

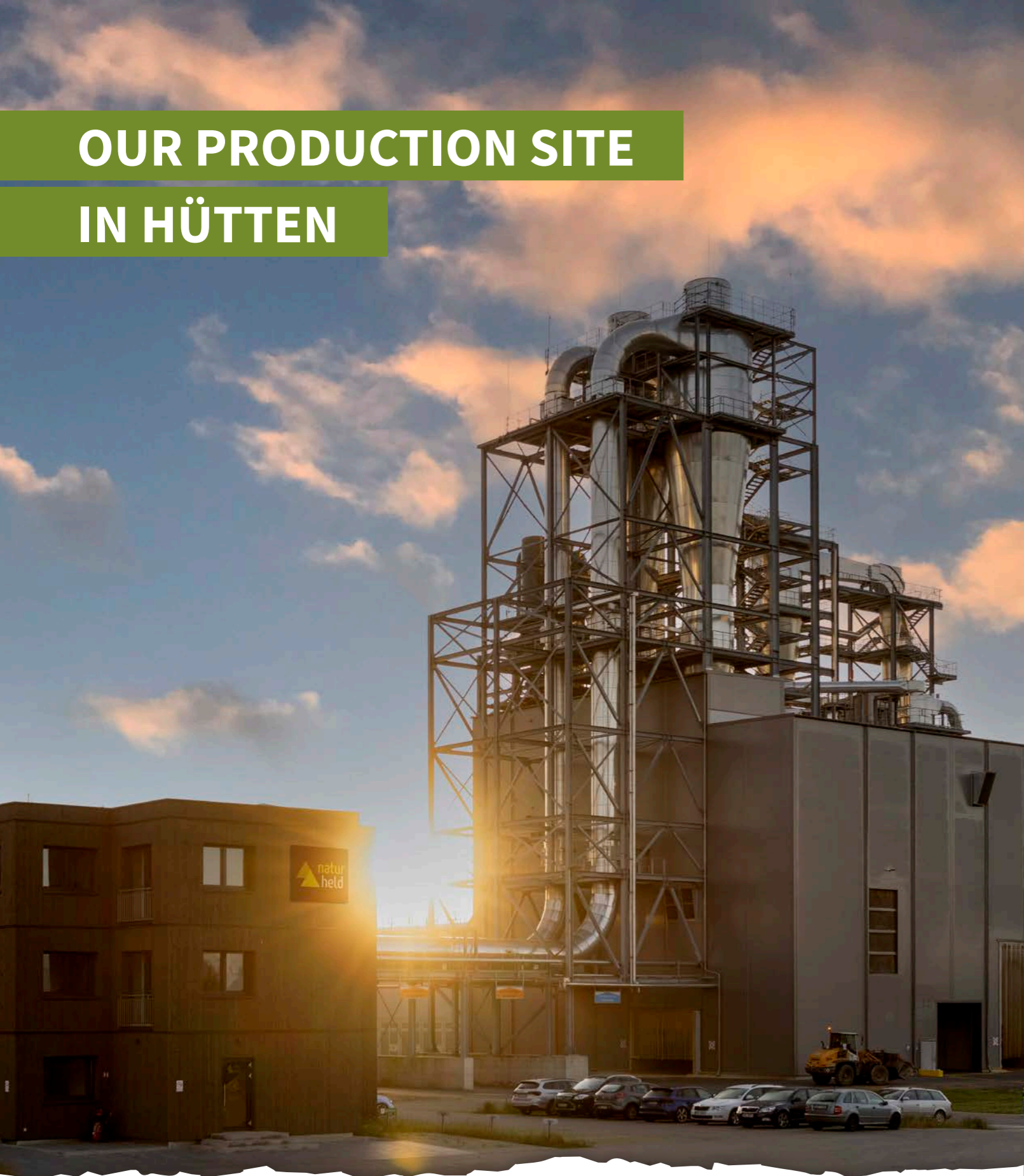


Generation 2.0

naturheld the best wood fibre
insulation boards

PRODUCT OVERVIEW

OUR PRODUCTION SITE IN HÜTTEN



Production site:
naturheld GmbH & Co. KG
Parksteiner Weg 20
92655 Grafenwöhr-Hütten

