

# The Next Generation of insulation products from



**Smart is...**

**Airflex**

**Expert**  
Multi-Foil

Hybrid System  
**AirGreen**

**Air-Reflect**



*“As the ultra-thin reflective insulation specialists, quality is our first priority.”*

*Our range of Next Generation insulation products is designed to help you cut down energy costs while achieving fantastic thermal performance. Learn more about a better way of insulating your home.*



**NON-TOXIC MATERIALS**



**80% RECYCLED**



**FIRE RESISTANCE**



**100% RECYCLABLE**



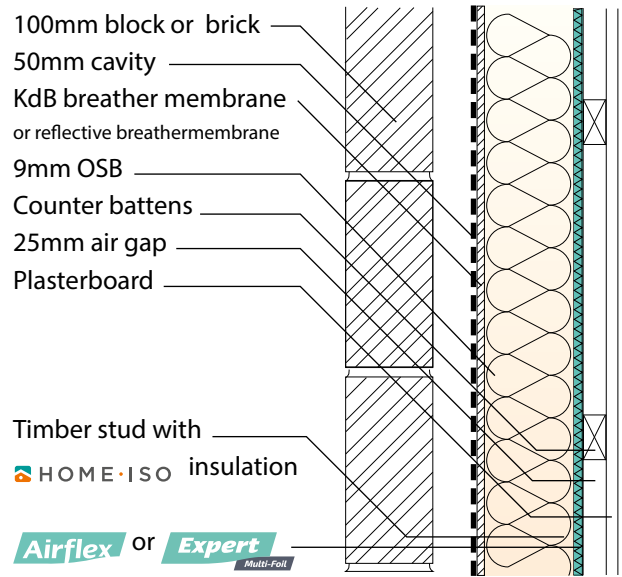
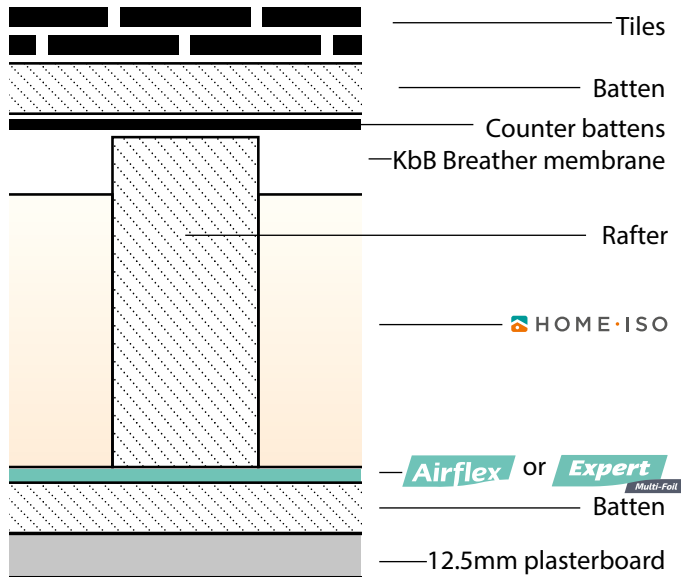
**CAUSES NO IRRITATION**

**KdB insulation products have been approved by:**



# Smart is... Hybrid System Airgreen®

“KdB ‘Airgreen Hybrid System’® combines Polyester mass insulation with KdB reflective insulation products, such as ‘Airflex’ or ‘Expert Multi-Foil’, giving benefits over traditional insulation methods.”



Airgreen Hybrid System®: pitched roof	
U-Value	System
0.18	140mm Home-iso 41 + Expert Multi-Foil
0.18	200mm Home-iso 41 + Airflex
0.15	200mm Home-iso 41 + Expert Multi-Foil

If full filling rafters it is advisable to use counter batten and tile batten above the membrane

Airgreen Hybrid System®: wall	
U-Value	With Standard Breather Membrane
0.25*	100mm Home-Iso + Airflex
0.20*	100mm Home-Iso + Expert Multi-Foil
0.18	140mm Home-Iso + Expert Multi-Foil
U-Value	With reflective Breather Membrane
0.21*	100mm Home-Iso + Airflex
0.20	140mm Home-Iso + Airflex
0.18*	100mm Home-Iso + Expert Multi-Foil
0.16	140mm Home-Iso + Expert Multi-Foil

