



Environmental product information for BREEAM® building certification

Scheucher Multilayer Parquet

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Date July 2023

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This document aims at the identification of linkages between environmental product information covered by EPDs and the requirements of the BREEAM® (Building Research Establishment's Environmental Assessment Method) building certification. It provides an overview of product related features based on the BREEAM® technical manual for International New Construction 2021 SD250 6.0 [www.breeam.com/new-construction].

.product description

Scheucher produces multilayer parquet flooring:

3-layer parquet WOODflor® (3-strip, planks)

- Top layer: various hardwoods
- Core layer: spruce, pine
- Balancing: spruce

2-layer parquet BILAflor®

- Top layer: various hardwoods
- Substrate: spruce

2-layer parquet MULTIfloor NOVOLOC® 5G

- Top layer: various hardwoods
- Substrate: softwood sticks with spruce veneer and plywood end pieces or plywood panel

This document refers to environmental product information of the delivered product including the finished coated surface.

Further information can be found at www.scheucherparkett.at/en/downloads

.application

Multilayer parquet flooring manufactured by Scheucher is intended for installation in Grade 1 interior applications (heated interiors with largely constant temperatures and climatic conditions typical for living areas).

WOODflor® can be installed with or without adhesives.

BILAflor® and MULTIfloor NOVOLOC® 5G must be installed fully glued down to subfloor.

.technical data

The following information must be provided in accordance with EU Directive No. 305/2011:

Name	Value	Unit	Compliance with further limit values of Scheucher multilayer parquet
Wood moisture acc. to <i>EN 13489</i>	5 – 9	%	
Length (min. - max.)	0.5 – 2.4	m	
Width (min. - max.)	0.07 – 0.222	m	
Height (min. - max.)	0.009 – 0.016	m	
Thermal conductivity acc. to <i>EN 14342</i>	0.14 – 0.17	W/(mK)	
Formaldehyde ¹ emissions acc. to <i>EN 717-1</i>	< 100	µg/m ³	Based on available test reports, it can be confirmed that the formaldehyde limit value according to the EU taxonomy is complied with (< 0.06 mg formaldehyde per m ³ according to <i>EN 16516</i>)
Formaldehyde ² emissions acc. to <i>EN 14342</i>	Class E1	All products are glued formaldehyde-free	Based on available test reports, it can be confirmed that the formaldehyde limit value according to the EU taxonomy is complied with (< 0.06 mg formaldehyde per m ³ according to <i>EN 16516</i>)
VOC ³ emissions acc. to <i>EN 16516</i> , <i>ISO 16000</i>	fulfils all requirements of EU-ECOLABEL, AgBB 2018, LEED, TÜV Interior, BREEAM, belgian and french VOC- regulation		
Breaking strength acc. to <i>EN 14342</i>	NPD	Not relevant for multilayer parquet	
Slip resistance acc. to <i>EN 14342</i>	NPD	No harmonised requirement standard available	
Durability acc. to <i>EN 14342</i>	Grade 1		

NPD: no performance declared; this characteristic is not of relevance for multilayer parquet.

No harmonised requirement standards are available for slip-resistance characteristics, national requirements refer to a wide variety of test standards and must be examined on a country-by-country basis and complied with as required.

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 14342:2013, Wood flooring - Characteristics, evaluation of conformity and marking* (not part of CE-marking).

¹ See category Hea 02 for respective assessment acc. to BREEAM

² See category Hea 02 for respective assessment acc. to BREEAM

³ See category Hea 02 for respective assessment acc. to BREEAM

Management

Man 02 Life cycle cost and service life planning

Aim

To deliver whole life value by encouraging the use of life cycle costing to improve design, specification, through-life maintenance and operation, and through the dissemination of capital cost reporting to promote economic sustainability. (BREEAM, 2021)

Product information for Scheucher multilayer parquet within this credit:

Construction process	<p>Scheucher parquet flooring must be installed in accordance with the installation instructions enclosed. The floor can be installed with or without adhesives (solely WOODflor®).</p> <p>Standard safety guidelines must be observed during installation (dust mask, goggles). Statutory guidelines concerning noise protection must be observed. Any tools required may only be used as designated and in accordance with the respective manufacturer's operating instructions. The specifications of the professional liability associations must be observed during commercial installation. Residual material or packaging must be disposed separately in accordance with the waste fraction.</p>
Service life	<p>In accordance with the current BNB Guidelines, the Reference Service Life is 40 years when installed and cared correctly (<i>BNB</i> Guideline: 11/2011).</p>
End of life	<p>Re-use: Due to the click profile (NOVOLOC® 5G) glueless installed, WOODflor® can be removed and re-used for the same application. If re-use is not possible, the high calorific value of the product makes it suitable for an energetic recovery in the form of cascade utilization.</p> <p>Disposal: After installation, residual parquet and packaging materials should be collected separately on site in accordance with the waste fractions. Residual parquet material can be recycled. If this is not possible, energetic utilization is possible. In accordance with the <i>European Waste Catalogue – EWC</i>, parquet is classified as 17 02 01 (wood).</p> <p>The packaging materials can be recycled as follows in accordance with the <i>European Waste Catalogue – EWC</i>: 15 01 01 (paper and cardboard packaging), 15 01 02 (plastic packaging), 15 01 03 (wooden packaging).</p>