CONTACT
Telefon: 09636 / 9209 - 5300
info@naturheld.global

CONTENT

AREA	
PRODUCT FINDER	S. 04
GENERATION 2.0	S. 06
PRODUCT OVERVIEW	S. 08
WOOD FIBRE INSULATION	S. 10
WOOD FIBRE INSULATION	
naturheld FLOW	S. 12
naturheld FLEX	S. 14
naturheld 110	S. 20
naturheld 140	S. 22
naturheld 180	S. 24
naturheld 220	S. 26
SYSTEM PRODUCTS	
naturheld 140 INSTALL	S. 28

AREAS OF APPLICATION

CEILING, ROOF

External insulation of roof or ceiling, protected from weathering, insulation under coverings



External insulation of roof or ceiling, protected from weathering, insulation under waterproofing



Insulation between rafters, double-skin roof, non-walkable but accessible top storey ceilings



Internal insulation of the ceiling (on the underside) or the roof, insulation under the rafters/supporting structure, suspended ceiling, etc.



Internal insulation of the ceiling or floor slab (top side) under screed without sound insulation requirements



WALL

External insulation of the wall behind cladding



External insulation of the wall under plaster



Insulation of double-skin walls, core insulation



Insulation of timber frame and timber panel construction



Interior wall insulation
















Insulation of partition walls




PRODUCT FINDER

...you will find the right product for your application!

Product	Format	Edge	Thickness	Applications Din 4108-10			
Product	mm		mm				
Product				Rafter insulation under cover sarking board	Insulation under waterproofing flat roof	Insulation between rafters, cavity insulation	For attic ceilings
naturheld FLOW Page 12							not walkable
naturheld FLEX Page 14	1220x575	square edged	30-240 (-300*)				not walkable
	1250x625	square edged	40-80				not walkable
naturheld 110 Page 20	1250x600	square edged	80-100				
	1200x400	square edged	120-200				
naturheld 140 Page 22	1250x600	square edged	40-60				
	1880x615	T+G	60-180 (-220*)				
naturheld 180 Page 24	1880x615	T+G	40-120				
	2550x615	T+G	40-60				
	2550x1185	T+G	60				
naturheld 220 Page 26	1250x600	square edged	22-35				
	2550x615	T+G	22-35				

Applications Din 4108-10								
								
Interior insulation Roof and ceiling underside	Insulation Floor under screed	Insulation behind a curtain wall	External plastered insulation, approved as ETICS insulation	Insulation between double-skin walls with ventilation	Panelling of timber frame construction and timber panel construction walls, especially prefabrication	Interior wall insulation, plastered Note: from 60mm insulation, the structure must be inspected	Interior wall insulation panelled	Insulation of partition walls
				**				Wooden construction
				**				Metal construction
				**				
				**				
			80-160					
			New: 40-120					
			Soffit panel					

* on request ** behind water-draining layer Suitable product: 



NEW TONGUE
+GROOVE
PROFILE

NEW!

GENERATION 2.0

MORE STABLE TONGUE AND GROOVE CONNECTION

Thanks to the rounded edges and the flat end face, the tongue is protected from damage caused by impacts during installation and reliably retains its shape and sealing ability. In addition, the rounding at the base of the tongue reinforces and protects the tongue from breaking, which is unique for soft wood fibreboards.

MORE COMFORTABLE HANDLING

The more robust edges and rounded profiles make it easier and more comfortable to lift and transport the panels.

IMPROVED STRENGTH

Due to the improved formulation and modified process parameters, a higher strength of the board is achieved.

THE NEW NATURHELD EDGE PROFILING

SIMPLE INSTALLATION & BETTER JOINABILITY

The groove entrance is also shaped. This means that the panels can be pushed together easily, even if the substructure is slightly uneven; the continuous rounding prevents tilting and the tongue centres itself when pushed together due to the funnel effect.

SECURE SEALING

The sealing flanks are parallel to the panel surface at 10 mm and therefore seal reliably even with joints of up to 3 mm.

EXCELLENT RAIN PROTECTION

Thanks to the innovative tongue and groove connection, the panel has improved weather protection from a roof pitch of 15°.

