

Technical data sheet

Gutex Thermosafe Homogen

Gutex Thermosafe Homogen is the universal wood fibre insulation board with excellent insulation properties for roofs, facades and floor slabs.

Ingredients

- Untreated fir and spruce wood
- 4,0 % PUR resin (polyurethane resin)
- 0,50 % Paraffine

Waste disposal

- Waste code numbers according to AVV: 030105, 170201



Technical data

Bulk density ρ [kg/m³]	~ 110
Nominal thermal conductivity λ_D [W/mK]	0,037
Vapour diffusion μ	4
Compressive stress/strength [kPa]	≥ 50
Tensile strength perpendicular to the panel plane [kPa]	≥ 5
Short-term water absorption [kg/m²]	≤ 2
Air flow resistivity [kPa s/m²]	≥ 35
Specific heat capacity [J/kgK]	2.100
Maximum working temperature [°C]	110
Fire reaction Euro Class as per EN 13501-1	E
Product standard	EN 13171:2012+A1:2015
Board designation	WF-EN13171-T4-WS2,0-CS(10/Y)50-TR5-MU4-AFr35

Technical data sheet

Gutex Thermosafe Homogen

Product details

Joint type	tongue + groove			
Thickness [mm]	60	80	100	120
Length × width [mm × mm]	1900 × 600			
Cover dimensions: length × width [mm × mm]	1880 × 580			
Coverage: square metres per panel [m²]	1,09			
m² per unit	1,14			
Weight per board [kg]	7,19	9,59	11,99	14,39
Weight per m² [kg]	6,60	8,80	11,00	13,20
Items per pallet	36	26	20	18
Square metres per pallet [m²]	41,04	29,64	22,80	20,52
Weight per pallet [kg]	290	280	270	290
Nominal thermal resistance R_D [m²K/W]	1,60	2,15	2,70	3,20
sd value [m]	0,24	0,32	0,40	0,48

Product details

Joint type	tongue + groove			
Thickness [mm]	140	160	180	200
Length × width [mm × mm]	1900 × 600			
Cover dimensions: length × width [mm × mm]	1880 × 580			
Coverage: square metres per panel [m²]	1,09			
m² per unit	1,14			
Weight per board [kg]	16,79	19,18	21,58	23,98
Weight per m² [kg]	15,40	17,60	19,80	22,00
Items per pallet	14	12		10
Square metres per pallet [m²]	15,96	13,68		11,40
Weight per pallet [kg]	270	260	290	270
Nominal thermal resistance R_D [m²K/W]	3,75	4,30	4,85	5,40
sd value [m]	0,56	0,64	0,72	0,80

Technical data sheet

Gutex Thermosafe Homogen

Product details

Joint type	rebate joint					
Thickness [mm]	140	160	180	200	220	240
Length × width [mm × mm]	1300 × 600					
Cover dimensions: length × width [mm × mm]	1285 × 585					
Coverage: square metres per panel [m²]	0,75					
m² per unit	0,78					
Weight per board [kg]	11,55	13,2	14,85	16,5	18,15	19,8
Weight per m² [kg]	15,40	17,60	19,80	22,00	24,20	26,40
Items per pallet	32	28	24	22	20	18
Square metres per pallet [m²]	24,96	21,84	18,72	17,16	15,60	14,04
Weight per pallet [kg]	400		390	400		390
Nominal thermal resistance R_D [m²K/W]	3,75	4,30	4,85	5,40	5,90	6,45
sd value [m]	0,56	0,64	0,72	0,80	0,88	0,96

