



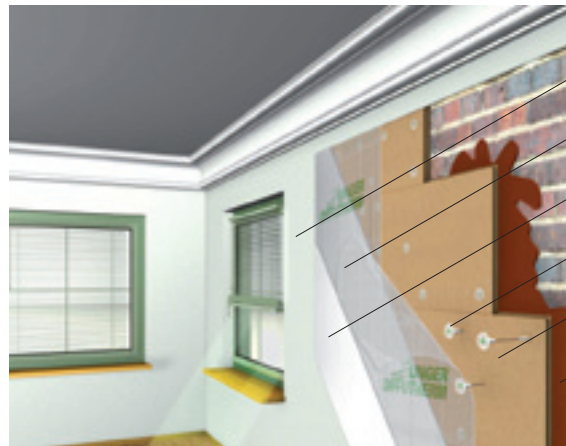
**DAS ORIGINAL UNGER**  
**DIFFUTHERM®**  
Innovative Thermal Insulation Systems

## *Udi***IN**® SYSTEM

*The ecological interior insulation system  
for listed buildings and other beautiful façades*



- ➔ proven system
- ➔ the alternative solution
- ➔ 20 years of competence
- ➔ renewable



- UdiLOAM® Fine plaster
- UdiLOAM® Paint
- UdiREINFORCEMENT® STRENGTHENING MESH
- UdiFOUNDATION COAT®
- UdiASSEMBLY® SDM Fixing
- UdiIN® wood-fibre insulation board
- UdiLOAM® Foundation plaster
- Substructure (Timber construction, masonry etc.)

## Features and Benefits

### Ecological and health-promoting

- manufactured from softwood fibres exclusively from renewable sources
- tested and recommended by the leading German ecological consumer magazine "Öko-Test" as the "best in class" thermal insulation system
- kind to the skin – both to the touch and when installing
- Top coat in natural lime or loam-clay in combination with the range of **UdiNatural paints**

### Tested and certified

- by the German Institute for Building Technology (DIBt) in Berlin, for both timber-framed and masonry constructions
- tested for its fire safety standards, weather resistance, durability/life expectancy and insulating properties
- over 100,000 square metres of insulation have already been successfully installed

### Universal spectrum

- for all types of masonry e.g. (Limestone, fired-loam bricks, concrete or natural stone)
- for all types of timber and timber-framed buildings
- applicable to special construction types i.e. half-timbered buildings
- applicable for interior use in all existing buildings (exceptions: areas below ground level, rising damp)
- suitable for insulation layers up to 20 cm and wall thicknesses up to 36.5 cm – without a building physics calculation certificate



### top class water vapour diffusion

- The **UdiIN® SYSTEM** deliberately does not employ water vapour barriers thereby ensuring that the natural moisture exchange between the interior and exterior airflows are not inhibited, creating a healthy room climate.
- The patented, mineral-based, vapour-regulating render in combination with our highly efficient wood-fibre, sandwich-layer, insulation boards prevents rooms from smelling musty.

### Acoustic insulation

- The combination of the special sandwich-layer design and a void-free, solid construction means that top-levels of sound proofing are possible

### Cost savings

- save up to 79 % on your current heating costs
- a typical amortisation (return on investment) period of 5 years
- take advantage of possible grants and subsidies available



## Highly efficient wood-fibre sandwich elements

- + Special coating and effective vapour retarder
- + Plaster base in a system solution
- + 20 years of experience

= **UdiIN® SYSTEM**



## Technical data – insulation board

### Insulation board:

Parameter	Test Standard	Classification / Value
Format		1,300 x 790 mm
Coverage (minus tongue & groove)		1,290 x 780 mm
	Tongue and groove around the whole circumference	
Insulation thickness		40/ 60/ 80/ 100 mm
Board coverage		130 x 79 cm
Board designation	DIN EN 13 171	T4-CS(10/Y)100-TR10,0-WS1,0
Thermal conductivity declared value $\lambda_D$	DIN EN 13171	0.044 W/mK
Fire class according to	DIN EN 13501-1	E
Apparent density	EN 1602	ca. 190 - 220 kg/m <sup>3</sup>
Minimum compressive strength kPa		100
Vapour diffusion resistance $\mu$	EN 12667	5
Specific enthalpy capacity c	DIN EN ISO 10456	2100 J/kg K
Longitudinal flow-resistance as a complete system		> 5 kNs/m4
Waste code	EWC (European waste catalogue)	030105, 170604
Produced and supervised in accordance with	DIN EN 13 171	

