

## Note on English translation / Hinweise zur englischen Fassung

This is a translation of the product data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

# KNAUF



Drywall Systems

## K437i.de

Product Data Sheet

2020-12



# Isoself®

Non load-bearing insulation bulk material made of perlite

## Product description

Isoself® insulation bulk material is made of perlite, the lightweight, resistant and environmentally-friendly granulate with excellent insulation properties for effective thermal and sound insulation for floors and cavities in old and new buildings.

## Storage

Store dry on pallets. It can be stored indefinitely.

## Quality

In compliance with EN 14316-1, the product is subject to initial type testing and continuous factory production control and bears the CE marking.

## Properties and added value

- Excellent thermal insulation features
- Very light and open to diffusion
- Non-combustible
- Dust-bound

- No waste - no cutting involved
- Fill without gaps regardless of the component dimensions
- Certified as harmless to health by the eco Institut in Germany
- Insensitive to moisture, rot or vermin
- Resistant to high temperatures

## Field of application

Isoself® is a non load-bearing insulation bulk material made of Perlite for the insulation of enclosed cavities in interiors, e.g. in wood joist ceilings, pitched roofs and shafts. Isoself® is characterized by jointless application and thus application without gaps. It is very light and thus only suitable for constructions bearing very low loads. Isoself is also very well suited for areas requiring proofing against vermin and rodents.

### Application

#### Substrate and pretreatment

Check the residual moisture and loadbearing capacity. Tighten the screws on old wooden floors and check for open and permeable joints. Check false ceilings / sound boarding for load-bearing capacity. In case of old floorboards, e.g. over ash or slag infill, remove and fill with Isoself® between the joists and then reinstall the floorboards. If the insulation layer on ceilings must be walkable, gangways should be applied as required to ensure that they can bear the corresponding load.

#### Preparation

Check the location and construction design of installations (pipes, cables, ducts, and similar). Clean the raw ceiling. Apply a cover of PE foil of least 0.2 mm thickness as protection against rising residual moisture from the floor overlapping by at least 20 cm and glue joints if necessary, or in case of concrete slabs touching the soil, sealing acc. to DIN 18533 and up the walls to the height of construction. Use permeable trickling protection on wooden substrates and between ceiling joists (e.g. fleece, Schrenzlage synthetic coated kraft paper) and apply on the joists, walls and other rising constructional components. In the case of closed compartments with floorboards or parquet planks, wooden composite boards or parquet flooring, the installer must check that only dry material is installed.

### Application

#### Spreading

Isoself® in loose and dry form is simply poured into the prepared cavities or filled in between the timbers and ceiling joists. It is recommended when pouring in the infill that the bag is kept as low as possible to prevent the formation of dust.

#### Ruling

The poured in Isoself® insulation infill material is ruled flat across the upper edge of the joists or square timbers using a flat batten or similar.

#### Covering / compaction

Non-walkable insulation layers (e.g. top storey floor slab) can either remain open or can be covered with corrugated cardboard, a glass fleece or a wood fibre insulation board (e.g. Fasoperl®-A8).

For walkable surfaces, GIFAfloor, OSB boards, particleboards or tongue and groove boards are laid on the joist layer without loading the levels filled with Isoself®. If necessary, a vapour barrier should be installed beforehand. Alternatively, the existing floorboards should be removed section by section at spacings of 2 m, Isoself® poured in manually from both sides until the cavity is completely filled. Refasten the floorboards when finished.

### Supplementary system elements

Designation	Product name
Cover insulation boards	Knauf Fasoperl®-A8

**Technical data**

Designation	Standard	Unit	Isoself®
Graining	–	mm	0 – 6
Bulk density $\rho_s$ in non-compressed state	–	kg/m <sup>3</sup>	approx. 90
Weight per unit area (installed)	–	kg/m <sup>2</sup> per cm	approx. 0.9
Rated value of thermal conductivity $\lambda_B$	–	W/(m·K)	0.052
Rated value of thermal conductivity $\lambda_D$	–	W/(m·K)	0.050
Building material class	–	–	Non-combustible
Reaction to fire	DIN EN 14316-1	–	A1
Resistance to temperature	–	°C	up to 800
Melting point	–	°C	approx. 1400
Water vapour diffusion resistance $\mu$	–	–	3
Application	DIN EN 14316-1	–	DI, DZ

**Material requirement and efficiency**

Material	Consumption per m <sup>2</sup> and 1 cm installation thickness
Isoself® for attics, timbers	Approx. 10 l depending on the compaction
Isoself® for pitched roofs, cavities, shafts	Approx. 11 l depending on the compaction

**Product range**

Designation	Application	Packaging unit	Material number	EAN
Isoself®	100 l/bag	24 bags / pallet	0008663	4003352121306

**Sustainability and environment**

Short description	Unit	Value
Certificate	–	eco-INSTITUT



**Observe safety data sheet!**

For safety data sheets and CE marking see [pd.knauf.de](http://pd.knauf.de)



Videos for Knauf systems and products can be found under the following link:

[www.youtube.com/knauf](http://www.youtube.com/knauf)



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