

PRODUCT DESCRIPTION

The two-component (solution and powder) furan anti acid mortar (FAM™) is renowned for its remarkable chemical resistance. In the construction industry, FAM™ furan anti-acid mortar is a crucial component for applications where durability and chemical resistance are required.

PRODUCT FEATURES

- Broad range of chemical resistance: Able to withstand most solvents, acids, and alkalis
- High temperatures tolerance: Able to tolerate temperatures as high as 180°C
- Minimal odor alcohol furfuryl polymer guarantees an application experience that is easy to use.
- Outstanding adherence to carbon bricks, ceramic tiles, or bricks
- Suitable for both full-joint and hollow-joint tile/brick installations.
- Conducting electricity

PRODUCT USES

FAM™ furan resin mortar is intended for use as a tile and brick lining for areas and components in environments that require durability and chemical resistance. Because of its special qualities, it can be used in a variety of industries and offers protection against physical wear and corrosive compounds.

- Chemical Processing: Used in the construction of bleach towers, tanks, vessels, trenches, sumps, and floors
- Food and beverage plants: ideal for environments that need to be resistant to solvents, acids, and alkalis
- Dairies: Offers durability and protection against corrosive agents
- Labs: Ideal for environments where resistance to chemicals is essential
- Textile, Steel, and Pulp & Paper Mills: Provide reliable protection against a variety of chemicals

HOW TO USE

SURFACE PREPARATION

- **Concrete:** appropriate action must be taken to prepare concrete surfaces. The plastered surface shall be slightly rough in line & level, dry & clean, free from dust, dirt, grease, oil etc., maintaining required slope etc. as no slope can be adjusted or altered in acid proof lining works.
- **Carbon Steel:** all contaminates such as those which are not visible but detectable, have to be removed. Ferrite steel surfaces must be blasted to "Near White Metal".

MIXING

To achieve optimal working consistency, the recommended average mixing ratio is 1 part by weight (PBW) of solution to 5 PBW of powder. It is advisable to prepare small batches of mortar. Prior to use, ensure that the solution is stirred thoroughly. Place the solution in an appropriate mixing pan and incorporate the powder. Mix the components thoroughly using a spatula or trowel. The mixing process should continue until a homogeneous mixture is achieved.



Furan Anti-Acid Mortar - FAM™

TECHNICAL DATA

Appearance / Colors	Part A: black solution Part B: white (gray) powder
Chemical Base	Furan Resin
Density (DIN En ISO 1183-1)	~2 g/cm ³
Flexural Strength (ASTM C580)	30 MPa
Compressive Strength (ASTM C579)	95 MPa
Tensile Strength (ASTM 307)	14 MPa
Abrasion Resistance (DIN 52108)	10 cm ³ /50 cm ²
Adhesion Strength to Ceramic Bricks (DIN En ISO 4624)	2.5 MPa
Thermal Conductivity (DIN En ISO 22007-2)	1.5 W/m.K
Mixing Ratio (Parts A:B:) by Weight	1:5
Substrate Temperature	Minimum: +10 °C Maximum: +30 °C
Pot Life	~ 30-50 min @ +20°C
Curing	Approx. 5 days

APPLICATION

- **Full-Joint Installation:** Apply the mortar to the two side edges of the tiles/bricks for full-joint installation. Then place the tile/brick in position. Remove the mortar bead with the towel and smooth out the joint.
- **Hollow-Joint Installation:** For a hollow-joint installation the butt joint shall remain free and be filled later. When FAM™ furan anti-acid mortar is being used for hollow-joint installation of tiles, the bedding joint must be cured and dry again.

CONSUMPTION

Required mortar for full length installation (Bed joint 5 mm, Joint width 7mm)

MATERIAL CONSUMPTION- FAM™		
Material	Size (mm)	Coverage (kg/m ²)
Bricks	240*115*80	Approx. 24.7
Bricks	240*115*65	Approx. 21.85
Tiles	240*115*40	Approx. 18.05
Tiles	240*115*20	Approx. 14.25
Bed Joint	4 – 7 mm	
Joint Width	5 – 8 mm	

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.

PACKAGING

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

STORAGE

- 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.

HANDLING

Approved personal protection equipment should be worn at all times. Particle mask is recommended for possible airborne particles. Gloves are recommended when handling mortars to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing / gloves / goggles. Ventilate area. In absence of adequate ventilation, use properly fitted respirator.

CLEANUP

Dispose of material in accordance with local disposal regulations. Uncured material can be removed with approved solvents. Cured materials can only be removed mechanically.

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the date of purchase. AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.