2020-12

GUTEX® Thermoflat Data Sheet

Photographic images are property of GUTEX archive

GUTEX Thermoflat is a single-ply insulating board featuring homogeneous wood fibre cross section with a compression proof construction. It is ideal for flat roofs, including wood, concrete and sheet metal structures.

Technical Data	Thermoflat
Joint type	Rebate
Thickness (mm)	100/120/140/160
Length x width (mm)	1230 x 600
Actual coverage, length x width (mm)	1215 x 585 (0.71 m²)
Square metres per sheet (m²)	0.738
Weight per sheet (kg)	10.3/12.4/14.5/16.5
Weight per m² (kg)	14/16.8/19.6/22.4
Boards per pallet	44/36/32/28
Square metres per pallet (m2)	32.47/26.75/23.62/20.66
Bulk density (kg/m³)	140
Weight per pallet (kg)	490
Vapour diffusion factor (μ)	3
sd-value (m)	0.3/0.36/0.42/0.48
Compressive stress/ strength (kPa)	70
Tensile strength perpendicular to board surface (kPa)	7.5
Short-term water absorption (kg/m²)	≤ 1
Air flow resistivity (kPa·s/m²)	100
Specific heat capacity (J/kgK)	2100
Fire reaction Euro Class as per DIN EN 13501-1	E
European Union	
Nominal thermal conductivity λ_D (W/mK)	0.040
Nominal thermal resistance R_D (m²K/W)	2.50/3.00/3.50/4.00

Designation: WF-EN13171-T5-CS(10/Y)70-DS(70,-)2-TR7,5-MU3-AF100.
German disposal category: A2 (treated wood; without non-halogenated organic compounds); code number as per AVV: 030105; 170201

Composition

- Manufactured from untreated Black Forest spruce and fir
- Additives:
  - 4 % polyurethane resin (binder)
  - 1.5% paraffin (hydrophobic agent)

Applications

- Thermal insulation of flat roofs constructed from wood, concrete and sheet metal

Advantages

- Provides excellent thermal insulation
- Circumferential rebate joints
  → prevent thermal bridging
- Superior thermal storage capacity provides outstanding insulation against heat in the summer and cold in winter.
- Significantly improves acoustic insulation
- Regulates humidity
- Water vapour diffusion permeable
- Compression resistant
- Wood is a sustainable, recyclable natural resource
- Made in Germany
- Biologically safe (natureplus® certified)

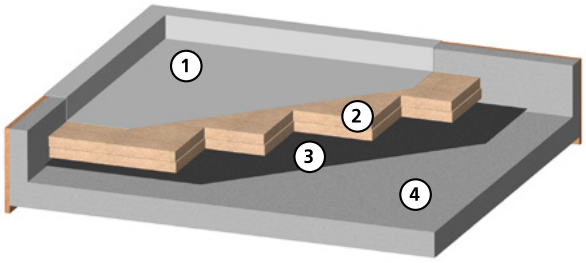
Installation

- Store and install this product dry.
- Avoid cross joints.
- For best cutting results, use a GUTEX saw or handheld circular saw and a vacuum fitting.
- Substrate must be dry, even and technically sound.
- The structure in which the insulation is installed must have adequate moisture protection to prevent the insulation from dampness.
- Avoid exposing the boards to direct wind force (especially suction) during installation.
- Vacuum off the dust in accordance with applicable workplace safety regulations or practices.

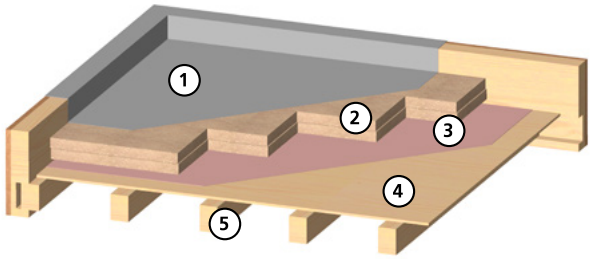
Fastening

- During installation, be sure to protect the insulating boards against the wind before they are fastened permanently. The boards fasten permanently with the roofing material (roofs not covered by vegetation or gravel).
- Only the edges have to be fastened on gravel roofs and roofs with patios.
- Consult the roofing material manufacturer to determine the best means of fastening.

Possible Flat Roof Constructions [1)]



(1) Roofing material, mechanically fastened.
(2) GUTEX Thermoflat
(3) Vapour barrier
(4) Concrete/ metal substrate



(1) Roofing material, mechanically fastened.
(2) GUTEX Thermoflat
(3) Adaptive vapour retarding membrane/ air barrier
(4) Exposed liner
(5) Exposed joists

1) The building physics has to be proofed.

GUTEX®

NATURALLY MADE FROM WOOD

GUTEX Holzfaserplattenwerk, Gutenburg 5, D-79761 Waldshut-Tiengen, Phone: ++49(0)7741/6099-0, Fax: ++49(0)7741/6099-57, E-mail: info@gutex.de, www.gutex.de