



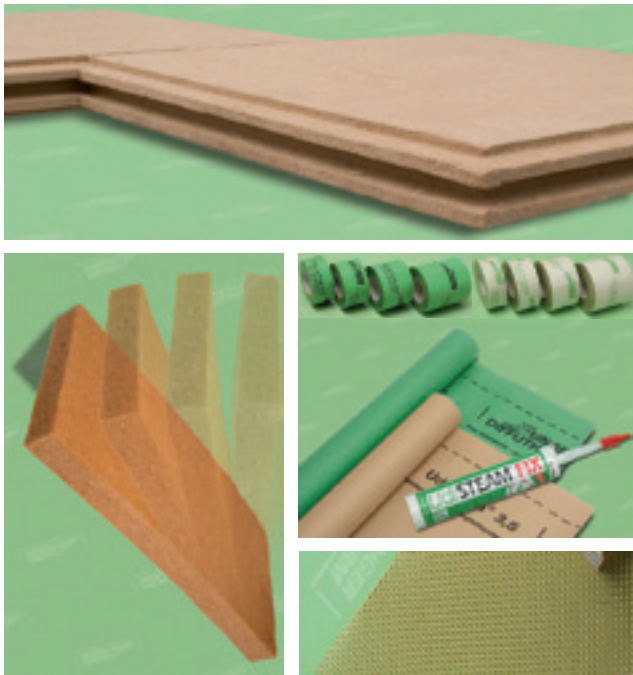
UdiPRODUCT  
INFORMATION

*DAS ORIGINAL*  
**UNGER**  
**DIFFUTHERM®**  
Innovative Thermal Insulation Systems

## UdiTOP® SYSTEM

*The full service for your roof  
and your timber façade*





The **UdiTOP® SYSTEM** is a perfect cold and heat-shielding insulation element; specially developed for all roof constructions, whether old or new. The **UdiTOP®** and **UdiTOP® Premium** sark boards form the basis of UNGER-DIFFUTHERM's tried and tested, Building Inspectorate approved, insulation systems for roof and façade areas. The highly efficient wood-fibre boards are produced using a wet-manufacturing process. The sandwich-layer construction of the boards is complemented and optimised by our specially designed **UdiSTEAM® Air and Wind-Proof System**, which includes a whole range of sealant tapes and system components. To insulate the voids between rafters, UNGER-DIFFUTHERM has developed a flexible wood-fibre insulation: **UdiFLEX®**, which is available in thicknesses from 40 to 240 mm.

**Our products offer comprehensive protection for every house:** Heat-shielding on summer days and the best possible insulation on cold winter days provide you with a comfortable room climate all year round. Negative effects such as the build-up of condensation are eliminated due to its excellent construction-related characteristics.

If required, the **UdiPROTECT® SYSTEM**, which combats electro-smog, can be installed as an external layer to protect against harmful radiation.

### Properties:

- Decisive improvements in the quality of new and existing roof structures through improved soundproofing, summer heat shielding and thermal insulation against the cold
- Uniform, quality-controlled, insulation materials which conform to official standards
- Building Inspectorate approved, wood-fibre, thermal insulation made from soft-wood fibres without artificial binders
- Universally applicable for rear-ventilated roofs and façade constructions
- The durable tongue-and-groove profile around the entire circumference ensures the boards are wind-proof and rainwater-proof for roof slopes  $\geq 20^\circ$
- Quick and simple to install, kind to the skin and posing no dangers to health
- Highly vapour-permeable for optimised roof insulation solutions providing protection from the wind, dust, heat, moisture, cold and noise pollution
- The excellent thermal insulation saves energy and reduces costs
- Ecological, environmentally-friendly, recyclable

