ENVIRONMENTAL-PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A1*

Owner of the Declaration	GUTEX Holzfaserplattenwerk H. Henselmann GmbH + Co KG
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-GTX-20200178-IBC1-EN
Issue date	30.10.2020
Valid to	08.10.2025

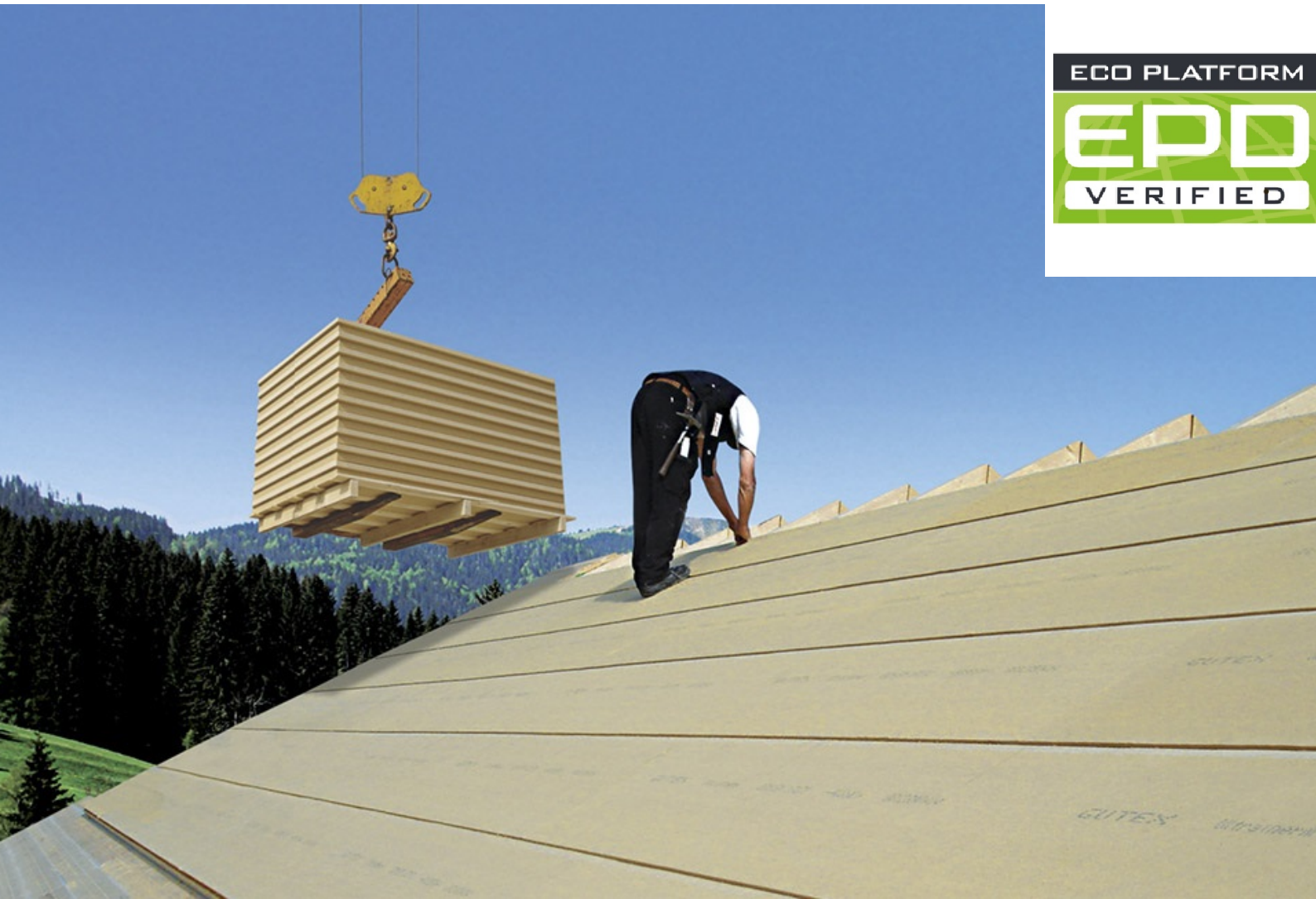
Wood fibre insulation boards

GUTEX Holzfaserplattenwerk H. Henselmann GmbH + Co KG

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

www.ibu-epd.com | https://epd-online.com



1. General Information

GUTEX Holzfaserplattenwerk H. Henselmann GmbH + Co KG

Programme holder

IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Declaration number

EPD-GTX-20200178-IBC1-EN

This declaration is based on the product category rules:

