





LEED version 4.1

PRODUCT DATA FOR CERTIFICATION

WOOD WOOL – HERAKLITH

LEEDv4.1 (Leadership in Energy and Environmental Design) is a voluntary standard that defines high performance green buildings that are healthier, more environmentally responsible, and more profitable structures. Credits for certification can be earned in various categories, each with a unique focus on sustainable design: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation and design process.

KNAUF INSULATION products put you on the right track for the highest result into the certification!

LEED - Credit Category code	Definition	Knauf Insulation Products contribution	Contributes towards
Energy and Atmosphere (EA) Optimize Energy Performance 	To achieve increasing levels of performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use.	Heraklith products help reducing energy demand through very high insulation efficiency (building envelop, partition walls, HVAC equipment, floors and ceilings).	18 points
Materials and Resources (MR) Building Product Disclosure and Optimization – Environmental Product Declarations 	To encourage the use of products where Life Cycle Assessment (LCA) is available and have environmentally, economically and socially preferable LCA. To reward project including products with verified LCA.	Third party verified Environmental Product Declarations (EN 15804-EPDs) are available online for Heraklith homogeneous board, Heratekta and Tektalan, ¹ .	2 points 
Materials and Resources (MR) Building Product Disclosure and Optimization – Sourcing of Raw Materials 	To encourage the use of products where LC A is available and have environmentally, economically and socially preferable LCA. To reward project including products verified to be extracted or sourced in a responsible manner.	Heraklith Products are manufactured with up to 80% of wood-based materials certified following FSC or PEFC labels (remaining part is the binder) ² .	1 point 



¹ https://www.knaufinsulation.com/download-epd-wood-wool?environmental_product_declaration=74;
<http://www.mrpi.nl/epd-certificaten>

² See annex 1

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Materials and Resources (MR) Building Product Disclosure and Optimization – Material Ingredients	To encourage the use of products where LCA is available and have environmentally, economically and socially preferable LCA. To reward project for which the products chemical ingredients are inventoried.	Heraklith products contains no ingredients listed on the REACH Authorization list, Restriction list or Substances of Very High Concern Candidate list ³ .	1 point
Indoor Environmental Quality (EQ) Low-Emitting Materials 	To reduce concentrations of chemical contaminants, as Volatile Organic Compound (VOC) that can damage air quality, human health, productivity and the environment. Emissions from ceilings, walls, thermal, and acoustic insulation are a complete category to be assessed.	Products are compliant with the German AgBB Testing and Evaluation Scheme and the higher category (A+) of the French labelling. They are certified with Blue Angel low air emission ecolabel (following RAL-UZ-132) ⁴ .	3 points 
Indoor Environmental Quality (EQ) Indoor Air Quality Assessment	To establish better quality indoor air in the building after construction and during occupancy	The quality of the Heraklith products help to reach appropriate concentration level regarding formaldehyde and TVOCs during indoor air quality assessment.	2 points
Indoor Environmental Quality (EQ) Acoustic Performance	To provide workspaces and classrooms that promote occupants' well-being, productivity, and communications through effective acoustic design.	Products have high performance acoustic properties ⁵ . They reduce HVAC background noise, increase sound insulation of building envelope, partitions, ceilings and aid in controlling reverberation time.	1 point

³ Compliance letter statement regarding REACH can be delivered on request for dedicated product's manufacturing plants

⁴ See annex 2

⁵ See annex 3

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Indoor Environmental Quality (EQ) Thermal Comfort	To promote occupants productivity, comfort, and well-being by providing quality thermal comfort.	Insulation is a design alternative strategy. Heat radiation and air-conditioning will be minimized which will have positive comfortability feel and increase productivity for workers.	1 point

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Annex 1: PEFC certificate for Simbach Plant and FSC certificate for Zalaegerszeg supplier



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The mark of responsible forestry



