SENTINEL HOLDING
INSTITUT

SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

14742-10-1001

Vermibit

Product group: Insulating fill - Screed & floor insulation

Isola VERMICULITE AG

Isola Vermiculite AG
Bühlstrasse 5
5076 Bözen

Product qualities:

- SHI Product Assessment 2024
- QNG Qualitätssiegel Nachhaltiges Gebäude
- DGNB NEW CONSTRUCTION 2023.2
- DGNB NEW CONSTRUCTION 2023
- DGNB NEW CONSTRUCTION 2018
- BNB-BN NEUBAU V2015
- BREEAM DE NEUBAU 2018
- LEED v4.1 (outside US)

CERTIFIED SUSTAINABLE PRODUCT
SHI PRODUCT PASSPORT
SENTINEL HOLDING INSTITUT
www.sentinel-holding.eu

Köttner

Helmut Köttner
Scientific Director
Freiburg, 26 August 2026

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Product:
Vermibit

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The SHI Database is the first and only database for construction products whose comprehensive processes and data accuracy are regularly verified by the independent auditing company SGS-TÜV Saar

SGS SGS TÜV SAAR

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SHI Product Assessment 2024

Since 2008, Sentinel Holding Institut GmbH (SHI) has been establishing a unique standard for products that support healthy indoor air. Experts carry out independent product assessments based on clear and transparent criteria. In addition, the independent testing company SGS regularly audits the processes and data accuracy.

Criteria	Product category	Harmful substance limit	Assessment
SHI Product Assessment	Insulation materials	TVOC ≤ 300 µg/m^3 Formaldehyd ≤ 24 µg/m^3	Indoor Air Quality Certified
Valid untill: 21 June 2027			

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QNG - Qualitätssiegel Nachhaltiges Gebäude

The Qualitätssiegel Nachhaltiges Gebäude (Quality Seal for Sustainable Buildings), developed by the German Federal Ministry for Housing, Urban Development and Building (BMWSB), defines requirements for the ecological, socio-cultural, and economic quality of buildings. The Sentinel Holding Institut evaluates construction products in accordance with QNG requirements for certification and awards the QNG ready label. Compliance with the QNG standard is a prerequisite for eligibility for the KfW funding programme. For certain product groups, the QNG currently has no specific requirements defined. Although classified as not assessment-relevant, these products remain suitable for QNG-certified projects.

Criteria	Pos. / product group	Considered substances	QNG assessment
3.1.3 Schadstoffvermeidung in Baumaterialien			QNG ready - Not relevant for assessment

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DGNB New Construction 2023.2

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact			Not relevant for assessment

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DGNB New Construction 2023

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings. The 2023 version sets high standards for ecological, economic, socio-cultural, and functional aspects throughout the entire life cycle of a building.

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 03.05.2024 (3rd edition)			Not relevant for assessment

Criteria	Assessment
SOC1.2 Indoor air quality (*)	May positively contribute to the overall building score

Criteria	Assessment
ENV1.1 Climate action and energy (*)	May positively contribute to the overall building score

Criteria	Assessment
SOC1.1 Thermal comfort (*)	May positively contribute to the overall building score

Criteria	Assessment
SOC1.3 Sound insulation and acoustic comfort (*)	May positively contribute to the overall building score

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 29.05.2025 (4th edition)	not applicable		Not relevant for assessment

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DGNB New Construction 2018

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings.

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact			Not relevant for assessment

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BNB-BN Neubau V2015

The Bewertungssystem Nachhaltiges Bauen (Assessment System for Sustainable Building) is a tool for evaluating public office and administrative buildings, educational facilities, laboratory buildings, and outdoor areas in Germany. The BNB was developed by the former Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and is now overseen by the Federal Ministry for Housing, Urban Development and Building (BMWSB).

Criteria	Pos. / product type	Considered substance group	Quality level
1.1.6 Risiken für die lokale Umwelt	36b Mineral and non-mineral interior insulations	VOC / biocides / hazardous substances / individual hazardous substances (formaldehyde) / halogenated blowing agents	Quality level 4
Verification: Prüfbericht des eco-Instituts vom 21.06.2023 (Nr. 58219-A001-L)			

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BREEAM DE Neubau 2018

BREEAM (Building Research Establishment Environmental Assessment Methodology) is a UK-based building assessment system that evaluates the sustainability of new constructions, refurbishments, and conversions. Developed by the Building Research Establishment (BRE), the system aims to assess and improve the environmental, economic, and social performance of buildings.

Criteria	Product category	Considered substances	Quality level
Hea 02 Indoor Air Quality	Ceiling, wall, and acoustic and thermal insulation materials	Emissions: Formaldehyde, TVOC, TSVOC, carcinogens	Exemplary quality
Verification: Prüfbericht des eco-Instituts vom 21.06.2023 (Nr. 58219-A001-L)			

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LEED v4.1

LEED (Leadership in Energy and Environmental Design) is an internationally recognised building certification system developed by the U.S. Green Building Council. It is one of the most widely used sustainability standards for buildings worldwide and is particularly applied in internationally oriented projects. LEED assesses buildings holistically across categories such as energy efficiency, resource conservation, material selection, indoor environmental quality and site sustainability. Depending on the number of points achieved, projects are awarded one of the certification levels: LEED Certified, Silver, Gold or Platinum.