\*Partial fill in 140mm stud

## The benefits of KdB “Airgreen Hybrid System”®:

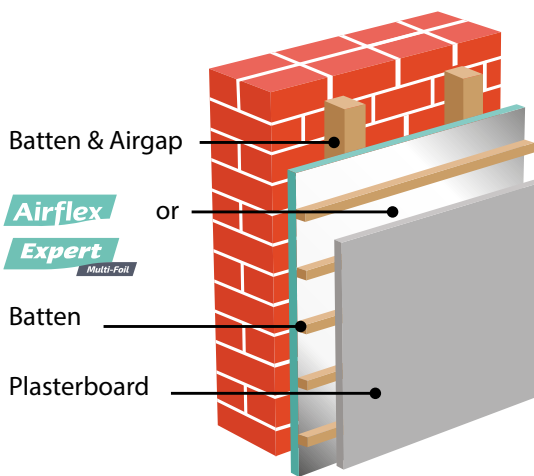
- Addresses all modes of energy transfer for a thermally efficient long lasting insulation solution;
- Acoustic and thermal performance;
- Easy to fit ensuring insulation is snug with no gaps, and little / no waste;
- Clean & safe, no dust no loose particles;
- Incorporates vapour barrier;
- Cost effective solution.



# ✓ Smart is... Upgrading solid walls

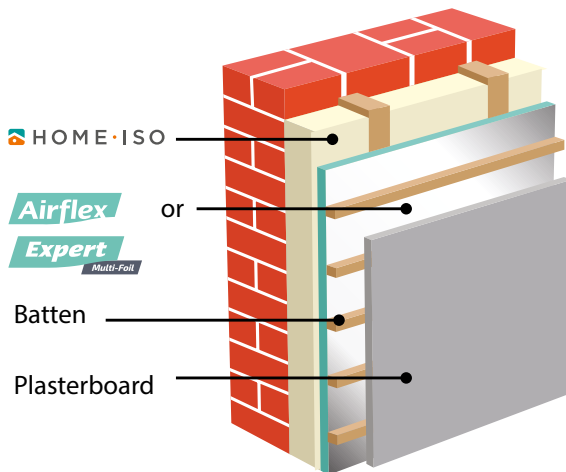
“ Achieve the best thermal and acoustic performance by UPGRADING external solid walls internally with Kdb’s reflective insulation range or using the Airgreen Hybrid system. ”

## Upgrading with Airflex, Expert Multi-Foil & Home-iso® - ✓ Easy, ✓ Safe, ✓ Little waste!



U Value	Between studs	Insulation over studs
0.48	Air gap / No Home-iso	Airflex
0.32	Air gap / No Home-iso	Expert Multi-Foil

Based on a 225 mm solid brick wall.



U Value	Home-iso 41 full fill	Insulation over studs
0.27	100 mm Home-iso	Airflex
0.22	100 mm Home-iso	Expert Multi-Foil

Based on a 225 mm solid brick wall.



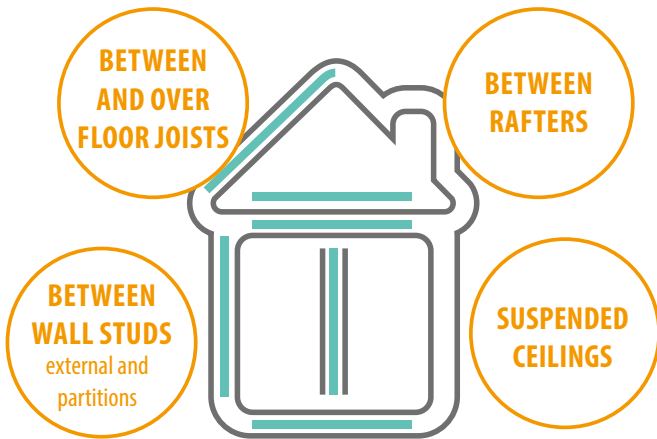
**POLYESTER**  
**+reflective Insulation**

“KdB Insulation - the next generation of Insulation products.”