Wood based panels, 08.03.2023
(PCR checked and approved by the SVR)

Issue date

30.10.2020

Valid to

08.10.2025

Dipl.-Ing Hans Peters
(chairman of Institut Bauen und Umwelt e.V.)

Dr. Alexander Röder
(Managing Director Institut Bauen und Umwelt e.V.)

Wood fibre insulation boards

Owner of the declaration

GUTEX Holzfaserplattenwerk H. Henselmann GmbH + Co KG
Gutenburg 5
79761 Waldshut-Tiengen
Germany

Declared product / declared unit

This Declaration refers to 1 m³ wood fibre insulating boards manufactured in a dry process with an average weighted density of 167 kg/m³. For all other densities, the results can be calculated using the formula indicated in section 5.

Scope:

This Declaration applies for wood fibre insulating boards manufactured in a dry process by GUTEX at its location in Waldshut-Tiengen.
The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A1. In the following, the standard will be simplified as *EN 15804 bezeichnet*.

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally

Matthias Klingler,
(Independent verifier)

2. Product

2.1 Product description/Product definition

GUTEX
wood fibre insulating boards are board-shaped insulating materials manufactured
from wood fibres in accordance with *EN 13171*.

By
adding low quantities of polyurethane (PUR) resin, insulating boards are
manufactured from wood fibres in a dry process. After production, they are cut
and profiled and finished where necessary. Water-repellent and non-water-repellent single-layer insulation panels can be manufactured to a
thickness of 240 mm.

Directive (EU) No. 305/2011(CPR) applies
for placing the product on the market in the EU/EFTA (with the exception of
Switzerland). The product requires a Declaration of Performance taking
consideration of the harmonised product standard *EN 13171:2015-04*,
Thermal insulation products for buildings – Factory-made wood fibre (WF)
products, and CE marking.

Other application standards:

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DIN
4108-4:2017-03, Thermal protection and

saving energy in buildings

.
DIN
4108-10:2015-12, Thermal protection and

saving energy in buildings

.
DIN EN 622-4:2019-08, Fibreboards

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SIA 2001:2015 data sheet: Thermally-insulating

construction products

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Association
pour la certification des matériaux

isolants *ACERMI certificate*

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ÖNORM B 6000:2018-08-01, Factory-made

insulating materials for thermal
and/or noise

protection in buildings
Please select one of the following options and delete the header of the selected [alternative]:

[Alternative 1a: Product according to the CPR based on a hEN]:

For the placing on the market of the product in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration EN xyz:date, title and the CE-marking.

For the application and use the respective national provisions apply.

[Alternative 1b: Products according to the CPR based on an ETA]:

For the placing of the product on the market in the European Union/European Free Trade Association /EU/EFTA) (with the exception of Switzerland) the Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration ETA no. xyz:date, title and the CE-marking.

For the application and use the respective national provisions apply.

[Alternative 2a: Product not harmonised in accordance with the CPR but in accordance with other provisions for harmonisation of the EU]:

For the placing on the market in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) the following legal provisions apply:

- *Directive no. xyz: date, title*
- *Regulation no. xyz: date, title*
- and the harmonised standards based on these provisions:
- *EN xyz: date, title*

The CE-marking takes into account the proof of conformity with the respective harmonized standards based on the legal provisions above.

For the application and use the respective national provisions apply.

[Alternative 2b: Product harmonized as well in accordance with the CPR as with other provisions for harmonisation of the EU]:

For the placing of the product on the market in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) the Regulation (EU) No. 305/2011/ (CPR) and the following other provisions for harmonisation apply:

- *Directive (EU) xyz: date, title*
- *Regulation (EU) no. xyz: date, title*

The product needs a declaration of performance in accordance with the CPR taking into consideration /EN xyz: date/, title or /ETA no. xyz/:date, title respectively and the CE-marking.

