

# The worlds most sustainable Indoor Climate Wall (HV84)

A vapour-permeable 'green' wall for a healthier indoor climate



inexhaustible  
natural materials



fire-resistant



easy to fit



sound-proofing



excellent  
screw retention



thermal  
insulation



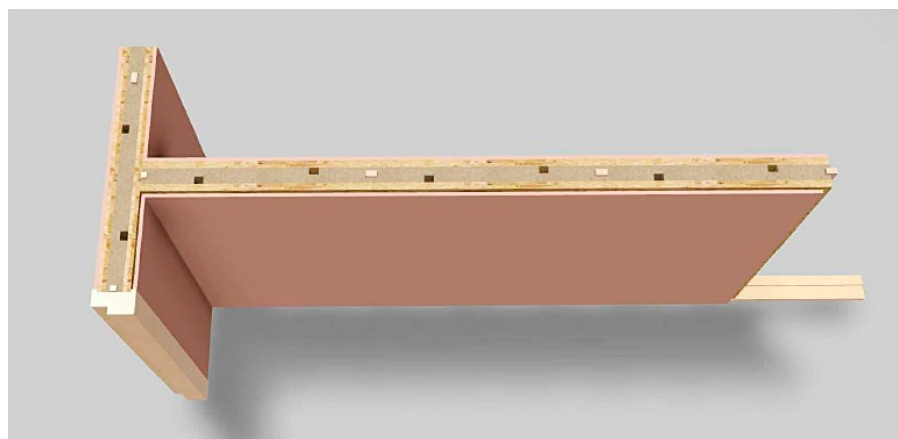
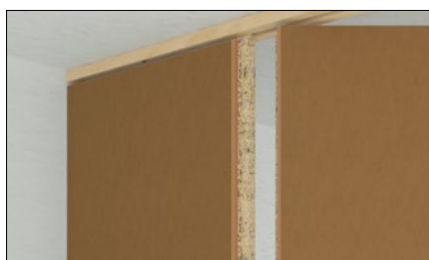
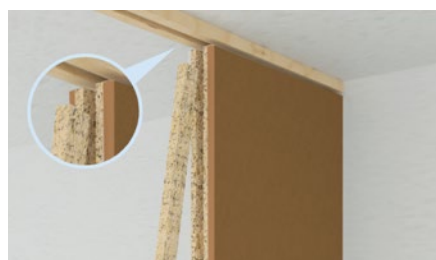
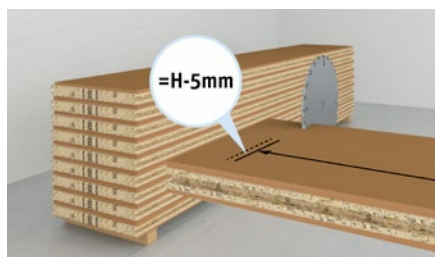
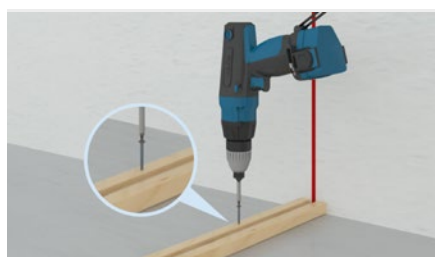
stable wifi

# 100% sustainable

The Indoor Climate Wall is extremely environmentally friendly: made from 100% renewable bio-based raw materials (Flax). With its ecologically sound production process, Faay Vianen (The Netherlands) has been supplying sustainable construction materials for decades. The Indoor Climate Wall is a very sound and 'green' choice to make!

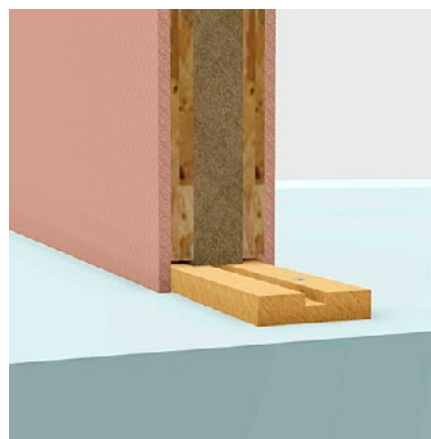


**LINUM** **USITATISSIMUM**  
‘LINEN’ ‘VERY USEFUL’



## Quick and easy instalment

HV84 Indoor Climate Wall is an ecological dry-build solution. Thanks to its prefab system Indoor Climate Wall is quick and easy to fit. Chipboard tongues are used to join the panels together and to fix them to the floor and ceiling. When using Breathaplasta lime plaster, bonding is not necessary, because reinforcing mesh is used in the lime plaster. Using Breathaplasta as the finish allows the installation time to 'finish' to be minimal, its ease of use and quick setting formulation, making it an ideal companion product for the HV84 Indoor Climate Wall, which can be lime plastered in just one day.