Product details

Joint type	flush-mount				
Thickness [mm]	40	60	80	100	120
Length × width [mm × mm]	1300 × 600				
Cover dimensions: length × width [mm × mm]	1300 × 600				
Coverage: square metres per panel [m²]	0,78				
m² per unit	0,78				
Weight per board [kg]	3,43	5,15	6,86	8,58	10,3
Weight per m² [kg]	4,40	6,60	8,80	11,00	13,20
Items per pallet	112	76	56	44	36
Square metres per pallet [m²]	87,36	59,28	43,68	34,32	28,08
Weight per pallet [kg]	400	410	400	390	
Nominal thermal resistance R_D [m²K/W]	1,05	1,60	2,15	2,70	3,20
sd value [m]	0,16	0,24	0,32	0,40	0,48

Technical data sheet

Gutex Thermosafe Homogen

Areas of application

- Roof insulation on full-surface substrate
- Insulation of the top floor ceiling
- Insulation of timber frame and timber panel construction
- Insulation of solid wood walls and masonry (ventilated facade)
- Lightweight partition walls
- Tongue and groove panel for exterior cladding on timber frame constructions with curtain wall facades and rear ventilation
- From 120 mm thickness, tongue and groove panels as rafter insulation with additional underlay membrane

Advantages

- Optimal thermal insulation
- Excellent specific heat capacity → protection against summer heat and winter cold
- High sound insulation
- Moisture regulating
- Vapour permeable
- Easy to process
- Wood is a sustainable raw material → recyclable
- Made in Germany (Black Forest)
- Biologically safe (natureplus® certified)

Processing instructions

General

- Store and install panels in a dry environment
- Install only on a fully level subfloor
- When laying multiple layers, install them in a staggered pattern
- Avoid cross joints
- For flooring applications, use only under wet screed up to a maximum of 60 mm. For additional installation options, see Gutex Thermosafe WD and Gutex Thermofloor
- Cutting can be performed using the following tools, among others:
 - Festool reciprocating saws
 - Mafell DSS 300cc
 - Band saws or circular saws with dust extraction
- Once installed, the panel must be secured and immediately protected with a weatherproof coating (depending on the application, e.g., Gutex Multiplex Top or Gutex Thermwowl)
- For fastening in roof insulation or behind-ventilated facades, you can find forms for "screw sizing" at www.gutex.de/service/bemessung-verbundungsmittel
- Can be used in combination with Gutex Thermofibre blow-in insulation. For more information, visit www.gutex.de/wissen-service/medien-downloads?s=-popularity

Curtain-type rear-ventilated facade

- Maximum center-to-center distance: 83.3 cm
- Joints and penetrations must be permanently sealed using the Gutex adhesive system to ensure wind and driving rain resistance
- Exposed to the elements for 3 months
- Install immediately with rear-ventilation battens
- Joint offset: at least 30 cm
- Gutex Thermosafe Homogen N+F serves as weather protection within the ventilated cavity.
- For rhomboid cladding, we recommend an additional facade membrane; for vertical joint cladding, a suitable facade membrane must be used.

Technical data sheet

Gutex Thermosafe Homogen

Roof

- Gutex Thermosafe <homogeneous N+F ≥ 120 mm; can be installed freely over the rafters
 - The maximum spacing for the rafter plane is 85 cm
 - For flush-mounted panels and interlocking joints, install only on a full-surface, load-bearing substrate
 - Offset joints on the roof from row to row by at least 1 rafter span
 - Rafter spaces are not accessible
 - The panel must be secured after installation and immediately protected with a suitable underlayment. The insulation board and underlayment must finally be secured with the counter-batten
 - Thermosafe Homogen N+F is not a load-bearing component (e.g., snow loads)
 - It is recommended to install the boards with the labeled side facing outward
 - Install boards horizontally, with a precise fit and tight joints
-

Fastening

Can be fastened with staples or nails up to 60 mm thick. For more information, please contact ITW Befestigungssysteme GmbH. Fasteners must be at least galvanized. Gutex Thermosafe Homogen can also be fastened with approved screws. The forms for "Design of Over-Roof/Over-Rafter Insulation" can be found at www.gutex.de/wissen-service/holzfaserdaemmung_verarbeiten/planung-konstruktion