The CE-marking for the product takes into account the Declaration of Performance in accordance with the CPR and the proof of conformity with the following harmonised standards or based on the other provisions for harmonisation:

- *EN xyz: date, title*
- *Source, date, title*

For the application and use the respective national provisions apply.

[Alternative 3: Product for which no legal provisions for harmonisation of the EU exist]:

For the use and application of the product the respective national provisions at the place of use apply, in Germany for example the building codes of the federal states and the corresponding national specifications.

2.2 Application

GUTEX insulating materials can be used in both old and new buildings: as a thermal insulation composite system for the plaster facade, wall insulation for back-ventilated facades, on-roof and/or false ceilings, insulating ceilings between floors, interior insulation of external walls, insulation of installation levels and impact sound insulation for floors.

2.3 Technical Data

The following technical (construction) data is of relevance for GUTEX wood fibre insulating boards on delivery:

Bautechnische Daten

Name	Value	Unit
Gross density to EN 13171	110 - 250	kg/m^3
Material dampness at delivery	8	%
Tensile strength rectangular nach EN 13171	5 - 30	N/mm^2
Thermal conductivity Nominal thermal conductivity to EN 13171	0.037 - 0.047	W/mK
Water vapour diffusion resistance factor to EN 13171	4	-
Water vapour diffusion resistance value to EN 13171	E	
Specific thermal capacity	2100	J/(kgK)
Compressive stress at 10% contraction to EN 13171	40-200	kPa

Performance data of the product in accordance with the Declaration of Performance with respect to its essential characteristics according to *EN 13171:2015-04* – Thermal insulation materials for buildings – Factory-made wood fibre (WF) products.

Voluntary information on the product is not a component of CE marking.

2.4 Delivery status

GUTEX insulating boards are supplied in thicknesses of 20 mm to 240 mm.

The dimensions of each product can be viewed on www.gutex.de.

2.5 Base materials/Ancillary materials

The product components are indicated as percentages by mass in the following table:

Name	Value	Unit
Coniferous wood: fir/spruce	approx. 95	%
PUR-resin	max. 4	%
Paraffin	max. 1,5	%

The following questions are answered with **no** for the declared product:

The product contains substances included on the ECHA list of substances of very high concern (SVHC, 07.10.2020) exceeding 0.1% by mass: **no**

The product contains other CMR substances in categories 1A or 1B which are not on the candidate list, exceeding 0.1 percentage by mass in at least one partial product: **no**

Biocide products were added to this construction product or it has been treated with biocide products (this then concerns a treated product as defined by the Ordinance on Biocide Products No. (EU) 528/2012): **no**

2.6 Manufacture

The manufacturing process is broken down into the following process steps:

1. Delivering the wood chips
2. Defibring the wood chips using the defibrator process
3. Hydrophobing the fibres with paraffin

4. Drying the fibres in the flow dryer

5. Glueing the fibres with PUR resin

6. Scattering the fibres on the forming belt to form

   a mat

7. Curing the mat in the calibration and hardening unit

8. Dividing up, profiling and assembling

The location is certified to *ISO 9001*.

2.7 Environment and health during manufacturing

Owing to the manufacturing conditions, no special statutory or regulatory measures are required as regards employee health protection. The statutory limit values are fallen short of.

Environmental protection during the manufacturing process:

Used air: Emissions are significantly lower than the limit values specified by the immission protection approval.

Waste water: The production process does not involve waste water.

Noise emissions: Measured values are below the permissible values of the immission protection approval thanks to sound protection measures.

The location is certified to *ISO 14001* and *EMAS*.

2.8 Product processing/Installation

Wood-processing machinery such as conventional portable circular saws and jigsaws are suitable for processing GUTEX wood fibre boards.

Industrial and environmental protection

The guidelines provided by the professional liability associations must be maintained during processing of wood fibre insulating boards.

No environmental pollution is incurred by processing and/or installing the wood fibre boards. No special measures need to be taken to protect the environment.

