

ATECH PLUS

Flooring Solutions

EPOFLOOR® SL

Multipurpose Broadcast Self Levelling Epoxy Resin

- 100% Solids
- Versatile - Sealer/Self level
- Quick Cure
- Gloss Satin Finish

Description

EPOFLOOR® SL is a 100% solids, multipurpose epoxy resin designed for the on site production of industrial grade epoxy toppings. It is used for all industrial flooring situations where a self leveling topping with an antislip finish is required and the service area is not regularly exposed to hot fats.

The resin is combined with SL quartz filler on site and spread with a trowel. The applied mix is then either broadcast with a – 1mm aggregate or is topcoated with an antislip surface finish. Applied to specification it typically produces a 4-5 mm hard wearing epoxy topping suited to use in the food and chemical industry.

Major Applications

- Dairies and dairy food processors.
- Bakeries & snack food producers.
- Abattoirs, butchers and small goods manufacturers
- Food preparation & service counters
- Hotel bars & commercial kitchens
- Canneries, soft drink & fruit juice processors
- Breweries and wineries
- Bunded areas containing dilute mineral acids
- Battery rooms & warehouses
- Industrial plants in the pharmaceutical and electronic industries
- Motor workshops and aircraft hangars

Application

The floor must be relatively even to prevent flow. The minimum coating thickness is 1 mm, with toppings of 4 -5 mm being the most common.

Two techniques are commonly used,

- 1) Broadcast Method – This technique produces a coarse non skid finish, suitable for areas that are to be cleaned with high pressure water.
- 2) SL Method – This technique produces relatively smooth antislip finishes, which can be swept, mopped or vacuumed

Guideline Specification

Broadcast Technique:	
Step 1	Mix 2 litre of resin and 1 litre of hardener with a power drill
Step 2	Add 4 kg of SL filler to the 3 litre of mixed resin and blend
Step 3	Spread mix over an area of 2– 2.5 sqm with a hand held trowel
Step 4	Cast a -1mm sand over the wet area to a dry beach finish
Step 5	Repeat steps 3 & 4 until the area is completely covered. Allow to cure
Step 6	Sweep or vacuum off excess sand not bonded to the surface
Step 7	Seal surface with EPOFLOOR® SL plus chosen colour pigment. Apply sealer at a rate of 2 – 3 sqm/litre. Allow to cure sufficiently to apply final coat of sealer.
Step 8	Apply a coat of EPOFLOOR® 120 at a coverage rate of 4-5 sqm/litre
Step 9	Sprinkle alumina aggregate into EPOFLOOR® 120 and backroll as desired.
Step 10	Allow to cure for a minimum of 8 hours before foot traffic.

Broadcast Technique:	
Step 1	Prime the prepared surface with EPOFLOOR® SL (3-4 sqm/litre)
Step 2	Allow the primer to cure sufficiently to be able to walk on it
Step 3	Prepare a mix containing 6-7 litres of EPOFLOOR® SL and 12 Kg of SL filler
Step 4	Spread the filled resin mix over an areas of not more than 5 sqm.
Step 5	Remove entrapped air bubbles by rolling with a porcupine roller.
Step 6	Repeat steps 4&5 until area is covered, allow to cure 18-24 hours
Step 7	Apply a coat of EPOFLOOR® 200 at a rate of 6-8 sqm/litre
Step 8	Allow to cure for a minimum of 12 hours before foot traffic.

Colour

All colour pigments are epoxy based. Whilst every effort is made to meet a customers colour requirement, the colour supplied does not purport to meet any recognized colour standard and it is the customers responsibility to ensure that the colour is suitable for the intended use. Within chemical environments, some colours may be adversely affected by chemical exposure, eg. Phosphoric acid and oxide based colours. Exposure to UV light will yellow high chemical resistant products. No guarantees as to colour stability can be given.

Surface Preparation

The existing surface needs to be free of fats, oils, curing agents, surface laitence and other recognisable contaminants. Shot blasting or diamond grinding are the preferred techniques. The finished prepared surface must have a tensile shear strength capable of absorbing the shear stresses applied by the epoxy topping as a result of thermal movement. The German standard (DIN 1048 part 2) measures this property and a result of minimum 2 MPa is expected from properly prepared surfaces. Poorer preparation may result in cohesive shear failure of the concrete substrate. The harder and thicker the topping the more important correct surface preparation becomes.

Physical Properties		
Viscosity	Resin	800
	Hardener	120
Surface quality		shiny
Mix ratio (by volume)		2:1
Specific Gravity	Resin	1.13
	Hardener	1.05
	Mix	1.10
Compressive Strength (6:1 mortar by wt)		55MPa
Chemical Resistance		good
Work time (mortar)		50min
Initial walk on time (Hours to 50 Shore D)	5°C	36
	15°C	10-12
	25°C	6
	35°C	3

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by ATECH either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not ATECH are responsible for carrying out procedures appropriate to a specific application.

Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at time of print. As the information herein is of a general nature, no assumption can be made as to the products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

Safety Precautions

Epoxy products may cause allergic reactions through skin contact, goggles, protective gloves and overalls must be worn. Ensure that there is adequate ventilation and avoid breathing the vapour.

Exclusion Clause

1. The information contained in this data sheet is based on many years experience and is correct to the best of our knowledge. ATECH will be under no liability whatsoever whether in:
 - a) Contract or tort (including, without limitation, negligence)
 - b) Breach of statute
 - c) Any other legal or equitable obligation other than the quality of the product at the time of despatch.
2. Any queries about specification use or application should be directed to our technical service department immediately.
3. This exclusion clause does not operate to exclude any warranty that by law may not be excluded.



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