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ThermoDams Ultratherm, a strong rain-tight insulating sarking board, has a single-ply construction and a homogenous cross section. It is suitable for new roofs and roof refurbishment.

Composition

- Manufactured from untreated Black Forest spruce and fir
- Additives:
 - 4.0 % polyurethane resin (binder)
 - 0.75 % paraffin (hydrophobic agent)

Applications

- Upgrading of insulation in new and old buildings
- Rain-tight sarking
- Sheathing of timber frame structures (vented facades)

Advantages

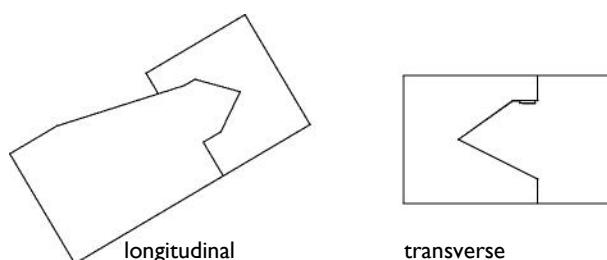
- Consistently uniform board dimensions make installation quicker and easier
- Homogeneous, single-ply construction
- Makes structures wind-tight
- hailproof (TÜV Rheinland confirms highest hailproof-class HW 5)
- No additional covering or taping of joints is necessary for roofs with pitches exceeding 15°.
- Suitable as temporary roof covering (max. 3 months)
- Adhesive nail tapes or sealants are not required.
- Ideal for upgrading the thermal insulation of existing structures
- Reduces thermal bridging
- Superior thermal storage capacity provides outstanding insulation against heat in the summer.
- Significantly improves acoustic insulation
- Regulates humidity
- Allows vapour diffusion
- Guaranteed by Germany's Association of Roofers
- Wood is a sustainable, recyclable natural resource –
- Made in Germany
- Biologically safe (natureplus® certified)
- Practical: combination of different thicknesses of ThermoDams Ultratherm possible, e. g. for insulation of the roof overhang

Technical Information	Ultratherm
Joint type	Tongue and groove
Thickness (mm)	50/60/80/100/120/140/160
Length x width (mm)	1780 x 600
Actual coverage (mm)	1749 x 569 (0.995 m ²)
Square metres per board (m ²)	1.07
Weight per board (kg)	9.6/11.6/15.4/19.3/23.1/27.0/30.8
Weight per m ² (kg)	9.0/10.8/14.4/18.0/21.6/25.2/28.8
Boards per pallet	40/36/26/20/18/14/12
Square metres per pallet (m ²)	42.72/38.44/27.77/21.36/19.22/14.95/12.82
Weight per pallet (kg)	430/445/400
Bulk density (kg/m ³)	180
Vapour diffusion factor (μ)	3
sd-value (m)	0.15/0.18/0.24/0.30/0.36/0.42/0.48
Compressive stress/ strength (kPa)	150
Tensile strength perpendicular to board surface (kPa)	20
Short-term water absorption (kg/m ²)	≤ 1.0
Air flow resistivity (kPa s/m ²)	100
Specific heat capacity (J/kgK)	2100
Fire reaction Euro Class as per DIN EN 13501-1	E
European Union	
Nominal thermal conductivity λ ₀ (W/mK)	0.042
Nominal thermal resistance R _D (m ² K/W)	1.15/1.40/1.90/2.35/2.85/3.30/3.80



Designation: WF-EN 13171-T5-VS1,0-CS(10/Y)100-TR20-MU3-AFr100
 German disposal category: A2 (treated wood; without non-halogenated organic compounds) Code number as per AVV:030105; 170201

Tongue and groove:

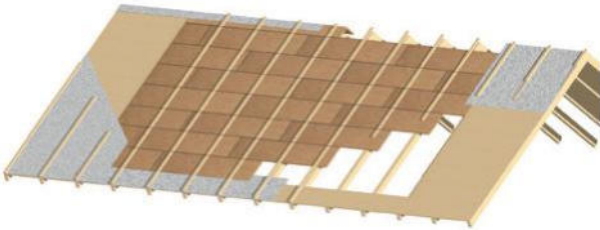


Installation

- Store and install this product dry.
- Always install the boards so the side with the marking is exposed on the exterior of the building.
- Max. rafter distance (on-centre):

Thickness in mm	Max. On-centre Distance in cm
50/60	110
80/100/120/140/160	125

- Board joints must be butted tightly.
- Avoid walking on areas between the rafters.
- Immediately install battens after installing boards.
- Adhesive nail tapes or sealants are not required.
- Avoid cross joints.



- Do not use damaged boards.
- As a rule, the boards install perpendicular to rafters.
- Stagger/offset butted side joints with the next row's joint being centred no closer than the next rafter.
- All seams and roof joints must be properly sealed via joint tape with prior priming to prevent the ingress of rain, e.g. (available from ThermoDams).
- Always install the boards so that their tongues point upwards.
- ThermoDams Ultratherm boards are not designed and made to provide structural support, strength or bear loads.
- Vacuum off the dust in accordance with applicable workplace safety regulations or practices.

Instructions for Specific Roof Pitches

< 15°	Requires suitable moisture barrier
≥ 15°	Not necessary to tape joints provided the pitch is not less than 8° under the recommended pitch specification.

Fastening

Use galvanized or better fasteners.

Nails

		ThermoDams Ultratherm 50			
		Nails per linear metre of batten			
		6 x 180 mm nails / 4.6 x 160 mm power nails			
		40 x 60 mm batten cross section			
Snow load (kN/m ²)		0.75	1.0	1.50	2.5
Weight of roofing (kN/m ²)	0.35	3 / 3	3 / 3	3 / 4	3 / 5
	0.60	3 / 4	3 / 4	3 / 5	4 / 6
	0.95	3 / 5	3 / 5	4 / 6	5 / 8

		ThermoDams Ultratherm 60 mm			
		Nails per linear metre of batten			
		6 x 180 mm nails / 4.6 x 160 mm power nails			
		40 x 60 mm batten cross section			
Snow load (kN/m ²)		0.75	1.0	1.50	2.5
Weight of roofing (kN/m ²)	0.35	3 / 4	3 / 4	3 / 5	4 / 7
	0.60	3 / 5	3 / 5	4 / 6	5 / 8
	0.95	3 / 7	3 / 7	5 / 8	6 / 10

ThermoDams Ultratherm® 80 mm and greater thicknesses require approved fasteners