2.9 Packaging

Disposable pallets made of wood, cardboard, PE straps and PE stretch foil are used for packaging and can be directed to the recycling process.

2.10 Condition of use

The contents comply with those of the base material composition in section 2.6.

2.11 Environment and health during use

No environmental pollution or damage to health can be anticipated if GUTEX wood fibre boards are used as designated.
The insulating board components are not referred to in the list of candidates in Annex IV of the REACH Directive. Pollutants of health relevance are not emitted by the boards.

2.12 Reference service life

When used as designated, the useful life of GUTEX insulating boards complies with at least the useful life of the respective building. No reference service life is declared on account of the multiple application possibilities.

In accordance with the *BNB 2017* evaluation system for sustainable building, a reference service life of 40 years is indicated for wood fibre insulating boards.
Description of the influences on the ageing of the product when applied in accordance with the rules of technology.

2.13 Extraordinary effects

Fire

All of the insulating boards listed comply with Euro class E in accordance with *DIN EN 13501-1*. The same combustion gases arise as when burning fir and/or spruce wood.

Fire protection

Name	Value
Building material class	E

Water
No ingredients are washed out which could be hazardous to water.

Mechanical destruction
GUTEX insulating boards can be damaged when exposed to too high mechanical stresses (pressure and traction). The boards display an inconsistent appearance when fractured or damaged.

No damage is incurred for the environment even when subject to unforeseen destruction.

2.14 Re-use phase
Provided they are untreated and undamaged, GUTEX wood fibre boards can be easily segregated and reused for the same application when converting or completing the usage phase of a building.

GUTEX wood fibre boards can be directed to recycling provided that they have not been contaminated.

2.15 Disposal
Owing to the high calorific value (approx. 18 MJ/kg), energetic utilisation for the generation of process energy and electricity in waste wood incineration plants is recommended.

Waste wood category A2; waste code in accordance with *AVV* (List of Wastes): 170201 or 030105

2.16 Further information
Further information is available at www.gutex.de.

3. LCA: Calculation rules

3.1 Declared Unit
The unit taken as a basis for the Declaration is one cubic metre (1 m³) wood fibre insulating board with an average weighted density of 167 kg/m³ by production volume (m³/year).

Details on declared unit

Name	Value	Unit
Declared unit	1	m^3
Conversion factor to 1 kg (kg/m³)	167	-
Mass reference (mass/declared unit)	167	kg/m^3

The formulations for the products under review vary within tight limits. For example, the respective percentage of wood is between 94.5 and 96.5%. The manufacturing process is identical. The declaration of an average product should therefore be regarded as significant for the various product variants. What is important is scaling to the corresponding density, as depicted in section 5.

3.2 System boundary
EPD type: cradle to gate – with options

This Environmental Product Declaration refers to the product stage (Modules A1–A3, including provision of raw materials, transport, manufacture and packaging materials). Furthermore, an end-of-life scenario (Module D) was also calculated: incineration with energy recovery. Recycling of packaging materials is considered in A5.

3.3 Estimates and assumptions
At the EoL, thermal utilisation is assumed with a pallet recycling rate of 100%. Within the framework of this study, no further approximations or estimates of data sets are necessary. Background data sets are available in the GaBi database (*GaBi ts*) for all basic materials.

3.4 Cut-off criteria
All operating data, i.e. all of the starting materials used, thermal energy, internal fuel consumption and electricity consumption, all direct production waste as well as all emission measurements available, is taken into consideration in the analysis.
Furthermore, data is recorded and taken into consideration for all inputs.
Material and energy flows accounting for less than one per cent are also taken into consideration and the cut-off criteria are maintained in accordance with the IBU *PCR, Part A*. It can be assumed that the total of all neglected processes does not exceed 5% in the effective categories. The inclusion of biogenic elements of relevance for the impact categories, e.g. carbon in the form of CO2, is taken into consideration within the framework of this Life Cycle Analysis.

3.5 Background data
All background data used is taken from the software databases. The data was last revised in 2019. The consistent data sets contained in the GaBi database are documented in the online GaBi documentation *GaBi ts*.

