

INSULATING MATERIAL

CANAFIBER INTERCAPEDINE



DESCRIPTION

CANAFIBER INTERCAPEDINE is a high quality insulating material made with industrial hemp fibers. A natural and sustainable product with exceptional insulating properties. The unique characteristics of hemp fiber in terms of thermal insulation, humidity regulation and noise reduction contribute in a distinctive way to a healthy and sustainable living environment: the natural comfort.

Thickness - mm		40	60	80	100	120
Density - kg/m3		30	30	30	30	30
Thermal Conductivity - W/mk	LAMBDA λ	0,04	0,04	0,04	0,04	0,04
Thermal Transmittance - W/m2K	U	0,855	0,599	0,461	0,375	0,315
Vapour permeability - μ		1,2	1,2	1,2	1,2	1,2
Airflow resistance - kPa.s/m2		$\geq 2,0$	$\geq 2,0$	$\geq 2,0$	$\geq 2,0$	$\geq 2,0$
Specific heat capacity - J/KgK		1700	1700	1700	1700	1700
Reaction to fire - Euroclasse		E	E	E	E	E
Operating temperature		-40°C / +100°C				
Carbon Footprint		0,138 kg CO ₂ eq. (GWP) Net of CO ₂ sequestered during the cultivation of hemp. Data calculated on 1kg of product. System boundaries : from cradle to grave, phase of use excluded.				

USE AND APPLICATIONS

CANAFIBER INTERCAPEDINE is the ideal product for thermo-acoustic insulation of roofs, walls and floors for both new buildings and renovations. **CANAFIBER INTERCAPEDINE** is the natural alternative to insulating materials of mineral and synthetic origin. It is compatible with any type of structure, from traditional concrete systems to more innovative ones such as steel or wood. The unique qualities of **CANAFIBER INTERCAPEDINE** are enhanced when used in combination with breathable and vapour permeable solutions such as **Bio Beton®** and **Biomattone®** of hemp and lime.

Thickness (mm)	Size (mm)	Panels / package	m ² / package	m ³ / package	Package / Pallet	m ² / Pallet	m ³ / Pallet
40	1100x600	12	7,92	0,3168	10	79,2	3,168
60	1100x600	8	5,28	0,3168	10	52,8	3,168
80	1100x600	6	3,96	0,3168	10	39,6	3,168
100	1100x600	5	3,3	0,33	10	33	3,3
120	1100x600	4	2,64	0,3168	10	26,4	3,168

INDUSTRIAL HEMP FIBER

- Unique thermal phase shift thanks to the high capacity to accumulate energy
- Endless life cycle
- It absorbs up to 20% of its weight in water vapour and self-regulates extraction and release
- Free of protein substances and unappetising to insects and rodents
- Energy consumption reduced by 90% compared to alternative synthetic and mineral insulation products
- It sequesters CO₂ during growth and contributes to the fight against climate change
- An excellent example of a circular economy

The annual cycle of industrial hemp fiber makes it a renewable non-toxic resource of high quality. The insulating materials in hemp fiber enjoy very high durability. They represent the ideal solution to create healthy and comfortable living spaces with an environmental impact reduced to a minimum.

DID YOU KNOW THAT...

- One hectare of agricultural land planted with hemp produces 9 tons of biomass per year which means, four times the production of one hectare of forest
- One hectare of hemp fiber sequesters 15 tons of CO₂ every time it is harvested
- The cultivation of industrial hemp doesn't need pesticides and enriches the soil

WHY CANAFIBER?

CANAFIBER INTERCAPEDINE is able to absorb noise, regulate humidity, prevent the appearance of condensation and mould and reduce internal temperature fluctuations. The panels are simple and pleasant to use and totally free of dangerous substances that can cause irritation of the skin and respiratory tract.

BULK PRODUCTS TO BE MIXED

CANAPULO GROSSO 0-25

HEMP SHIV 0-25



AVAILABLE IN BAGS OF 20 KG

DESCRIPTION

Canapulo Grosso 0-25 is obtained by mechanical scutching of hemp bales and subsequent shredding of the stems. **Canapulo Grosso 0-25** is produced with hemp that is cultivated, processed and packaged from selected and certified seeds in accordance with European legislation on the content of $\Delta 9$ -THC.

COMPOSITION

- 100% sourced from hemp stalks
- 97,5% organic matter, of which:
- 52% cellulose, 18% lignin, 9% hemicellulose

DENSITY

- About 100 kg/m³ \pm 5%

HUMIDITY

- Less than 19% of the raw material, Systematic control on incoming raw material;
- About 13% on average on the finished product, based on over 1500 measurements per year.

DUST

The residual dust rate is controlled and is less than 2% after the dust removal process by suction and passing through a 0.25 mm sieve.

PHYSICAL PROPERTIES

- Absorbing power: 375% (NF V19-002)
- Calorific value: 3690 cal/g (EN 14918)
- Thermal conductivity: 0,048 W/m.K (EN 12667)

GRANULOMETRY

Particle size measurements are regularly carried out by screening in order to check the dimensional regularity of the hemp shiv.

GRANULOMETRIC BREAKDOWN

- Greater than 40 mm: less than 2%
- From 20 to 40 mm: 0-3%
- From 2.5 to 20 mm: 93-98%
- From 0 to 2.5 mm: less than 3%

CHEMICAL

- Water: from 9 to 14%
- Dry matter from 85 to 90% of which:
- Total organic matter: 97.5% on dry matter, of which:
 - Crude cellulose: 52%
 - Lignin: 18%
 - Hemicellulose: 9%
 - Minerals:
 - Calcium: 5 g/kg (dry)
 - Magnesium: 0,17 g/kg (dry)
 - Phosphorus: 0,18 g/kg (dry)
 - Potassium: 1,8 g/kg (dry)
 - Total nitrogen: from 0,3 to 1% (dry)
 - Total carbon: 49,2% (dry)
 - C/N: 160
- Ashes: 2%
- PH in suspension at 10%: 6.7