Man 03 Responsible construction practices

Aim

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner. (BREEAM, 2021)

Product information for Scheucher multilayer parquet relevant to this issue:

Specific information	Evidence (quality)
Prerequisite: All timber and timber-based products are 'Legally harvested and traded timber'? YES	<p>Site Mettersdorf (Austria): Forest Stewardship Council (FSC) Certificate Number HFA-COC-100057 (Chain-of-Custody) Date of first issuance: 18.02.2011 Date of issuance: 13.01.2021 Valid to: 12.01.2026</p> <p>Scheucher sources FSC-certified wood. When ordering, it must be stated that FSC-certified wood is used, thus it can be guaranteed to be assigned to the project.</p> <p>Scheucher multilayer parquet has been awarded the European Ecolabel UZ 035 Wood, cork and bamboo-based floor coverings under registration no. AT/035/001.</p>

Man 04 Commissioning and handover

Aim

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants. (BREEAM, 2021)

Scheucher parquet flooring must be installed in accordance with the installation instructions enclosed. The floor can be installed with or without adhesives (solely WOODflor®). Standard safety guidelines must be observed during installation (dust mask, goggles). Statutory guidelines concerning noise protection must be observed. Any tools required may only be used as designated and in accordance with the respective manufacturer's operating instructions. The specifications of the professional liability associations must be observed during commercial installation. Residual material or packaging must be disposed separately in accordance with the waste fraction.

Further information can be downloaded from the website www.scheucherparkett.at/en/downloads

Health and wellbeing

Hea 02 Indoor air quality

Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes. (BREEAM, 2021)

Product information from Scheucher multilayer parquet for this criterion:

Formaldehyde:

Scheucher multilayer parquet is glued formaldehyde-free and is according to the test report below the detectability limit ($< 0.005 \text{ ppm} = < 0.0062 \text{ mg/m}^3$). Emission limits acc. to BREEAM table 17 are complied with. Therefore, a contribution is made to good indoor hygiene.

Scheucher multilayer parquet received the following certificates:

- European Ecolabel UZ 035 Wood, cork and bamboo-based floor coverings under registration no. [AT/035/001](#) (formaldehyde limit value acc. to UZ 035, therefore $\leq 0,062 \text{ mg/m}^3$).

Further product information of Scheucher multilayer parquet for this criterion, see EPD chapter 2.12 (environment and health during use):

- Evidence that Scheucher parquet flooring is safe for use is provided by the TÜV PROFICERT-Interior Program. The current certificate has the certificate registration number 70 720 5620-1 and is based on audit report 2117130/2020/1.
- Scheucher parquet floors are considered emission-free in accordance with the Austrian BAUBOOK.
- Scheucher parquet meet the requirements of the AgBB scheme, the French and Belgian VOC regulations, BREEAM⁴ general level and LEED v4.

VOC-emissions:

See EPD chapter 7 (requisite evidence):

Already after 7 days the termination criterion according to the AgBB scheme was fulfilled.

Test institute: EPH Dresden, Entwicklungs- und Prüflabor Holztechnologie GmbH, Zellescher Weg 24, 01217 Dresden.

Test report: Nr. 250241/2015/1/1 dated 30.11.2015

Test method: chamber test acc. to ISO 16000-3, ISO 16000-6 and ISO 16000-9

According to EPD chapter 2.6 (base materials/Ancillary materials) all ingredients comply with REACH requirements (date 25.06.2020), no other cancerogenic, mutagenic, reprotoxic (CMR) substances of category 1A or 1B that are not on the *ECHA candidate list*, above 0.1 % by mass.