# ✓ Smart is...

## HOME·ISO

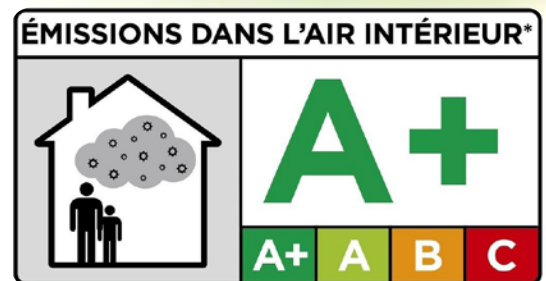
// Home-iso is a sustainable polyester insulation, that when combined with KdB's reflective insulation products provides effective thermal and acoustic insulation for frames. //



- ✓ Thermal and acoustic insulation;
- ✓ Tight frame fit;
- ✓ High thermal resistance;

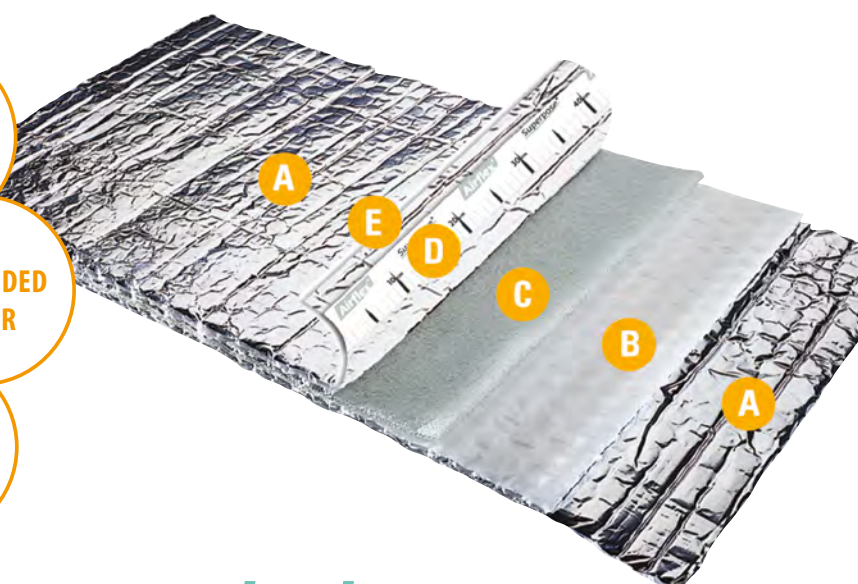
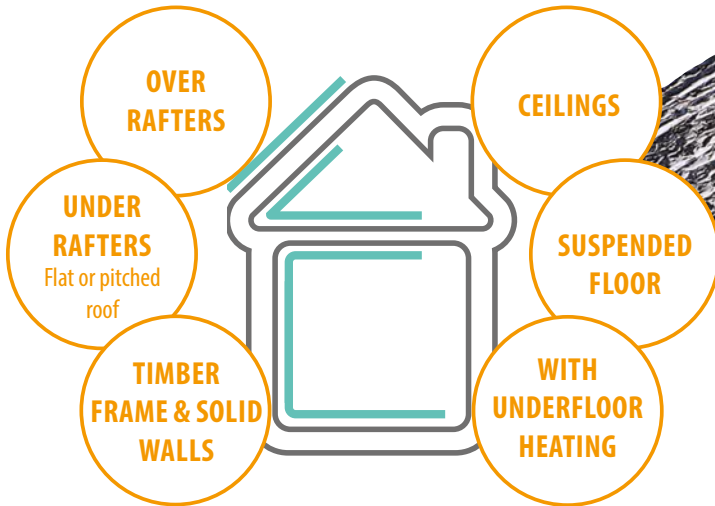
### The benefits of "Home-iso"

- Sustainable: maintains its shape and characteristics and wont slump;
- Non irritant;
- No protective clothing required;
- Environmentally friendly.



# Smart is... Airflex

“ Airflex® is a 10mm, semi-rigid thermal reflective barrier that when combined with mass insulation can achieve lower U-values reducing insulation thickness required. ”



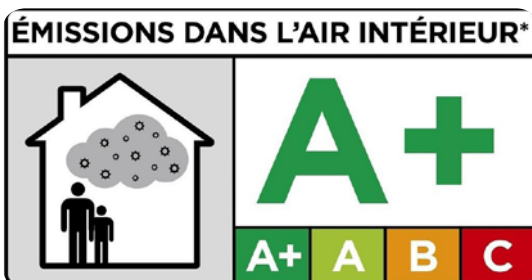
- ✓ Reflects radiant heat
- ✓ Ensures air tightness;
- ✓ Seals as a vapour barrier;
- ✓ Adds Insulation value.

