

## Knauf Tribon® Thin

Technical Data Sheet 12/2023



## Knauf Tribon® Thin

Calcium sulphate based thin floor screed

### Product Description

Knauf Tribon® Thin is hand and machine applied self levelling floor screed for general purpose in indoor areas at thicknesses from 1 to 10 mm.

### Storage

Bags should be kept in a dry environment in their original packages on pallets horizontally. Pallets should be prevented from direct contact with water and should not be exposed to direct sunlight. Seal damaged and opened bags should not be used. The product can be stored for 6 months.

### Standard

TS EN 13813 CA-C20-F5

### Fields of Application

- The product is applied on the floor in interior areas, on floors where minimum thickness is desired, floors where a heating floor system is available. As a composite leveller, on concrete slabs, calcium sulphate and cementitious screeds.
- The product can be used in indoor areas like domestic bathrooms, kitchens and cellar with normal humidity levels. If water is expected on the floor such as showers, bathrooms etc., water insulation shall be applied on the screed.
- Not suitable for application in areas such as saunas, Turkish baths, indoor swimming pools etc.

### Application Thicknesses

- As self levelling screed on substrate with 1-10 mm thickness
- As self levelling screed under parquet with at least 3 mm thickness

### Properties

- High thermal conductivity
- Hand and machine application
- Self levelling
- Dimensional stability
- High strength
- Smooth surface
- Application such as ceramic tiles, laminate wooden floors, PVC without further treatment

## Application

### Preparation of the Substrate

The condition of the substrate is crucial in terms of screed bonding and strength. Therefore, the surface has to be strictly controlled. The substrate must be free of dirt, dust, paint, oil, bitumen, old adhesive residues, soft or sticky layers of old coverings etc. which may affect bonding before priming. Protect the applied product from direct sunlight, airflow, frost, rain.

The temperature of both substrate and the surrounds while the construction works are carried out should be amongst +5°C and 35°C. In case of cracks in the surface subject to application, the surface shall be repaired by using special repairing screed.

It is recommended to use edge strips (Knauf Randdämmstreifen FE) in screed applications. This polyethylene insulation tape prevents any leakage of the screed from the application area and absorbs expansions in the floor.

Edge strip (Knauf Randdämmstreifen FE) shall be applied and fixed around the location and the building's supporting elements (walls, columns etc.) which shall reduce impact noise and determine the screed limit.

### Preparation of Mortar

After preparing the surface area and preparing the mixture as required and calculation of thickness the screed may be applied both manually or mechanically. If necessary, the area shall be divided into sections.

In case of manual preparation, for 1-5 mm thickness screed; 1 bag of Tribon Thin shall be mixed with 7,8 L; for 5-10 mm thickness 6,9 L of clean water shall be mixed with the aid of a mechanical mixer for at least 2 minutes until a homogenous mixture is achieved. Do not add any foreign materials into the prepared mortar. Screed can be applied directly on the floor manually or it can be applied with PFT machines PFT G4 or PFT Ritmo L. To determine the appropriate slump; fill the slump funnel with screed which is ready for use (1,3 lt capacity). Lift the funnel and let the screed flow. The formulated diameter shall be  $\geq 56$  for 1-5 mm thickness,  $\geq 53$  cm for 5-10 mm thickness. If the thickness of the screed is less than 5 mm, it is recommended to use PFT® Rotomix Disc or PFT® Static Remixer for a homogeneous and consistent application.

The aforementioned test shall be conducted in at least 2 minutes after the dry material has been mixed with water. All tools and machines shall be cleaned before starting to work. During preparation and pouring of the mixture, the water shall not rise upwards and the filling shall not sink down. This situation may appear due to improper storage conditions (humid environment, damaged packing, storage period exceeding 6 months) or incorrect mixture rate.

