



For roofs & walls





- (2) BBA tested, approved & certified
- (1) Multi-foil insulation for roofs & walls
- (合) R Value 1.9
- (1) Building regulations Part L compliant
- Airtight insulation
- (1) Integral vapour barrier
- (1) Easy fit, clean & lightweight



Kontrol R1.9 has been scientifically developed with the use of microfibres to perform better than conventional wadding.

Unlike conventional multi-foil products that rely upon excessive layers of waddings to deliver its thermal properties, Kontrol R1.9 utilises a polyester microfibre within each of its three fibrous layers. (see Fig 1).

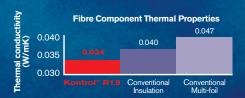


Fig 1. Kontrol microfibre thermal performance

#### Microfibre technology: the secret behind the most advanced multi-foil

Kontrol R1.9 combines this advanced microfibre technology with high performance reflective layers to create an ultra-thin, versatile thermal insulation (see Fig 2).

Kontrol R1.9's unique combination of these reflective layers and micro-fibre technology gives unrivalled insulation performance by reflecting radiation, minimising conduction and eliminating convection, saving energy and reducing heat loss within the build.



Kontrol R1.9 is a versatile insulation product that can be used with other materials to improve U-Values (see Table 1) to meet current and future building regulation requirements in warm-roof and timber frame applications.



Fig 2. Kontrol microfibre under the microscope



### **Kontrol R1.9 timber frame application**

Simple to install, Kontrol R1.9 can be fitted on site or in the factory.

#### Installation instructions

Kontol R1.9 is installed across the timber frame on the warm side of the building envelope, stapling the product in place.

Fibre insulation such as Thermafleece (wool or hemp), Supaloft Green (recycled plastic), mineral wool or rigid board, is then fitted in the stud cavity to give a high performance, airtight insulation system.

#### Vapour control

Kontrol R1.9 is an insulated vapour barrier which when installed on the warm side of the build eliminates the need for a separate vapour control layer within the system.





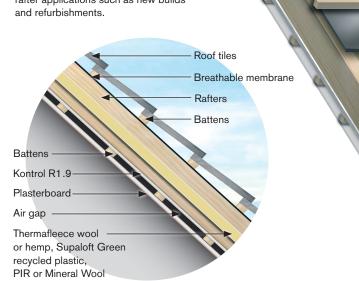


## Kontrol R1.9 warm roof application

Kontrol R1.9 is simply installed under rafter across the roof on the warm side of the build, with additional insulation fitted between the rafters.

Fitting is completed by battening and fixing plasterboard.

Kontrol R1.9 can also be used in over rafter applications such as new builds and refurbishments.









# Multi-foil insulation

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## Time and money saving installation

Clean and lightweight, Kontrol R1.9 is easy to fit with little waste, speeding up the installation process, saving time and money on site.

#### **Durability**

Kontrol R1.9 is rot proof and does not tear easily. When installed as specified it will have a life equivalent to that of the roof structure in which it is incorporated.

#### **Space saving solution**

The ultra thin, space saving Kontrol R1.9 means minimal truss depth is required creating maximum living space.

## Working towards carbon zero homes

Reducing the carbon footprint of new homes is a key concern for private and social sector housing providers of today with the government's eventual move towards zero carbon homes in three steps (see Table 2).

We are committed to innovating and delivering insulation products that meet the 'Energy Efficiency' performance targets laid out in the Code for Sustainable Homes, which integrates higher sustainability and thermal performance into the design of future builds.

Date	2010	2013	2016
Carbon improvement as compared to Part L (BRs 2006)	25%	44%	zero carbon
Equivalent energy/carbon standard in the Code	code level 3	code level 4	code level 6

Table 2. Code for Sustainable Homes targets

#### **Technical Specification**

Roll Weight:	13kg
Thickness:	Nominal 33mm
Width:	1200mm
Length:	12.5m
Square metre per roll:	15sq.m
Emissivity of outer layers	0.17

Outer layer WVT	0.02-0.05 g/m²/day
	(ASTMF 1249)2K/W
Resistance to tearing:	300-450N (nail shank)
	(BS EN ISO 12310-1)
Flammability:	Class E
	BS EN ISO 11925-2
Core thermal resistance:	0.97m <sup>2</sup> K/W

#### Technical Standard

Kontrol R1.9 meets or contributes to meeting the building regulations of England/Wales, Scotland and N. Ireland.





#### Where to buy:

a copy of which is available on request.

Kontrol Multifoil is available through a wide network of merchants and distributors. To find your nearest supplier visit our web site www.kontrol-insulation.com or call 0844 8009953.

#### **Contact:**

Eden Renewable Innovations Ltd, Soulands Gate, Dacre, Penrith, Cumbria CA11 0JF tel: 017684 86285 fax: 017684 86825 email: info@kontrol-insulation.com



All products are supplied in accordance with Eden Renewable Innovations Ltd's terms and conditions of business,

