



Approval body for construction products and types of construction

**Bautechnisches Prüfamt** 

An institution established by the Federal and Laender Governments



# **European Technical Assessment**

ETA-18/0454 of 1 August 2019

English translation prepared by DIBt - Original version in German language

#### **General Part**

Technical Assessment Body issuing the European Technical Assessment:

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment contains

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of

Deutsches Institut für Bautechnik

Staubex, Butler macht's! Dämmstoff-Schüttung, HEJON PERL, Precit Mineralische Schüttung unter Nassestrich, Prima Dämmschüttung, Starzonek staubgebremst

thermal insulation product made of loose fill expanded perlite

KNAUF AQUAPANEL GmbH Kipperstraße 19 44147 Dortmund DEUTSCHLAND

Plant 1 (see Annex 1)

Plant 2 (see Annex 1)

Plant 3 (see Annex 1)

6 pages including 1 annex which form an integral part of this assessment

EAD 040461-00-1201



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#### Specific part

#### 1 Technical description of the product

This European Technical Assessment applies to the thermal insulation product made of loose fill expanded perlite (EP) with the following designations, hereinafter referred to as thermal insulation.

- Staubex
- Butler macht's! Dämmstoff-Schüttung
- HEJON PERL
- Precit Mineralische Schüttung unter Nassestrich
- Prima Dämmschüttung
- Starzonek staubgebremst

The thermal insulation material is a granular, inorganic bulk good of grain sizes 0 - 6 mm made of thermally blown perlite.

The perlite grains are provided factory-made with a dust-binding coating.

The European Technical Assessment has been issued for the product on the basis of agreed data/ information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed. The European Technical Assessment applies only to products corresponding to this agreed data/information.

### 2 Specification of the intended use in accordance with the applicable European Assessment Document

The thermal insulation material can be used in the compressed state as interior insulation of ceilings or floor slabs (on the top) under screed without requirements for protection against noise.

The performance according to section 3 only applies if the insulation product is installed according to the manufacture's installation instructions dry and in a compressed state with a compression at least 20% by volume in accordance with the bulk density given in the ETA and if it is protected from precipitation, wetting or weathering in built-in state and during transport, storage and installation.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the insulation product of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.



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#### 3 Performance of the product and references to the methods used for its assessment

For sampling, conditioning and testing the provisions of the EAD No 040461-00-1201 "Thermal insulation product made of loose fill expanded perlite (EP)" apply.

#### 3.1 Mechanical resistance and stability (BWR 1)

Not applicable.

#### 3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class A1 acc. to Decision 1996/603/EC (as amended) in connection with Delegated Regulation (EU) 2016/364
Determination of the organic content test acc. to EN 13820 (determination of combustion loss) *	< 1.0 mass-%
* Deviating from EN 13820 test samples conditioned at 200 °C for 6 hours.	

#### 3.3 Hygiene, health and the environment (BWR 3)

Not applicable.

#### 3.4 Safety and accessibility (BWR 4)

Not applicable.

#### 3.5 Protection against noise (BWR 5)

Not applicable.

#### 3.6 Energy economy and heat retention (BWR 6)

Wesentliches Merkmal	Leistung
Thermal conductivity (in compressed state)	Declared value of thermal
test acc. to EN 12667:2001	conductivity
acc. to EN 14316-1:2004	$\lambda_{D (23/50)} = 0.050 \text{ W/(m \cdot K)}^*$
Loose bulk density (not in compressed state)	90 kg/m³ (± 15 %)
test acc. to EN 1097-3:1998	
Particle size distribution	No performance assessed.
Water repellency	No performance assessed.
Crushing resistance	No performance assessed.
Water vapour diffusion resistance factor	$\mu = 3$
acc. to EN 14316-1:2004	
Settlement	No performance assessed.
Compressive stress at 10 % deformation	≥ 130 kPa **
test acc. to EN 826:2013	

<sup>\*</sup> Declared value of thermal conductivity for a moisture content of the insulation product at 23 °C/50% relative humidity, representative of at least 90% of production with a 90% confidence level.

<sup>\*\*</sup> Test samples compressed before testing approx. 20% by volume, compressed sample height approx. 50 mm.



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#### 3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with the European Assessment Document No 040461-00-1201 "Thermal insulation product made of loose fill expanded perlite (EP)" the legal basis is: Commission Decision 1999/91/EC.

The system to be applied is: system 3.

In addition, with regard to reaction to fire the applicable European legal act is: 1999/91/EC (in accordance with the decision 96/603/EC).

The system to be applied is: system 4

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 1 August 2019 by Deutsches Institut für Bautechnik.

Maja Tiemannbeglaubigt:AbteilungsleiterinGetzlaff



**Staubex, Butler** macht's! Dämmstoff-Schüttung, HEJON PERL, Precit Mineralische Schüttung unter Nassestrich, Prima Dämmschüttung, Starzonek staubgebremst

Annex 1

#### Einbauzustand bzw. dargestelltes Bauteil

Manufacturing plants

Plant 1 KNAUF AQUAPANEL GmbH

Kipperstraße 19 44147 Dortmund DEUTSCHLAND

Plant 2 KNAUF AQUAPANEL GmbH

Ruhrstraße 8

86633 Neuburg/Donau DEUTSCHLAND

Plant 3 KNAUF AQUAPANEL GmbH

Hauptstraße 102 39345 Bülstringen DEUTSCHLAND

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