# Why Flax as raw material?

For over 50 years Faay Vianen has focussed on the principles of the circular economy utilising locally grown flax to form the biobased core of its partition walls. Flax has a short growth cycle, is renewable and reusable, takes CO<sub>2</sub> from the atmosphere and stores it, has a natural ability to regulate temperature and moisture, contains no harmful dust particles and is recyclable. In addition, the flax core is very strong and stable, provides excellent acoustic properties, has good fire resistance and excellent screw-holding properties.



## CO<sub>2</sub>-absorption

The HV84 has a flax core of 44 mm. Each panel (w 600 x h 3000) absorbs more than 90 kg of CO<sub>2</sub>.

## Advantages of the Flax sustainable Indoor Climate Wall (HV84)



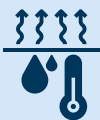
The HV84 Indoor Climate Wall is an ecological modular dry-build solution. Easy to build and also to reuse over and over again.



The raw material Flax has a short growth cycle. This bio-based material is renewable and easy to recycle.



Use of the Indoor Climate Wall (HV84) adds to the performance achieved by a project BREEAM rating.



Is naturally temperature and moisture regulating










The flax inside the HV84 Indoor Climate Wall stores CO<sub>2</sub> from the atmosphere.



No emission of nitrogen to soil and water

## Technical specifications

								
Height	Width	Thickness Element	Weight	Fire resistance	Thermal insulation (U)	Sound insulation		Ultra-low Formaldehyde emission
2995 mm	600 mm	84 mm	24,30 kg/m <sup>2</sup>	EI30 EN 1364-1	0.63 W/m <sup>2</sup> K (U) *	Rw 33 dB *	D nT,A,k 32 dB *	< 4 mg/100 g flax fibre core panel

\*Tested with 2 x 8 mm clay plaster finish



# Sustainable and ecological construction with an HV84 Indoor Climate Wall

**The use of natural finishing materials is on the rise. But the secret of a beautifully plastered wall starts with a good substrate. Faay Vianen has been supplying sustainable construction materials for healthy living and working for decades. We are continually seeking further improvements and listening to the market.**

In addition to the partition walls that consist of a flax core with plasterboard on either side, Faay has developed a wall that functions as a 'carrier' for lime plaster.

This wall is made up of panels that consist of a flax fibre core with a 20 mm wood fibre-board on either side.

We recommend applying Breathaplasta lime plaster. Applied directly to the Woodfibre surface the key benefit of Breathaplasta is its ease of use and quick setting formulation, making it an ideal companion product for Faay's Indoor Climate Wall which can be lime plastered in just one day.



## More than a 'carrier'

Faay's Indoor Climate Wall also has excellent physical properties such as good fire-resistance of > 30 minutes and excellent screw-holding properties. On top of that the Indoor Climate Wall provides optimum insulation, acoustic as well as thermal. With a thermal insulation value of 0.63 W/m<sup>2</sup> K (U) it provides excellent protection against cold from outside and contributes to a more pleasant indoor temperature.

## Built-in ducts

Furthermore, each panel is equipped as standard with two integrated slots for electrical and/or data communication cables, which makes the installation of cables, switches and sockets quick and easy.

## Green production

The Indoor Climate Wall is extremely environmentally friendly: made from 100% renewable raw materials and 100% bio-based materials. The production process is also ecologically sound. During the production there are no chemicals needed and Faay also produces their own green electricity right on their roofs. It is expected that this solar power plant can provide about 2/3 (285.00 kWh) of our electricity needs. We also had a changeover to LED lighting in the entire FAAY plant in Vianen. The next phase is ultimately going to be 100% self-sufficient in electricity. In short, the Indoor Climate Wall is a very sound and 'green' choice!



