by the independent testing body TRADA Technology Ltd. The performance of the TRISO-SUPER 10 is compared to that of traditional mineral wool insulation materials tested concurrently and in identical conditions. This testing is strictly supervised by BM TRADA Certification Limited (Certificate no. BIPS-0102 dated 3 April 2009). There are currently no ISO and BS EN testing standards which are appropriate for innovative multifoil insulation products.

Under the current legislative framework in England and Wales, Local Authority Building Control Bodies have the discretion to accept independent certification for insulation products, such as that provided for this product by BM TRADA. We strongly advise that you seek confirmation of this approval from your local Building Control Body before installing the **TRISO-SUPER 10**.

'In situ' testing gives a more accurate measurement of the actual performance of multifoil products than the guarded hot-box test method, which is designed to test bulk insulation products, and is conducted in a controlled static laboratory environment. A hot-box measures heat transfer primarily by conduction, and does not take correctly into account heat transfer by radiation, which is the function of multifoil products. The European Directive of Building Products includes a procedure which allows for the creation of new standards for innovative products, the Request for European Technical Approval (ETA).

ACTIS have made an ETA request for thin multifoil insulation products to the European Organisation for Technical Approvals (EOTA, the European body responsible for conducting this process). The aim of this request is to establish a new standard for assessing the thermal performance of thin multifoil insulation, based on the in situ test methodology defined by BM TRADA, with a view to achieving CE marking for these products.



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

Distributor details

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