Certificate of Registration


This is to certify that

ZSELBA SZOLGÁLTATÓ ÉS TERMELŐ KFT
Trading as: ZSELBA KFT

"the certified site" has been certified in accordance with the requirements of the Forest Stewardship Council® A.C. using the FSC® Chain of Custody standards* and that ZSELBA SZOLGÁLTATÓ ÉS TERMELŐ KFT of

Site Address: Lenti - Zajda 046HRSZ, Lenti, Zala, 8960, HUNGARY
Registered Address: Béke u 49, Lenti, 8960, HUNGARY

is hereby licensed to use the FSC Logo on and sell as FSC certified all products listed on the attached FSC product schedule as FSC 100%

Certificate Registration Code:	SA-COC-004508
Licence Code:	FSC-C122593
Issued By:	Soil Association Certification Limited Spear House, 51 Victoria Street Bristol, BS1 6AD United Kingdom
Issue Date:	18 September 2019
Valid until the Renewal Date:	17 September 2024
Signed on behalf of Soil Association Certification	 Kevin Jones, Head of Forestry

CA-COC-604-57 Rev 2018 © Prepared by Soil Association Certification Ltd, FSC Licence Code FSC-P-A200513
 This certificate is only valid for sale of FSC products when accompanied by a current product schedule. Validity of this certificate shall also be verified by checking the FSC database. In full compliance with the FSC Chain of Custody standards, this certificate is the property of Soil Association Certification Ltd and all copies or reproductions of this certificate shall be destroyed or returned to the Soil Association Certification Ltd immediately, on request.
 A description of the products, sites or services that are included in the scope of the certificate may be obtained from Soil Association Certification on request.
 This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC certified (or FSC controlled wood). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claims are clearly stated on invoices and shipping documents.

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Annex 2: Blue Angel Requirements and certificate.

From document: “Basic Criteria for Award of the Environmental Label; Low-Emission Thermal Insulation Material and Suspended Ceilings for Use in Buildings RAL-UZ 132”.

The product shall not exceed the emission values listed in Table 1 in the test chamber in conformity with the „Health risk assessment process for emissions of volatile organic compounds (VOC) from building products” developed by the Committee for Health-related Evaluation of Building Products.

Table 1: Emission Values

Substance	Requirements Final Value 28 Days
Total organic compounds within the retention range $C_6 - C_{16}$ (TVOC)	$\leq 100 \mu\text{g}/\text{m}^3$
Total organic compounds within the retention range $> C_{16} - C_{22}$ (TSVOC)	$\leq 20 \mu\text{g}/\text{m}^3$
C substances ¹²	$\leq 1 \mu\text{g}/\text{m}^3$ per single value
Total VOC without LIC ^{13, 14}	$\leq 50 \mu\text{g}/\text{m}^3$
R value	≤ 1
Formaldehyde	$\leq 0.05 \text{ ppm}$

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CERTIFICATE

Knauf Insulation GmbH
84359 Simbach am Inn, Germany

is granted the right, on the basis of the contract on the use of the environmental label no. 36096 based on DE-UZ 132 Edition 2020, for the product

Knauf Insulation Wärmedämmstoffe für Gebäude gemäß Anlage

to use the Blue Angel Ecolabel shown below as a sign of special environmental friendliness.



Bonn, 21 June 2021

R. Völlmann
Managing Director
RAL gGmbH



CERTIFICATE

Knauf Insulation Kft.
8924 Zalaegerszeg, Hungary

is granted the right, on the basis of the contract on the use of the environmental label no. 36097 based on DE-UZ 132 Edition 2020, for the product

**Knauf Insulation Tektalan A2 HS (Anwendungstyp nach DIN 4108-10: DI)
Knauf Insulation Tektalan A2 C 037/2; A2 037/2; A2 Silent; C 037/2;
037/2; Silent (Anwendungstyp nach DIN 4108-10: DZ, DI)**

to use the Blue Angel Ecolabel shown below as a sign of special environmental friendliness.



Bonn, 12 April 2021

R. Völlmann
Managing Director
RAL gGmbH



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Annex 3: Sound absorption example

α coefficient is the coefficient for *sound absorption*.