3.6 Data quality

The GaBi background data used was last revised in 2019. The quality and representativity of GaBi data as well as the data recorded by GUTEX can be regarded as high.

3.7 Period under review

The data used refers to the production processes of financial year 2019 at the GUTEX wood fibre board plant in Waldshut-Tiengen. The Life Cycle Assessment is modelled for Germany as a reference area.

3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Europe

3.9 Allocation

Allocation of the plant data in the insulating material plant (production energy, raw materials, additives and auxiliaries, waste etc.), which could not be clearly allocated to the specific products on the basis of the processes or via a formula, was based on mass.

Closed-loop recycling: Redirecting cut-offs, trimmings and waste from sorting insulating material. Leftovers are directed to the shredder where they are combined with fresh wood chips and reused in the production process.

3.10 Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. Die Hintergrunddaten entstammen *GaBi ts*

4. LCA: Scenarios and additional technical information

The following technical information forms the basis for the declared modules or can be used for developing specific scenarios in the context of a building evaluation if modules are not declared (MND).

Construction installation process (A5)

This module concerns disposal of the packaging materials (wooden pallets, paper and foil). Thermal recycling is assumed.

Waste processing (C3)

In terms of disposal of the product, use as a secondary fuel is assumed. The calculated scenario contains a recycling rate of 100%.

The carbon dioxide bound in the product is declared as emissions in accordance with *EN16485*.

Benefits and loads outside the system boundary D

Once the product has reached end-of-waste status, it is directed to thermal recycling with an R1 value greater than 0.6. The ensuing impacts and credits are declared in Module D.

The impacts and credits from thermal recycling of the packaging (A5) are also indicated in Module D.

When used as designated, the product is not treated with chemicals during use.

5. LCA: Results

The results of the Life Cycle Assessment for wood fibre insulating boards with a balanced density of 167 kg/m3 are summarised below.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE NOT DECLARED; MNR = MODULE NOT RELEVANT)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
X	X	X	MND	X	MND	MND	MNR	MNR	MNR	MND	MND	MND	MND	X	MND	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A1: 1 m³ wood fibre insulating board

Parameter	Unit	A1-A3	A5	C3	D
Global warming potential (GWP)	kg CO_2-Äq.	-198.4	21.76	270	-184.5
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11-Äq.	8.52E-13	6.95E-15	0	-4.7E-12
Acidification potential of land and water (AP)	kg SO_2-Äq.	1.32E-01	2.81E-03	0	2.39E-01
Eutrophication potential (EP)	kg PO_4^3-Äq.	2.62E-02	5.75E-04	0	-6.27E-03
Formation potential of tropospheric ozone photochemical oxidants (POCP)	kg Ethen-Äq.	1.55E-02	1.79E-04	0	2.91E-02
Abiotic depletion potential for non fossil resources (ADPE)	kg Sb-Äq.	9.07E-05	4.83E-07	0	-5.1E-05
Abiotic depletion potential for fossil resources (ADPF)	MJ	1.45E+03	5.124	0	-2309

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A1: 1 m³ wood fibre insulating board

Parameter	Unit	A1-A3	A5	C3	D
Renewable primary energy as energy carrier (PERE)	MJ	316	141.286	0	-833.4
Renewable primary energy resources as material utilization (PERM)	MJ	2.9E+03	-137.108	-2765	0
Total use of renewable primary energy resources (PERT)	MJ	3.22E+03	4.178	-2765	-833.4
Non renewable primary energy as energy carrier (PENRE)	MJ	1.23E+03	16.8	0	-2627
Non renewable primary energy as material utilization (PENRM)	MJ	251	-11.2	-240	0
Total use of non renewable primary energy resources (PENRT)	MJ	1.48E+03	5.573	-240	-2627
Use of secondary material (SM)	kg	0	0	0	0
Use of renewable secondary fuels (RSF)	MJ	0	0	0	3.01E+03
Use of non renewable secondary fuels (NRSF)	MJ	0	0	0	0
Use of net fresh water (FW)	m^3	0.3129	0.05302	0	-0.2616

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A1: 1 m³ wood fibre insulating board