## The benefits of “Airflex®”

- Quick and Easy to install with little/no waste;
- Boost U-Values, airtightness and the building’s lifetime;
- Cost effective, particularly when part of the “Airgreen Hybrid System”;
- Non-flammable;
- Clean, hygienic and safe;

## Technology:

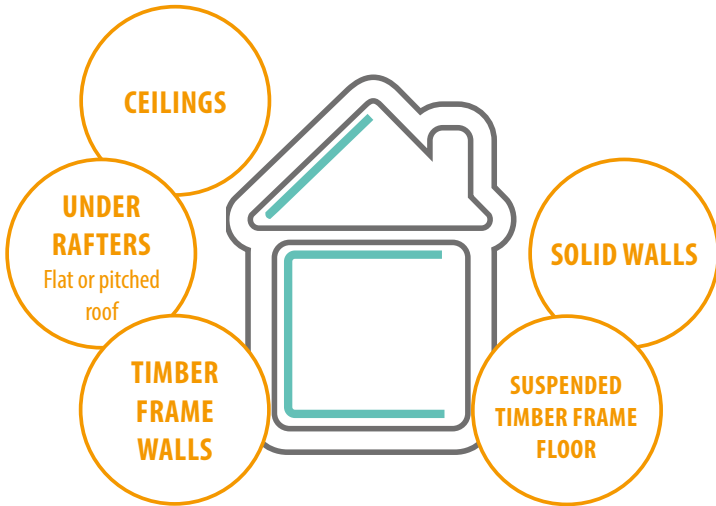
- A** 99% Pure Aluminum Foil, 30 microns;
- B** Fire-resistant, dry air-bubble Polyethylene film, 150 microns;
- C** Fire-resistant, closed-cell polyethylene foam film of 25kg/m<sup>3</sup> density, 3mm thick;
- D** Adhesive surface;
- E** Overlapping strip, 99% pure Aluminum foil, 30 microns.



“KdB Insulation - the next generation of Insulation products.”

# Smart is... Expert Multi-Foil

// Expert Multi-Foil is a multi-layered reflective insulation which provides additional thermal resistance to reduce the thickness of insulation and provide high performing, cost effective solutions. //



- ✓ Reflects radiant heat;
- ✓ Adds insulation value;
- ✓ Seals as a vapour barrier;

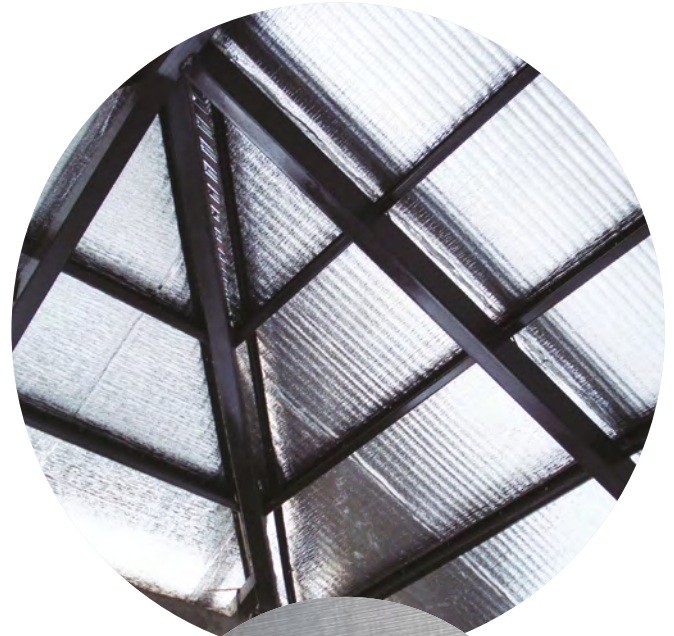
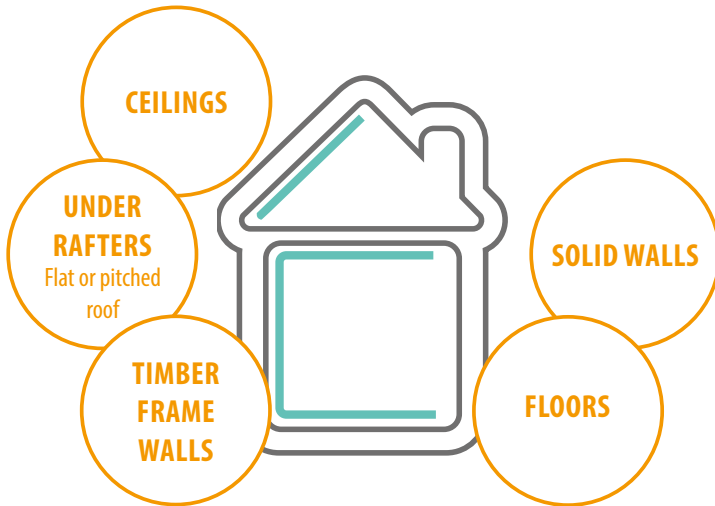
## The benefits of "Expert Multi-Foil"

- Boost u values, airtightness and the building's lifetime;
- Cost effective, particularly when part of the "Airgreen Hybrid System";
- Reduces thickness of mass insulation
- Clean, hygienic and safe.



