

# Technical data sheet

## Gutex Thermosafe WD

Gutex Thermosafe WD is the pressure-resistant wood fibre insulation board for internal floor and wall structures with a load capacity of up to 5 kN/m<sup>2</sup>.

### Ingredients

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

### Waste disposal

- Waste code numbers according to AVV: 030105, 170201



### Technical data

|                                                                   |                                          |
|-------------------------------------------------------------------|------------------------------------------|
| <b>Bulk density <math>\rho</math> [kg/m<sup>3</sup>]</b>          | ~ 170                                    |
| <b>Nominal thermal conductivity <math>\lambda_D</math> [W/mK]</b> | 0,043                                    |
| <b>Vapour diffusion <math>\mu</math></b>                          | 3                                        |
| <b>Compressive stress/strength [kPa]</b>                          | ≥ 150                                    |
| <b>Compressibility at payload ≤5 kPa [mm]</b>                     | ≤ 1                                      |
| <b>Air flow resistivity [kPa s/m<sup>2</sup>]</b>                 | ≥ 100                                    |
| <b>Specific heat capacity [J/kgK]</b>                             | 2.100                                    |
| <b>Maximum working temperature [°C]</b>                           | 110                                      |
| <b>Product standard</b>                                           | EN 13171:2012+A1:2015                    |
| <b>Board designation</b>                                          | WF-EN13171-T7-CP1-CS(10/Y)150-MU3-AFr100 |

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### Product details

|                                                                |             |        |       |       |       |       |
|----------------------------------------------------------------|-------------|--------|-------|-------|-------|-------|
| Joint type                                                     | flush-mount |        |       |       |       |       |
| Thickness [mm]                                                 | 20          | 30     | 40    | 60    | 80    | 120   |
| Length × width [mm × mm]                                       | 1300 × 600  |        |       |       |       |       |
| Cover dimensions: length × width [mm × mm]                     | 1300 × 600  |        |       |       |       |       |
| Coverage: square metres per panel [m <sup>2</sup> ]            | 0,78        |        |       |       |       |       |
| m <sup>2</sup> per unit                                        | 0,78        |        |       |       |       |       |
| Weight per board [kg]                                          | 2,65        | 3,98   | 5,3   | 7,96  | 10,61 | 15,91 |
| Weight per m <sup>2</sup> [kg]                                 | 3,40        | 5,10   | 6,80  | 10,20 | 13,60 | 20,40 |
| Items per pallet                                               | 220         | 144    | 110   | 72    | 54    | 36    |
| Square metres per pallet [m <sup>2</sup> ]                     | 171,60      | 112,32 | 85,80 | 56,16 | 42,12 | 28,08 |
| Weight per pallet [kg]                                         | 690         | 610    | 620   |       |       | 670   |
| Nominal thermal resistance R <sub>D</sub> [m <sup>2</sup> K/W] | 0,45        | 0,65   | 0,90  | 1,35  | 1,85  | 2,75  |
| sd value [m]                                                   | 0,06        | 0,09   | 0,12  | 0,18  | 0,24  | 0,36  |

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### Advantages

- Excellent thermal insulation
- Excellent heat storage capacity → high protection against summer heat
- Improvement of sound insulation
- Moisture regulating and vapour permeable
- Pressure resistant
- Wood is a sustainable raw material → recyclable
- Made in Germany (Black Forest)
- Biologically safe (natureplus® certified)

### Note

Gutex Thermosafe WD is a universal insulation board that impresses with its high compressive strength and a load capacity of up to 5 kN/m<sup>2</sup>. This makes it a stable basis for load-bearing floor constructions. Thermosafe WD is also versatile in other ways: it is ideal for retrofitting insulation in the top floor ceiling and for insulating roofs and walls from the inside. As a diffusion-open and moisture-regulating insulation board made from ecological wood fiber, Thermosafe WD contributes to a healthy indoor climate and ensures year-round living comfort: protection from heat in summer, protection from cold in winter, and noticeable sound reduction. The natureplus-certified insulation board is proven to be biologically safe and recyclable – contributing to the sustainable insulation of old and new buildings.

### Processing instructions

- Store and process panels in a dry place.
- When working with multiple layers, stagger the joints.
- Avoid cross joints.
- The panels can be cut to size using the following tools, among others:
  - Gutex cutting blades for jigsaws
  - Festool reciprocating saws
  - Mafell DSS 300 cc
  - Band saws or circular saws with extraction
- Create a dry, level, and technically sound substrate.
- Protect from moisture.
- Apply edge strips at the height of the entire structure.
- When used under mastic asphalt screeds, Gutex Thermosafe WD can withstand short-term installation temperatures of up to 230 °C.
- Legal requirements for handling wood dust must be observed.

### Maximum installation height

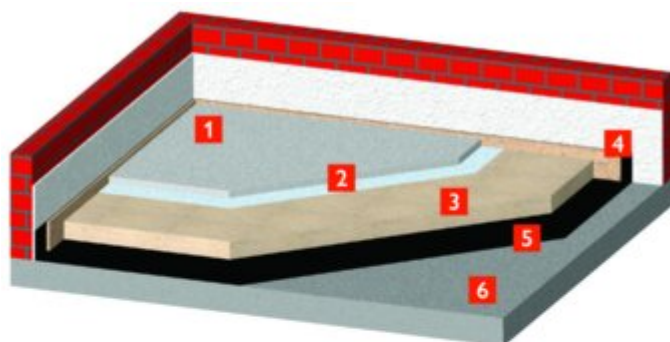
| Flooring laid on top of insulation           | Max. installation height |
|----------------------------------------------|--------------------------|
| Wet screed                                   | 200 mm                   |
| Mastic asphalt                               | 140 mm                   |
| Chipboard ≥ 25 mm                            | 140 mm                   |
| OSB board ≥ 22 mm                            | 140 mm                   |
| GUTEX Thermosafe NF                          | 100 mm                   |
| Dry screed element ≥ 25 mm                   | 100 mm                   |
| Prefinished engineered wood flooring ≥ 14 mm | 30 mm                    |
| Laminate flooring ≥ 8 mm                     | 20 mm                    |

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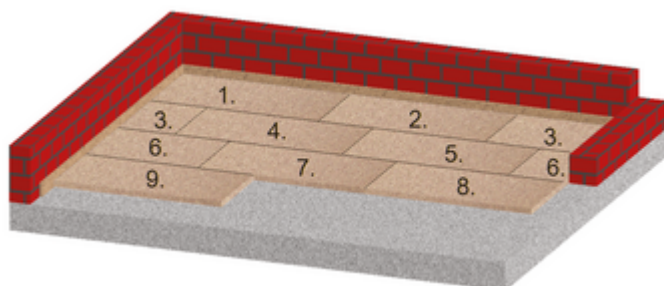
### Detailed designs

#### Soil structure



- 1 Wet screed
- 2 Moisture-protection film
- 3 Gutex Thermosafe-wd
- 4 Edge strip
- 5 Moisture barrier as per 18195
- 6 Basement ceiling

#### Laying pattern



Laying Thermosafe WD in a composite pattern

The remaining piece from one row is placed at the start of the next row (see laying pattern).