

## Note on English translation / Hinweise zur englischen Fassung

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

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# KNAUF



Floor Systems

## F401.de

Product Data Sheet

2020-07



# S 400 Sprint

Quick-drying cementitious light levelling mortar under screed

## Product description

S 400 Sprint is a quick-drying light levelling mortar made of EPS aggregate and a cement-based special binder. The high compressive strength and quick drying ensures that S 400 Sprint can be subjected to high loads after just one day. S 400 Sprint is resistant to water.

## Storage

Store in a dry place.

Maximum storage time 12 months

## Quality

In compliance with an ETA approval, the product is subject to initial type testing and continuous factory production control and bears the CE marking.

## Properties and added value

- Quick setting
- Conditionally walkable after 12 hours
- Subsequent work is possible after 24 hours
- Low weight
- Basic floor equalization on a separating layer from 30 to 150 mm in one layer
- Basic floor equalization as a bonded layer from 10 to 150 mm in one layer
- Easy to work
- Robust and stable
- Non-combustible
- Complies with the demands acc.to the AgBB scheme (2018); HBCD free

## Quick-drying cementitious light levelling mortar under screed

### Field of application

S 400 Sprint is used as a light levelling mortar in interiors under screed acc. to DIN 18560-2, to level unevenness and sloping of the basic floor and for filling out hollow spaces with cables, installation conduits and other pipes on the basic floor.

Due to its high stability, S 400 Sprint can also be used under Knauf thin-layer heating floor screeds (see system data sheet [Knauf Thin-Layer Heating Floor Screed Systems FE22.de](#)) and under Knauf Brio Pre-fab Floor Screed.

Direct application of a floor covering on S 400 Sprint is not possible. Furthermore, walls, including drywall partitions, cannot be installed directly on top of S 400 Sprint.

### Application

#### Substrate

The substrate must be stable, clean and the surface must be dry.

S 400 Sprint is suitable for all common ceiling systems. Any necessary moisture barrier, e.g. Katja Sprint sealing membrane, can be situated underneath (including separating layer) or on top of S 400 Sprint.

Ensure that there is a fully stable, load-bearing substrate made of planks or wooden composite boards with wood joist ceilings. Application over dead floor and levelling with S 400 Sprint only if sufficient load bearing capacity of the dead floor is assured.

On reinforced concrete coverings, lay a 0.2 mm thick PE foil (as protection against any possible rising residual moisture) overlapped by at least 20 cm and apply up to the construction height on the walls.

Irrespective of the constructions mentioned previously, walls sensitive to moisture (e.g. drywall partitions) must be protected from S 400 Sprint by edge insulation strips, foil strips or similar. Installations enclosed in S 400 Sprint must be protected against corrosion.

#### Application

**Note** Use clean mixing tools.

S 400 Sprint can be applied directly on the raw floor (from 10 mm) or on a separating layer (from 30 mm).

#### Manual application

S 400 Sprint is mixed in a tub using an agitator.

#### Machine application

S 400 Sprint is mixed and pumped with a compressed air conveyor. Add 5 to 6 l of clean water with a 60 liter bag of S 400 Sprint and mix until all the material is included in the mix.

Only mix as much material as you can apply within the application time. If you determine a reduction in the working time of the material after mixing several batches, wash the tools occasionally with water. Do not add additional water.

The mortar is to be spread uniformly in a semi-dry consistence on the substrate so that walking on the mortar when levelling is unnecessary. The mortar is levelled using a levelling rod or similar tool.

In case of special demands on the surface evenness or strength (e.g. subsequent laying of the pre-fab screed), after levelling the mortar, compress and compact by light impacts applied using a float. Compress the mortar occasionally in case of large heights (from approx. 10 cm) or thick mortar layers. For layer thicknesses exceeding 15 cm apply several layers, but wait for at least 24 h between each application.

### Application temperature / climate

Do not apply below +5 °C and above +30 °C. Lower temperatures delay setting and higher temperatures speed it up.

### Application time

The application time of S 400 Sprint at 20 °C is approx. 60 min. At higher temperatures the application time is reduced.

### Drying

S 400 Sprint is conditionally walkable after setting and can be prepared for the following screed application. The subsequent screed is applied to a separating layer or insulating layer (mastix asphalt screed only on an insulation layer).

Further floor construction can be applied as soon as the residual moisture level is  $\leq 10$  CM %. The samples are taken across the entire cross-section, e.g. by drilling a small diameter tube (diameter 50 mm) into the floor and removing the S 400 Sprint core. When professionally applied the S 400 Sprint is sufficiently dry after 24 h.

Avoid rapid drying within the first 12 h for layer thicknesses under 15 mm (no draughts, when necessary, cover with foil).

**Technical data**

Description	Standard	Unit	S 400 Sprint
Reaction to fire	DIN 4102	Class	A2
Layer thickness on a separating layer	–	mm	30 – 150
Bonded layer thickness	–	mm	10 – 150
Density, drying	–	kg/m <sup>3</sup>	approx. 400
Weight per unit area	–	kg/m <sup>2</sup> per cm height	approx. 4
Compressive stress with 10 % compression	–	N/mm <sup>2</sup>	≥ 0.5
Thermal conductivity $\lambda_{10, dry, 90/90}$	–	W/m-K	approx. 0.1014
Water vapour diffusion resistance $\mu$	–	–	approx. 5

**Material requirement and efficiency**

Material	Consumption for 1 cm per m <sup>2</sup> levelled
S 400 Sprint	approx. 10 l

**Product range**

Description	Application	Packaging unit	Material number	EAN
S 400 Sprint	60 l/bag	20 bags / pallet	00691357	4003982533708

**Sustainability and environment**

Short description	Value
Requirements of the German AgBB-scheme (2018), HBCD free	fulfilled



**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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