The new naturheld formula for wood fibre insulation

VERSATILE APPLICATION POSSIBILITIES

The versatile application possibilities of the products enable economical warehousing.

PROFILING ADAPTED TO THE PANEL THICKNESS

With the thinner panels, the tongue is shorter, 20 and 22 instead of 24 mm. This makes it even more robust and production is more efficient. The 10mm sealing flank is still retained.

MORE COVERAGE WITH THE SAME GROSS PANEL SIZE

The panels are all milled from the same gross formats, the shorter edge profiling means there is less waste in production and the cover dimension is larger in relation to the gross panel size.

OPTIMISED SURFACE STRUCTURE FOR INCREASED SLIP RESISTANCE AND SURE-FOOTEDNESS

The clear structuring of the surface improves slip resistance on the roof and the rendering of the façade.

NEW TONGUE
+GROOVE
PROFILE



NEW GENERATION 2.0



OUR VERSATILE PRODUCTS

naturheld 110

▲ Page 20

naturheld 140

▲ Page 22

naturheld 180

▲ Page 24

naturheld 220

▲ Page 26

naturheld FLOW

▲ Page 12



naturheld FLEX

▲ Page 14



CAN BE USED VARIABLY FOR ROOF, WALL AND FLOOR

Whether solid, flexible or as loose fibres, our new naturheld products are always the best choice for insulating new and old buildings. The curved edges enable faster installation, which not only saves time but also labour and costs. Thanks to optimised production, the prices remain as favourable as ever.

The solid boards are symmetrically equipped with tongue and groove and can be used efficiently and quickly as a water-repellent, robust underlay board for walls or internal insulation. Modern roof constructions can be easily realised with a solid naturheld insulation board as a rainproof sub-roof in accordance with ZVDH regulations from a roof pitch of 15°. A thermal insulation composite system (ETICS) as an external wall construction can also be fully insulated with our insulation boards and permanently and effectively protected from the weather with coordinated plaster systems.

naturheld 140 install

Page 28



naturheld FLOW



PEFC/04-31-1223




AREAS OF APPLICATION DIN 4108-10: DZ, DI-zk, WH, WI-zk, WTR



- ▲ Insulation between rafters
- ▲ Compartment insulation of walls in timber frame and timber stud construction
- ▲ Insulation of wooden beam ceilings
- ▲ Insulation of the top storey ceilings
- ▲ Izolacja poziomów instalacyjnych
- ▲ Izolacja elementów kompensacyjnych na podłożach mineralnych

TECHNICAL DATA:

Label	ETA-23/0125	
DoP /Declaration of Performance	Flow_01.09.24	
Density	kg/m ³	33-45
Nominal thermal conductivity λD EU 	W/(mK)	0,038
Fire behaviour according to DIN EN 13501-1		E
PN-EN 13823+A1: 2022-12		B s2 d0
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, ammonium sulphate (fire retardant)	
Water vapour diusion resistance factor		μ 1-2
Specific heat capacity	J/(kgK)	2100
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

PACKAGING DETAILS

PACKAGING / WEIGHT

Packaging of the bales	Weight per bale (kg)	Bales per pallet	Weight of the pallet (kg)
foiled	15	21	315
unfoiled	20	18	360

SINGLE-VARIETY LOADING(ON STANDARD LORRY, LOADING SPACE2,40 X 13,60M)

Packaging of the bales	Pallet dimensions (approx.)	Pallets per lorry
foiled	1200 x 800 x 2550 (L x W x H)	33
unfoiled	1200 x 800 x 2550 (L x W x H)	32





OUR
FLEXIBLE
PANELS

naturheld FLEX

AREAS OF APPLICATION DIN 4108-10:
DZ, DI-zk, WH, WI-zk, WTR



- ▲ Insulation between rafters
- ▲ Compartment insulation of walls in timber frame and timber stud construction
- ▲ Insulation of wooden beam ceilings
- ▲ Insulation of the top storey ceilings
- ▲ Insulation of installation levels
- ▲ Insulation of ribbing on mineral substrates



TECHNICAL DATA:

Label	WF-EN 13171-T3-MU1/2-AFr5	
Density	kg/m³	50
Nominal thermal conductivity λD EU	W/(mK)	0,036
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PP / PE (binding fibre), ammonium sulphate (fire retardant)	
Linear flow resistance	kPa*s/m²	5 to 60mm, 6 to 80mm
Water vapour diusion resistance factor		μ 1-2
Specific heat capacity	J/(kgK)	2100
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

*New Lambda
value*

λ_D
0,036

PACKAGING INFORMATION

TIMBER FRAME CONSTRUCTION, WIDTH 575MM

Format (mm)	Thickness (mm)	m²/pallet	pcs/pallet	Packages/ pallet	m²/package
1220x575	30*	112,24	160	10	11,22
	40	84,18	120	10	8,42
	50	67,34	96	8	8,42
	60	56,12	80	8	7,02
	80	42,09	60	10	4,21
	100	33,67	48	8	4,21
	120	28,06	40	8	3,51
	140	22,45	32	8	2,81
	160	21,05	30	10	2,10
	180	16,84	24	8	2,10
	200	16,84	24	8	2,10
	220*	14,03	20	10	1,40
	240	14,03	20	10	1,40
	260*	11,22	16	8	1,40
	280*	11,22	16	8	1,40
	300*	11,22	16	8	1,40

DRY CONSTRUCTION WITH METAL PROFILES, WIDTH 625MM

Format (mm)	Thickness (mm)	m²/pallet	pcs/pallet	Packages/ pallet	m²/package
1250x625	40	93,75	120	10	9,38
	60	62,50	80	8	7,81
	80	46,88	60	10	4,69

SINGLE-VARIETY LOADING (ON STANDARD LORRY, LOADING SPACE2,40 X 13,60M)

Panel format (mm)	Pallet dimensions (approx.)	Pallets per lorry
1220x575	1220 x 1150 x 2550 (L x W x H)	22
1250x625	1250 x 1200 x 2550 (L x W x H)	20

*on request

OUR SOLID PANELS



The new naturheld edge profiling

OPTIMISED FORMATS:

LENGTH: 1.500 becomes **1.250** | 2.000 becomes **1.880**
This means that the Generation 2.0 can be installed more quickly on roofs and walls, and the adapted length means that more cubic metres fit into a lorry.

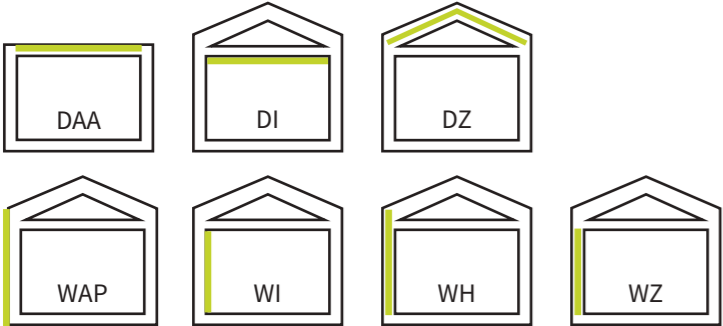
WIDTH: 580 netto becomes **615 BRUTTO**
The panels are all milled from the same gross formats, the shorter edge profiling means there is less waste in production and the cover dimension is larger in relation to the gross panel size.

615
GROSS

1.250 / 1.880 / 2.550

naturheld 110

AREAS OF APPLICATION DIN 4108-10:
DAA-dh, DI, DZ, WAP, WI, WH, WZ



- ▲ High-performance insulation board for numerous applications
- ▲ Can be plastered directly as ETICS insulation
- ▲ Numerous approved plaster systems
- ▲ Can be plastered or clad directly for interior insulation
- ▲ For the top storey ceiling
- ▲ For roof insulation on formwork or CLT
- ▲ Suitable for flat roof insulation

TECHNICAL DATA:

Label	WF-EN 13171-T5-CS(10/Y)50-TR15-DS(70,-)3-AFr20-WS1,0-MU3	
Density	kg/m³	110
Nominal thermal conductivity λD EU	W/(mK)	0,039
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PMDI adhesive, paraffin	
Compressive stress at 10% compression	kPa	≥ 50
Tensile strength perpendicular to the plane of the panel	kPa	≥ 15
Water vapour diusion resistance factor		μ 3
Specific heat capacity	J/(kgK)	2100
Dynamic stiffness	MN/m³	80mm<40, 100mm<30, 160mm<20
Linear flow resistance	kPa*s/m²	80mm>50, 100mm>45, 160mm>35
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

