Technical datasheet

best wood **TOP 220**

Version 01/2025

TOP 220 is a pressure-resistant, weatherproof insulation board and a rain-proof sarking board, classified as ZVDH class 3 (ZVDH=Federation of German Roofing Contractors). Furthermore, TOP is also ideally suitable for weatherproof facade insulation on both-closed and ventilated curtain wall facades. Due to the use of paraffin (wax), the best wood board is completely water-repellent. The surface is equipped with an anti-slip latex coating. TOP 220 is weatherproof for up to 12 weeks' outdoor exposure. The application of nail sealing tapes is not necessary.

Technical information

Denomination	WF-EN 13171-T5-DS(70,-)3-CS(10\Y)180-TR35-WS1,0-MU3-AFr100
Density	220 [kg/m^3]
Nominal value of thermal conductivity λ_D	0.047 [W/(mK)]
Rated value of thermal conductivity λ	0.049 [W/(mK)]
Reaction to fire according to DIN EN 13501	E
Construction material class according to DIN 4102	B2
Full declaration	Wood fibers, PMDI gluing, paraffin, latex
Production process	Dry process
Compressive stress at 10% compression	≥ 180 [kPa]
Tensile strength perpendicular to the plane of the board	≥ 35 [kPa]
Modulus of elasticity $E_{(d)}$	≥ 3.00 [N/mm^2]
Water vapor diffusion resistance μ	3
Linear flow resistance	> 100 [kPa·s/m^2]
Short time water absorption	< 1.0 [kg/m^2]
Specific heat capacity	2,100 [J/(kg K)]
Waste code according to AVV	030105, 170201
Sarking board (EN 14964)	SB.H

Fields of application according to DIN 4108-10

DAD-ds, DAA-ds, DEO-ds, WAB-ds, WZ, WH

DAD	Outside insulation of roof or ceiling, protected against direct exposure to the weather, insulation under coverage
ds	High pressure resistance
DAA	Outside insulation of roof or ceiling, protected against direct exposure to the weather, insulation under coverage
DEO	Inside insulation of the ceiling (on the top) under screed without noise protection requirements
WAB	External insulation of the wall behind the cladding
WH	Insulation in timber frame constructions and timber panel constructions
WZ	Insulation of cavity walls, cavity insulation

Delivery formats (Standard formats)

Edge formats	Tongue + groove
Thickness	22, 35, 40, 50, 60 mm
Length	2,000, 2,500 mm
Width	580 mm
Pallet height	up to a max. of 1,350

Other board lengths are possible on request.

Board weights

		Tongue + groove (Standard format)	
Thickness in mm	**1 m²**	**580 x 2,000 mm 1.16 m²**	**580 x 2,500 mm 1.45 m²**
22	4,8	5,6	7,0
35	7.7 kg	8.9 kg	11.2 kg
40	8.8 kg	10.2 kg	12.8 kg
50	11.0 kg	12.8 kg	16.0 kg
60	13.2 kg	15.3 kg	19.1 kg

Certificats

Installation advice

Die TOP 220 is to be laid on pressure and joint free. Even the smallest joints have to be closed with best wood underlays-adhesive sealant UDB before installing the counter batten.

- Store and install TOP 220 dry
- The tongue faces roof ridge, cross joints are not allowed
- Do not use TOP 220 statically or as load-bearing component
- Do not install damaged boards!
- Boards can only be walked on via the rafters
- Each TOP board has to cover at least two rafters. The joint displacement per row has to be at least 1 rafter space
- Afterwards it has to be fixed immediately with the counter-batten.
- The boards have to be installed rectangularly to the rafter
- Connections on the roof ridge, covings, hips and penetrations have to be sealed with the suitable system components
- Dust extraction in accordance with BG regulations
- Installation elements or inlets (e.g. solar pipes ...), for which temperatures of > 80°C can be expected, must not be installed without any additional fire precautions into the best wood SCHNEIDER wood fiber insulation materials.

Please note the special processing guidelines for ON-ROOF INSULATION.

When installing the TOP 140/160/180/220 directly onto the rafters, the following maximum rafter distances must be observed:

best wood on-roof insulation		**TOP 140**	**TOP 160**	**TOP 180**	**TOP 220**
maximum rafter distance [mm]	**minimum board length [mm]**	**thickness of board of the on-roof insulation [mm]**			
≤ 750	2,000	≥ 80	≥ 60	≥ 35	≥ 22*
≤ 850	2,000	≥ 100	≥ 80	≥ 50	≥ 35
≤ 1,100	2,500	≥ 140*	≥ 120*	≥ 80	≥ 50
≤ 1,250	2,500	≥ 200*	≥ 160*	≥ 100*	X

*Order-based production

ATTENTION!
All TOP boards are only treadable on the rafters.
So boards can only be walked on via the rafters.

Fastening instructions

You have the possibility to calculate the screws required for fastening the on-roof insulation by yourself, using the free Heco software program. Alternatively, you can complete the fax information form and let Heco calculate the screws.
Furthermore, you can receive a calculation from ITW for ring nails, nail screws or clips by using the questionary fax. Please note that the calculation of ITW is only valid for ITW fixing elements. Remarks and boundary conditions in the result printout have to be considered.
The **cross-section of the counte**r-batten is analyzed or stated depending on the fastening material when HECO and ITW do the calculation.
Corresponding input forms can be found in the website www-schneider-holz.com.

No need for nail sealing tapes

As per rules and standards of the ZVDH, all TOP products are certified in the UDP-A class. In effectiveness of the examinations of the Holzforschung Austria it can be evidenced, that for connections of the counter-batten by means of of screws, cleats, self-piercing screws or threaded nails, due to natural swelling behaviour, an application of nail sealing tapes is not necessary.