

## PRODUCT

High quality wood fiber insulation element that can be plastered with thermally optimized and proven sandwich structure for ETICS (thermal insulation composite systems) UdiFRONT® System or UdiIN® System.

## APPLICATIONS

UdiUNGER-DIFFUTHERM® NF wood fiber insulation boards have established themselves in the top class ETICS systems for more than fifteen years. Their structural and physical characteristics were copied from the wood and optimized. These elements are used in the area of the professional execution of vapor-permeable exterior walls made of masonry and wood structures in half-timbered construction, wood panel and solid wood construction and as interior insulation of exterior walls.

## COMPONENTS

Produced using the wet process, fresh coniferous wood residues are pressed in the wood's own lignin (natural resin) into individual, dense panel layers and laminated to one another to form a high-performance insulation element.

## CHARACTERISTICS

UdiUNGER-DIFFUTHERM® NF heat, sound and cold insulation that is perfect for cleaning. It forms the basis for the tried and tested and officially approved thermal insulation composite systems UdiFRONT®SYSTEM or UdiIN®SYSTEM. The long-term functionality of the wood fiber-based board is ensured exclusively by all specially coordinated high-quality plasters in conjunction with all system components from our range. The all-round protection for every house in wood or masonry. The intelligent sandwich structure ensures diffusion-open, sound-insulating and climate-regulating wall structures with flexible surface tension reduction in the plastered area.

## TECHNICAL SPECIFICATIONS

CHARACTERISTICS VALUE	DECLARED VALUE
Nominal value of thermal conductivity $\lambda_d$	0,046 W/MK
Design value of the thermal conductivity $\lambda$	0,048 W/MK
Fire behavior according to din en 13501-1	E
Gross density	ca. 230 kg/ m <sup>3</sup>
Tensile strength perpendicular to the plane of the plate	≥15kPa
Compressive stress at 10% compression	100 kPa
Water vapor diffusion resistance coefficient $\mu$	5
Specific heat storage capacity c	2100 J/kg K

Waste key

EAK-Code 030105 // 170201

## Application according to DIN 4108-10: 2015

DEO-dm//WAB-dm//WH//WI-zg//WTR//WAP-zh

## QUALITY CONTROL

Produced and monitored in accordance with DIN EN 13171

## STORAGE

- Cool and not exposed to sunlight
- Dry
- Lying down

Items No.	Thickness	Dimensions		Pcs/Pallet	Ft <sup>2</sup> /Pallet	R-Value
		Tongue	Groove			
190060	60 mm (2 23/64 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	30	331.63	R-7
190080	80 mm (3 5/32 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	22	243.15	R-10
190010	100 mm (3 15/16 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	18	199	R-12.8
190012	120 mm (4 23/32 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	15	165.81	R-16.1
190020	20 mm (0 25/32 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	56	626.89	R-3
190040	40 mm (1 37/64 in)	51 3/16 x 31 7/64	50 13/64 x 30 1/8	28	313.44	R-6

## Processing

The professional and extraction device, e.g. jigsaw with hollow cut, band saw, mini chain saw or circular saw, each with a hard metal fitting. Laying in principle seamlessly and precisely in the bond and in the tongue and groove bond with flying joints. Panel surface tolerances max. 1/10 inches. Sand over it with an electric sander or lattice grate. In new buildings made of wood, moisture penetration, e.g. through screed, filler or clay work, should be taken into account during the construction process. In the case of connections, the layer thickness (e.g. for roof overhangs, drainage pipes, window and door reveals, balcony and terrace floors, etc.) must be taken into account. Horizontal covers and window sills should protrude at least 1 1/5 (plus 2/5 inches plaster thickness). Basically, all connections must be dimensioned and properly sealed so that driving rain and other moisture cannot penetrate behind the insulation elements. Third-party component connections (e.g. beams, windows, doors, penetrations and base rails) must be made waterproof and windproof with UdiFUGENBAND® (front edge of the insulation board). Building expansion joints must be adopted and integrated into our insulation systems. Do not exceed an outdoor exposure time of 60 days. Cut surfaces and upper edges of the panels (depending on the construction progress, the upper edge of the upper row) must be protected daily and permanently against the ingress of moisture