# Smart is... Air-Reflect

// Air-reflect is a reinforced reflective vapour barrier. //



- ✓ Reflects radiant heat (keeping it in/out);
- ✓ Ensures airtightness;
- ✓ Seals as a vapour barrier.

## The benefits of "Air-Reflect"

- Boost u values and airtightness;
- Cost effective, particularly when part of the "Airgreen Hybrid System";
- Clean, hygienic and safe;
- Ideal for insulating agricultural buildings



# Introducing: KdB Insulation Kit

// The All-In-One kit for quick and easy DIY garage door and radiator insulation. //

## The Insulation Kit includes:

0.6 x 10-metre Rolls = 6 m<sup>2</sup>  
(4mm Bubble Foil)

+ 25 metres of 25 mm Double-sided Adhesive tape  
+ 25 metres of 50 mm Aluminum Adhesive Tape  
+ 1 Cutter

\*The components in the Kit are sufficient for the garage door OR for the radiator but not for both.

Stick

1

Apply the double-sided adhesive tape to the previously cleaned uprights of your door frame in the positions in which the insulation is to be placed (around the edges and on the cross members).

Position

2

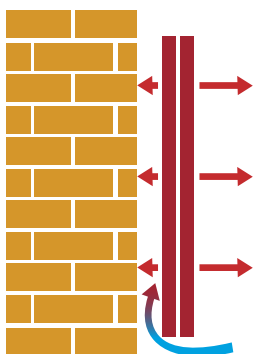
Depending on the configuration, the insulation can be fitted horizontally or vertically.

Position the insulation on the double-sided adhesive tape. Leave a cut-out for the handle.

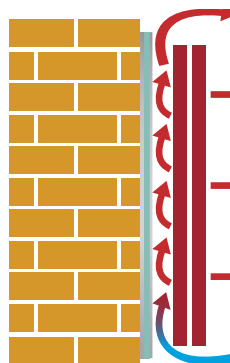
Connect

3

Connect the last strip, using the double-sided adhesive tape. Leaving an overlap of approximately 5 cm. Airgaps must be restricted to a minimum. Using the aluminum adhesive tape provided to seal the joints in order to provide a perfect airtight seal around the door and overlaps.



Without Radiator Insulation Kit  
some of the heat is lost through the wall.



With Radiator Insulation Kit fitted behind the radiator  
the heat is reflected back into the room