Criteria	Product category	Considered substances	Assessment
EQ Credit: Low-Emitting Materials	Dämmstoffe	Emissionen: Formaldehyd, VOC, Krebserregende Stoffe	compliant
Verification: Prüfbericht des eco-Instituts vom 21.06.2023 (Nr. 58219-A001-L)			

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Product labels

In the construction industry, high-quality materials are crucial for a building's indoor air quality and sustainability. Product labels and certificates offer guidance to meet these requirements. However, the evaluation criteria of these labels vary, and it is important to carefully assess them to ensure products align with the specific needs of a construction project.



This product is SHI Indoor Air Quality certified and recommended by Sentinel Holding Institut. Indoor-air-focused construction, renovation, and operation of buildings is made possible by transparent and verifiable criteria thanks to the Sentinel Holding concept.



Products bearing the Sentinel Holding Institute QNG-ready seal are suitable for projects aiming to achieve the "Qualitätssiegel Nachhaltiges Gebäude" (Quality Seal for Sustainable Buildings). QNG-ready products meet the requirements of QNG Appendix Document 3.1.3, “Avoidance of Harmful Substances in Building Materials.” The KfW loan program Climate-Friendly New Construction with QNG may allow for additional funding.

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Legal notices

(*) These criteria apply to the construction project as a whole. While individual products can positively contribute to the overall building score through proper planning, the evaluation is always conducted at the building level. The information was provided entirely by the manufacturer.

Find our criteria here: https://www.sentinel-holding.eu/de/Themenwelten/Pr%C3%BCfkriterien%20f%C3%BCr%20Produkte

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SGS TÜV SAAR

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Vermibit®

AUSGLEICHSCHÜTTUNG

Ausgleichsschüttung
Für Altbausanierungen
und Neubau

Vrac d’égalisation
Pour l’assainissement de
bâtiments anciens et la
réalisation d’ouvrages neufs

wärmedämmend	**isolation thermique**
schallhemmend	**isolation phonique**
gute Trittschall-Dämmwerte	**bonnes valeurs d’isolation des bruits d’impact**
stark belastbar	**trés bonne capacité de charge**
einfache, schnelle, trockene Verarbeitung	**mise en oeuvre simple, rapide et à sec**
staubfrei	**sans poussière**
geringes Flächengewicht	**faible poids superficique**
100 % mineralisch	**Matériau 100 % minéral**



Materialbeschrieb
VERMIBIT besteht aus Vermiculite-Körnern die im Wärmeverfahren mit Bitumen umhüllt werden. Dieses Material wurde speziell als Trockenschüttung entwickelt und weist sehr gute thermische und akustische Eigenschaften auf.

Descriptif
VERMIBIT est composé de grains Vermiculite enrobés de bitume par procédé à chaud. Ce matériau a été développé spécialement pour des chapes sèches et possède de très bonnes caractéristiques thermiques et acoustiques.

Verarbeitung von VERMIBIT:
Installationsrohre können lose auf die Böden verlegt werden (Überschüttung mind. 20 mm).
Bei undichten Böden ist ein Rieselschutz vorzusehen.
Ist mit aufsteigender Feuchtigkeit zu rechnen, muß ein dampfsperrendes Material ausgelegt und an den Rändern hochgezogen werden.



Setzen der Abziehlehren z. B. auf VERMIBIT.

Placer les gabarits de tirage sur des bandes VERMIBIT ou installer des gabarits de hauteur.



Verdichten der Schüttung ca. alle 4 cm, z. B. mit einem Rechen,Stampfer oder Brettschuhen um ca. 10-15 %.

Compactage du matériau dêversé à raison d'env. 10-15 % tous les 4 cm approximativement, par exemple à l'aide d'un râteau, d'unpilon ou de chaussures munies de planchettes.



Wellkarton (oder für verbesserten Trittschall Weichfaserplatte 10 mm) verlegt, verhindert das Eindringen der Körner in die Fugen der Bodenverlegeplatten.

Poser du carton ondulé (ou un panneau fibreux mou pour obtenir une meilleure isolation phonique) afin d'évite un passage de grainsdans les joints entre les dailes de revêtement de sol.

Mise en oeuvre du VERMIBIT:
De la tuyauterie d'installation peut être posée librement sur les sols (remplissage au minimum 20 mm sur les installations).
Il faut mettre une protection contre le ruisselment pour les sols qui ne sont pas étanches.
En cas d'humidité ascendante, un matériau agissant comme barrière antivapeur (antihumidité) est étendue et relevée aux bords.



Schütten und verteilen, Mindesthöhe 20 mm.

Déversement et répartition, hauteur minimale 20 mm.



Oberflächenglattes Abziehen von VERMIBIT.

Tirage et lissage superficiel de VERMIBIT.