- ▲ Previous name: naturheld Wand 110



PACKAGING INFORMATION

STANDARD FORMAT

Format (mm)	Edge	Thickness (mm)	m²/pallet	pcs/pallet
1250x600	square-edged	80	21,00	28
		100	16,50	22
1200x400		120	12,96	27
		140	11,52	24
		160	10,08	21
		180	8,64	18
		200	7,20	15

SINGLE-VARIETY LOADING (ON STANDARD LORRY, LOADING SPACE 2,40 X 13,60M)

Panel format (mm)	Pallet dimensions (approx.)	Pallets per lorry
1250x600	1250 x 1200 x 1300 (L xW x H)	44
1200x400	1200 x 1200 x 1300 (L x W x H)	44



naturheld 140

AREAS OF APPLICATION DIN 4108-10:
DAD, DAA-ds, DI, DEO-ds, WAB ds, WAP, WI, WH, WZ, DZ



- ▲ Universal, lightweight insulation board
- ▲ UDP-A underlay board as a rainproof sub-roof in accordance with ZVDH regulations from a roof pitch of 15° (T+G 60-180mm)
- ▲ UDP-A: Tested as a rainproof sub-roof in accordance with ÖN B4119 by Holzforschung Austria (T+G 60-180mm)
- ▲ ETICS insulation can be plastered directly, for timber frame construction and stud frame (T+G 80-160mm)
- ▲ Numerous approved plaster systems
- ▲ 4 weeks freely weatherable
- ▲ For rear-ventilated facades
- ▲ Can be plastered or clad directly for interior insulation
- ▲ For the top storey ceiling
- ▲ For floor insulation under wet screed
- ▲ Suitable for flat roof insulation

TECHNICAL DATA:

Label	WF-EN 13171-T5-CS(10/Y)100-TR20-DS(70,-)3-AFr60-WS1,0-MU3	
Density	kg/m³	140
Nominal thermal conductivity λ_D EU	W/(mK)	0,041
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PMDI adhesive, paraffin	
Compressive stress at 10% compression	kPa	≥ 100
Tensile strength perpendicular to the plane of the panel	kPa	≥ 20
Water vapour diusion resistance factor		$\mu 3$
Specific heat capacity	J/(kgK)	2100
Dynamic stiffness	MN/m³	60mm<65, 80mm<50, 140mm<30
Linear flow resistance	kPa*s/m²	>60

▲ Previous name: naturheld Wand 140



PACKAGING INFORMATION

INTERIOR INSULATION AND INSTALLATION LEVEL

Format (mm)	Edge	Thickness (mm)	m²/pallet	pcs/pallet
1250x600	square-edged	40	42,00	56
		60	28,50	38

WITH TONGUE AND GROOVE, FOR FAÇADES AND ROOFS

Format (mm)	Edge	Thickness (mm)	Cover dimension (mm)	m²/pallet (gross dimension)	m²/pallet (cover dimension)	pcs/pallet
1880x615	Generation 2.0 with the new tongue and groove profile	60	1856x591	43,94	41,68	38
		80	1856x591	32,37	30,71	28
		100	1856x591	25,44	24,13	22
		120	1856x591	20,81	19,74	18
		140	1856x591	18,50	17,55	16
		160	1856x591	16,19	15,36	14
		180	1856x591	13,87	13,16	12
		200*	1856x591	11,56	10,97	10
		220*	1856x591	11,56	10,97	10

SINGLE-VARIETY LOADING (ON STANDARD LORRY, LOADING SPACE 2,40 X 13,60M)

