

Fibertherm special

Insulation boards for renovations

Beton Wood

Environmentally-friendly insulation system
made with natural wood fibres



AREAS OF APPLICATION

External insulation board
Water resistant roof sarking manufac-
tured from natural wood fibres

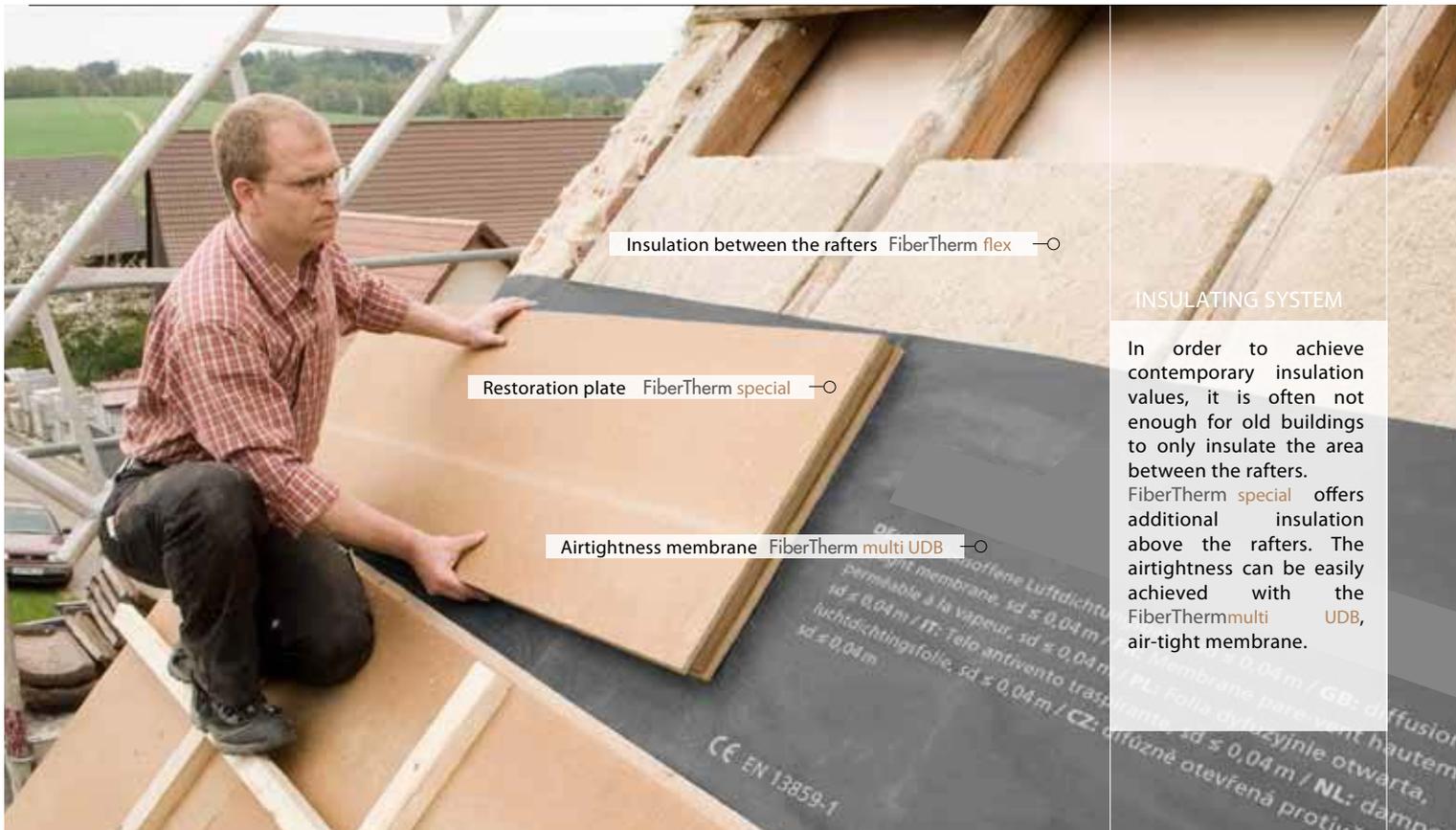
For both new build and roofing
renovation

