

HEALTHY INTERIOR INSULATION AND CLIMATE REGULATION

EPATHERM® INDOOR CLIMATE BOARDS



epatherm

EPATHERM IS AN INNOVATION BY EPASIT

COMFORTABLE CLIMATE FOR YOU AND YOUR FAMILY

epatherm® indoor climate boards provide healthy room air conditions in a reliable and economically beneficial way. The system is excellently suited to avoid mould and to thermally insulate the insides of building walls and ceilings.

Millions of highly surface-active micropores open to diffusion absorb potential moisture and gradually emit it to the indoor air. The board surface, however, remains constantly dry. The thousandfold proved system is produced of purely mineral natural building materials such as chalk and sand, according to the latest technology

The high-quality calcium silicate boards can be mounted in a time-saving and flexible way and are successfully used in living spaces, churches, structures historically worth of protection, vault constructions, half-timbered houses and in moisture-proof spaces. They have excellent features from the building design aspect, are not flammable and are simultaneously noise-reducing.

With epatherm® you opt for an enduring and save solution with which you save energy costs and permanently avoid mould. And with which you create a comfortable climate for you and your family.

EPATHERM INDOOR CLIMATE BOARDS YOUR ADVANTAGES AT A GLANCE

YOUR ADVANTAGES AT A GLANCE

- > Insulation and regulation of room air conditions on the whole
- > Optimal fire protection (building material class A1)
- > Without risks for health
- > High alkalinity permanently prevents mould growth
- > Easy and flexible mounting



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TYPICAL FIELDS OF APPLICATION

- > Interior insulation
- > Interior rehabilitation of residential buildings
- > Avoidance of mould
- > Regulation of room air conditions
- > Dry mortarless constructions & half-timbered houses
- > Rehabilitation and modernization of moisture-proof spaces and cellars
- > Insulation of thermal bridges according to applicable standards

HEALTHY INTERIOR INSULATION

epasit® is the only supplier of indoor climate boards, who has been examined according to the strict quality guidelines of the Sentinel-Haus Institut and who is recommended as to consultancy and building projects according to the Sentinel-Haus concept. The renowned institute offers architects, building owners and fabricators a contractually guaranteed high-quality indoor air - a probably unparalleled guarantee for building materials throughout Europe. For the epochal challenge to modernize existing buildings, epasit® offers professional and healthy system components, which contribute to the fact that human beings feel comfortable in their homes



EXAMPLE
**MONUMENT
& HALFTIMBER**



EXAMPLE
BATHROOM



EXAMPLE
CELLAR



EXAMPLE
**THERMAL
BRIDGE**



EXAMPLE
MOULD

SYSTEM PRODUCTS

EPATHERM AT A GLANCE



Indoor climate board *epatherm*® etp

Mineral, surface-active insulating board to regulate room air conditions. It absorbs moisture and prevents mould growth. Dimensions: 100 x 75 cm, thicknesses: 30 and 50 mm, as a special design thicknesses of 20 to 160 mm are available. Also available: reveal boards and thermal wedges (wedge-shaped ceiling- and wall-connected boards).

Packaging: on throw-away pallets with edge protection and shrink film. Store weatherproof.



Primary coat *epatherm*® etg

Technical desiccation barrier for sorption-capable building materials, solvent-free and ready to use.

Packaging: units of 5 or 10 litres each

General consumption: approx. 0.7 l/m² or 0.5 l per board



Board adhesive *epatherm*® etk

High-quality system adhesive of mineral bonding agents and aggregates.

Packaging: sacks of 30 kg each

Consumption: approx. 4-5 kg/m² according to substrate



Inside filler *epatherm*® multi-eti

Mineral smoothing filler ready to use for an all-over touch-up of indoor climate boards (Q3). With its 0.4 mm graining it can be exceptionally structured, felted or used as a basic filler for thin mortar beds and patent plasters. We recommend to insert *epatherm*® etw in the inside filler.

Packaging: sacks of 25 kg each, consumption: approx. 1 kg/m²/mm



Inside filler *epatherm*® eti

Very small-grained, mineral smoothing mortar ready to use (Q4). It may also be used to fill spallings.

Packaging: sacks of 30 kg each, consumption: approx. 1 kg/m²/mm



Glass cloth *epatherm*® etw

Alkali-resistant glass reinforcement lattice (A1) for an all-over embedding in all *epatherm*® fillers.