Parameter	Unit	A1-A3	A5	C3	D
Hazardous waste disposed (HWD)	kg	2.95E-06	6.78E-09	0	-1.43E-06
Non hazardous waste disposed (NHWD)	kg	5.88E-01	3.07E-01	0	-3.31E-02
Radioactive waste disposed (RWD)	kg	1.08E-02	1.78E-04	0	-1.26E-01
Components for re-use (CRU)	kg	0	0	0	0
Materials for recycling (MFR)	kg	0	0	0	0
Materials for energy recovery (MER)	kg	0	0	167	0
Exported electrical energy (EEE)	MJ	0	27.75	0	0
Exported thermal energy (EET)	MJ	0	64.91	0	0

As there is a linear connection between the results of the LCA and the density of the wood fibre insulating boards, the following formula can be used for obtaining the results of other densities:

$$P(y) = [P(x)/x]*y$$

P(y): LCA indicator for the wood fibre insulating board to be re-calculated

P(x): Indicator of the declared wood
fibre insulating board (e.g. Global Warming Potential (GWP))

x: Density of the declared wood fibre
insulating board [kg/m³] (average: 167 kg/m³)

y: Density of the wood fibre insulating board to be re-calculated [kg/m³] (e.g.
250 kg/m³)

6. LCA: Interpretation

In terms of the entire life cycle,
manufacturing (A1–A3) and disposal (C and D) represent the phases of
environmental relevance. At less than 5%, transport (A2) and disposal of
packaging (A5) are of marginal significance in all categories under review.

During the manufacturing phase (A1–A3),
PUR resin material and the generation of thermal energy and electricity from
the natural gas-powered combined heat-and-power plant are responsible for the
majority of environmental impacts.

PUR resin exhibits percentages of
between 25 and 40% in most environmental impacts. In terms of the abiotic
depletion potential (ADPe), this share even accounts for 96%. The provision of
thermal energy in the impact categories of photochemical ozone creation
potential (POCP), acidification potential (AP), eutrification potential (EP)
and abiotic depletion potential of fossil resources (ADPf) ranges between 23
and 33%. Electricity from the company's own in-house combined heat-and-power
plant exhibits relevant contributions of around 10% in EP, AP and ADPf, while
electricity from regenerative sources used has a marginal influence here of
< 1%.

Where the photochemical ozone creation
potential (POCP) is concerned, thermal utilisation of product waste accounts
for approx. 20%.

7. Requisite evidence

As a general rule, all statements must be documented with measured data (presented by the corresponding test certificates). The methods of evidence and the test conditions have to be described together with the results.

If substances are not detected, the limit of detection must be included in the declaration.

Interpreting statements such as “… free of …” or “… are entirely harmless …” are not allowed.

If evidence required by the specific PCR part B is not provided, this has to be justified under the respective title for the required evidence.

If relevant for the scope of application of the declared product, or if derivable from its material composition, it is recommended to provide additional adequate evidence.

7.1 Formaldehyd

The following test is representative
for all of the products declared.

Measuring agency: Bremer Umweltinstitut GmbH (independent and accredited analysis and research institute, Bremen, Germany)

Test report, date: *Test report AZ: K 9731 FM-K* dated 22.06.2020, Thermowall

Result: The test
concerning formaldehyde content was performed in accordance with *EN 717-1*.

The equalisation concentration of formaldehyde is 0.02 mg/m3.

7.2 MDI

The following test is representative for all of the products declared.

Measuring agency: Bremer Umweltinstitut GmbH (independent and accredited analysis and research institute, Bremen, Germany)

Test report, date: *Test report AZ: K6635 FM* dated 02.05.2018, Thermowall

Result: MDI emissions fall below the detection limit.

7.3 Pre-treatment of substances used

No waste wood is used in the manufacture of GUTEX wood fibre insulating boards. .

7.4 VOC emissions

The following test is representative for all of the products declared.

