

Environmentally-friendly insulation system made from hemp



AREAS OF APPLICATION

Flexible cavity insulation in **roof**, **dry wall** and **floor** constructions

Cavity insulation for partition walls, external walls and service zones



- Flexible thermal insulation
- Good compression resistance
- Expands to fit adjoining components
- Prevention of thermal bridges
- Excellent insulation properties in winter and summer
- Classified as non-irritant to skin, easy handling
- Water vapour open for a healthy room environment
- Ecological and environmentally-friendly

For more information please visit our website at www.steico.com



Ecological in many ways

our environment on the other.

During its growth, hemp absorbs

Ecological means balancing our needs

on the one hand, with a concern for

greenhouse gas CO₂ from the atmos-

phere. This remains fixed during the

entire life span of the insulating mate-

rial - in contrast to many conventional

their production release large quanti-

Another positive effect is that while

hemp extracts CO₂ from the atmos-

phere, at the same time it produces

valuable oxygen during the growth

process. In addition, the whole pro-

duction process of STEICOcanaflex

conventional insulating materials.

from the insulation performance of

STEICOcanaflex in achieving better

Even after installation, STEICOcanaflex

that it is free from domestic air pollut-

ants of all kinds and is considered to

makes an ecological contribution in

The environment also benefits

energy performance.

be emission-free.

requires much less energy than many

insulating materials, which during

ties of CO₂.





Hemp is a very versatile agricultural crop with a long tradition. In China rope and paper had been manufactured from hemp even before writing was invented. Still at the beginning of the 20th century, hemp was a vital cultivated plant in Europe, until it started being replaced by wood for paper manufacturing and cotton for textile production.

As a result hemp was overlooked for a long time but today its natural advantages are becoming the focus of attention again. Hemp uses solar energy more effectively than many plants. Used as part of a rotation policy it is a good soil conditioner and during the growing process it makes a significant contribution to climate protection by fixing CO₂. As a raw material in STEICOcanaflex insulation, hemp shows its real performance once the fibres have been processed into a highly efficient flexible insulation board with no dangerous additives.

MORE VITALITY IN A HEALTHY ROOM CLIMATE

How comfortable you feel within your own four walls depends on many factors but the right environmental climate is definitely a key factor, so are a pleasant temperature, optimum humidity and fresh air.

STEICOcanaflex has outstanding insulation values. With this natural building material you can save valuable heating energy in winter and at the same time you will be protected against the heat gain in summer.

Yet another advantage of STEICOcanaflex is the capacity to effectively absorb sound.

The water vapour open structure of the material allows STEICOcanaflex to reduce the risks of interstitial condensation within a frame. Using STEICOcanaflex in a



breathing wall construction will help to maintain comfortable humidity levels in the building. Due to the fact that we only use natural products with no environment damaging additives, you can rely on STEICOcanaflex to provide a healthy room climate.



ECOLOGICAL PERFORMANCE OVER MANY YEARS

STEICOcanaflex may be a little more expensive than some conventional insulating materials. However, the purchase price represents only one part of the total costs of the insulation performance over time.

Conventional insulation materials, which are not considered emission free, require more stringent handling and disposal procedures, leading to higher costs. STEICOcanaflex can be easily and cheaply recycled.

With STEICOcanaflex you do not only insulate for the current generation but can also be confident about the product's performance in the future. This is because this ecological insulation material is non hazardous and can easily be recycled. This is a cost advantage which pays off.

MACHINING - SIMPLE AND NON ALLERGENIC

The processing of STEICOcanaflex is particularly user friendly and will not knowingly cause itching or scratching - whether during cutting or installation. STEICOcanaflex can be processed using simple tools. The special STEICO insulating knife is suitable, among others, for fast trimming cuts.



In order to make simple and uncomplicated cuts, it is best to use an electric all purpose saw (recommendation: Bosch GFZ 14-35 A). Custom made insulation knives available direct from STEICO.

The flexible STEICOcanaflex board is installed into cavities using minimum pressure (cut the board 10 to 20 mm oversize to assist friction fitting). Off cuts may be used to fill small voids to minimize wastage. To fill wider voids install the boards in a horizontal direction.



STRONG PERFORMANCE -**FIBRE BY FIBRE**



Hemp fibres are one of the most resilient natural products providing ideal conditions for a long insulating material life. In comparison to other annual fibre crops such as flax, jute or cotton, hemp fibres are characterised by a unique combination of fibre length, fibre stiffness and breaking strain. Therefore, hemp is considered to be the strongest native natural fibre and is classed second only to coco fibres for durability in use.

In addition, STEICOcanaflex offers a high resistance to insects and rodents due to the nature of the material properties.

TIP

When STEICOcanaflex is fitted in winter months, a vapour barrier should be fitted immediately to the inside face to prevent moisture uptake by the insulation.

PACKAGING

STEICOcanaflex

Thickness [mm]	Dimensions [mm]	Weight/m² [kg]	Pieces/Pallet	Coverage / Pallet [m ²]	Approximate weight/Pal. [kg]
40	1200 * 575	1.60	8 packs of 15 pieces	82.8	150
50	1200 * 575	2.00	8 packs of 12 pieces	66.2	150
60	1200 * 575	2.40	8 packs of 10 pieces	55.2	150
80	1200 * 575	3.20	8 packs of 7 pieces	38.6	150
100	1200 * 575	4.00	8 packs of 6 pieces	33.1	150
120	1200 * 575	4.80	8 packs of 5 pieces	27.6	150
140	1200 * 575	5.60	8 packs of 4 pieces	22.1	150
160	1200 * 575	6.40	12 packs of 3 pieces	24.8	150
180	1200 * 575	7.20	8 packs of 3 pieces	16.6	150
200	1200 * 575	8.00	8 packs of 3 pieces	16.6	150
220	1200 * 575	8.80	12 packs of 2 pieces	16.6	150
240	1200 * 575	9.60	12 packs of 2 pieces	16.6	150

Other board sizes are available on request.



STEICOcanaflex is certified with the European quality mark – natureplus®.

The natureplus®-seal of quality embodies health awareness, environmentally-friendly production, protection of limited natural resources and their suitability of application. Products with this label are made predominantly from renewable/ sustainable sources of raw materials.

CHARACTERISTIC VALUES STEICOcanaflex

Produced and supervised according to ETA-06/0040 Z-23.16-1598				
Fire class according to EN 13501-1	E			
Building materials class acc. DIN 4102	B2			
Declared thermal conductivity $\lambda_D [W/(m^*K)]$	0.040			
Declared thermal resistance R _D [(m ² *K)/W]	1.00/1.25/1.50/2.00/2.50/3.00/ 3.50/4.00/4.50/5.00/5.50/6.00			
Thickness [mm]	40/50/60/80/100/120/ 140/160/180/200/220/240			
Density ρ [kg/m³]	ca. 40			
Water vapour diffusion resistance value $\boldsymbol{\mu}$	1/2			
Specific heat capacity c [J/(kg*K)]	1700			
Declared level of airflow resistance [(kPa*s)/m ²]	2			
Raw material	hemp fibres, ammonium phosphate, polyolefin fibres			



Operating site certified according to ISO 9001:2000





Your STEICO Agent

www.steico.com