**"Flax grows without fertilizers and pesticides and does not undergo any chemical treatments"**

# Why opt for the Indoor Climate Wall finished with Breathaplasta?

breath**A**plasta™

**Circular construction is not only more 'people' and 'environmentally' friendly, but natural materials also improve the indoor climate and moisture management and do not emit harmful substances.**

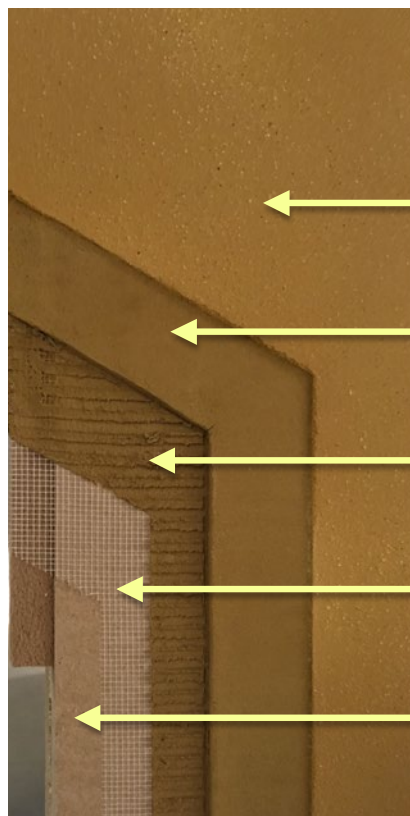
Flax absorbs nitrogen during its growth phase and takes CO<sub>2</sub> from the atmosphere and stores it. It is fire-retardant, has screw-holding and heat-buffering properties, ensuring a constant temperature and pleasant acoustics.

Breathaplasta is a high-performance, bio-based quick setting lime plaster that contains fine hemp shiv its is a healthier alternative to standard internal plasters and helps reduce problems with condensation, damp and mould.

Lime is considered carbon neutral as the carbon dioxide emitted during the creation of quicklime is later reabsorbed by the lime mortar through a chemical reaction known as carbonation – the process of lime setting by absorbing water soluble carbon dioxide from the air. Lime is a more sustainable and higher performance option for a wide range of building applications compared with the most commonly used alternatives, cement and gypsum – even in modern construction.

Breathaplasta is versatile and can be used as both base coat and top coat to finish the bio-based formulation is flexible, highly breathable and moisture regulating (hygroscopic). Primer is not required when applying to wood fibre boards.

The combination of an Indoor Climate Wall finished with lime plaster is ideal for sustainable and circular construction. Walls finished with natural lime can continue to breathe and have a natural disinfecting effect. This prevents mould growth in the house and creates a modern and healthy finish. With a Faay Interior Climate Wall as a 'carrier' finished with 100% natural Breathaplasta you are guaranteed a healthy and breathing living, learning and working climate.



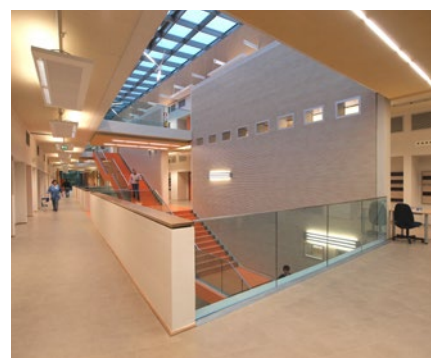
80% clay plaster finish  
20% clay plaster fine sanding

Basecoat clay plaster

Adhesive clay primer

Reinforcing mesh

FAAY HV84



Cees Faay, the spiritual father of the Faay panels, was far ahead of his time. When he devised a new wall system 50 years ago, no one was thinking about sustainability and circularity. Let alone that anyone knew what 'biobased' meant. And yet he was convinced of the advantages of prefabrication and natural raw materials.

The prefab FAAY wall has a core of flax, an inexhaustible raw material that is renewable, recoverable and environmentally friendly.

**FAAY: The most sustainable wall in the country.**

#### UK Enquiries:

Ecomerchant  
NSBRC, Swindon, SN5 8UB  
01793 847 444  
info@ecomerchant.co.uk  
www.ecomerchant.co.uk

If you want to find out more about building with flax, please take a look at [www.faay.com](http://www.faay.com) or get in touch with us.



#### Manufacturer:

Faay Vianen B.V.  
Mijlweg 3, 4131 PJ Vianen  
The Netherlands  
T +31 (0)347 376 624  
info@faay.com  
www.faay.com