### Technical Data UdiTOP® SYSTEM

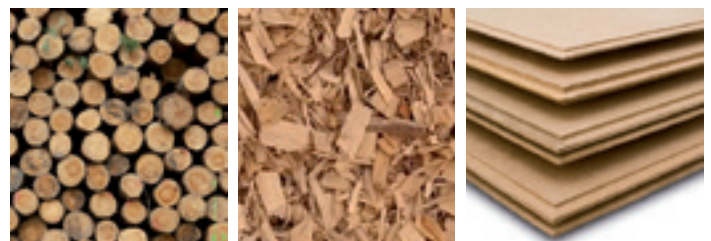
Parameter	Classification/Value	
	UdiTOP®	UdiTOP® Premium
Description DIN EN 13 171	EN 13 171 WF – EN 13171 – T4 – DS(70,-)2 – CS(10/Y)100 – TR30 – WS 1,0 – AF 100	
Declared value of thermal conductivity $\lambda_D$ DIN EN 13171	0.049	0.048/0.046 W/mK
Fire behaviour class DIN EN 13501-1	E	E
Apparent density EN 1602	approx. 270	approx. 240 kg/m <sup>3</sup>
Tensile strength	30 kPa	10 kPa
Compressive strength	200 kPa	100 kPa
Water vapour diffusion resistance coefficient EN 12667 $\mu$	5	5
Specific enthalpy capacity c DIN EN ISO 10456	2100 J/kg K	2100 J/kg K

#### Components

Wood fibres, Binding agents  
Waste Code EWC-Code 030105/ 170201

#### Manufacture and monitoring as per

DIN EN 13 171 and BAZ Z-23.15-1625



Thicknesses:

**UdiTOP®**: 22, 35, 52, 60 mm

**UdiTOP® Premium**: 60, 80, 100 + 120 mm

Available in the formats:

**UdiTOP®**: 248 x 58.5 cm for 22 mm; 247.7 x 57.7 cm for 35 to 60 mm

**UdiTOP® Premium**: 188 x 60 cm for 60 to 120 mm

- ➔ **Moisture-regulating, vapour permeable and wind-tight**
- ➔ **Excellent thermal storage capacity**
- ➔ **Time-saving and easy to install**
- ➔ **Multi-layer design to insulate against sound, heat and the cold**
- ➔ **Minimisation of thermal bridges through the tongue-and-groove edges**
- ➔ **Special latex impregnation provides a vapour permeable surface from which moisture just rolls off**
- ➔ **Sustainable and environmentally-friendly**

*UdiTOP*® is thoroughly treated with a water impermeable impregnation. By *UdiTOP*® Premium only the upper insulation layer is water-repellent. This stable and high quality, interlocking, wood-fibre insulation product is used as a sark board for the exterior cladding of rear-ventilated roofs and for exterior wall constructions. These applications have been certified by the German Roofing Industry Association. *UdiTOP*® and *UdiTOP*® Premium can be employed as a temporary weather-proof layer or emergency roof for up to 12 weeks. Please take into consideration snow loads during the installation period.

**Application areas**

For the external cladding of timber-frame constructions; for use with solid timber elements; on masonry walls behind the curtain walls of rear-ventilated façades and as a full-surface insulation between rafters in accordance with DIN 4108 -10 DIdm, WABdm



**Application:** Full-surface, wind-tight, **sark boards** in accordance with the new European standard DIN EN 14964 and the German Roofing Industry Association standards.



**Application:** The external cladding of rear-ventilated façades directly onto timber-frame constructions; for use with solid timber elements and on masonry walls behind the curtain walls.

The water-repellent, wood-fibre boards *UdiTOP*® and *UdiTOP*® Premium are increasingly being employed in the construction of roofs and for decades have been regarded as a superior alternative to standard underlays. In addition to their excellent insulating properties, the boards provide an extra layer for the drainage of rain-water beneath the top covering of sloped roofs. The thermal protection of the roof is significantly improved by the additional, thermal-bridge-free, insulating layer. By combining the product with our flexible *UdiFLEX*® inter-rafter insulation boards, which now have even better U-values, the insulating properties of the whole roof can be further improved.

