

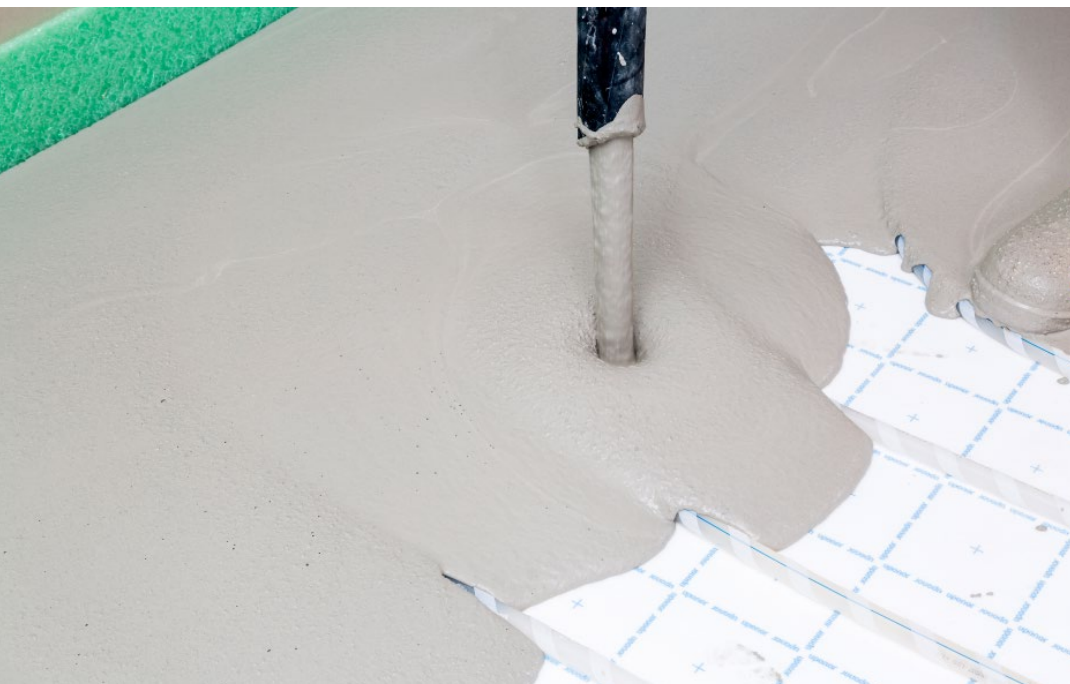
Note on English translation / Hinweise zur englischen Fassung

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



Floor Systems

F321.de

Product Data Sheet

2022-05



FE 25 A tempo

Fast setting calcium sulphate floor screed CAF-C30-F6

Product description

The FE 25 A tempo flowing screed is a factory-mixed dry mortar on a calcium sulphate basis intended for mixing with water. It consists of special gypsum, superplasticizing admixtures and aggregates (0 to 4 mm).

Quality classification acc. to EN 13813

CA-C30-F6

Storage

Dry mortar up to 6 months

Quality

In compliance with EN 13813, the product is subject to initial type testing and continuous factory production control and bears the CE marking.

Properties and added value

- Ideal for underfloor heating, short drying time
- Very low emission, EMICODE EC 1^{PLUS}
See www.emicode.com/en
- High thermal conductivity
- High application performance
- Self-levelling
- Very low shrinkage and stresses
- Very quickly load capable
- No sinter layer
- Even surfaces with minimum joint requirement
- Controlled, constant quality



Field of application

FE 25 A tempo and its quick availability for floor covering is the ideal screed for construction sites with tight deadlines and for floors with enhanced tensile strength requirements, e.g. for schools and commercial applications.

FE 25 A tempo is used in interiors as

- Floating screed, nominal thickness ≥ 35 mm
- Heating screed, nominal thickness ≥ 35 mm above the heating elements
- Screed on a separating layer, nominal thickness ≥ 30 mm
- Bonded screed, nominal thickness ≥ 25 mm
- Screed as hollow floor, nominal thickness ≥ 30 mm.

Application

Mixing

For 40 kg of dry mortar (1 bag) approx. 7 l of clean water is required.

Mixing by machine

FE 25 A tempo floor screed is mixed with clean water in mixing pumps (e.g. PFT FERRO 100, PFT G4 or similar) and pumped onto the prepared surface.

Application

Recommended spread $\varnothing 45$ cm, determined using a consistence checking tin 1.3 l on an even, non-absorbent surface.

No water should separate from the screed while spreading!

FE 25 A tempo levels to a horizontal flat surface when pitched with a screed brush or a dappling bar.

Note	The introduced mortar must be levelled within approx. 10 minutes.
-------------	---

Cleaning

In case of machine application, the machine and hoses must be cleaned within 30 minutes at the latest after machine standstill.

Movement joints

FE 25 A tempo floor screed expands slightly during hardening. Separate all adjacent vertical components from the screed using at least 8 mm thick edge insulation strips. Provide movement joints in door openings and if the diagonal length of the area is over ≥ 10 m.

Structural joints must be implemented at the same position across the full width in the screed.

Press joints (construction joints) are permitted depending on the work progress, machine performance and building size. Further requirements and specifications (e.g. for heated screed) for joints are available in the IGE Code of Practice "Fugen in Calciumsulfat-Fließestrichen" (Joints in flowing calcium sulphate screeds).

Drying – Application of covering

Prior to further floor covering being applied the screed must dry sufficiently (ready for coverage). The prerequisite for the readiness to receive a coverage for the FE 25 A tempo are the following moisture levels.

