

YBS Insulation

HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY



UKAS Certification No:

1145 - 738

Agrément Certification No:

BPD 07-217 (design) BPD 07-218 (application)

ECO-WOOL

CLEANER GREENER AND SAFER LOFT INSULATION

Recycled Fibre Loft Insulation



Quick, clean and easy to install

Can be laid over existing loft insulation

Free from floating fibres

High performance energy saving properties

Direct equivalent to glass fibre insulation

Totally recyclable

TOTALLY
**ITCH
FREE**

NON-ALLERGENIC
NON-IRRITANT

Patent
Pending

Made from
approx.

85%
RECYCLED PLASTIC
BOTTLES

ECO-WOOL

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Recycled Fibre Loft Insulation

Eco-Wool Insulation is made from user-friendly non-irritant, non-itch material that is free from floating fibres or dust and so avoids skin irritation and respiratory problems normally associated with other forms of insulation.

Eco-Wool will not deteriorate over time and will not be affected by mould, mildew or rot. Eco-Wool is also resistant to vermin and insect attack.



Other features include:

- Totally safe and easy to install with no protective clothing required.
- Ensures a safe indoor air quality.
- Fully recyclable and uses recycled material in its production.
- Provides good acoustic properties to help keep your home or commercial environment quiet and free from noise pollution.
- Eco-Wool is unaffected by water.
- Long term stability and durability 50 years +
- Every one tonne of plastic bottles recycled for the manufacture of Eco-Wool saves one and a half tonnes of carbon emissions into our atmosphere and so has a dramatic positive impact in our efforts to save our planet.
- Every roll of Eco-Wool manufactured saves enough energy to power a 60 watt light bulb for approx 290 hours.

Eco-Wool is designed for use in:

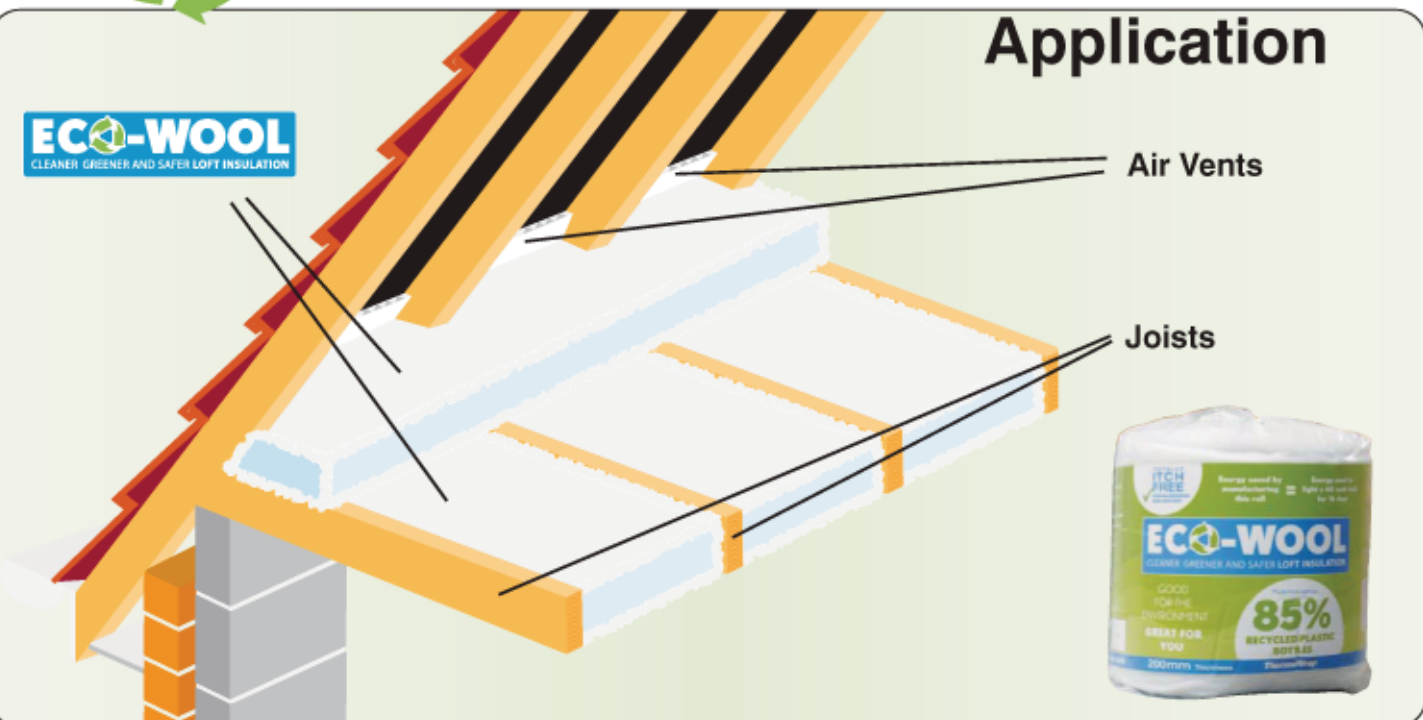
- Loft applications between and over joists in ventilated and unventilated lofts under pitched roofs.
- Between rafters for tiled or slated pitched roofs.
- Timber-frame wall applications between studding with a weather - resistant cladding.