To increase the thermal protection of the roof even more an additional, over-rafter, layer of insulation can be installed in combination with *UdiTOP*® and *UdiTOP*® Premium. This range of options highlights the flexibility of wood-fibre insulation.

The specially treated *UdiTOP*® and *UdiTOP*® Premium can be laid directly onto masonry or timber constructions to provide an external insulating layer and then façade battens can be applied for the construction of a rear-ventilated external covering. Weather boards, slates or metal sheeting, among others, can be used as an alternative to a classical external thermal insulation composite (ETIC) system. A clear benefit of the system is that the insulating layer is not interrupted by construction battens as is necessary with soft types of insulation. This means that significantly better mean U-values are achieved. In addition, this insulation system improves the level of sound-proofing and heat-shielding - even for solid masonry walls. The boards are initially affixed to the masonry using *UdiASSEMBLY*® Insulation fixings. After installing the façade battens, the boards are finally affixed using approved frame anchors and securing screws.



**Insulate naturally.  
The Original.**

## OUR SYSTEM RANGE:

### For roof and interior construction:

#### UdiCLIMATE® SYSTEM

*The interior insulation system with integrated climate chambers*

#### UdiSTONE® SYSTEM

*Ecological insulation blocks for partition wall construction*

#### UdiFLEX® SYSTEM

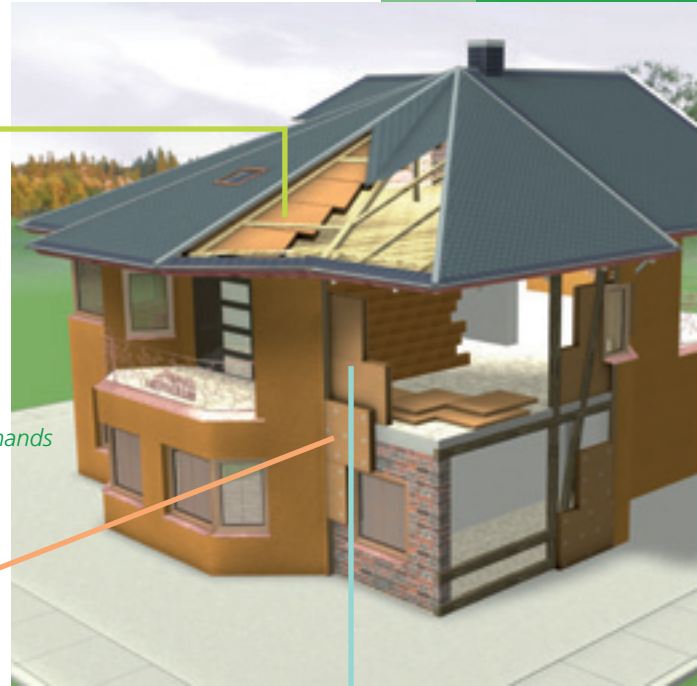
*Flexible planning with a flexible insulation to meet the highest of demands*

#### UdiTOP® SYSTEM

*The complete program for your roof*

#### UdiSTEP® SYSTEM

*Wood-fibre, floor insulation*



### For external walls:

#### UdiRECO® SYSTEM

*External thermal insulation composite system with intelligent levelling compensation*

#### UdiFRONT® SYSTEM

*External thermal insulation composite system with a 15 year guarantee*

#### UdiSPEED® SYSTEM

*The efficient insulation system for pre-fabricated, timber-frame buildings*

### For interior insulation:

#### UdiIN® SYSTEM

*Interior insulation system with a 15 year guarantee*

#### UdiIN RECO® SYSTEM

*The interior insulation system – specially designed for uneven surfaces*

#### UdiIN 2CM® SYSTEM

*The quick and slim internal insulation system*

Our specialist merchants are always happy to advise you:

**Unger-Diffutherm GmbH**  
Environmentally-friendly, innovative,  
insulation systems

Blankenburgstraße 81  
09114 Chemnitz, Germany  
Telephone: +49 (0) 371 - 81 56 40  
Telefax: +49 (0) 371 - 81 56 4 64

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