## Introducing a New Type of Insulation for Radiators.

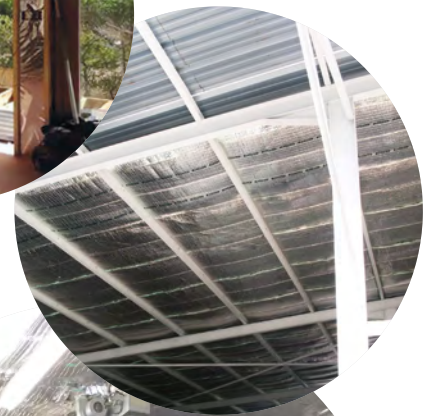
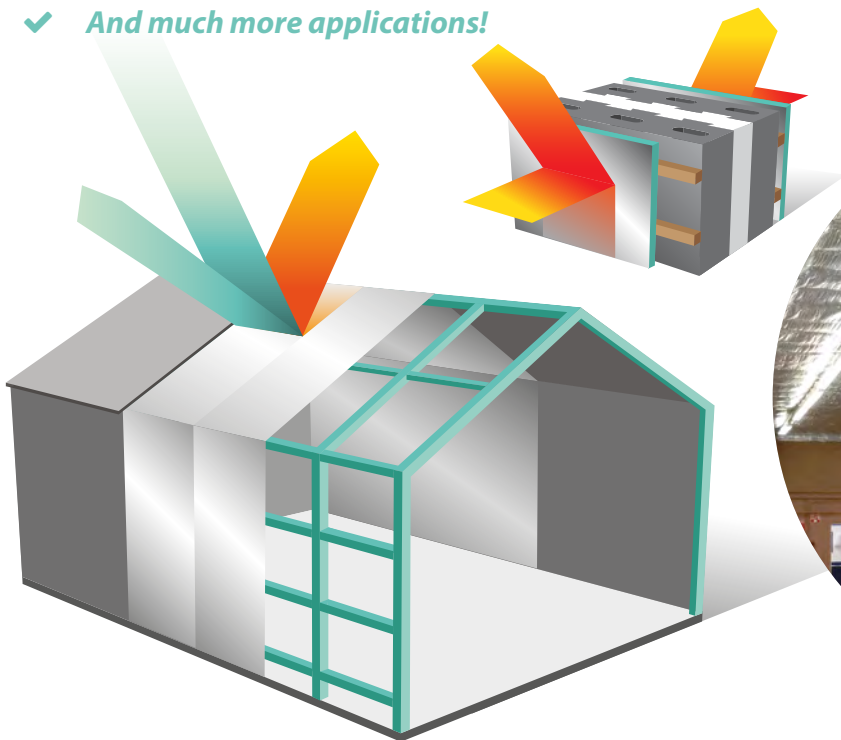
Can be installed at the rear of the radiator. Through its high heat reflecting performance, the aluminium reflects the warmth back into the room and prevents the heat going back into the wall.

# Smart is...

## Commercial building Insulation

**KdB Reflective insulation  
range is also perfect for:**

- ✓ *Factories and warehouses;*
- ✓ *Agricultural buildings;*
- ✓ *Retail and commercial buildings;*
- ✓ *Hot climate insulation;*
- ✓ *Upgrading old barns;*
- ✓ *And much more applications!*



***Kdb Insulation is a proud  
sponsor of Kim Huybrechts!***

*"KdB Insulation - the next generation of Insulation products."*

# Smart is...

Hybrid System  
**Airgreen®**

## Installation guide:

1

Home-iso 100mm + Airflex 10mm.



2

Home-iso tightly fitted between studs.



3

Airflex fitted over studs & Home-iso.



4

Airflex fitted, ready for battens.



5

Battens fitted.



6

Start fitting plasterboard, with airspace behind.



B

"Home-iso" can also be used with "Expert Multi-Foil" insulation.



# X Smart is not...

Insulation has failed in the past and still is failing. There are many reasons for the failures and most common causes are as follows:



## X Not understanding insulation products.

It is important to understand the differences in insulation products and what their limitations are. It is factual - no one product can take care of the three causes of heat loss:

**1. Conduction 2. Convection 3. Radiation**

✓ **Mass insulation**, such as **"Home-iso"** is an ideal material for retaining heat through Conduction and Convection in a building.

✓ **Reflective Insulation**, such as **"Airflex"**, **"Expert Multi-Foil"**, **"Air-Reflect"** is an ideal product for preventing radiant heat loss.

## X Poor workmanship

There are many recorded images showing badly fitted insulation. The most common are gaps between insulation and roof rafters, also timber studs in stud walls.

Then there is insulation that shrinks: from 200 mm to 175 mm in two years and so on. When you have gaps and material that has shrunk the U-values are meaningless and you don't have the product that you paid for.

It is impossible to fit rigid insulation boards between timber rafters and expect the results that are printed in the manufacturer's brochures. Timber is a breathable substance that contracts and expands during the year.

✓ The answer lies in products that are easy-to-fit and are designed to maintain their shape, such as KdB's **"Home-iso"** polyester insulation, as well as products that ensure airtightness, such as **"Airflex"**.

## X Lack of regulations

It is only in the last few years that the insulation industry has been addressed by regulators. In the past this was guided by manufacturers themselves.

At long last the game is changing: the public are no longer kept in the dark and organisations like LABC are moving in the right direction to enforce the regulations.

At present, Regulations are addressing multi-foil products. We strongly believe that all insulation products must be addressed and the public informed about the limitations of each product.

✓ Fitting rolls of new generation insulation products, such as **"Home-iso"** is easy, as the roll sustains its shape and won't slump after installation.

! **Health Warning: there are many reports claiming certain insulating products contain carcinogens.**

! **NONE OF OUR PRODUCTS CONTAIN CARCINOGENS!**



## The Next Generation of Insulation Products

**Wish to find out more about our products?  
Contact us today!**

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