Consumption: approx. 1 running metre per m²



Patent plasters *epatherm*® ete

White dry ready-to-use mortar with a high water vapour permeability for a surface design in the interior on indoor climate boards.

Available as: Struktur Münchner Rauhputz ete/r (grains of 2, 3, 4 mm)

Struktur Scheibenputz ete/s (grains of 1.5, 2, 3, 4, 5 mm)

Packaging: sacks of 30 kg each, consumption: approx. 2.5 kg to 4.0 kg (see data sheet)

HANDY HELPERS

WHEN REQUIRED, USE OUR ADDITIONAL SYSTEM COMPONENTS WHICH ARE EXACTLY HARMONIZED WITH THE EPATHERM SYSTEM.
FOR FURTHER PRODUCTS REGARDING SURFACE COATING SEE WWW.EPASIT.DE



Climatic plaster epatherm® ekp

It completes indoor climate boards in narrow vaults, narrow reveal boards or to level areas hard to get at.

Packaging: sacks of 20 kg each, consumption: approx. 10 kg/m²/10mm



epatherm® sealing tape

It serves as a waterproofing open to the diffusion of vapour used for assembly joints, expansion joints and connection joints. It can be touched up with epatherm® fillers and surface plasters.

Packaging: 12.5 m/roll, consumption: by running meter

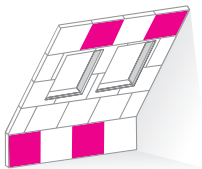


Levelling colour epatherm® etf

White, single-component and solvent-free silicate colour open to diffusion and ready to use.

For colouring mineral substrates such as the epatherm® system.

Packaging: 15 l or 5 l, consumption: approx. 120 to 150 ml/ms²



Heating board epatherm® etp/H

When converting rooms, thermal insulation and heating are often necessary. For the (subsequent) conversion of cellar and attic, epasit offers a heatable board. Your advantage: an expensive heating installation with heating elements or floor heating is not necessary anymore.



Schimmel-Ex epatherm® etx

Biocide solution on a watery basis to combat mould on masonry, concrete, plaster and colouring.

It is registered at the German Federal Institute for Occupational Safety and Health under N-32942.

Packaging: bottle of 1 l or tin of 5 l, consumption: approx. 0.2 l/m²



Mould binder epatherm® etb

Used to destruct and bind mould spores and mould components before their removal, so that they are not being released into the indoor air.

Packaging: bottle of 1 l or tin of 5 l, consumption: approx. 0.3 l/m²

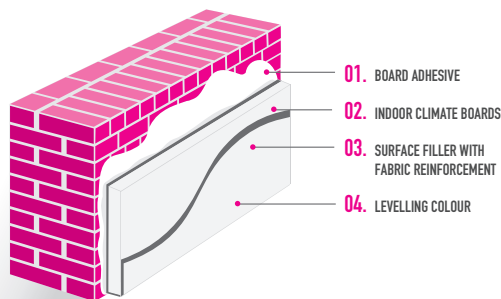


For all product components of the epatherm® indoor climate board system and the epasit® rehabilitation system you can download the relevant product data sheets and specifications under www.epasit.de

Special board formats are available on request.

INSTALLATION & PROCESSING

EPATHERM INDOOR CLIMATE BOARDS



CONDITION OF THE SUBSTRATE

The existing wall has to be firm, stable and free of loose components. First, level uneven areas with lime cast (*epasit*[®] mpm1) or grout and masonry mortar (*epasit*[®] mpm2) or renovation mortar 5in1. Treat absorbing substrates (plaster surface, masonry, concrete) with the desiccation barrier *epasit*[®] ab or with the plaster contact coat *epasit*[®] pk. In case of moist and salt-efflorescing walls you should use suitable *epasit*[®] plasters (WTA renovation plaster system). Check, in addition, the evenness of the floor and always part from the highest point; if necessary, put levelling wedges under the first row of boards.

SAFETY GUIDELINES [X]

Use gloves, a dust mask and a dust extraction set when cutting the boards. Because of the high capillarity carry out an all-over primary coat.

PROCESSING EXPLAINED STEP BY STEP

01.



