

Kanop.

**Bio-based thermo-acoustic loose-fill insulation
for intermediate floors and unconverted lofts**

COMFORT
THAT SETTLES IN,
WITHOUT
A SOUND.



- ✓ **Bio-based**
- ✓ **Ready to use**
- ✓ **Acoustic**



Kanop and its double benefit

Walls are insulated. Roofs are insulated. **Intermediate floors and unconverted lofts**, though, are too often the forgotten spaces, in new build as in renovation.

Yet it is between two floors that much of a building's everyday comfort is decided: **limiting the transmission of impact noise**, softening voices and preserving the peace of every room.

In an unconverted loft, the challenge is mainly thermal: slowing the progress of heat in summer, **keeping the indoor freshness** longer and limiting heat loss in winter.

Preserving the **peace** of every room.

First, **Silence**.

Built into a suitable floor system, Kanop achieves **sound reduction of up to 56 dB*****. It disperses and softens what wears away the peace of a place: impact noise, footsteps on the parquet, a chair pulled back on the floor above. For this, it is the strongest argument: calm settles in.

Calm.

Kanop, what is it?

Kanop is a ready-to-use, **bio-based thermo-acoustic loose-fill insulation**. Hemp and lime, nothing else.

It is poured by hand into intermediate floors and unconverted lofts, whether unfinished or existing, in new build as in renovation.

Up to 56 dB*** of sound reduction. And genuine summer comfort under the roof.

Comfort.

Then, a **stable indoor climate.**

In an **unconverted loft**, Kanop provides the mass that is missing exactly where the building loses, and gains, the most heat. This **thermal inertia delays** heat penetration by several hours. The summer afternoon peak only reaches the inside in the evening, when you can finally ventilate. In winter, it is the opposite: the heat that rises stays under the floor instead of escaping through the roof.

Between two storeys, the principle stays the same: a mass that absorbs and smooths. Kanop **reduces temperature differences** from one level to another, and thermal comfort stabilises.

In both cases, this added mass also reduces the load on both heating and cooling. Savings follow, all year round.

“ From the first days, you feel the difference: cool in summer, comfortable in winter... and above all, what calm indoors!”

Freshness in summer.
Warmth in winter.



A bio-based material.

Kanop is made of hemp and lime, a **100% natural mineral and plant blend**. A real alternative to conventional or petrochemical insulation, without giving up any performance.



A protected building.

Fire resistance classed Bs1d0**: the product does not spread flame (B), releases very little smoke (s1) and does not produce flaming droplets (d0). In the event of a fire, these three criteria determine how much time occupants have to evacuate safely. You can rest easy.



Healthy indoor air.

Kanop is classed A+, the best level of health labelling for indoor air emissions. The guarantee of an insulation material that does not emit harmful volatile compounds. Enjoy cleaner air, at home, every day.



One material. Two uses.



Kanop is **ready to use** and installed without mixing and without machinery. Whether the floor is under construction or already existing, the same material adapts to two configurations: the intermediate floor and the unconverted loft.

Each with its own benefit.

“ Take a leap in comfort.”