### Application

Knauf Estrichgrund prime shall be diluted with water at a rate of 1:1 and shall be applied as one or two layers depending on the suction of the substrate. The prime shall be applied evenly onto the surface with a rolling brush or paint brush. The prime shall be rested for drying before starting application on the surface (minimum 12 hours). The period between the complete drying of the primer and starting of further works shall be as short as possible in order to prevent any occurrence of construction dust on the floor surface.

The screed line is determined by a water gauge or laser. The screed shall be applied until achieving the specified level on the floor.

After the application, the thickness of the screed is controlled with a steel trowel and to release the retained air in the screed spiked roller should be used. During and after pouring process, avoid any ventilation and direct sunlight in the environment so that the mixture can bond evenly and hardens in the first day. If this rule is not followed, micro cracks may occur on the screed surface.

The drying period depends on the thickness of the screed, ambient temperature and humidity level of the location. As of the second day of the application, it shall be ensured that the location shall be properly ventilated in order to reduce the drying period of the screed. The drying period may vary depending on

the screed thickness and drying conditions. It is recommended that the screed shall be poured at the first stage of finishing processes or during the general construction works. During or after gypsum board applications, no screed shall be poured because the high humidity level in the air may damage such materials. Gypsum board and plaster applications may be done when the humidity level in the place is maximum 60%. The residual moisture rate shall be specified with a humidity meter by an expert using appropriate control methods.

### Application Tools

Mechanical mixer, PFT® G4 or PFT® Ritmo L, PFT® 1,3 L Slump Cone

### Application Temperature

Do not apply material at air and/or substrate temperatures below +5°C and above +35°C.

### Safety Instructions

- Wash hands with plenty of water after handling.
- Use protective gloves / protective clothing / eye protection / face protection.
- In case of contact with eyes: Rinse your eyes cautiously with water for several minutes. If there is a lens remove it and continue to rinse.
- If eye irritation persists: Get medical advice / attention.

### Residual Moisture Rates Depending on Substrate

Substrate	Without Heated Floor	With Heated Floor
Cementitious substrate by weight	2.0 CM %	1.8 CM %
Calcium sulphate substrate by weight	0.5 CM %	0.5 CM %

The maximum permissible moisture content of the substrate should not be exceeded.

### Residual Moisture Rates Depending on Coverings

Covering	Screed Without Heating Floor	Screed With Heating Floor
Vapor permeable coatings (carpets etc.)	≤ 1.0 %	≤ 0.5 %
Vapor retardant coverings (ceramic etc.)	≤ 1.0 %	
Vapor-proof coverings (PVC, wooden parquets etc.)	≤ 0.5 %	

The maximum permissible moisture content of the substrate should not be exceeded.

### Technical Properties

Description	Unit	Value
Applicable thickness	mm	1 - 10
Density (dry screed)	kg/m <sup>3</sup>	1700 - 1950
Water ratio	L / bag	7,8 (for 1-5 mm thickness) 6,9 (for 5-10 mm thickness)
Reaction to fire	-	A1
Screed application duration	minutes	20
Compressive strength	MPa	≥ 20
Flexural strength	MPa	≥ 5
Walkable in	hour	> 2 *
Load receivable in	hour	> 24
Ready for floor covering tiles	day	up to 2 mm layer thickness: 1 up to 10 mm layer thickness: 5
Ready for vapour-tight coverings	day	up to 2 mm layer thickness: 2 up to 10 mm layer thickness: 8
Application temperature	°C	5 - 35

\* This period may differ depending on the application area width, substrate structure, application thickness and ambient temperature.

### Material Consumption

Product	Unit	Consumption (kg/m <sup>2</sup> )
Knauf Tribon® Thin (for 10 mm)	kg	16

### Packaging

Product	Weight (kg)	Packaging (pcs/pallet)	Material Number
Knauf Tribon® Thin	30	48	686569

### System Performance Values

Please check for detailed information;  
[Knauf Technical Website](#)  
[Document Center](#)

### Application

It is suggested to follow the technical details which given on Knauf system brochures for application.

▶ 444 YAPI - 9274

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