

Environmentally friendly insulation system made from natural wood fibres

Can be installed without a vapour control layer



## Ecological insulation board for internal insulation of masonry and traditional timber construction



### Areas of application

Internal insulation of external walls

Render carrying board for Lime and Clay plasters

- Excellent control of condensation – advanced performance using intelligent building physics
- Particularly diffusion open
- Made from fresh, sustainable softwood
- Provides a healthy internal climate
- Ecological, sustainable and recyclable like natural wood





## STEICO*internal*

### 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.

### The ecological insulation for internal applications on external walls – ideal for areas with limited space.

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.

#### Square edge profile



Healthy, affordable and energy efficient

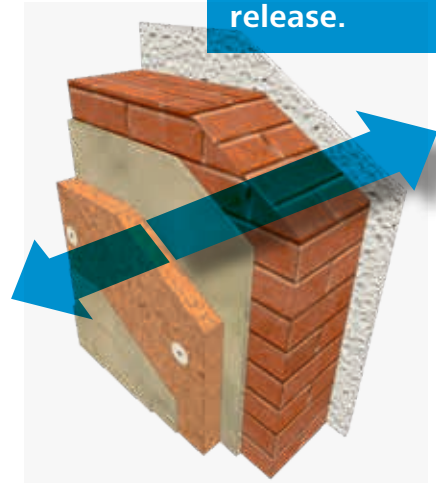
## Advantage wood fibre – on the safe side with STEICO

**STEICO*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>. 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.

The working principle of wood fibre:  
**Moisture buffering with controlled release.**



## 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.

STEICO*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, STEICO has worked in conjunction with Lime Green Products to produce a detailed system fixing approach.

The full details are available at [www.steico.co.uk](http://www.steico.co.uk)

### STEICO*Tube*

Installation instructions available at [www.steico.com/videos](http://www.steico.com/videos)



**Important protection from mould:**  
Insulating with STEICO*internal* greatly increase the internal wall surface temperature – another important protection against the possible build-up of mould.

### Feel-good factor:

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.





## Packaging STEICO<sup>internal</sup>

Easy to handle format for site installation

Size [mm]	Cover. dim. [mm]	Edge profile	Thickness [mm]	Pieces / Pallet	m <sup>2</sup> / pallet	surface / pallet	Weight [kg/m <sup>2</sup> ]	Weight / pal. [kg]
1200 * 380	1186 * 366	T & G	40	84	38.3	36.5	6.40	ca. 243
1200 * 380	1186 * 366	T & G	60	57	26.0	24.7	9.60	ca. 250
1200 * 380	–	square edged	40	84	38.3	38.3	6.40	ca. 255
1200 * 380	–	square edged	60	57	26.0	26.0	9.60	ca. 260
1200 * 380	–	square edged	80	42	19.2	19.2	12.80	ca. 255

Pallet format: ca. 1.15 \* 1.20 \* 1.29 m; 44 Pal. Load

## Characteristic values STEICO<sup>internal</sup>

Produced and supervised according	EN 13171
Board designation	WF – EN 13171 – T4 – CS(10\Y)50 – TR2,5 – AFr 100
Edge profile	T & G / square edged
Fire class according to EN 13501-1	E
Declared thermal conductivity $\lambda_D$ [W/(m*K)]	0,038
Declared thermal resistance $R_D$ [(m <sup>2</sup> *K)/W]	1.05 (40) / 1.55 (60) / 2.10 (80)
Density [kg/m <sup>3</sup> ]	ca. 160
Water vapour diffusion resistance factor $\mu$	5
$s_d$ value [m]	0.2 (40) / 0.3 (60) / 0.4 (80)
Specific heat capacity $c$ [J/(kg*K)]	2.100
Compression strength [kPa]	50
Raw material	wood fibre, bond between layers
Waste code (AVV)	170201, Disposal like timber and timber products

## Recommended plasters



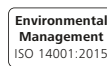
**Notes:** Store flat, level and under cover. Protect edges from damage. Remove plastic foil packing only when the pallet is on hard, dry and even ground. Max. stacking height: 2 pallets.

Planning and installation instructions available at [www.steico.com](http://www.steico.com).

STEICO recommends the use of Lime and Clay based plasters. For enhanced performance STEICO recommends the specially formulated plasters from Lime Green Products.



The safe installation of STEICO<sup>internal</sup> is only possible with recommended render systems and a manufacturer specific installation guide.



Your STEICO partner

[www.steico.com](http://www.steico.com)