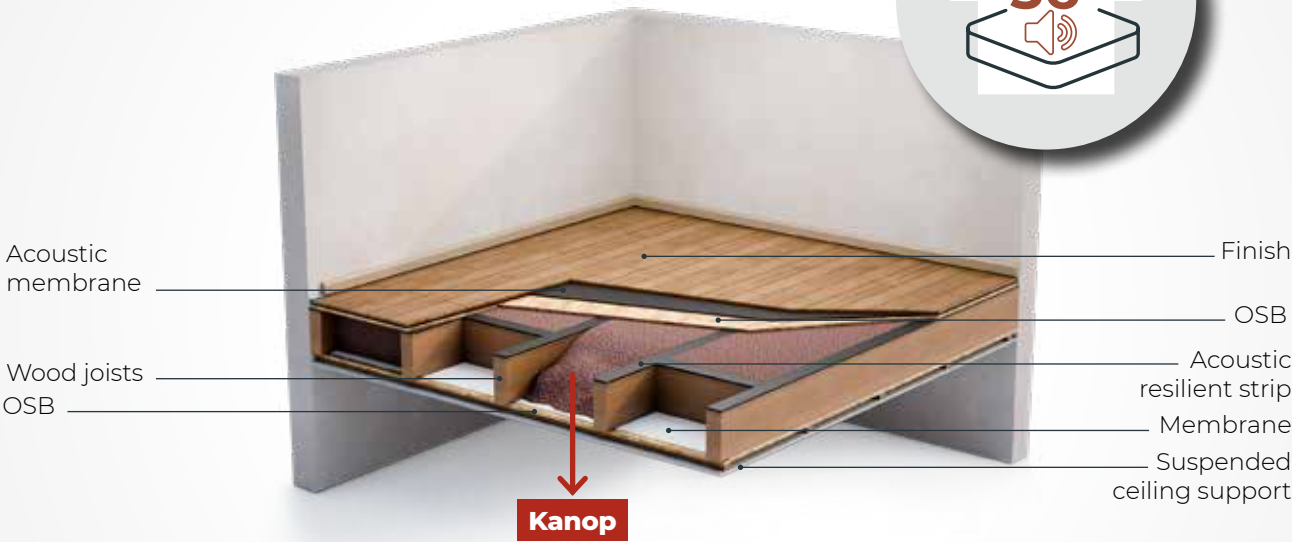
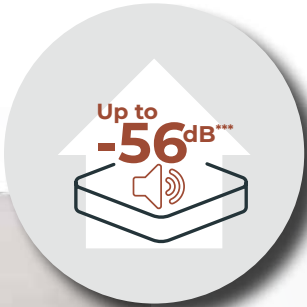
	KANOP (22,5 CM)	CONVENTIONAL INSULATION (16 CM)*
 WINTER COMFORT	★★★	★★★
Thermal resistance (R)	4	4
Thermal conductivity (λ Ui)	0,058	0,041
 SUMMER COMFORT	★★	★
Phase shift (h)	14	7
Damping	30	10
 FIRE RESISTANCE	★★	★ to ★★★★★
	B-s1, d0**	depending on choice
 SERVICE LIFE	★★★	★
Estimated service life	100 - 150 years	30 - 50 years
Settling after installation	no	depending on choice

* Simulations established from the most common loft and intermediate floor insulation configurations on the market.

** Certification in progress

Floors.

Silence between floors.



	KANOP	NO INSULATION	CONVENTIONAL INSULATION
Sound reduction	up to -56 dB***	Low	Medium
Acoustic comfort	High	Low	Medium
Voice attenuation	Very attenuated	Low	Attenuated

*** Simulated value of 56 dB (-2;-10) for airborne noise, for the following build-up: 10 mm flooring, acoustic membrane, 12,5 mm OSB, 175 mm Kanop, 18 mm OSB, 20 mm battens, 12,5 mm plasterboard

Unconverted loft.

Thermal comfort,
summer and winter alike.



Simple installation.

1 Checking and preparation

- Check the general condition of the floor and joists: cleanliness, protruding screws removed, sound timber
- Calculate the allowable load of the structure, taking into account the weight of Kanop and the finishes (see table, last page)
- Treat:
 - heat-emitting elements: see specific points
 - electrical and ventilation fittings and access hatches.
 - ventilation ducts may be covered

2 Support and membrane

Where a suitable support already exists under the joists, lay the membrane directly on top. Where none exists yet, first roll out the membrane under the joists, then fix the support underneath to hold it in place.

In both cases, bring the membrane up the edges to the fill level (+5 cm) and seal the joints and overlaps well, so that the granulate cannot escape.