Measuring agency: Bremer Umweltinstitut GmbH (independent and accredited analysis and research institute, Bremen, Germany)

Test report, date: *Test report AZ: K 6635 FM* dated 02.05.2018, Thermowall

AgBB overview of results (28 days)

Name	Value	Unit
TVOC (C6 - C16)	35	µg/m^3
Sum SVOC (C16 - C22)	2	µg/m^3
R (dimensionless)	0.132	-
VOC without NIK	*	µg/m^3
Carcinogenic Substances	*	µg/m^3

* = not detectable

7.5 Lindane/PCP

No additives containing pesticides are used in the manufacture of GUTEX wood fibre insulating boards. The following test is representative for all of the products declared.

Measuring agency: Bremer Umweltinstitut GmbH (independent and accredited analysis and research institute, Bremen, Germany)

Test report, date: *Test report AZ: K 6635 FM* dated 02.05.2018, Thermowall

Result: The measured values are below the detection limit.

8. References

PCR, Part A

Product category rules for building-related products and services, Part A: Calculation rules for the Life Cycle Assessment and requirements on the Background Report, www.ibu-epd.com, version 1.8, 2019

PCR:
Wood-based panels

Product category rules for
building-related products and services, Part B: Requirements on the EPD for
wood-based materials, Institut Bauen und Umwelt e.V. (pub.), 12.2018

GaBi
ts

GaBi 9 dataset documentation for the
software system and databases, LBP (University of Stuttgart) and thinkstep AG,
Leinfelden-Echterdingen, 2020
(http://www.gabi-software.com/deutsch/databases/gabi-databases/), SP 40

BNB
2017

BBSR table: “Useful life of components
for life cycle assessments in accordance with the BNB”, Evaluation system for
sustainable building, Federal Institute for Building, Urban Affairs and
Regional Planning, Presentation II on Sustainable Building; available online at
https://www.nachhaltigesbauen.de/de/baustoff-und-gebaeudedaten/nutzungsdauern-von-bauteilen.html
(last revised 02/2017)

AVV

Ordinance governing the European List
of Wastes (List of Wastes – AVV) dated 10.10.2001

EMAS

EMAS Directive (EC) No. 1221/2009 on
voluntary participation by organisations in a common system for environmental
management and audit scheme, dated 28 August 2017

EN
717-1

DIN EN 717-1:2004, Wood-based panels –
Determination of formaldehyde release – Part 1: Formaldehyde emission by the
chamber method

ISO
9001

DIN EN ISO 9001:2015, Quality
management systems – Requirements

EN
13171

DIN EN 13171:2015-04, Thermal
insulation products for buildings – Factory-made wood fibre (WF) products – Specifications

DIN
EN 13501-1

DIN EN 13501-1:2018, Classification of construction products and methods by reaction to fire – Part 1: Classification with the results of tests on reaction to fire of construction products

Test report AZ: K 9731 FM-K

Test report no. 35541-001 “Laboratory test for GUTEX”, dated 22.06.2020; Bremer Umweltinstitut GmbH, Bremen, Germany

ISO 14001

DIN EN ISO 14001:2015, Environmental management systems – Requirements with guidance for use

DIN 4108-4

DIN 4108-4:2017-03, Thermal protection and saving energy in buildings

EN 16485

DIN EN 16485:2014-07, Round and sawn timber – Environmental Product Declarations – Product category rules for wood and wood-based products for use in construction

DIN 4108-10

DIN 4108-10:2015-12, Thermal protection and saving energy in buildings

Test report AZ: K 6635 FM

EN 622-4

Test report no. 35541-001 “Laboratory test for GUTEX”, dated 02.05.2018; Bremer Umweltinstitut GmbH, Bremen, Germany

DIN EN 622-4:2019: Fibreboards

REACH Directive

SIA data sheet

Directive (EC) No. 2020/71 of the European Parliament and Council of 27 February 2020 on the Registration, Evaluation, Authorisation of Chemicals

Thermally-insulating construction materials, current version SIA 2001:2015

ACERMI

Association
pour la certification des matériaux isolants, www.acermi.com

ÖNORM
B 6000

ÖNORM B 6000:2018-08-01, Factory-made
insulating materials for thermal and/or noise protection in
buildings

The literature referred to in the Environmental Product Declaration must be listed in full.Standards already fully quoted in the EPD do not need to be listed here again.
The current version of PCR Part A and PCR Part B of the PCR document on which they are based must be referenced.

Publisher

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