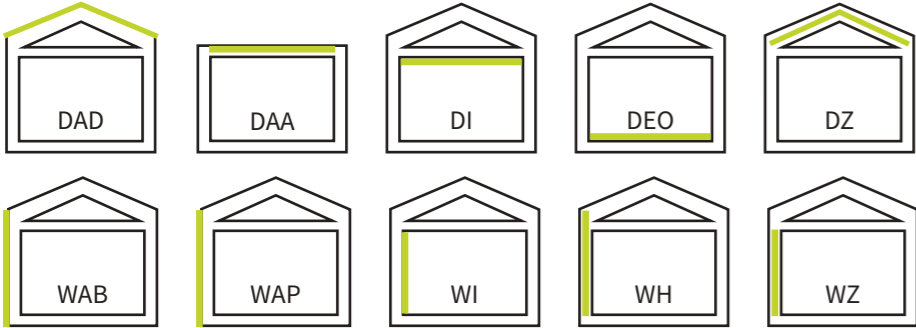
Panel format (mm)	Pallet dimensions (approx.)	Pallets per lorry
2635x1250	2635 x 1250 x 1300 (L x W x H)	20
1250x600	1250 x 1200 x 1300 (L x W x H)	44
1880x615	1880 x 1210 x 1300 (L x W x H)	28

*on request



naturheld 180

AREAS OF APPLICATION DIN 4108-10: DAD, DAA-ds, DI, DEO-ds, WAB-ds, WAP, WI, WH, WZ,DZ



- ▲ Robust universal insulation board
- ▲ UDP-A underlay board as a rainproof sub-roof in accordance with ZVDH regulations from a roof pitch of 15°
- ▲ UDP-A: Tested as a rainproof sub-roof in accordance with ÖN B4119 at Holzforschung Austria
- ▲ ETICS for timber frame construction up to 83.3 cm centre distance
- ▲ Numerous approved plaster systems
- ▲ Can be exposed to the weather for up to 12 weeks if the construction is open from the inside and the insulation board is visible
- ▲ Can be exposed to the weather for 4 weeks when the component has been removed and insulated
- ▲ For rear-ventilated facades
- ▲ Can be plastered directly for interior insulation
- ▲ For the top storey ceiling
- ▲ For floor insulation under wet screed
- ▲ Suitable for flat roof insulation
- ▲ ETICS insulation can be plastered directly, to frame structures (T+G 40-120mm)

TECHNICAL DATA:

Label	WF-EN 13171-T5-CS(10/Y)150-TR30-DS(70,-)3-AFr100-WS1,0-MU3	
Density	kg/m ³	180
Nominal thermal conductivity λ D EU	W/(mK)	0,043
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PMDI adhesive, paraffin	
Compressive stress at 10% compression	kPa	≥ 150
Tensile strength perpendicular to the plane of the panel	kPa	≥ 30
Water vapour diusion resistance factor		μ 3
Specific heat capacity	J/(kgK)	2100
Dynamic stiffness	MN/m ³	40 mm < 90, 60mm < 60
Linear flow resistance	kPa*s/m ²	>100
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

▲ Previous name: naturheld Wand 180 UDP-A



PACKAGING INFORMATION

LARGE FORMAT, FOR PREFABRICATION

Format (mm)	Edge	Thickness (mm)	Cover dimension (mm)	m ² /pallet (gross dimension)	m ² /pallet (cover dimension)	pcs/pallet
3000x1250	square-edged	60*		71,25		19
2550x1185	Generation 2.0 with the new tongue and groove profile	60	2526x1161	57,41	55,72	19

LONG FORMAT WITH TONGUE AND GROOVE, FOR FAST WORK ON ROOFS AND FAÇADES

Format (mm)	Edge	Thickness (mm)	Cover dimension (mm)	m ² /pallet (gross dimension)	m ² /pallet (cover dimension)	pcs/pallet
2550x615	Generation 2.0 with the new tongue and groove profile	40	2528x593	87,82	83,95	56
		60	2526x591	59,59	56,73	38

WITH TONGUE AND GROOVE, FOR FAÇADES AND ROOFS

Format (mm)	Krawędź	Thickness (mm)	Cover dimension (mm)	m ² /pallet (gross dimension)	m ² /pallet (cover dimension)	pcs/pallet
1880x615	Generation 2.0 with the new tongue and groove profile	40	1858x593	64,75	61,70	56
		60	1856x591	43,94	41,68	38
		80	1856x591	32,37	30,71	28
		100	1856x591	25,44	24,13	22
		120	1856x591	20,81	19,74	18