3 Filling

- **Open the Kanop bags**, ready to use (no mixing required).
- **Pour the granulate by hand** into the space between the joists (no need to loosen it)
- **Fill up** to the top of the joists and rake level
- **Lightly compact** to achieve an even fill
- **Top up** by pouring more granulate and level off by hand for a complete fill



4 Acoustic resilient strip (optional)

Lay a resilient strip on the joists, under the future floor panel, to reduce impact noise transmission.

5

Closing the floor

Close with an OSB-type panel laid on the joists. If a separate finish is planned (parquet, floor covering), an acoustic underlay can be added on the OSB before laying the finish, for absolute acoustic comfort.

→ In non-accessible unconverted lofts, this step is not necessary: the Kanop can remain exposed.



Specific points.

Allowable load of the structure

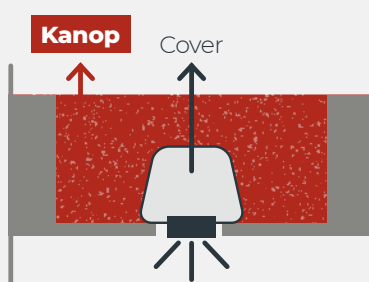
A load calculation is essential before installation and must be validated with a professional.

Bulk density as installed:
194 kg/m³

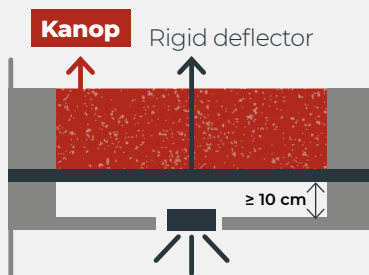
Find more data in the table on the next page or in our technical data sheets at www.iso hemp.com

Spotlights and heating elements

Any heat-emitting element must be protected before filling (cover intended for this purpose, or rigid deflector); it must not be in direct contact with the Kanop.



or

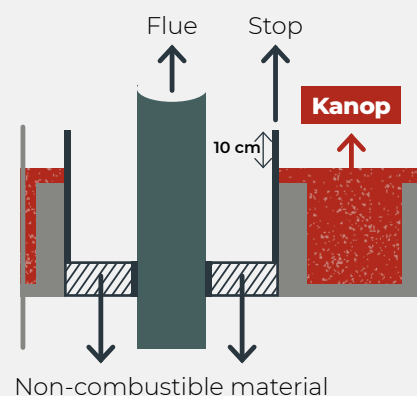


Chimney flue

The safety distance to observe is the one declared by the flue manufacturer.

Failing any indication, allow at least 8 cm for a single-wall or multi-wall metal flue and 10 cm for a masonry flue.

A rigid, fixed stop (metal or A2-s1,d0 mineral board) is fitted all around the flue, at the required distance, and extends at least 10 cm beyond the finished Kanop level. The resulting space stays empty.



Installation recommendations.

THICKNESS (mm)	R (m ² K/W)*	WEIGHT (kg/m ²)**	NUMBER OF BAGS/m ²
140	2,6	24	2,2
175	3,2	29	2,8
200	3,6	33	3,2
225	4	36	3,4
240	4,3	38	3,6

* Ri and Re included

** Joist volume subtracted, assuming 40 cm spacing

Installation is carried out exclusively by manual pouring.
The use of a blowing machine is prohibited.

Packaging.

	MAX WEIGHT (kg)	NR/PALLET	MAX PALLET WEIGHT (kg)	PALLET DIMENSIONS (cm)
Bag 60L	11	33	413	120 x 80 x 210
Big Bag 1.000L	201	1	221	120 x 100 x 115

Let's talk about your project.

Because a successful project relies as much on the choice of materials as on the quality of support.

Alongside you

- Preliminary studies & plan review: we look at your project before talking about products.
- Technical support & specification: help with sizing, technical data sheets, answers for design offices.
- Training & site assistance: because good material deserves installation to match.

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