Eco-Brite® For Floors

Eco-Brite® is a two sided single foil for use as a heat reflective lining within the fabric of sustainable homes, most prefabricated domestic and commercial building components including portable and modular structures.

The Eco-Brite® system is primarily intended for installation within floors, walls, ceilings and roofs. Its inclusion will reduce the thickness of the soft insulation required, substantially minimising energy needs and improve comfort for occupants.

Draped over the floor joists and below the pipes, the Eco-Brite® membrane reflects the radiating heat back up to the floor, warming its surface more rapidly and evenly so providing better temperature control and comfort levels in the room.

Eco-Brite® installed below under floor heating pipes

Eco-Brite® has an emissivity of only 0.048, so 96.1% of radiant heat is reflected back (hot or cold). Every square metre used will save up to 23Kg of CO_2 per annum on an un-insulated wall and 12.33 Kg of CO_2 per annum on an insulated wall.

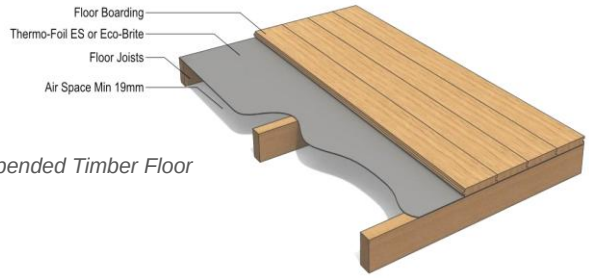
Quality

It has BBA Approval, (Certificate No. 08/4576) Dubai Municipality Certification and fire certification to BS476 Part 6 and Part 7, and has been designed and tested to last the lifetime of a house.

Installation

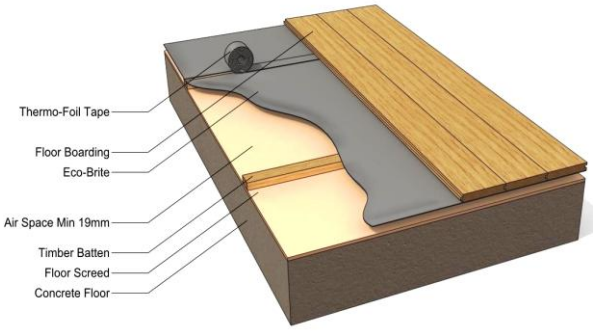
To act as a radiant barrier Eco-Brite ® is installed within a structure facing at least one air space, (usually 19mm to 25mm). In a floor application with downward heat flow and a minimum air space of 19mm either side of the Eco-Brite®, a Thermal Resistance of **1.6m^{2}K/W** can be achieved.

Installation Guide



Suspended Timber Floor

Concrete Ground Floor



Apollo's HRMs R Values

Using an emissivity value of 0.05, the thermal resistance (m^{2}KW–1) of the products is shown below

Element of Structure	Thermal Resistance Values of The Products With A Minimum Air Space of 25mm on one side
Ceiling Upwards heat flow	0.45 m^{2}KW–1
45 Degree Pitched Roof Upwards heat flow	0.51 m^{2}KW–1
Wall Horizontal heat flow	0.67 m^{2}KW–1
Floor Downward heat flow	0.80 m^{2}KW–1

Tested to BBA Approval

Eco-Brite® installed in a Cabin Floor

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