

# **GUTEX® Ultratherm Data Sheet**



Photographic images are property of GUTEX archive

**GUTEX 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.

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)	1760 x 568 (1.0 m <sup>2</sup> )
Square metres per board (m <sup>2</sup> )	1.07
Weight per board (kg)	9.6/11.5/15.4/19.2/23.1/26.9/ 30.8
Weight per m <sup>2</sup> (kg)	9.0/10.8/14.4/18/21.6/25.2/ 28.8
Boards per pallet	40/34/26/20/18/14/12
Square metres per pallet (m <sup>2</sup> )	42.72/36.31/27.77/21.36/ 19.22/14.95/12.82
Weight per pallet (kg)	400
Bulk density (kg/m <sup>3</sup> )	180
Nominal thermal conductivity $\lambda_D$ (W/mK)	0.042
Nominal thermal resistance $R_D$ (m <sup>2</sup> K/W)	1.19/1.43/1.90/2.38/2.86/3.33/ 3.81
Vapour diffusion factor ( $\mu$ )	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)	30
Short-term water absorption (kg/m <sup>2</sup> )	≤ 1.0
Air flow resistivity (kPa s/m <sup>3</sup> )	100
Specific heat capacity (J/kgK)	2100
Fire reaction Euro Class as per DIN EN 13501-1	E



## Composition

- Manufactured from untreated Black Forest spruce and fir
- Additives:  
4.0 % polyurethane resin (binder)  
1.5% 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
- 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)

Designation: WF-EN 13171-T4-WS1,0-CS(10/Y)100-TR30-MU3-AF100.

\*Approval No. 23.15-1404.

German disposal category: A2 (treated wood; without non-halogenated organic compounds) Code number as per AVV:030105; 170201

## 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 GUTEX).
- Always install the boards so that their tongues point upwards.
- GUTEX 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

### Nails

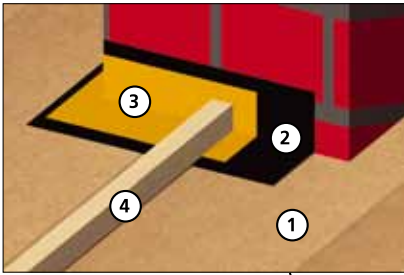
GUTEX Ultratherm 50 mm					
Nails per linear metre of batten					
6 x 180 mm nails / 4.6 x 160 mm power nails					
40 x 60 mm batten cross section					
Snow load (kN/m <sup>2</sup> )	0.75	1.0	1.50	2.5	
Weight of roofing (kN/m <sup>2</sup> )	0.35	3 / 3	3 / 3	3 / 4	3 / 5
	0.60	3 / 4	3 / 4	3 / 5	4 / 6
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

GUTEX 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 <sup>2</sup> )	0.75	1.0	1.50	2.5	
Weight of roofing (kN/m <sup>2</sup> )	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



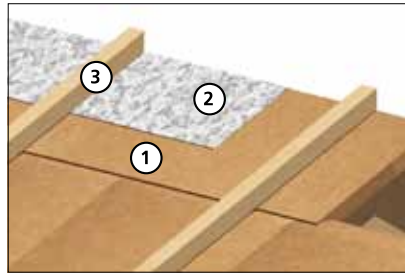
## Detail Drawings

### Roof Interruptions



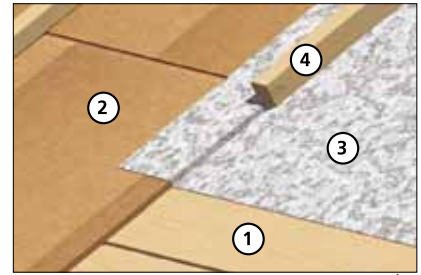
- ① GUTEX Ultratherm
- ② GUTEX Primer
- ③ GUTEX Joint Tape
- ④ GUTEX cross battens