Hea 04 Thermal comfort

Aim

To ensure that appropriate thermal comfort levels are achieved through design, and controls are selected to maintain a thermally comfortable environment for occupants within the building. (BREEAM, 2021)

EPD chapter 2.4 (technical data, table constructional data of the EPD:

Specific information	Value and evidence (quality)
Thermal conductivity acc. to EN 14342	0.14 – 0.17 W/(mK)

⁴ Confirmed by TÜV PROFICERT-product Interior certificate, certificate registration number 70 720 5620-1

Ranges for product specific constructional data for Scheucher multilayer parquet are indicated in the table of technical data. For project specific information, please contact Scheucher directly (www.scheucherparkett.at/en/)

Materials

Mat 01 Life cycle impacts

Aim

To recognise and encourage the use of robust and appropriate life cycle assessment tools and consequently the specification of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. (BREEAM, 2021)

General information of environmental product declarations of Scheucher multilayer parquet:

Material category	1. Timber or timber-based products acc. to table 46 of Mat03 Responsible sourcing of construction products (<i>BREEAM, 2021</i>)
Owner of the declaration	Scheucher Holzindustrie GmbH
Programme holder & publisher	Institut Bauen und Umwelt e.V. (IBU)
Mutual recognition with BRE	yes
ECO-EPD at ECO platform	yes
Author of the LCA	Daxner & Merl GmbH
Software & database	GaBi software-system and database for life cycle engineering GaBi 9, DB v8.7 SP 40 [see documentation]
Third-party verification	Completed; Type III declaration in compliance with <i>ISO 14025</i>
External verifier	Matthias Klingler
Declaration number	EPD-SCP-20200238-IBC1-EN (Multilayer parquet)
System boundaries	Cradle-to-gate with modules (A1-A3; C3 and D)
PCR	Solid wood products
Issue date	11.03.2021
Valid to	30.11.2025
Declaration type	Manufacturer's declaration of an average product according to <i>EN 15804+A1</i>
Declared unit	1 m ² average Scheucher multilayer parquet (7.37 kg/m ²) with a moisture of 6-9 % at delivery, produced at the Scheucher production site in Mettersdorf (Austria).
Conversion factor [mass/declared unit]	Scheucher multilayer parquet: 7.37
Reference period	In accordance with the current BNB Guidelines, the Reference Service Life is 40 years when installed and cared correctly (<i>BNB Guideline: 11/2011</i>).
End of life scenario	The product reaches the end of waste status after removal from the building. For the End-of-Life of Scheucher multilayer parquet, energy recovery as secondary combustibles is assumed. The energy recovery takes place in a biomass power plant. As the sales market for Scheucher multilayer parquet is concentrated in the European region, plant-specific characteristic values correspond to a European average scenario (EU-28). The scenario considers a reprocessing rate of the multilayer parquet of 100 % after removal from the building. This assumption has to be adjusted accordingly when applying the results in the building context. At the End-of-Life of the product, an equilibrium moisture content of 12 % is assumed. This value can vary widely depending on the storage of the product before energy recovery.

.results of the LCA – environmental impacts acc. to EN 15804+A1

Declared unit: 1 m ² Scheucher multilayer parquet (7.37 kg/m ²)				
Declared life cycle stage		Product stage	End of life stage	Benefits and loads beyond the system boundary
Indicator	Unit	A1-A3	C3	D
GWP	[kg CO ₂ -Eq.]	-6.71E+00	1.22E+01	-6.48E+00
ODP	[kg CFC11-Eq.]	6.69E-08	1.74E-15	-1.08E-13
AP	[kg SO ₂ -Eq.]	2.03E-02	1.06E-04	3.37E-03
EP	[kg (PO ₄) ³⁻ -Eq.]	4.86E-03	1.30E-05	2.27E-04
POCP	[kg ethene-Eq.]	3.24E-03	8.70E-06	1.31E-03
ADPE	[kg Sb-Eq.]	3.87E-06	1.82E-08	-1.29E-06
ADPF	[MJ]	7.47E+01	6.46E-01	-9.24E+01

Caption

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE - Abiotic depletion potential for non-fossil resources; ADPF - Abiotic depletion potential for fossil resources

.results of the LCA – resource use acc. to EN 15804+A1

Declared unit: 1 m ² Scheucher multilayer parquet (7.37 kg/m ²)				
Declared life cycle stage		Product stage	End of life stage	Benefits and loads beyond the system boundary
Indicator	Unit	A1-A3	C3	D
PERE	[MJ]	1.25E+02	1.25E+02	-2.88E+01
PERM	[MJ]	1.25E+02	-1.25E+02	0.00E+00
PERT	[MJ]	2.50E+02	4.62E-01	-2.88E+01
PENRE	[MJ]	7.65E+01	1.18E+01	-1.17E+02
PENRM	[MJ]	1.08E+01	-1.08E+01	0.00E+00
PENRT	[MJ]	8.72E+01	1.04E+00	-1.17E+02
SM	[kg]	3.78E-02	0.00E+00	0.00E+00
RSF	[MJ]	1.20E+00	0.00E+00	1.16E+02
NRSF	[MJ]	0.00E+00	0.00E+00	-1.07E+02
FW	[m ³]	1.06E+00	5.35E-04	-2.38E-02