SINGLE-VARIETY LOADING (ON STANDARD LORRY, LOADING SPACE 2,40 X 13,60M)

Panel format (mm)	Pallet dimensions (approx.)	Pallets per lorry
3000x1250	3000 x 1250 x 1300 (L x W x H)	16
2550x1185	2550 x 1185 x 1300 (L x W x H)	20
2550x615	2550 x 1210 x 1300 (L x W x H)	20
1880x615	1880 x 1210 x 1300 (L x W x H)	28

*on request

naturheld 220

AREAS OF APPLICATION DIN 4108-10: DAD, DEO-ds, WAB-ds, WI, WH, WZ



With the new tongue and groove profile:

- ▲ High-strength insulation board for various applications
- ▲ UDP-A underlay board as a rainproof sub-roof in accordance with ZVDH regulations from a roof pitch of 15°
- ▲ UDP-A: Tested as a rainproof sub-roof in accordance with ÖN B4119 by Holzforschung Austria
- ▲ For rear-ventilated facades
- ▲ Can be exposed to the weather for up to 12 weeks if the construction is open from the inside and the insulation board is visible
- ▲ Can be exposed to the weather for 4 weeks when the component has been removed and insulated

TECHNICAL DATA:

Label	WF-EN 13171-T5-CS(10/Y)200-TR50-DS(70,-)3-AFr100-WS1,0-MU5	
Density	kg/m ³	220
Nominal thermal conductivity λD EU	W/(mK)	0,047
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PMDI adhesive, paraffin	
Compressive stress at 10% compression	kPa	≥ 200
Tensile strength perpendicular to the plane of the panel	kPa	≥ 50
Water vapour diusion resistance factor		μ 5
Specific heat capacity	J/(kgK)	2100
Dynamic stiffness	MN/m ³	100
Linear flow resistance	kPa*s/m ²	>100
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

▲ Previous names: naturheld Dach 220 and Innen 220



PACKAGING INFORMATION

BOTTOM COVER PANEL WITH PROFILED EDGE

Format (mm)	Edge	Thickness (mm)	Cover dimension (mm)	m ² /pallet (gross dimension)	m ² /pallet (cover dimension)	pcs/pallet
2550x615	Generation 2.0 with the new tongue and groove profile	22	2530x595	163,10	156,56	104
		35	2528x593	100,37	95,94	64

SQUARE-EDGE

Format (mm)	Edge	Thickness (mm)	m ² /pallet	pcs/pallet
1250x600	square-edged	22	78,00	104
		35	48,00	64

SINGLE-VARIETY LOADING (ON STANDARD LORRY, LOADING SPACE 2,40 X 13,60M)

Panel format (mm)	Pallet dimensions (approx.)	Pallets per lorry
2550x615	2550 x 1210 x 1300 (L x W x H)	20
1250x600	1250 x 1200 x 1300 (L x W x H)	44

naturheld 140 INSTALL

AREAS OF APPLICATION DIN 4108-10: DI, DEO-ds, WI, WH



- ▲ Pre-milled installation channels
- ▲ Channel width 50 mm
- ▲ Channel depth 27 mm
- ▲ Distance between milled channels 75 mm
- ▲ Large format for prefabrication

TECHNICAL DATA:

Label	WF-EN 13171-T5-CS(10/Y)100-TR20-DS(70,-)3-AFr60-WS1,0-MU3	
Density	kg/m ³	140
Nominal thermal conductivity λ_D EU	W/(mK)	0,041
Fire behaviour according to DIN EN 13501-1		E
Building material class according to DIN 4102-1		B2
Full declaration	Wood fibres, PMDI adhesive, paraffin	
Compressive stress at 10% compression	kPa	≥ 100
Tensile strength perpendicular to the plane of the panel	kPa	≥ 20
Water vapour diusion resistance factor		$\mu 3$
Specific heat capacity	J/(kgK)	2100
Dynamic stiffness	MN/m ³	60mm<65, 80mm<50, 140mm<30
Linear flow resistance	kPa*s/m ²	>60
Waste key numbers according to AVV	030105/170201,Wood and wood-based materials, waste wood category A II	

LARGE FORMAT, FOR INSTALLATION SPACES WITH 50 MM WIDE CHANNELS

Format (mm)	Edge	Thickness (mm)	m ² /pallet	pcs/pallet
2635x1250	square-edged	50*	72,46	22



With naturheld 140-Install, installers can reduce installation time on site. The solid wood fibre insulation board is factory-fitted with pre-milled installation channels.

