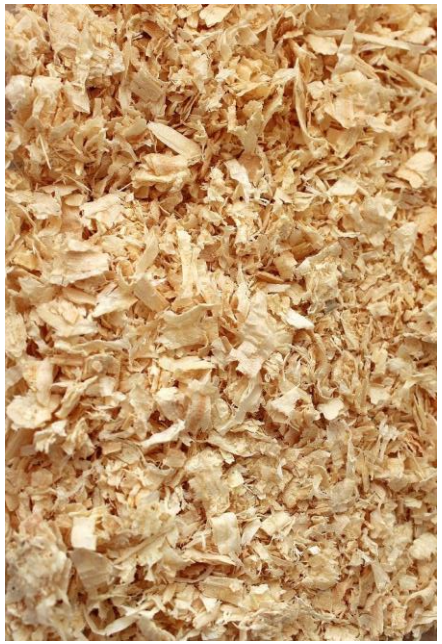
neolife®
Et si on se réinventait durablement ?

F.A.Q VESTA®

What is VESTA® ?



It is a unique combination of vegetal and mineral.

It is a patented material with a high timber fibre concentration, resulting from over 10 years of research and development (R&D). We have combined

- ✓ the best of the vegetal [renewable, low hot/cold conductor (insulator), clean waste, local resource]
- ✓ And the best of the mineral [hardness, colour fastness, rot-proof, fire resistance]

to create a unique, stable, ecological material.

To bind the timber fibres and mineral salts, we chose a thermo-binder which allows the thermal transformation of the material into a finished product. It is a virgin polymer-not recycled, without phthalates or heavy metals - of fossil origin, and mixed with mineral salts..

Where do the timber fibres in VESTA® come from ?

We only use softwood fibres from French and/or European sustainably managed forests, to reduce our carbon footprint as much as possible.

We use solid timber scraps from planing mills, with timber that is perfectly clean, without varnish or solvent: timber chips and sawdust from reclaimed solid timber materials.

We do not use recycled timber to make sure that the fibre is perfectly virgin. Recycled timber is often timber that has been treated, and this type of chain is very difficult to trace .

What exactly are the pigments that give VESTA® its colour ?

They **are pigments of mineral origin** which, when added to the timber fibres, allow the finished product to be tinted in the mass (dyed throughout).

These are the same pigments used in lime coatings, which have proved their excellent UV resistance for hundreds of years. And just like stones, which in nature do not lose their colour over time, VESTA® retains its colour over the years.

Is VESTA® a timber composite ?

(WPC family - Wood Plastic Composite)

Yes, in the strict sense of the NF EN 15 534 standard - NFC family (Natural Fibre Composite). However, the latter does not impose any minimum fibre content, which varies from 1% to 40% depending on the manufacturer. Depending on the composition and the manufacturing techniques used, a WPC can be of varying quality.

In the NFC family, VESTA® is the material with the highest timber fibre content, up to 8kg/m²*, which gives it excellent dimensional stability.

The intrastate qualities of VESTA®, coupled with our certified manufacturing requirements in our French factories, explain why **Neolife's solutions are currently the only ones under technical approval in the NFC family.**

AVIS TECHNIQUE CC FAT

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*For information : 1 m² of solid timber cladding weighs on average 10 Kg.

How will VESTA® age over time, is there a durability guarantee ?

After 10 years of experience and more than 500,000 m^2 installed, we have proven the perfect durability of our VESTA® solutions:

- **Natural maintenance of rot-proofing** without any subsequent treatments,
- **Colourfastness in the mass** thanks to the mineral pigments,
- **Excellent resistance** to weathering and impacts,
- **High structural and dimensional stability**, no change in shape or appearence.

In addition, **all our products are covered by a Technical review** and are certified "Qualité Bâtiment" (QB15) by the CSTB (1) with annual audits in our factories.

We also provide support to the building companies with a ten-year guarantee of the product incorporated in the work (2).