Caption

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

.results of the LCA – output flows acc. to EN 15804+A1

Declared unit: 1 m ² Scheucher multilayer parquet (7.37 kg/m ²)				
Declared life cycle stage		Product stage	End of life stage	Benefits and loads beyond the system boundary
Indicator	Unit	A1-A3	C3	D
HWD	[kg]	8.85E-07	4.32E-10	-4.64E-08
NHWD	[kg]	1.45E-01	7.40E-04	5.46E-03
RWD	[kg]	4.59E-03	1.58E-04	-9.85E-03
CRU	[kg]	0.00E+00	0.00E+00	0.00E+00
MFR	[kg]	0.00E+00	0.00E+00	0.00E+00
MER	[kg]	0.00E+00	7.71E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00

Caption

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy, electric energy, EET = Exported energy, thermal energy

Mat 03 Responsible sourcing of construction products

Aim

To recognise and encourage the specification and procurement of responsibly sourced construction products. (BREEAM, 2021)

Scheucher multilayer parquet matches the BREEAM material category **1. Timber or timber-based products** in accordance with table 46 (BREEAM, 2021).

Type of scheme	Specification of implemented scheme	Scope by material category
RSCS ⁵	<p>Site Mettersdorf (Austria): Forest Stewardship Council (FSC) Certificate Number HFA-COC-100057 (Chain-of-Custody) Date of first issuance: 18.02.2011 Date of issuance: 13.01.2021 Valid to: 12.01.2026</p> <p>Scheucher sources FSC-certified wood. When ordering, it must be stated that FSC-certified wood is used, thus it can be guaranteed to be assigned to the project.</p> <p>Scheucher multilayer parquet has been awarded the European Ecolabel UZ 035 Wood, cork and bamboo-based floor coverings under registration no. AT/035/001.</p>	Standard FSC-STD-40-004, Chain-of-Custody Certification. Production and/or trade of parquet

Mat 06 Material Efficiency

Aim

To recognise and encourage measures to optimise material efficiency in order to minimise the environmental impact of material use and waste without compromising on structural stability, durability or service life of the building. (BREEAM, 2021)

Characteristics of Scheucher multilayer parquet when it comes to material efficiency:

Recycled content	No secondary wood is used to produce Scheucher multilayer parquet.
Replacement	In accordance with the current BNB Guidelines, the Reference Service Life is 40 years when installed and cared correctly (BNB Guideline: 11/2011).
End of life	<p>Re-use: Due to the click profile (NOVOLOC® 5G) glueless installed, WOODflor® can be removed and re-used for the same application. If re-use is not possible, the high calorific value of the product makes it suitable for an energetic recovery in the form of cascade utilization.</p> <p>Disposal: After installation, residual parquet and packaging materials should be collected separately on site in accordance with the waste fractions. Residual parquet material can be recycled. If this is not possible, energetic utilization is possible. In accordance with the <i>European Waste Catalogue – EWC</i>, parquet is classified as 17 02 01 (wood). The packaging materials can be recycled as follows in accordance with the <i>European Waste Catalogue – EWC</i>: 15 01 01 (paper and cardboard packaging), 15 01 02 (plastic packaging), 15 01 03 (wooden packaging).</p>

⁵ BREEAM recognised responsible sourcing certification scheme

Waste

Wst 01 Construction waste management

Aim:

To promote resource efficiency via the effective and appropriate management of construction waste. (BREEAM, 2021)

Scheucher multilayer parquet represents a suitable target for diversion of resources from landfill and therefore may contribute to the BREEAM target rates for diversion from landfill, applying re-use or thermal recycling according to chapter 2.15.

Section 2.9 of the environmental product declaration of Scheucher multilayer parquet presents details for the product's construction phase. In addition, section 2.15 indicates the product's re-use phase.

Referring information are compliant with the intent to promote resource efficiency via the effective and appropriate management of construction waste. According to table 49 (BREEAM, 2021), Scheucher multilayer parquet may contribute to target rates for diversion from landfill. The following aspects described in the EPD should be considered:

EPD | chapter 2.9 | product processing/installation

Scheucher parquet flooring must be installed in accordance with the installation instructions enclosed. The floor can be installed with or without adhesives (solely WOODflor®). Standard safety guidelines must be observed during installation (dust mask, goggles). Statutory guidelines concerning noise protection must be observed. Any tools required may only be used as designated and in accordance with the respective manufacturer's operating instructions. The specifications of the professional liability associations must be observed during commercial installation. Residual material or packaging must be disposed separately in accordance with the waste fraction.

