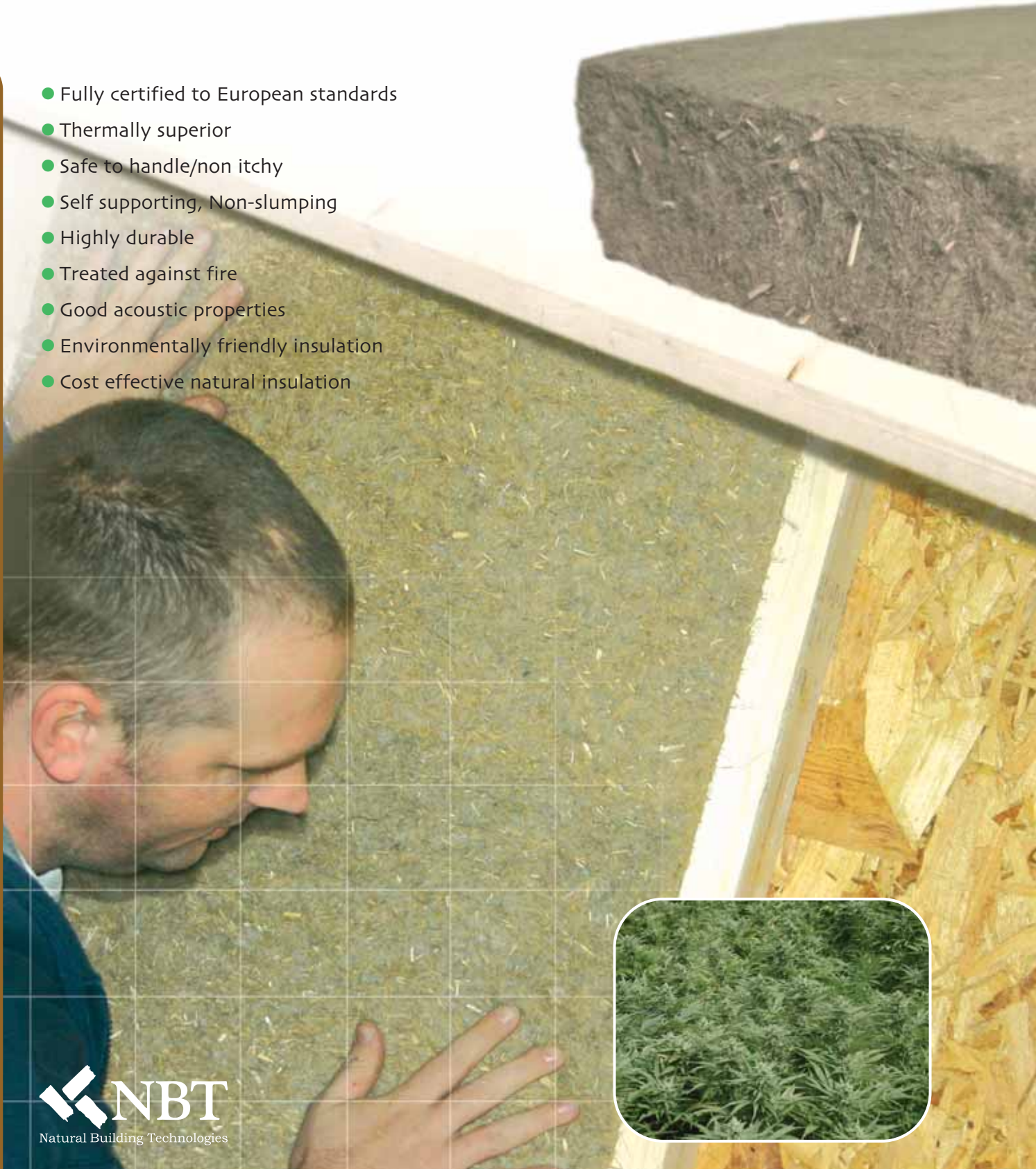


NBT Hemp Batts

For Lofts, Walls, Ceilings and Floors

- Fully certified to European standards
- Thermally superior
- Safe to handle/non itchy
- Self supporting, Non-slumping
- Highly durable
- Treated against fire
- Good acoustic properties
- Environmentally friendly insulation
- Cost effective natural insulation



Why use NBT Hemp Batts?

- **Thermally superior**
- **Durable**
- **Sustainable and environmental**
- **Self supporting, non-slumping**
- **Safe to handle**
- **Fire protection**
- **Moisture controlling**
- **Good acoustically**
- **Versatile**
- **Proven**

Thermally Superior

NBT Hemp Batts have a thermal resistance (k -lambda) of 0.040Wm/k. When used in thicknesses above 100mm, they do not compress, so that if 250mm of insulation is installed into a loft it remains 250mm (unlike nearly all lightweight fibre insulations).

The complex non woven structure reduces heat loss through convection, while the moisture regulating properties of natural fibres mean that there is no heat loss through dampness (as can happen in loft spaces). These two factors have been shown in tests to improve thermal performance by up to 10% over most lightweight fibre insulations.

Durability

NBT Hemp Batts use simple non-reacting compounds to provide protection against insects, biological and fungal attack and make it unattractive to vermin, whilst remaining harmless to common building components such as PVC cables and nailing plates. Natural fibres are also naturally durable because of their great flexural strength.

Sustainable and environmental

NBT Hemp Batts are manufactured mainly from hemp fibres grown within 50km of the factory. They also contain 8-10% thermoplastic binder to give loft and stability. These fibres are completely inert and harmless. Hemp cultivation requires minimal petroleum additives and helps preserve soil condition. In addition NBT Hemp Batts contain no VOCs, no CFCs and no Formaldehyde, and do not constitute a waste hazard when disposed of finally.

Self Supporting, non- slumping

The high density and great flexural strength of NBT Hemp Batts makes the product tight fitting and non-slumping. This is essential for ease of application and

effective thermal performance particularly in timber frame walls, and sloping ceilings. It is also important for good acoustic performance, wherever installed.

Safe to handle

NBT Hemp Batts are non-toxic, non-hazardous, irritant free and can be handled without any specialist protective clothing.

Fire Protection

NBT Hemp Batts are approved for use as loft, wall, and ceiling insulation (achieving a Euro Class E rating). This fire protection is achieved by the through coating of the fibres with simple non reacting salt compounds.

Moisture control

NBT Hemp Batts actively assist in the control of moisture in buildings, drawing vapour away from vulnerable timbers, without any loss of thermal performance or effect on the durability of the insulation. This is particularly important in older buildings, and in modern timber frame structures.

Acoustics

Because of their density (40 Kg/m³) and the complex nature of the fibres NBT Hemp Batts can help improve acoustic performance in partitions as well as external walls.

Versatile

NBT Hemp Batts are suitable for use in external walls in timber and steel frame buildings, and for all internal applications including walls, suspended floors, lofts and roofs. They are suitable for both new build and renovation.

Proven

NBT Hemp Batts are authorised for use throughout the EU and have full European product certification ETA 06/0040. They also have full life cycle environmental certification under the "Natureplus" method (see www.natureplus.org). NBT Hemp Batts have been extensively used in domestic, public and commercial buildings throughout Europe.

Sizes Available

NBT Hemp Batts (Density 40kg/m³) are available as standard in 1.2 metre lengths, 50mm, 75mm and 100mm thicknesses in 385mm and 575mm widths and 140mm thickness in 575mm width.