External wall insulation for new build
and renovation projects



- provides an additional insulation layer above rafter level
- water vapour open board for a healthy living environment
- 3 fold functionality: wind-proof layer, secondary water resisting layer, additional insulation layer
- excellent summer heat protection
- reduces thermal bridging through the rafters or studs
- high security tongue & groove profile; suitable for roof inclinations greater than 16° without the need for tapes or glue.
- tongue & groove profile contributes to building airtightness
- improved sound insulation
- good fire resistance – Class E according to EN13501-1
- simple and economic on site handling
- ecological, environmentally friendly and recyclable

For more informations about the uses and the installation,
our offices are ready to answer your questions on www.fibradilegno.com



INSULATING SYSTEM

In order to achieve contemporary insulation values, it is often not enough for old buildings to only insulate the area between the rafters. FiberTherm special offers additional insulation above the rafters. The airtightness can be easily achieved with the FiberTherm multi UDB, air-tight membrane.

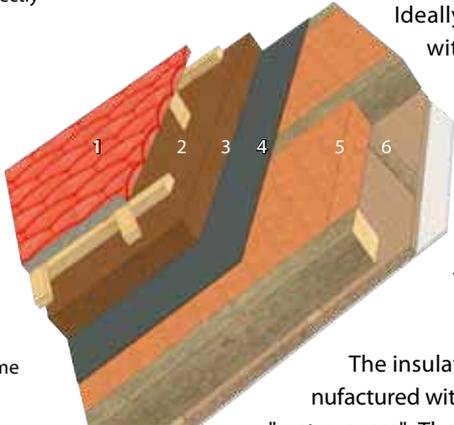
Roof renovation with security

FiberTherm special: The insulating system for external roof renovations

Above the roof with its large area, a lot of heating energy is lost. The potential for savings during renovation is correspondingly high. But what if the attic is already developed and inhabited? Here, Fibertherm special offers the solution - an ecological insulation board that can be laid directly on the rafters from the outside.

In renovations:

- 1 Roofing
- 2 battens and counter battens
- 3 FiberTherm special laid directly above the rafters
- 4 FiberTherm multi UDB airtightness membrane
- 5 Inter-rafter insulation with Fibertherm flex, FiberTherm zell o FiberTherm flex
- 6 Room-side substructure (inventory): wood wool lightweight board with lime cement plaster



Ideally, first the area between the rafters is insulated - e.g. with the flexible wood-fiber insulation Fibertherm flex from the FiberTherm system.

Often, however, old-style parapets are dimensioned too small to achieve contemporary insulation values with only an intermediate rafter insulation. With Fibertherm special it is possible to install the required additional insulation above the rafters. The living space under the roof is not affected.

The insulation boards are made of natural wood fibers and are manufactured without any questionable additives according to the well-proven "wet process". The plate binding is done not by added glues, but only by the wood-based binder lignin.

| IMMEDIATE WEATHER PROTECTION, INSTANT WINDPROOF



In the case of roof refurbishment from the outside, it is necessary that the weather protection for the underlying living space is ensured as quickly as possible.

The all-round special profiling of Fibertherm special guarantees the windproof suitability and water drainage without additional joint sealing for roof pitches of at least 16°.

Fibertherm special protects the roof against rain and weather on the day of installation.

| SECURITY SYSTEM



The Fibertherm special insulation boards are diffusion-open and thus additionally protect the roof construction.

Because the plates offer a high evaporation potential and support a safe moisture management.

Thus, in suitable room-side substructures, such as in plastered wood wool lightweight panels on an elaborate, room-side vapor barrier can be omitted. Instead, the easy-to-install Fibertherm multi UDB airtightness membrane is used, which can be easily installed above the rafters. The result: Economical roof constructions - lasting functional safety.

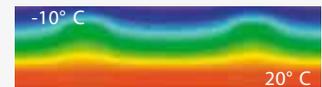
| INSULATING SYSTEM

An uninsulated old building roof is a true energy srew. In addition, the low surface temperatures lead to unpleasant air movements in the interior of the room.