When Eco-Wool is installed it then continues to save energy, whilst keeping you warm it ensures your continued contribution to reduce global warming maintaining a safe environment for our children and our children's children.

Application

ECO-WOOL
CLEANER GREENER AND SAFER LOFT INSULATION



Air Vents

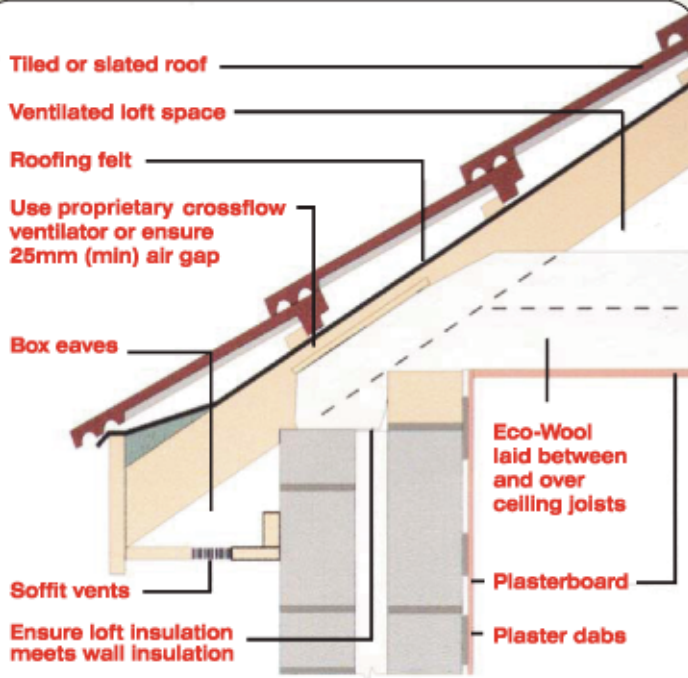
Joists



When fitting Eco-Wool, the roof structure must have provisions in place for preventing condensation.

Adequate permanent ventilation of the roof space should be provided by continuous openings or frequently spaced vents of equivalent area positioned along two opposite sides of the roof at eaves level. Pitched roofs greater than 15°, roofs with spans exceeding 10m, and monopitched roofs should be in accordance with clause 9.4 (in particular 9.4.7.1) of BS 5250 : 1989. Further information and guidance is given in BRE Report No 262 Thermal insulation : avoiding risks.

In roof structures incorporating the insulation at ceiling level, a breathable membrane can be used to limit excessive condensation.