(1) CSTB = Centre Scientifique et Technique du Bâtiment/Scientific and technical Building Construction center.
(2) The 10 year guarantee being a major milestone in the world of construction).

Does VESTA® have insulating properties ?

Strictly speaking, VESTA® is not an insulator, this is not its primary purpose.
However, thanks to its **low lambda λ of 0.07 W/m.K*** (thermal conductivity), VESTA® will participate as a coating in the insulation of the cladding complex in winter, and will especially constitute an excellent thermal shield in summer.

These insulating properties make our cladding an ideal partner for bio-based insulation made from flax, hemp, cotton, grass, timber fibre or cellulose wadding. The VESTA® will reinforce the phase shift, to guarantee summer comfort as recommended in the RE2020.

* The thermal resistance value is slightly than of timber (0.12 W/m.K).

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Is VESTA® low carbon, in which way are VESTA® products eco-friendly ?

Since its creation, Neolife has been anchored in an eco-design approach with essentially ecological products.

VESTA® is labelled as a "biosourced product" by the biosourced label expert Karibati. .

This has several reasons:

Overcycling: no trees are cut down to make VESTA® products as we overcycle sawmill and planer waste from clean timber.

Carbon storage : VESTA® has a very high timber fibre content, so it is a material that stores carbon in the same way as solid timber. VESTA® cladding contains up to 8 kg of timber/m^2 in the form of fibres.

[For information: 10 Kg/m^2 for solid timber cladding.]

Recyclable: VESTA® products are 100% recyclables. They can be grinded and re-extruded to make new equivalent products that perform as well as the original. Our analysis show that it is possible to make at least 3 cycles without losing mechanical strength on the finished product. Thus, the carbon remains stored much longer.

No offcuts: the production of VESTA® construction solutions does not generate any offcuts; any possible offcuts are reintegrated into the production process.

Maintenance-free: our VESTA® ranges are maintenance-free during their lifetime; no need for varnishing or insecticide treatment, no need for cleaning, which avoids the use of water and the need for scaffolding... All of this is beneficial to the environment.

Carbon footprint: in all our industrial choices, we make sure to minimise our carbon footprint by sourcing our components as close as possible to our factories, and by deciding to manufacture all our constructive solutions in France.

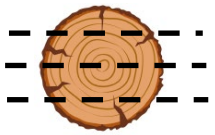
Environmental impact comparison

TIMBER WOOD
VESTA®

Timber Wood

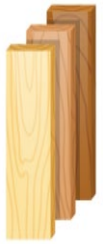
Sustainably Managed European Forests

SAW MILL



BOARDS

PLANING MILL



CLEAN PLANING WASTE

PROFILE

WOOD PROFILE
Wood
10 Kg / m²

FDES vérifié inies

50 YEARS
Maintenance every 10 years

END OF LIFE

Removal and Partial unique recycling

VESTA®

NATURAL MINERAL PIGMENTS & SALTS

NON-RECYCLED VIRGIN POLYMERE

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MADE IN FRANCE

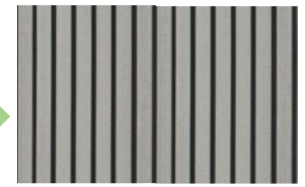
Produit Biosourcé

VESTA®

UPCYCLING

PROFILE

VESTA® PROFILE
Wood fibers
8 Kg / m²



FDES vérifié inies

50 YEARS
Maintenance FREE

DISMOUNTING

GRINDING

3 times 100% recyclable

SOLID WOOD
- 67% recyclable solely once into particle panels and energy value recovery
- Avoided impact: -3,3 Kg CO2 per/m²
- Stored biogenic carbon during the product lifetime: 17,4 Kg/m²

VESTA®
- 100% Upcycled - 3 times
- Avoided impact: -33.8 Kg CO2 per/ m² (production substitution virgin material)
- Stored biogenic carbon during the product lifetime: 11.9 kg/m²

VESTA® 's Life Cycle Analysis