

# Fibertherm internal

Internal insulation board

**Beton**  **Wood**

Environmentally-friendly insulation system  
made from natural wood fibres



## | AREAS OF APPLICATION

Internal insulation of external walls



## | MATERIAL

Wood fibre insulation board produced in accordance with EN 13171 and with ongoing quality supervision.

Wood for Fibertherm *internal* comes from sustainable forestry and is independently certified by the FSC®.

- Environmentally friendly internal insulation made from natural softwood
- Ideal for renovation of masonry and traditional timber constructions
- Excellent control of condensation – advanced performance using intelligent building physics
- Can be utilised without an additional vapour barrier
- Water vapour open for a healthy internal climate
- Ecological and recyclable with no impact on the environment.

For more informations about the uses and the installation,  
our offices are ready to answer your questions on [www.fibradilegno.com](http://www.fibradilegno.com)



# Comfort - from within

## Healthy, affordable and energy efficient.

Internal insulation makes sense: It reduces heating costs and can greatly improve the internal climate. There are many areas of application and on many buildings internal insulation is the only affordable solution.



**FiberTherm internal:**  
The easy to use insulation boards are ideal for use in tight room spaces. They are available with a T & G profile or as square edge.

There are many reasons to insulate internally. When external elevations can't be changed, when a single apartment in a block of flats is cold or when existing external insulations are insufficient or need improvement.

Internal insulation also offers possibilities in buildings that are not often used such as holiday homes, meeting rooms and guest rooms. With internal insulation systems the rooms heat up much quicker so the whole wall structure does not need 'heating through'.

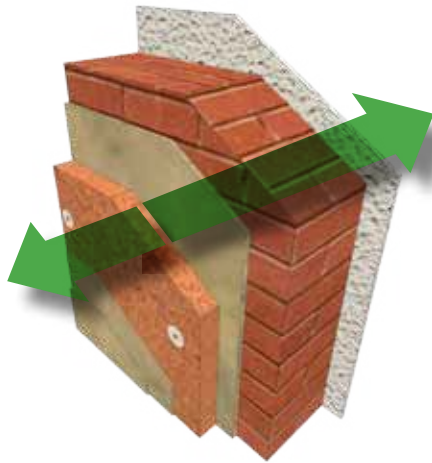
In addition, the fixing of internal insulation is often much easier. There are no expensive scaffolding costs and the works can carry on regardless of external weather conditions. As internal insulation is more critical than external insulation in terms of building physics it is recommended to use components that are compatible together in use.

## | ADVANTAGE WOOD FIBRE – ON THE SAFE SIDE WITH FIBERTHERM

Fibertherm **internal**, the multi-purpose internal insulation board that saves energy and improves the internal climate.

The easy to use wood fibre boards are water vapour open and allow the passage of moisture through capillary action.

Research at the Fraunhofer Institute for Building Physics has shown that wood fibre is able to buffer more moisture than any other researched internal insulation board<sup>1</sup>. This means that Fibertherm **internal** provides excellent internal air quality, as moisture buffering and moisture transfer through capillary action, provide an internal climate that make mould growth almost impossible.



The working principle of wood fibre:

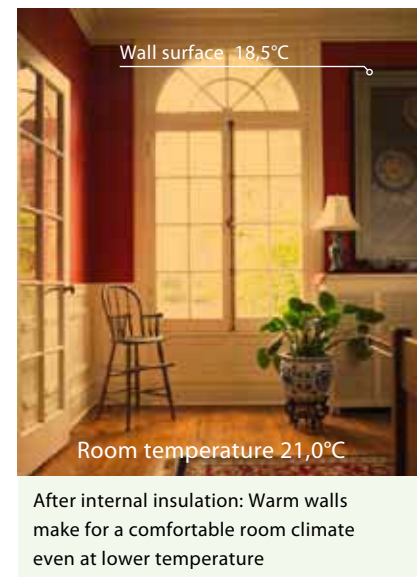
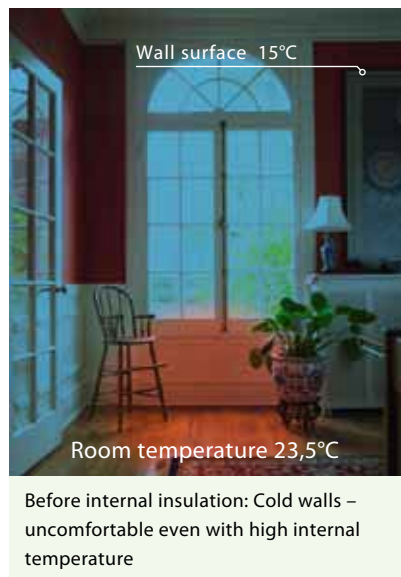
**Moisture buffering with controlled release.**

At times of high humidity eg in bedrooms at night or when cooking, the buffering effect of wood fibre removes additional moisture without the risk of condensation forming. Thanks to the transfer of moisture due to capillary action buffered moisture is transported to the face of the board so that any evaporation can occur through the external wall or into the room itself. An additional vapour control layer is therefore not required.

## | GOOD CLIMATE LOOKING GOOD

Saving on energy costs and a healthy internal climate are important arguments for internal insulation but the appearance also plays an important role.

Fibertherm **internal** can be directly fixed and plastered and there are a multitude of available finishes and colours available. In order to ensure that the positive aspects of wood fibre are utilised to their best potential, BetonWood has worked in conjunction with Lime Green Products to produce a detailed system fixing approach.



Insulating with Fibertherm **internal** greatly increase the internal wall surface temperature – another important protection against the possible build-up of mould. Rooms also feel significantly warmer if the wall surface temperature is higher. If the room feels warmer, then it is often possible to decrease the actual room temperature.



## AVAILABLE DIMENSIONS Fibertherm internal

tongue and groove edges

Thickness	Dimensions	Real surface	Weight / m <sup>2</sup> (kg)	Panels / Pallet	m <sup>2</sup> /Pallet	kg/Pallet
40 mm	1200x380 mm	1186x366 mm	6,40	84	38,3	ca.260
60 mm	1200x380 mm	1186x366 mm	9,60	54	24,6	ca.250

sharp edges

Thickness	Dimensions	Weight / m <sup>2</sup> (kg)	Panels / Pallet	m <sup>2</sup> /Pallet	kg/Pallet
40 mm	1200x380 mm	6,40	84	38,3	ca.260
60 mm	1200x380 mm	9,60	57	26,0	ca.250
80 mm	1200x380 mm	12,80	42	19,2	ca.270

## RECOMMENDATION

Store FiberTherm *internal* flat, level and under cover.

Protect edges from damage.

Remove plastic foil packing only when the pallet is on hard, dry and even ground.

Max. stacking height: 2 pallet.

For dust extraction please refer to national requirements

## TECHNICAL CHARACTERISTICS Fibertherm internal

Produced and supervised according to	DIN EN 13171
Board designation	WF – EN 13171 – T4 – CS(10\Y)50 – TR2,5 – AF 100
Fire class according to EN13501-1	E
Declared thermal conductivity $\lambda_D$ W/(m*K)	0,038
Declared thermal resistance $R_D$ (m <sup>2</sup> *K)/W	1,0 (40)/ 1,5 (60)/ 2,0 (80)
Density kg/m <sup>3</sup>	ab.160
Water vapour diffusion resistance factor $\mu$	5
sd value (m)	0,2 (40)/ 0,3 (60)/ 0,4 (80)
Specific heat capacity c J/(kg*K)	2.100
Minimum compression strength (kPa)	50
Declared level of Airflow resistance (kPa*s)/m <sup>2</sup>	≥100
Raw material	wood fibre, bond between layers
Waste code (EAK)	030105/170201

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FTHINT IR.18.01