Between Joists

For safety, work from suitable “crawling boards” spanning four joists. Start from the eaves ensuring the wall plate is covered and work towards the centre of the loft, placing Eco-Wool between the joists (on top of any existing insulation in place). Butt joint where necessary. When space along the joists is filled, the end of the roll can be turned back to start an extra layer of insulation or may be cut to size. Layer insulation to the required thickness ensuring the ceiling beneath is completely covered except directly under the water tank. Where the depth of previously installed insulation has reached the top of the joists, extra heat saving is gained by cross layering (at right angles to joists) with Eco-Wool. Insulate and draught seal the loft hatch.

Tanks and Pipes

Fit YBS cold water tank insulation to the cold water tank to protect from freezing. DO NOT insulate directly underneath the water tank. Wrap all water pipes with YBS Spiral Wrap or YBS Pipe Lagging to protect from frost.

Electrical Installations

Insulation must not be laid over electric cables. Carefully lift electric cables above the insulation so that they do not overheat. Ensure there are no loose or disconnected wires and re-route them if necessary. Insulation should be kept at least 150mm away from recessed light fittings and hot flues to prevent them from overheating. Use fire hoods where possible when downlighters are installed.

Environment

Eco-Wool does not have Global Warming Potential (GWP) or Ozone Depleting Potential (ODP).



Insulation between joists

The table below shows the U-values achieved using Eco-Wool laid in the roof void.

U-values are based on the first layer of insulation laid between the joists, and the remaining thickness installed as a second layer, cross-laid over the joists to reduce cold bridging.

Thickness of Eco-Wool (mm)		U-value W/M ² K
1st Layer	2nd Layer	
100	170	0.16
100	200	0.14
150	200	0.12

Thickness	Width	Length	Area	Thermal Conductivity	Thermal Resistance
100mm	2x 570mm	8m	9.12M ²	0.0425 W/mk	2.353 M ² K/W
100mm	3x 380mm	8m	9.12M ²	0.0425 W/mk	2.353 M ² K/W
150mm	2x 570mm	5.33m	6.07M ²	0.0425 W/mk	3.529 M ² K/W
150mm	3x 380mm	5.33m	6.07M ²	0.0425 W/mk	3.529 M ² K/W
170mm	2x 570mm	4.71m	5.36M ²	0.0425 W/mk	4.000 M ² K/W
170mm	3x 380mm	4.71m	5.36M ²	0.0425 W/mk	4.000 M ² K/W
200mm	2x 570mm	4m	4.56M ²	0.0425 W/mk	4.706 M ² K/W
200mm	3x 380mm	4m	4.56M ²	0.0425 W/mk	4.706 M ² K/W

Tensile Strength	Water Vapour Diffusion Resistance Factor	Water Absorption	
		Short Term	Long Term
2.4 kPa	1.51	0.78 kg/m ²	1.30 kg/m ²

Fire Test BS 5803-4 = Passed

Test Report No: 0316-L-06/12.

EN 10286: Thermal insulating products for building applications - Determination of water vapour transmission properties (1997-07).

Test Report No: 0316-L-06/13.

EN 1609: Thermal insulating products for building applications - Determination of short term water absorption by partial immersion, method A (1997-01).

Test Report No: 0316-L-06/7.

EN 12087: Thermal insulating products for building applications - Determination of long term water absorption by immersion, method 1A (1997-07).

Test Report No: 0316-L-06/10.

EN1604: Thermal insulating products for building applications - Determination of dimensional stability under specified temperature and humidity conditions (1997-01).

Test Report No: 0316-L-06/8.

EN 12667: Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter method - Products of high and medium thermal resistance (2001-02).

Test Report No: 0316-L-06/9.

EN822: Thermal insulating products for building applications - Determination of length and width (1994-11).

Test Report No: 0316-L-06/9.

EN823: Thermal insulating products for building applications - Determination of thickness(1995-05).

Test Report No: 0316-L-06/7.

BS 5803-4: Thermal insulation for use in pitched roof spaces in dwellings - Part 4: Methods for determining flammability and resistance to smouldering (1985).

Distributor:



GOOD
FOR THE
ENVIRONMENT
**GREAT FOR
YOU**

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