

## TECHNICAL DATA SHEET



GUTEX Thermoflex is the flexible wood fibre insulation mat for between-rafter and compartment insulation.

#### Ingredients

- Untreated fir and spruce
- Flame retardant: 6.0 % ammonium salts
- Approx. 5.0 % textile binder fibre

#### Disposal

• Waste code numbers as per AVV 030105, 170201

Bulk density ρ [kg/m³]	~ 50
Nominal thermal conductivity $\lambda_{_D}$ [W/mK]	0.036
Vapour diffusion $\mu$	2
Tensile strength perpendicular to the surface [kPa]	≥ 1
Air flow resistivity [kPa s/m <sup>2</sup> ]	≥ 5
Specific heat capacity [J/kgK]	2100
Maximum working temperature [°C]	110
Fire reaction Euro Class as per EN 13501-1	E
Product standard	EN 13171
Board designation	WF-EN 13171-T3-TR1-MU2- AF <sub>r</sub> 5



# **GUTEX** Thermoflex

## Detailed information

Joint type			Flush-mount		
Thickness [mm]	30	40	50	60	80
Length × width [mm × mm]			1350 × 575		
m²/Piece(s)			0.77		
Weight per board [kg]	1.20	1.60	1.90	2.30	3.10
Weight per m <sup>2</sup> [kg]	1.50	2.00	2.50	3.00	4.00
Piece(s)/Package	12	8	9	8	6
Packs per pallet	12	14		10	
Piece(s)/Pallet	144	112	90	80	60
Square metres per pallet [m <sup>2</sup> ]	111.78	86.94	69.86	62.10	46.57
Weight per pallet [kg]			200		
Nominal thermal resistance R <sub>D</sub> [m <sup>2</sup> K/W]	0.80	1.10	1.35	1.65	2.20
sd value [m]	0.06	0.08	0.10	0.12	0.16

Joint type			Flush-mount		
Thickness [mm]	100	120	140	160	180
Length × width [mm × mm]			1350 × 575		
m²/Piece(s)			0.77		
Weight per board [kg]	3.90	4.70	5.40	6.20	7.00
Weight per m <sup>2</sup> [kg]	5.00	6.00	7.00	8.00	9.00
Piece(s)/Package		4		3	}
Packs per pallet	12	10	8	10	8
Piece(s)/Pallet	48	40	32	30	24
Square metres per pallet [m <sup>2</sup> ]	37.26	31.05	24.84	23.28	18.63
Weight per pallet [kg]			200		
Nominal thermal resistance R <sub>D</sub> [m <sup>2</sup> K/W]	2.75	3.30	3.85	4.40	5.00
sd value [m]	0.20	0.24	0.28	0.32	0.36



Joint type		Flush-mount	
Thickness [mm]	200	220	240
Length × width [mm × mm]	1350 × 575		
m²/Piece(s)		0.77	
Weight per board [kg]	7.80	8.50	9.30
Weight per m <sup>2</sup> [kg]	10.00	11.00	12.00
Piece(s)/Package		2	
Packs per pallet	12	1	0
Piece(s)/Pallet	24	2	0
Square metres per pallet [m <sup>2</sup> ]	18.63	15.	52
Weight per pallet [kg]		200	
Nominal thermal resistance R <sub>D</sub> [m <sup>2</sup> K/W]	5.55	6.10	6.65
sd value [m]	0.40	0.44	0.48

#### **Ecological Building Systems**

For stockist information and full technical support for your project, please contact Ecological Building Systems or visit www.EcologicalBuildingSystems.com





## PRODUCT INFORMATION

## Areas of use

- Between studs in interior and exterior walls
- Between-rafter insulation
- Ceiling insulation
- Partition walls/dry construction

## **Advantages**

- Flexible and elastic for adjustability
- Outstanding thermal insulation
- Outstanding specific heat capacity → protection from heat in summer and cold in winter
- Excellent sound insulation
- Easy and quick to work with
- Moisture-regulating
- Steam vapour-permeable
- Wood as the sustainable raw material  $\rightarrow$  recyclable
- Ecologically safe

## Installation instructions

#### General

- Store and work with the boards in a dry place
- Protect from moisture
- Do not stack pallets
- The following are some of the tools that may be used to produce the cut:
  - Electric foxtail (Bosch) or alligator (Dewalt or Elu)
  - Festool ISC 240 insulation saw or sword saws
  - Mafell DSS 300 cc
  - GUTEX Thermoflex knife
  - Band or circular saws with extraction unit
- Drilling with metal or stone drills at full speed
- Drilling of holes for flush-mounted sockets or pipe penetrations possible with circular hole saws
- GUTEX Thermoflex can be exposed to temperatures of up to 100°C, even over a longer period of time. Exposure to an open flame must be prevented at all times. We also recommend encapsulating local heat sources such as recessed lights using suitable boxes.
- Note the legal requirements for handling wood dust

#### Between wooden studs or beams

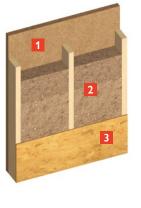
- Cut to length and width with oversize and clamp in place
- Edge joints are avoided by compressing the board
- In terms of sound insulation, 80% filling of the stud interior walls with GUTEX Thermoflex is advantageous
- Two pieces can also be clamped next to each other, taking into account the oversize when cutting to size, thus minimising waste.
- Depending on the design and condition of the rafters/ceiling joists as well as the roof pitch, the values may be higher or lower.



- The clamping allowance is ≥ 1% of the clear width of the compartment. This is also to be observed in the longitudinal direction of the compartment.
- Processed boards in the roof and ceiling area must be protected from falling out after 3 days at the latest (see clamping table).

**Clamping table** 

#### **Construction proposal**



GUTEX Thermowall/GUTEX Thermowall-gf
GUTEX Thermoflex between studs
OSB board

Board thickness	Maximal Board Width
30 mm	350 mm
40 mm	450 mm
50 mm	475 mm
60 mm	500 mm
80 mm	565 mm
100 mm	600 mm
120 mm	650 mm
140 mm	700 mm
160 mm	750 mm
180 mm	800 mm
200 mm	850 mm
220 mm	900 mm
240 mm	950 mm

#### Between metal studs

- First Insulate end panels with the facing CW profiles
- Adjust the insulation, adjust the profiles to the final position, and then fasten them in place
- Then insulate the remaining panels

#### **Clamping table**

Stud Width	Board thickness
50 mm	40 mm
75 mm	60 mm
100 mm	80 mm
125 mm	100 mm

#### **Ecological Building Systems**

For stockist information and full technical support for your project, please contact Ecological Building Systems or visit www.EcologicalBuildingSystems.com



For over 20 years, Ecological Building Systems has been at the forefront of environmental and sustainable building products supplying a range of innovative airtightness solutions and natural insulations backed up with expert technical support.

As product suppliers in the UK and Ireland, we're happy to assist you with your projects and have expert technical and sales advice on hand.



## Call us

Great Britain +44 (0)1228 711511 Ireland +353 46 9432104



## Email us

info@ecologicalbuildingsystems.com



### Find us

Great Britain Ecological Building Systems UK Ltd., Cardewlees, Carlisle, Cumbria, CA5 6LF, United Kingdom

Ireland Ecological Building Systems Ltd., Main Street, Athboy. Co. Meath, C15 Y678, Republic of Ireland



Discover our solutions online at ecologicalbuildingsystems.com