EPD | chapter 2.15 | re-use phase

Due to the click profile (NOVOLOC® 5G) glueless installed, WOODflor® can be removed and re-used for the same application. If re-use is not possible, the high calorific value of the product makes it suitable for an energetic recovery in the form of cascade utilization.

Wst 06 Functional adaptability

Aim:

To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan. (BREEAM, 2021)

Multilayer parquet flooring manufactured by Scheucher is intended for installation in Grade 1 interior applications (heated interiors with largely constant temperatures and climatic conditions typical for living areas). WOODflor® can be installed with or without adhesives. BILAflor® and MULTIfloor NOVOLOC® 5G must be installed fully glued down to subfloor.

Due to the click profile (NOVOLOC® 5G) glueless installed, WOODflor® can be removed and re-used for the same application.

Disclaimer: The content of, and results shown in this fact sheet are based on data and information submitted by the client. Therefore, Daxner & Merl GmbH makes no representation or warranty in regard of the correctness or completeness of the content of this document, or the results shown.

.references

AgBB, board for the health evaluation of building products, German Federal Environmental Agency, Wörlitzer Platz 1, 06844 Dessau-Roßlau.

BNB: BNB evaluation table for building products. Useful lives of components for life cycle assessments in accordance with the sustainable building assessment system (BNB), Federal Ministry of Transport, Building.

BREEAM, 2021. BREEAM® technical manual for International New Construction 2021 SD250 6.0 (December 2021).

ECHA candidate list: List of substances of very high concern considered for approval (status 25.06.2020) according to Article 59 para. 10 of the REACH Regulation. European Chemicals Agency.

EN 717-1: DIN EN 717-1:2005-01, Wood-based panels - Determination of formaldehyde release - Part 1: Formaldehyde emission by the chamber method.

EN 13489: DIN EN 13489:2017-12, Wood-flooring and parquet - Multi-layer parquet elements.

EN 13501-1: DIN EN 13501-1:2007+A1:2009, Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests.

EN 14342: DIN EN 14342:2013-09, Wood flooring - Characteristics, evaluation of conformity and marking.

EN 15804: DIN EN 15804: 2012-04+A1 2013, Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products.

EN 16516: DIN EN 16516:2018-01, Construction products: Assessment of release of dangerous substances - Determination of emissions into indoor air.

EPD (2021), EPD-SCP-20200238-IBC1-EN, Scheucher Multilayer Parquet, Scheucher Multilayer Parquet, Scheucher Holzindustrie GmbH, Institut Bauen und Umwelt e.V. (IBU), 2021.

European Ecolabel UZ 035 Wood, cork and bamboo-based floor coverings: Scheucher multilayer parquet, registration no. [AT/035/001](#).

European Waste Catalogue – EWC: in accordance with the AVV dated 10.12.2001 (BGBl I, p. 3379), last amended by the Directive dated 24.7.2002 (BGBl. I, p. 2833).

FSC-certificate, Site Mettersdorf: Forest Stewardship Council (FSC). Certificate Number [HFA-COC-100057](#) (Chain-of-Custody). Date of issuance: 13.01.2021, Valid to: 12.01.2026.

GaBi: GaBi 9, Software-System and Database for Life Cycle Engineering. DB v8.7 SP 40. Stuttgart, Echterdingen: Sphera, 1992-2020. Available at: <https://sphera.com/product-sustainability-gabi-data-search/>.

ISO 14025: DIN EN ISO 14025:2011-10, Environmental labels and declarations - Type III environmental declarations - Principles and procedures.

ISO 14040: DIN EN ISO 14040:2009-11, Environmental management - Life cycle assessment - Principles and framework (ISO 14040:2006).

ISO 14044: DIN EN ISO 14044:2006-10: Environmental management - Life Cycle Assessment - Requirements and Guidelines.

ISO 16000: DIN ISO 16000:2013-01, Indoor air.

ISO 16000-3: DIN ISO 16000-3:2013-01, Indoor air - Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method.

ISO 16000-6: ISO 16000-6:2011-12, Indoor air contaminants – Part 6: Determination of VOCs in indoor air and test chambers, sampling on Tenax TA®, thermal desorption and gas chromatography with MS/FID.

ISO 16000-9: DIN EN ISO 16000-9:2008-04, Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method.

TÜV PROFiCERT-Interior Program: Certificate registration number 70 720 5620-1, based on audit report 2117130/2020/1.