

FAM™ FU 633

Furan Anti-Acid Mortar



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

The CTech-LLC[®] furan anti-acid mortar (FAM™ FU 633) is a two-component (solution and powder) bonding material known for its exceptional chemical resistance. FAM™ FU 633 furan anti-acid mortar and grout is an essential component in the construction industry for applications in environments that demand chemical resistance and durability.

TECHNICAL DATA

	Unit	FAM™ FU 633
Appearance / Colors	-	Part A: black solution Part B: white (gray) powder
Chemical Base	-	Furan Resin
Density (DIN En ISO 1183-1)	g/cm ³	~2
Compressive Strength (ASTM C579)	MPa	95-100
Flexural Strength (ASTM C580)	MPa	40
Bond Strength to Substrate (DIN En ISO 4624)	MPa	2.5
Tensile Strength (ASTM 307)	MPa	15
Abrasion Resistance (DIN 52108)	cm ³ /50 cm ²	12
Thermal Conductivity (DIN En ISO 22007-2)	W/m.K	1.35
Mixing Ratio (Parts A:B:) by Weight	-	1:5
Substrate Temperature	°C	Minimum: +10 Maximum: +30
Maximum Service Temperature	°C	185
Pot Life	min	~ 10-20 @ +20°C
Curing	days	Approx. 7

ADVANTAGES

- Wide range chemical resistance: Resists acids, alkalis, and most solvents
- High-temperature tolerance (max 185°C)
- Low odor furfuryl alcohol polymer: Ensures a user-friendly application experience

- Provides a dense, hard, mortar joint with excellent bond to ceramic tiles, bricks or carbon bricks surfaces
- Suitable for hollow-joint and full-joint tiles/bricks lining
- Electrically conductive material

TYPICAL USES

FAM™ FU 633 furan resin mortar offers a range of high-performance acid-resistant mortars designed to provide superior chemical resistance and durability in harsh industrial environments.

- Chemical Processing: Used in the construction of floors, sumps, trenches, tanks, vessels, and bleach towers.
- Food & Beverage Plants: Ideal for environments requiring resistance to acids, alkalis, and solvents.
- Dairies: Provides durability and protection against corrosive substances.
- Laboratories: Well-suited for settings where chemical resistance is crucial.
- Textile, Steel, and Pulp & Paper Mills: Offers reliable protection against a wide range of chemicals.

INSTALLATION PROCEDURE

PREPARATION OF SUBSTRATE

All surfaces in contact with FAM™ FU 633 furan anti-acid mortar should be clean, dry, and free of dust, dirt, grease, oil, and other contaminants. Surface prep should be in accordance with membrane requirements. Steel surfaces must be blasted to "Near White Metal Blast

Cleaning". The concrete surface shall be slightly rough in line & level.

MIXING

In order to obtain good working consistency, the average mixing ratio is 1 PBW of solution & 5 PBW of powder. Prepare small batches of Mortar. Stir the Solution thoroughly before use. Place the Solution in a suitable mixing pan and add powder in it. Mix thoroughly with a spatula or Trowel. The mixing operation shall be continued until a uniform mixture is obtained.

APPLICATION

- **Bed Joint:** Apply the mortar with a 3/16" V-notched trowel held at a 45 degree angle. Place a sufficient amount of mortar to provide a continuous bond coat to the desired thickness.
- **BRICK JOINTS:** Install the mortar using conventional bricklaying techniques. Apply the mortar to two sides of the brick forming a "V" profile. Place the brick on the setting bed and slide it into place to attain a 3.2 mm wide joint. Strike excess mortar before the mortar begins to set.

CONSUMPTION

Material quantities below are theoretical. Actual usage rate will vary dependent upon scope of installation, experience of workmen, field conditions and other contingencies. Personnel using the blow chart should, therefore, add an appropriate wastage factor.

Joint dimensions

Bed Joint Thickness	5 mm
Joint Width	7 mm
Joints Depth	min. 10mm

Mortar requirement per m² (approx.)

Tiles 240 x 115 x 20 mm	11.7 kg
Tiles 240 x 115 x 40 mm	15 kg
Bricks 240 x 115 x 65 mm	19.2 kg
Bricks 240 x 115 x 80 mm	21.6 kg

STORAGE & SHELF LIFE

- Furan Solution: 24 Months at the temperature 30°C
- Furan Powder: 24 Months at the temperature 30°C
- All two components are stored in cool and dry place under the roof until ready to use it original unopened (Sealed) containers.

PACKAGING

- Hobbock: 20kg
- Bag: 4*25kg

CAUTION

All components of anti-acid mortar systems may cause skin irritation

and sensitization. Use of chemical resistant gloves is recommended. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Resins products can cause strong eye irritation. Avoiding eye contact and Using safety goggles is necessary.