Covering	Vapour proof coverings (elastic floor coverings) as well as parquet	Vapour retardant coverings (tiles, natural stone) as well as vapour permeable floor coverings (textile, etc.)
FE 25 A tempo unheated	≤ 0.5 CM-%	≤ 1.0 CM-%
FE 25 A tempo heated (heated screed)	≤ 0.5 CM-%	≤ 0.5 CM-%

Observe the following with drying:

- After the screed application process has been completed and the screed can be walked on (after about 3 hours) the windows and doors must be opened.
- Windows that are tilted open or surge ventilation in the mornings and evenings are insufficient for quick drying as the air exchange rate is too low. Protect the interior area from frost and rain. The drying time for screed thickness of 35 mm (unheated) is approx. 2 to 4 weeks depending on the drying conditions.

As a heated screed, FE 25 A tempo should be heated until dry before the floor covering is laid.

Heating up immediately after application

After the screed application process has been completed and the screed can be walked on after about 3 hours, windows and doors must be opened for ventilation purposes and the heating must be operated with a flow temperature of max. 55 °C.

Drying time with screed thickness

35 mm (type B) about 5 days

55 mm (type A) about 10 days

At screed thicknesses ≥ 60 mm the heating period must be increased

Heat up of the hardened screed

If the screed cannot be dry heated immediately after application, start with 25 °C, hold this temperature for 1 day, then operate at the highest flow temperature (max. 55 °C).

Keep maximum heating temperature without lowering overnight until the screed is ready for covering.

Please request the detailed heating up regulations with heating up report, refer to the technical information [Knauf floor screeds on electrical underfloor heating Bo17.de](#) and technical information [Knauf Floor screeds on warm water underfloor heating Bo18.de](#).

Note	The drying time is, in addition to the screed thickness, mainly dependent on: Temperature, air humidity and air speed. Permanent ventilation is necessary for rapid drying. Additional heating (no gas burners permitted) accelerates the drying process.
-------------	---

Note	After coordination of trades with area heating and area cooling systems of the BVF, the measurement points for CM measurement must be arranged.
-------------	---

Note	For further information on planning and design of Knauf floor systems with Knauf flowing screed, see technical brochure Knauf Floor Systems F20.de .
-------------	--

Heating protocol for coverage ready heating

Investor:

Building site:

Heating engineer:

Site manager:

Every change in the flow temperature (warm water heating) or floor thermostat setting (electrical heating) during heat up and cooling must be documented exactly to 5 °C. Every drying test should be documented.

Heating system:

Screed applied on:

Average screed thickness: mm

Coverage of heating element:

min.: mm max: mm

Heat up (coverage ready heating)

Date	Flow temperature / floor thermostat setting in °C	Signature

- Ventilation
- Window ventilation

Date from	Date to	Ø h per day

Preliminary drying test
(e.g. foil test ¹⁾)

Date	Dry yes/no	Signature

Drying test
(CCM measurement)

Date	Residual moisture in %	Signature

Reduction of the flow temperature

Date	Flow temperature / floor thermostat setting in °C	Signature

Coverage ready heating completed

Date	Outdoor temperature in °C	Signature

Place / Date

Signature (Site manager)

Please keep this document!

1) Does not replace CM measurement before laying floor covering.

Technical data

Designation	Standards	Unit	FE 25 A tempo
Compressive strength (dry)	EN 13813	N/mm ²	> 30
Flexural strength (dry)	EN 13813	N/mm ²	> 6
Modulus of elasticity	–	N/mm ²	approx. 17000
Building material class	EN 13813	–	A1fl - non-combustible
Density, drying	–	kg/l	approx. 1.9
Density, wet	–	kg/l	approx. 2.1
Bulk density of dry material, bulk	–	kg/l	1.5
Application time	–	min	approx. 40
Walkable	–	h	after approx. 3
Can be loaded	–	h	after approx. 8
Free expansion when setting	–	mm/m	approx. 0.5
Thermal expansion coefficient	–	mm/(m·K)	approx. 0.011
Thermal conductivity λ_2	–	W/(m·K)	approx. 1.4
Yield from 100 kg dry mortar	–	l	approx. 54
Reaction of mortar	EN 13454	–	alkaline

The stated technical data were evaluated acc. to the respective test standards. Deviations under site conditions are possible.

Material requirement and efficiency

Material requirement	Consumption approx.
Per 1 cm screed thickness	19 kg/m ²

Product range

Designation	Application	Packaging unit	Material number	EAN
FE 25 A tempo	Bulk	–	00005527	4003982155870
	40 kg	30 bags / pallet	00005349	4003982000330

Sustainability and environment

Short description	Unit	Value
Requirements of the German AgBB-scheme	–	fulfilled
Complies with the requirements of the French emission class	–	A+
Certificates	–	Emicode EC 1 ^{PLUS}



Observe safety data sheet!

For safety data sheets and CE marking see pd.knauf.de



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

www.youtube.com/knauf



The Knauf Infothek App now provides all the current information and documents from Knauf Gips KG at any time and in every location in a clear and comfortable way.

[Knauf Infothek](#)

Knauf Direct

Technical Advisory Service:

▶ knauf-direkt@knauf.com

▶ www.knauf.de

Knauf Gips KG Am Bahnhof 7, 97346 Iphofen, Germany

All technical changes reserved. Only the current printed instructions are valid. The stated information represents current state-of-the-art Knauf technology. The entire state of approved engineering rules, appropriate standards, guidelines, and rules of craftsmanship are not included herewith. These and all application instructions have to be adhered to separately by the installer. Our warranty is expressly limited to our products in flawless condition. All application quantities and delivery amounts are based on empirical data that are not easily transferable to other deviating areas.

All rights reserved. All amendments, reprints and photocopies, including those of excerpts, require our expressed permission.