Uninsulated roof



Insulated roof with Fibertherm special



The thermography of a roof cross-section with rafters shows that while the uninsulated roof loses all its heat, Fibertherm special insulation materials insulate perfectly and provide pleasantly warm surfaces on the room side.

Compared to the uninsulated roof truss, an intermediate rafter insulation with Fibertherm flex 50 (140 mm) and an insulation with Fibertherm special (60 mm) already reduces the energy loss by more than 85%. At the same time, we feel much better in rooms with warm blankets.

| 3 PLUS ADVANTAGES

1

Excellent heat and sound insulation

Under the roof tiles, it can get up to 70° C in the summer. Many conventional insulation materials allow this heat to penetrate the living spaces almost unhindered. Fibertherm special insulation boards have a very high density for an insulating material and are thus able to effectively brake the heat passage. At the same time, a high bulk density is the most effective protection against noise - especially in the roof with its lightweight components.

2

Safe weather protection profile

The special tongue and groove profile of the Fibertherm special has a specially developed geometry - for easy installation and lasting safety.

3

Ecological quality and many years of experience

As a leader in wood fiber insulation, BetonWood has decades of experience in the manufacture and use of wood fiber insulation materials.

Independent certifications such as from the Institute for Building Biology Rosenheim GmbH confirm the quality and offer builders and processors permanent security by marking with a seal of approval.

| MATERIAL

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

| USES

(according to national standards)

External insulation of roof or ceiling, protected against weathering, insulation under cover	DAD - dk, dg, dm, ds
External insulation of roof or ceiling, protected against weathering, insulation under waterproofing	DAA - dh, ds
Interior insulation of the ceiling (below) or the roof	DI - zk, zg
Interior insulation of the ceiling or floor slab (on the top) under screed without noise protection requirement	DEO - dg, dm, ds
Exterior insulation of the wall behind clothing	WAB - dk, dg, dm, ds
Insulation for Wooden frame and wooden panel construction	WH
Insulation of room partitions	WTR

Pressure capacity: dk = none, dg = low, dm = medium, dh = high, ds = very high

| RECOMMENDATIONS

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 paletts

For dust extraction please refer tonational requirements

| AVAILABLE DIMENSIONS Fibertherm special tongue and groove edges

Thickness	Dimensions	Real surface	Weight/m ² (kg)	Panels/Pallet	m ² /Pallet	kg/Pallet
60 mm	1880x600 mm	1855x575 mm	14,01	36	38,4	ca.620
80 mm	1880x600 mm	1855x575 mm	18,44	28	29,9	ca.620
100 mm	1880x600 mm	1855x575 mm	22,81	22	23,5	ca.620
120 mm	1880x600 mm	1855x575 mm	27,21	18	19,2	ca.620

| TECHNICAL CHARACTERISTICS Fibertherm special

Produced and supervised in accordance with	DIN EN 13171
Board Designation	WF- EN 13171-T5 -DS(70, -)2 - CS(10 \Y)100 - TR 10 - WS 1,0 - AF100
Fire class according to DIN EN 13501-1	E
Declared Thermal Conductivity λ_D W/(m*K)	0,046
Declared Thermal Resistance R_D (m ² *K)/W	1,30 (60)/1,70 (80)/2,15 (100)/2,60 (120)
Density kg/m ³	ca.240
Water vapour diffusion resistance factor μ	5
sd value (m)	0,3 (60)/ 0,4 (80)/ 0,5(100)/ 0,6 (120)
Specific Heat Capacity c J/(kg*K)	2.100
Minimum compression strength 10% deformation σ_{10} [N / mm ²]	0,1
Minimum compression strength [kPa]	100
Tensile strength perpendicular to Board level [kPa]	≥10
Declared level of airflow resistance [(kPa*s)/ m ²]	≥100
Raw material	woodfibre, bond between layers
Waste Code (EAK)	030105/170201

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Das Zeichen für verantwortungsvolle Waldbirtschaft

