



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 λ_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 ³
Minimum compressive strength kPa		100
Vapour diffusion resistance μ	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/mm²; μ -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:

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