Verlegen der Bodenverlegeplatten von mind. 22 mm, resp. Gipsplatten mind. 2 x 10 mm.

Poser des dalles de revêtement de sol de min. 22 mm, resp. des panneaux de plâtre de min. 2 x 10 mm.

Stärke der verdichteten VERMIBIT-Schüttung:
Epaisseur du VERMIBIT compacté:
3 cm ..... 35 l/m²
5 cm ..... 60 l/m²
8 cm ..... 100 l/m²

Technische Daten:
Schüttdichte ca. 145 kg/m³, Abfüllmenge: 100 l Sack ca. 14,5 kg
Bemessungswert: 0,07 W/mk, Brandkennziffer:5,3;B2;Q1
Klassifizierung nach DIN EN 13501-1 Brandverhalten E fl

Masse volumique en vrac env. 145 kg/m3
Contenance à l'ensachage:
100 l sacs en enc. 14,5 kg, Conductibilité thermique: 0,07 W/mK
Classe d'incendie: 5,3; B2; Q1,

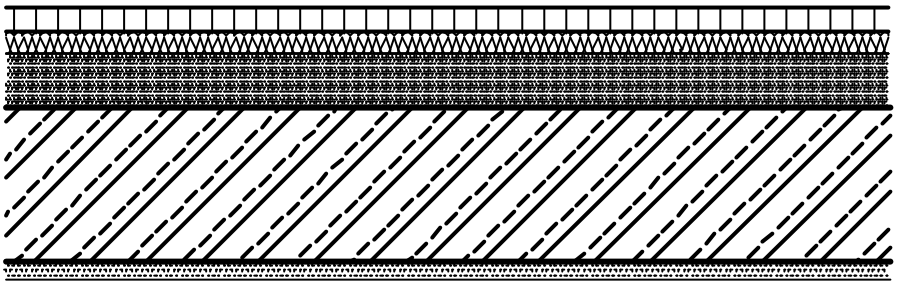
Gutachten/Expertise: Institut für Baubiologie und Ökologie Neubeuern

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Schallschutz von Massivdecken mit VERMIBIT



Holzspanplatte 22 mm
Holzfaserdämmplatte 21 mm
VERMIBIT-Schüttung 50 mm

Massivdecke

Deckenputz

Trittschallverbesserungsmaß D L_w **= 21 dB** (nach ÖNORM S 5101*)

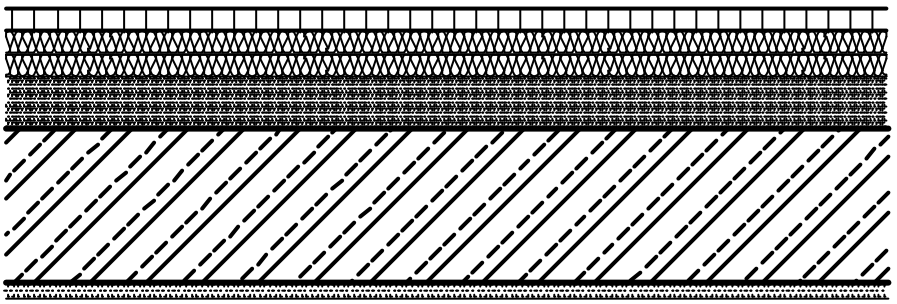
*Geprüft in der Versuchsanstalt für Wärme- und Schalltechnik, A-1200 Wien (PZ 8051/WS-1)

Bewertete Normtrittschallpegel $L_{n,w}$ gemäß DIN 4109

14 cm Vollbetondecke	$L_{n,w}$ = 57 dB
15 cm Vollbetondecke	$L_{n,w}$ = 56 dB
16 cm Vollbetondecke	$L_{n,w}$ = 55 dB
17 cm Vollbetondecke	$L_{n,w}$ = 54 dB
18 cm Vollbetondecke	$L_{n,w}$ = 53 dB
24 cm Ziegeldecke + Aufbeton	$L_{n,w}$ = 58 dB

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Schallschutz von Massivdecken mit VERMIBIT



Holzspanplatte	22 mm
Holzfaserdämmplatte	21 mm
Steinwolleplatte TPT	20 mm
VERMIBIT-Schüttung	50 mm

Massivdecke

Deckenputz

Trittschallverbesserungsmaß D L_w **= 25 dB** (nach ÖNORM S 5101*)

*Geprüft in der Versuchsanstalt für Wärme- und Schalltechnik, A-1200 Wien (PZ 8051/WS-2)

Bewertete Normtrittschallpegel $L_{n,w}$ gemäß DIN 4109

14 cm Vollbetondecke	$L_{n,w}$ = 53 dB
15 cm Vollbetondecke	$L_{n,w}$ = 52 dB
16 cm Vollbetondecke	$L_{n,w}$ = 51 dB
17 cm Vollbetondecke	$L_{n,w}$ = 50 dB
18 cm Vollbetondecke	$L_{n,w}$ = 49 dB
24 cm Ziegeldecke + Aufbeton	$L_{n,w}$ = 54 dB

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