### Technical data UdiMULTIGRUND® as a vapour-retarder

A special coating for UNGER-DIFFUTHERM interior insulation systems. It is an effective vapour retarder to restrict the level of condensation and serves as a filler, a reinforcement coat and a base coat for renders/plasters, paint coats, wallpaper etc.

Granularity: ca. 0.4 mm; Compressive strength: ca. 4 - 9 N/mm<sup>2</sup>;  $\mu$ -value: ca. 125  
Reinforcement coat thickness: Average of 4 mm



## The UdiIN® SYSTEM in detail

### Mounting and fixing the insulation boards

Our insulation boards are permanently fixed to the surface using special anchors/fixings. Any voids are filled using our UdiLOAM® Foundation plaster which, with its natural capillary properties, prevents the build up of condensation.

### Water vapour regulating strengthening foundation

The next layer is comprised of a water-vapour-regulating foundation render with a strengthening mesh. This coat should have a minimum thickness of 8 mm. This is the base for a durable, permanently dry, crack-free and ready-to-paint top layer of finishing plaster/render.

### Surface design

Once the foundation render is dry, a final, textured, finishing render coat is applied. Alternatively, you can opt for UdiLOAM®. This is coloured according to your individually selected colour preference. The Unger-Diffutherm trained installer will then give the finishing coat the surface structure/texture you desire. Choose between UdiLOAM® Loam plaster, loam paint, structured interior plaster or simply wallpaper.



- ➔ System tried + tested in long-term study
- ➔ Improves the room climate
- ➔ Stabilizes the build-up of condensation
- ➔ Vapour permeable + capillary-active

## Guaranteed...



### UdiMould-free GUARANTEE®

- unique 'freedom from mould growth' guarantee
- health-promoting insulation system for you and your family – effective a life-time long



### UdiWarp-free GUARANTEE®

- unique guarantee that the UdiIN® SYSTEM insulation boards will remain warp-free
- storm-proof façade – up to wind speeds of 185 mph
- the UdiIN® SYSTEM surface always remains smooth
- warp-free even under thermal stresses i.e. temperature extremes



### UdiCrack-free GUARANTEE®

- unique crack-free guarantee for plastered façades
- the UdiIN® SYSTEM ensures that the substance of the building remains dry
- over 2 million square metres have been installed since 1989 – without any cracks developing!



### UdiColour choice GUARANTEE®

- your individual dream colours for the interior render are available in the complete colour spectrum



## Benefit from our 15 year guarantee package

Attention to detail is decisive in ensuring the long-lasting functionality of the UdiIN® SYSTEM. We can provide you with well thought out and proven solutions for all areas of your property – from the cellar to the roof. These include the choice of the correct accessories and information on professionally trained and certified installers. Don't take any risks – demand the UdiIN® SYSTEM from a UdiCertified installer®.



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*

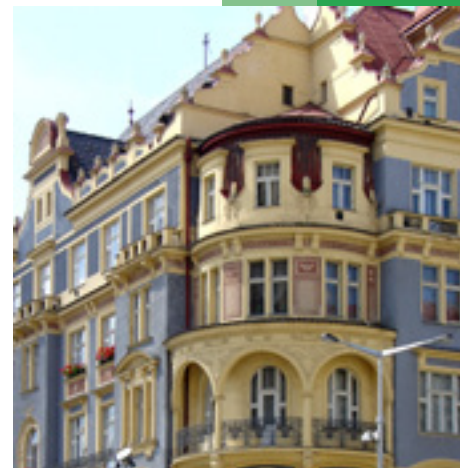
#### UdiIN RECO® SYSTEM

*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  
Oberfrohnauer Straße 2  
09117 Chemnitz, Germany  
Telephone: +49 (0) 371 - 81 56 40  
Telefax: +49 (0) 371 - 81 56 4 64

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

