



Flowtex F1 Mortar

A three component, solvent free, high strength multipurpose epoxy resin-based mortar.

Uses

Commonly used as a subfloor for resinous toppings where a high strength thin section screed is required. Can be laid to falls and feathered down to a minimum thickness of 1mm, maximum thickness of 50mm (in one application).

Environment & Health

Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety datasheets for the individual components.



Low Odour

Low odour and low taint.



Resistant

Durable, high strength abrasion and impact resistance.



Application Method

Easy to apply by steel trowel.



Bond Strength

Excellent bond strength.

Packaging

The product is supplied as:

Base A	Universal Resin Base A 708
Hardener B	Universal Hardener B (W)
Filler C	Graded Quartz Aggregates

Standard Coverage Rates

For Every 1mm of Thickness Required	1.8kg/m ²
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Curing Times (at 25 °C)

Max Overcoating	24 hours
Foot Traffic	18 hours
Vehicular Traffic	48 hours
Full Chemical Cure	7 days

*Full chemical resistance is achieved after 5-7 days.

Additional Information

Density	Approx 1.8kg/l (combined)
Compressive Strength	> 55 N/mm ²
Flexural Strength	> 20 N/mm ²
Tensile Strength	> 8 N/mm ²
Bond Strength	> than cohesive strength of concrete
Impact Resistance	Rated as excellent (0.9 kg steel sphere test).
Colour	Natural. Special colours can be produced.

Substrate Requirements

Concrete or screed substrate should be a minimum of 25 N/mm², free from laitance, dust and other contamination. Substrate should be dry to 75% RH as per ASTM F2170 (AS1884:2012). Slab on ground concrete must have an effective damp proof membrane in place. Must be free from rising damp.

All damaged areas of floor should be made good and up to level with Flowtex F1 Mortar applied over wet Flowprime.

All moving joints must be carried through the Flowtex F1 Mortar and properly sealed. Construction joints and cracks may be covered but if substrate movement occurs, the Flowtex F1 Mortar will reflect the crack.

Storage

Time	12 Months in Unopened Packs. If longer than 12 Months consult Flowcrete.
Temperature	Storage temperature between 5°C and 35°C.
Protection	Should be stored inside and protected from frost, weather, moisture, direct sunlight and contamination ingress.

Surface Preparation

Either by totally enclosed shot blasting, diamond grinding or scarification. Edges completed by vacuum controlled hand tools. All residues must be removed to provide a dry, dust free open textured surface.

Mixing

The product is supplied as follows:

Base A	Universal Resin Base A 708
Hardener B	Universal Hardener B (W)
Filler C	Graded Quartz Aggregates

Decant required amount of Base A. Add Hardener B to Base A container. Mix with a slow speed drill and helical spinner head until uniform. Take care not to entrain air. Transfer mix to forced action mixer and add Filler C. Mix for 90 seconds.

Solvent

Solvent should not be added to the Flowtex F1 Mortar.

Application Temperature

The recommended material and substrate temperature is 10 - 35°C, but no less than 10°C. The temperature of the substrate should exceed the "dew point" by 3°C during application and hardening.

Temperatures should not fall below 5°C in the 24hrs after application.

Application / Pot Life

Ready-mixed product should be used within 40 minutes at a temperature of 25°C. At higher temperatures (or if left in bucket) the application time is shorter.

Priming

Use Flowprime AU.

Application Method

Immediately after mixing, place on the wet/tacky or dry seeded primer and spread out to give a uniform finish. Use a steel bladed trowel to finish.

Sealing

If no further topping is to be applied, allow the F1 Mortar to cure overnight before sealing. Refer to Flowcrete Technical team for suitable sealing products.

Chemical Resistance

Consult Flowcrete for more detailed test data. Performance against more common chemicals :-

	Excellent	Good	Limited
ACIDS			
Citric 30%	✓		
Acetic 10%	✓		
Lactic 20%	✓		
Sulphuric 40%	✓		
Hydrochloric 20%	✓		
Nitric 25%			✓
Phosphoric 20%			✓
ALKALI			
Sodium Hydroxide 70%		✓	
Ammonia 10%		✓	
SOLVENTS			
Engine Oil	✓		
Hydraulic Oil	✓		
Petrol	✓		
Diesel	✓		
Kerosene	✓		
Methylated Spirits		✓	
Acetone			✓
Butanol			✓

Additional Notes

1. Maximum overcoat time is 24 hours at 25°C.
2. The product has reached full cure after 7 days at 25°C.
3. It is the applicators responsibility to verify accuracy of colour prior to application. Flowcrete does not bear any responsibility or accept claims for incorrect colour after application of material.
4. This system is not UV stable and will discolour unless otherwise stated.
5. Do not cover or wash within the first 36 hours of curing at 25°C.
6. This system should be installed at 3°C above the dew point.
7. Please ensure application temperature and RH limits are followed.
8. Wind or strong airflow may cause quick curing and drying of the system.
9. Ensure wind or strong airflow is eliminated during application, however adequate safety ventilation should still be followed.
10. Direct heat during application of the system can cause flash curing and potential delamination. Ensure you do not apply this system to substrates with temperatures exceeding 35°C.