

# For pleasantly cool rooms in summer.

Now living under the roof becomes comfortable.

### Insulation between the rafters with THERMO JUTE 100

- Pleasant cool under the roof in summer
- Insulation for healthy living, natureplus<sup>®</sup> certified
- High quality insulation made from an annually renewable raw material



Best mark "0" in the test for susceptibility to mould



#### **Ecological Building Systems**

For stockist information and full technical support for your project, please contact Ecological Building Systems or visit www.EcologicalBuildingSystems.com

## Excellent summer heat protection.

Ideal phase shift of 11 hours with 24 cm **THERMO JUTE 100**. This corresponds to a conventional installation of more than 50 cm glass wool insulation.

Glass wool: 20 kg/m<sup>3</sup>, λ 0.035 W/m· K, c= 830 J/(kg·K)

Most of the heat enters the house through the roof. Therefore we recommend insulating with 24 cm **THERMO JUTE 100** between the rafters. **With a value of 2350 J/ (kg·K)**, this excellent natural product reaches the **best specific heat storage capacity among all insulation materials currently on the market** (test result of the Material Testing Institute Leipzig).

Jute is one of the most used natural fibres in the world. These durable fibres are sourced from the ancient cultivated plant Corchorus. For the production of **THERMO JUTE 100** we use high quality singular use jute bags from the transport of cacao and coffee beans.

#### How the heat shield works:

On hot summer days, the space between the tiles and the insulation on the roof can heat up to 80°C. The jute insulation strongly damps the penetrating heat which only reaches the interior approximately 11 hours later – during evening hours. The heat stored in the insulation is given off to the cool night air.

#### Your advantages:

Pleasant temperatures in your attic, even without expensive and electricity intensive air conditioner.



Natural and healthy indoor climate through the natural raw material characteristics of the jute fibre. natureplus<sup>®</sup> certified insulation. The installation and use is completely harmless and there is no pollutant emission to people or environment.

**Soda is used as fire protection.** A natural salt which is also used in the food production (baking powder).

**No mould growth.** Best mark "0" in the test for susceptibility to mould.

**Moisture regulating.** The capillarity of the plant fibre remains intact, moisture is derived by the jute fibre through the construction to the outside and/or the inside.

**Positive CO<sub>2</sub> balance and sustainability** by using renewable raw materials.

Best lambda value among natural fibre insulations:  $\lambda 10,\,dry$  / m· K 0,0359 W / m·K

#### Heat storage capacities



#### Comparison of the thickness

A thickness of over 52cm of glass wool would be required to gain a comparable effect of heat protection!