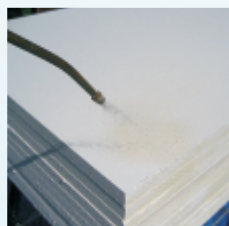
Because of their dimension of 1,000 mm x 750 mm the boards can be processed without problems from just one person. Mark the boards with a pencil and cut them easily and in a tailor-made manner to size by using a commercially available saw (fox tail, pendulum jigsaw, plunge saw or disk saw with suction). A subsequent planing or grinding is also possible. Rests and cuttings may be used otherwise.

02.



After the cutting the appropriate primary coat is applied all over in an undiluted way and on all boards (with paint roller, brush or sprayer). Thus, the board adhesive is not depleted hastily of the mixing water.

03.



After a period of action of approx. 30 minutes the boards can be mounted. The surface of the boards guarantees an extremely safe bonding also on very smooth and even substrates.

04.



Mix the system adhesive in a clod-free and highly viscous way by using clean water.

05.



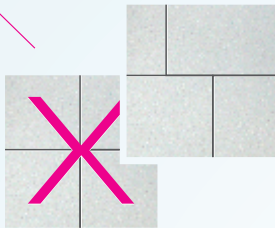
Now apply the adhesive all-over on the primary coated back of the board or on the wall by means of a toothed spattle (10 to 12 mm) or a middle-bed trowel.

06.



Press the boards on the wall starting from the floor and align the first layer as horizontally as possible by means of small shims. By doing so, the further mounting will be much easier. Align the boards by using a spirit level or browning rod and fit them close together. Absolutely avoid cavities on the wall! Do not apply any adhesive on the surfaces showing towards the wall. It is not necessary when using *epatherm*[®]. Thus, visible thermal bridges are avoided; besides, you save time and material. If, after the press-on and the alignment, adhesive should come out on the edge, remove it before mounting further boards. As surface finish an all-over reinforcement is used.

07.



The boards may be aligned horizontally or vertically. Thus, cross joints are absolutely to be avoided and a mismatch of approx. 20 cm is to be kept. It is certainly possible to combine boards of different thicknesses such as, behind heating elements, boards of a thickness of only 25 mm are used. In case of wall heights of more than 2.80 m the indoor climate boards have to be bonded and doweled.

08.



Shift all wall sockets or light switches forward by the board thickness. The required cut-out openings can be made with a core drill bit (socket extensions are available at specialized dealers).

09.



To avoid thermal bridges in the area of bonded-in walls and ceilings, we recommend the *epatherm*[®] thermal wedge (1000 x 600 x 40/5mm). The assembly takes place analogously to the mounting of the indoor climate boards. On roof slopes and ceilings adhesive must generally be applied and must be doweled in a tailor-made manner with the dowel milling machine for boards. After having continuously completed the existing surface with filler it is either possible to smooth or to plaster (double-ply with all-over fabric reinforcement) the surface.

10.



To insulate the reveal boards, we offer a special, robust board solution "etl" with dimensions of 1,000 mm x 240 mm of x 20 mm.

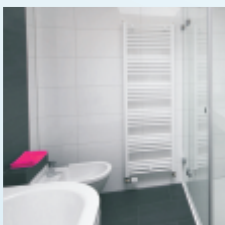
11.



Coat boards individually

Use as a "surface finish" the levelling colour open to diffusion *epatherm*[®] etf. The use of wallpaper or latex paint is not recommended.

12.



Up to a height of two thirds the walls can be faced with tiles or other ceramic coatings. The sequence of the tiler craft is to be kept.

TECHNICAL DATA

EPATHERM INDOOR CLIMATE BOARDS

Dimensions icons	1000 x 750 mm	Compressive strength	> 1 N/mm ²
Thickness	30 and 50 mm, (Special dimensions from 20 to 160 mm)	Fire protection class (DIN 4102)	A1
Window / door reveal boards	1000 x 240 x 20 mm	Thermal conductivity	λ_z 0,067 W/mK λ_{10tr} 0,059 W/mK
Wedge-shaped boards	1000 x 600 x 40/5 mm	Steam diffusion	μ 3
Dry density	220 - 240 kg/m ³	Capillary moisture	26 kg/m ² at 5 cm
Total porosity	approx 90%	pH-Value	11 to 12



epatherm® has been awarded the General Building Inspectorate Approval by the Deutsches Institut für Bautechnik (DIBT). The epatherm® indoor climate board system has been examined by the eco-Institut, Cologne, according to the strict requirements of the Sentinel-Haus Institut.

**EVERYTHING
FROM ONE
PROVIDER:**

**SYSTEMS
FROM EPASIT**