### Ridges

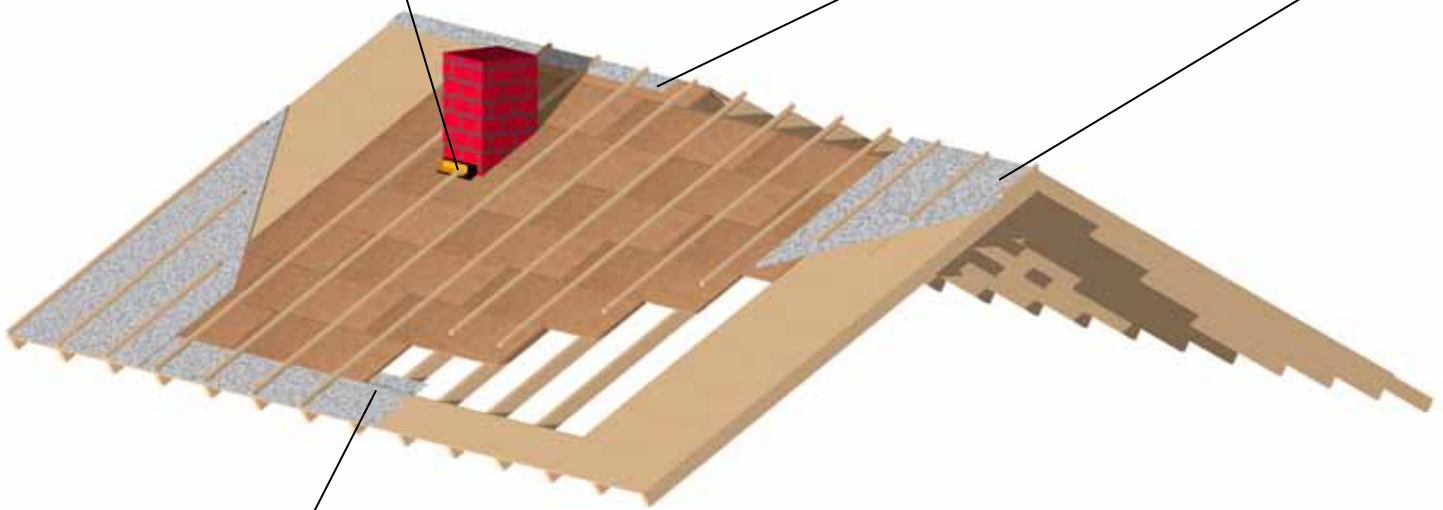


- ① GUTEX Ultratherm
- ② Vapour permeable roofing felt
- ③ Cross battens

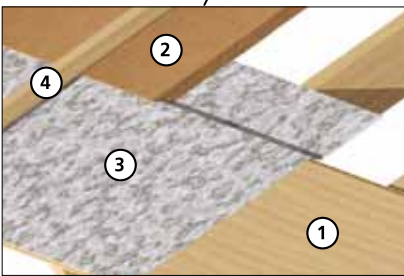
### Gable Ends



- ① Sheathing of exterior overhang
- ② GUTEX Ultratherm
- ③ Vapour permeable roofing felt
- ④ Cross battens

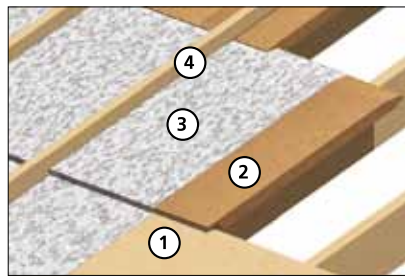


### Eaves Variation 1



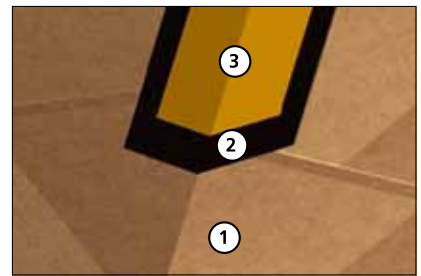
- ① Sheathing of exterior overhang
- ② GUTEX Ultratherm
- ③ Vapour permeable roofing felt
- ④ Cross battens

### Eaves Variation 2



- ① Sheathing of exterior overhang
- ② GUTEX Ultratherm
- ③ Vapour permeable roofing felt
- ④ Cross battens

### Valleys



- ① GUTEX Ultratherm
- ② GUTEX Primer
- ③ GUTEX Joint Tape

All rights reserved. Henselmann GmbH + Co KG is not liable for any damage resulting from error or misprinting. The technical data provided herein is subject to change. Although all of the information was current at the time of its publication, the publication of superseding

information renders the old information invalid.

The suitability of this product for applications not specified in this data sheet is not guaranteed. Warranty and liability claims are subject to the terms of GUTEX's General Terms of Business.



NATURALLY MADE FROM WOOD