Hollow pipes can also be laid in the cable channel. A single channel is 5 cm wide and 2.7 cm deep. This eliminates the need for conventional on-site milling. The location of the cable laying can be flexibly selected as required.

With a large format of 2635 x 1250 mm, the panel is ideal for quickly and completely covering typical room heights. The plasterboard can be fixed directly to a 50 mm thick panel.

Naturheld 140-Install is also ideal for prefabricated timber structures. The large format speeds up installation in the assembly hall. In addition, serial prefabrication is simplified as the final position of the cables is irrelevant.



PIONEERING INSULATION PLANT OF WOOD FIBRE

Since 2022, naturheld has had one of the most modern wood fibre insulation factories. We have drawn on the extensive experience of leading plant manufacturers such as ANDRITZ and DIEFFENBACHER to jointly develop an extremely innovative, efficient and resource-saving production process. We therefore attach great importance to recycling all materials and production waste. As climate neutrality is not enough for us, we want to achieve a negative carbon footprint for our entire production.

OWN ENERGY GENERATION FROM NATURE

Our location close to local sawmills enables us to quickly transport sawdust in the form of woodchips to our production facilities. We also receive bark, which we burn in our own combined heat and power plant. Together with photovoltaic systems on our four warehouses, we generate both electricity and heat for our production.

UNIQUE NATURAL PRODUCTION: CLOSED AIR AND WATER CYCLE

Our bark-based heating plant is the sustainable engine that drives our production processes, generating steam and hot air (exhaust). A special feature: both elements can be recovered or cleaned using special processes:

- **Water vapour 21,7 t/h:** for cooking woodchips
- **Almost complete water recovery through condensation**
- **Hot air (exhaust) 120 - 130 degrees Celsius:** Drying of wood fibres after shredding in two fibre mills (refiners)
- **The dehumidification air passes through the exhaust aftertreatment system:** The process produces a valuable phosphorus fertilizer for agriculture

THE THREE NATURHELD PRODUCT LINES RUN IN PARALLEL

Woodchips stored in silos are cooked, pulped in two fibre mills (refiners), and then dried. Small amounts of compatible additives are then added to the resulting wood fibres. These are required by law and necessary to obtain a high quality product in terms of physical construction. With a proportion of less than 5%, all our wood fibre insulation products remain sustainable and do not contain any toxins or irritating fibres.

Production line for solid insulation boards:

- Bonding with PMDI: This adhesive contains no formaldehyde and is very efficient. Only very small quantities are required. The adhesive binds with water vapour to form polyurethane - a solid plastic
- Paraffin wax - used in food production, e.g. for cheese coating - is applied using hot air and prevents subsequent water absorption by the insulation boards.

Production line for flexible insulation panels:

- Mixing wood fibres with BiKo textile fibres to give soft insulation panels more structure
- Fibre bonding in a convection oven at a low temperature of 120-130 degrees Celsius
- Adding ammonium sulphate (fertiliser) as a flame retardant

Blow-in insulation production line:

- The wood fibres in this product line contain only ammonium sulphate as a flame retardant



With naturheld you can rely on quality and trust. All combined in the label 'Made in Germany'. Insulating materials that delight today and tomorrow.



naturheld GmbH & Co. KG

Parksteiner Weg 20
92655 Grafenwöhr-Hütten
Germany
USt.-Ident-Nr.:DE 452269120

Telefon: +49 (0)9636 / 9209 - 5300

Fax: +49 (0)9636 / 9209 - 1899

E-Mail: info@naturheld.global

TECHNICAL SUPPORT

Telefon: 09636 / 9209 - 5454

E-Mail: technik@naturheld.global

www.naturheld.global

Version no.: 011
valid from 05/2025