

# UQESH® TF Elastic Anti Crack Polyurethane Mortar Self-Leveling System 2mm



UQESH®



## 01 Description

UQESH® TF is an elastic polyurethane self-leveling system applicable to various sub-  
strates and suitable for dry environments. It consists of primer layer, intermediate layer  
and optional topcoat layer. It delivers a seamless, smooth, protective floor finish  
featuring excellent resilience, elasticity and superior crack-resistance. The system offers  
comfortable foot feel and outstanding impact sound insulation, and suits environments  
demanding aesthetic appeal, acoustic performance and resistance to substrate-induced  
movement.

## 02 Uses

- ☒ Libraries, schools, kindergartens, and exhibition halls
- ☒ Pharmaceutical factories and hospitals with noise reduction requirements
- ☒ Warehouses and packaging facilities
- ☒ Other commercial and industrial environments requiring walking comfort, acoustic performance, and crack resistance

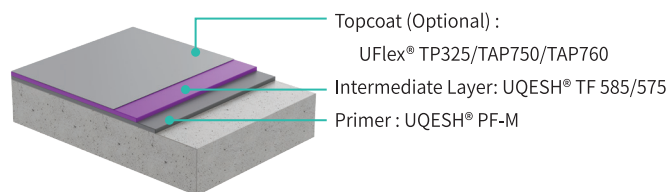


## 03 Product Characteristics

- Odorless
- Excellent crack resistance
- Chemically resistant
- Resilient and elastic, providing comfortable footfall
- Outstanding impact sound insulation
- Suitable for environments ranging from -10°C to 50°C and for short-term high-temperature steam flushing

## 04 System Composition Thickness:2 mm

| System component   | Product                        | Recommended dosage (kg/m <sup>2</sup> ) |
|--------------------|--------------------------------|-----------------------------------------|
| Primer             | UQESH® PF-M                    | 1.5                                     |
| Intermediate Layer | UQESH® TF 585/575              | 1.5                                     |
| Topcoat (Optional) | UFlex® TP325 / TAP750 / TAP760 | 0.12                                    |



Schematic diagram

- UFlex® TP325 / TAP750 / TAP760 provides UV protection and enhanced slip resistance, enabling the system to achieve an R9-R10 slip resistance rating.

### Product Specifications

The product is supplied in full units as A+B+C+D / A+B+D packs.

| Product | Total weight per set (kg/set) | Part A (kg/bag) | Part B (kg/bag) | Part C (kg/bag) | Part D (kg/bag) | Suggested dosage (kg/m <sup>2</sup> /mm) |
|---------|-------------------------------|-----------------|-----------------|-----------------|-----------------|------------------------------------------|
| PF-M    | 16                            | 2.5             | 2.8             | 10.2            | 0.5             | 2kg/m <sup>2</sup> /mm                   |
| TF 585  | 16.75                         | 13.45           | 2.8             | /               | 0.5             | 1.2kg/m <sup>2</sup> /mm                 |
| TF 575  | 11.1                          | 9.0             | 1.6             | /               | 0.5             | 1.2kg/m <sup>2</sup> /mm                 |
| TAP 760 | 9.6                           | 0.37            | 1.8             | 5.5             | 0.5             | 0.08-0.12kg/m <sup>2</sup> /0.05-0.07mm  |
| TAP 750 | 8.5                           | 2               | 3               | 3               | 0.5             | 0.1-0.14kg/m <sup>2</sup> /0.06-0.08mm   |
| TP 325  | 8.5                           | 2               | 3               | 3               | 0.5             | 0.1-0.14kg/m <sup>2</sup> /0.06-0.08mm   |

## System Technical Parameters

| Item                                 | Technical index                                                                                   | Reference standard |
|--------------------------------------|---------------------------------------------------------------------------------------------------|--------------------|
| 7d Compressive strength / MPa        | ≥ 40                                                                                              | ISO 679-2009       |
| 7d Flexural strength / MPa           | ≥ 10                                                                                              | ISO 679-2009       |
| 7d Tensile bond strength / MPa       | ≥ 2.0                                                                                             | ISO 4624-2016      |
| Shore hardness (Type A)              | ≥ 85A                                                                                             | ISO 868:2003       |
| Dry coefficient of friction          | ≥ 0.5                                                                                             | ASTM C 1028 07     |
| Anti-slip grade                      | R9-R10 (with topcoat)                                                                             | DIN 51130          |
| Volatile organic compounds (VOC) g/L | ≤ 60                                                                                              | ISO 4624-2016      |
| Chemical resistance                  | Resistant to a variety of chemicals. For specific resistance, consult UQESH Technical Department. | /                  |
| Fire resistance                      | Bfl-S1                                                                                            | EN 13501-1         |

\* Above parameters apply exclusively to TF 585 flooring system.

## Application Conditions

### Substrate Requirements

|                                         |             |
|-----------------------------------------|-------------|
| Substrate temperature range             | 10°C - 30°C |
| Substrate relative humidity (RH)        | ≤ 93%       |
| Ambient relative humidity range (RH)    | ≤ 80%       |
| Concrete substrate compressive strength | ≥ 25MPa     |
| Concrete tensile strength               | ≥ 1.5MPa    |

- ▶ Application is not recommended when the substrate surface temperature ranges from 5–10°C.
- ▶ Application is not recommended when ambient relative humidity exceeds 80%.

### Surface Preparation

- ▶ Surface preparation shall comply with the following: treat the surface with a concrete grinder or light shot blasting (Note: shot blasting may leave residual marks not fully covered by subsequent coatings). Completely remove all cementitious laitance to expose a sound substrate, ensuring the surface is dry, dust-free and properly textured.
- ▶ Use hand-held equipment for hard-to-reach areas (e.g., wall bases, corners). Repair damaged or uneven areas with **IF/PF** mortar (consult UQESH in advance for alternative materials) or conduct mechanical grinding to ensure a smooth, coating-suitable surface.
- ▶ Properly cut anchoring grooves in the application area; mandatory along all perimeter edges and around drains/outlets. (Refer to the System Installation Manual for detailed procedures.)

## Application Instructions

### Mixing

All pack components are pre-measured for optimum performance. Do not split packs. If proportioning is required, measure strictly by weight using calibrated digital scales.

| NO. | Step                  | Details                                                                                                                          |
|-----|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| ①   | Pre-Mix Main Agent    | Shake Part <b>A</b> to disperse sediment, then pour it into a mixing bucket.                                                     |
| ②   | Add Color Paste       | Add Part <b>D</b> into the mixing bucket.                                                                                        |
| ③   | Add Curing Agent      | Add Part <b>B</b> into the mixing bucket.                                                                                        |
| ④   | Mix Liquid Components | Mix quickly for <b>10 seconds</b> until the mixture is uniform.                                                                  |
| ⑤   | Add Aggregates        | With the mixer is running, add Part <b>C</b> and continue mixing for <b>30 seconds</b> until the slurry is smooth and lump-free. |
| ⑥   | Mixing Time           | Complete mixing in <b>40–90 seconds</b> . The mixture must be used immediately.                                                  |
| ⑦   | Spreading             | Pour the mixture immediately and spread using a <b>2–3mm</b> serrated trowel/flat trowel.                                        |

\*Adjust times based on temperature if needed.

## Pot Life

|      |               |
|------|---------------|
| 25°C | ≤10 minutes   |
| 15°C | 15-20 minutes |

## Application Method

Apply the mixed material evenly to the substrate using a pin rake / notched trowel / flat trowel. When applying the topcoat, back roll with a spike roller to aid flow and release entrapped air. Complete application within the pot life to ensure optimum bonding and surface finish. For detailed application procedures, refer to the system installation manual.

## Curing Times (at 25°C)

| Curing time | Opening for                         |
|-------------|-------------------------------------|
| 8 hours     | Foot traffic                        |
| 24 hours    | Light vehicular / equipment traffic |
| 48 hours    | Heavy traffic and chemical exposure |

\* Times are estimates and may vary depending on environmental and substrate conditions.

## Special Notes

- ▶ Final floor flatness is dependent on the condition and flatness of the existing substrate. Where specific flatness tolerances are required, a project-specific installation plan shall be prepared in advance.
- ▶ The polyurethane flooring system is not inherently prone to cracking, cracking may occur due to substrate movement, including thermal expansion and contraction.

## Transportation & Storage

- ▶ Store in original, unopened packaging in a dry, cool, and well-ventilated area at 5-35°C, away from heat sources and open flames.
- ▶ During transportation, ensure the materials are securely stacked and the vehicle is dry and enclosed. Protect from moisture, frost, freezing, direct sunlight, and rain. Components A and B must be protected from frost at all times.

## Shelf Life

(when stored in original, unopened packaging under recommended storage conditions)

| Product | Part A    | Part B    | Part C    | Part D    |
|---------|-----------|-----------|-----------|-----------|
| PF-M    | 18 months | 12 months | 12 months | 18 months |
| TF 585  | 12 months | 12 months | /         | 18 months |
| TF 575  | 12 months | 12 months | /         | 18 months |
| TAP 760 | 12 months | 12 months | 12 months | 18 months |
| TAP 750 | 18 months | 12 months | 12 months | 18 months |
| TP 325  | 12 months | 12 months | 12 months | 18 months |

Months refer to the period calculated from the date of manufacture.

## Environment, Health & Safety

- ▶ For detailed health and safety information relating to UQESH® TF Elastic Anti Crack Polyurethane Self-Leveling System, refer to the relevant Material Safety Data Sheet (MSDS).
- ▶ The following general precautions apply to all UQESH products:
  - During transportation, storage, and application, avoid contact with eyes, mouth, and foodstuffs.
  - In the event of eye contact, rinse immediately with plenty of clean water and seek medical attention.

## Statement

December 2025

UQESH® hereby declares that it is confident that the information involved herein is true and accurate as of the date of publication. UQESH makes no express or implied warranties regarding the contents of this product manual. We reserve the right to revise this manual at any time without prior notice. Please contact UQESH® to obtain the latest version of this manual.

## Uqesh AB

Address: Sjöflygvägen 35A, 183 62 Täby

Tel. +46 (0) 858 08 08 08

E-mail : info@uqesh.com

Hemsidan: www.uqesh.com

SN:YKX-XT-DM-2609005