

# Epoxy Plus

## Durable chemical resistant floor topping

### Flooring Easilay

hd. Epoxy Colour Screed

#### About this product

Epoxy Plus Flooring Easilay is a three component pack consisting of epoxy resin, hardener and specially selected graded aggregates. This has been formulated for the specific purpose of screeding floors to provide a chemically resistants, durable, heavy duty floor topping. The aggregate blends incorporate pigments to achieve the required colour. Properly laid, it will last at least 5 times as long as the best granolithic topping.

#### Uses

- Laying of large floor areas to give good wear resistance
- Ideal for floor repairs which are subject to heavy industrial use, when areas are subject to heavy impact use Epoxy Plus Concrete.
- Areas of use include engineering works, food processing plants, chemical plants, workshops, warehouse etc.

#### Features and benefits

- Specially formulated for better workability. Large areas can be laid in a day.
- Provides a lightly textured surface finish.
- Easy to maintain provides an easy to clean surface.
- Provides a surface resistant to many chemicals, water, oil and grease.
- Surface may be finished to provide hard wearing grip for both vehicular and pedestrian traffic.
- · Available in a range of colours.

#### Limitation of use

Epoxy Plus Flooring Easilay should not be applied less than 5mm thick or greater than 30mm thick.

Epoxy Plus Flooring Easilay should not be laid in areas where high ambient temperatures will be experienced.

Although ideal for use in normal UK ambient temperatures, softening of the surface may occur subject to temperatures in excess of  $40^{\circ}$ C. Therefore, the material should not be used in the following situations:

- Where there are heat sources such as furnaces and ovens.
- 2) Where steam cleaning or high pressure hot water is used for washing down the floor.
- 3) Where spillage of hot liquids may occur.
- 4) Where underfloor heating is present

#### Typical properties

Strength (BS6319)		10°C	22°C
Compressive	1 d	ay10N/mm²	50N/mm <sup>2</sup>
	2 days	30N/mm <sup>2</sup>	60N/mm <sup>2</sup>
	7 days	70N/mm <sup>2</sup>	70N/mm <sup>2</sup>
Tensile	7 d	ays	12N/mm²
Flexural	7 d	ays	30N/mm <sup>2</sup>
Flexural modulus: 1		(N/mm²	
Pot life: 5		ours at 10°C	
	1 h	nours at 20°C	

#### Chemical resistance

After 28 days immersion at 22 to	s following / day	ys cure.
Tartaric Acid	10%	Excellent
Citric Acid	10%	Excellent
Sodium Hydroxide (NaOH)	50%	Excellent
Sulphuric Acid	50%	Excellent
Engine Oil		Excellent
Hydrochloric Acid	20%	GoodNitric
Acid	5%	GoodLactic
Acid	5%	Good
Phosphoric Acid	50% Good	Sugar
Solution	50% Good	Petrol
	Good	
Lactic Acid	10% Poor	Nitric
Acid	10%	Poor
Skydrol		Poor
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After 20 days immersion at 22°C following 7 days our

#### Application

#### 1) Substrate preparation

Epoxy Plus Flooring Easilay can be applied to both new and existing concrete or cementitious toppings. New concrete should be at least 21 days old.

The substrate must have a minimum compressive strength of 25N/mm² and after preparation have a pull off strength of not less than 1.0N/mm². The moisture content must not exceed 6% when tested with a Protimeter or have a relative humidity at the slab surface above 75% when with a Hygrometer.

All oil and grease must be removed. Care must be taken to ensure oil and grease is removed and not simply spread over a large area.

A sound freshly exposed surface free of laitance, etc. should be obtained either by mechanical means such as grit blasting scabbling, bush hammering or by acid etching, in which case the surface must be thoroughly washed and dried.

The importance of thorough preparation to produce the clean freshly exposed surface cannot be over emphasised. Inadequate preparation is likely to lead to a failure of bond.

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#### 2) Priming

Prior to the application of Epoxy Plus Flooring Easilay, the substrate should be primed with Epoxy Plus Tack Coat and the topping laid onto the primer whilst it is still tacky.

Epoxy Plus Tack Coat is supplied as a two component pack comprising epoxy resin and hardener. The hardener is mixed into the resin and stirred vigorously with a flat bladed palette knife or flat stick until an even consistency and colour are achieved. The primer should be brushed well into the substrate at a uniform spreading rate so that a thin film primer is on all the surfaces.

#### 3) Mixing

Mechanical mixing of Epoxy Plus Flooring Easilay is essential especially when covering large areas of when doing large repairs. We can supply the following suitable mixers:

Mixal MR40

Creteangle S or L mixers

First blend the resin and hardener, mixing until an even colour and consistency is achieved. Then add the pigmented aggregates and continue mixing until the material is uniform and cohesive.

#### 4) Laying

Large areas should be divided into bays with timber form work accurately cut (or marked) to the required depth to ensure the topping is laid level and without excess thickness. The average recommended thickness for laying Epoxy Plus Flooring Easilay is 6mm. The minimum thickness should not be less than 5mm. The mixed material

placed on the primed surface whilst the primer is still tacky and raked out to the required depth, it should then be tamped with a wooden float to ensure proper consolidation. Finally, the surface can be trowelled with a steel float to bring to the surface enough resin binder on thoroughly seal the surface. Too much resin binder on the surface should be avoided; ideally, the surface should have aggregate just breaking the surface to provide a non-skid finish.

For maximum chemical resistance floors must be finished to a well closed smooth finish. Regular washing is essential to avoid chemical build-up.

N.B. The application of epoxy flooring is a skilled operation and we will be pleased to advise the names and addresses companies specialising in this work.

#### Pot life and curing time

Temperature will determine the pot life and cure time and the following tables are a guide only. N.B.

Do not mix or use below 10°C as the workability will be noticeably impaired.

Temperature	Epoxy Plus Tack Coat	Epoxy Plus Flooring Easilay
10°C	50minutes	80 Minutes
20°C	22 minutes	40 minutes

Time before Epoxy Plus Flooring Easilay may be trafficked.

Temperature	Light traffic	Heavy traffic
10°C	36 hours	60 hours
20°C	24 hours	36 hours

Application is easier in warm conditions. In colder weather, it is advisable to keep the product in a warm place overnight prior to using it.

#### Packaging and coverage

Epoxy Plus Tack Coat is supplied in a 1, 5 and 25 litres non-returnable containers. Coverage is 4 to 6m<sup>2</sup> per litre.

Epoxy Plus Flooring Easilay is supplied in 25kg pack yielding approximately 11.5 litres. Coverage per pack at 5mm thick is 2.3m<sup>2</sup>.

#### Colours

Natural Grey, Tile Red, Beige Light Green. Other colours can be supplied in minimum 100 pack lots.

#### Shelf life and storage

Shelf life is at least 12 months when it is kept unopened, in proper storage conditions in a cool, dry area.

#### Health and safety

All skin contact with epoxy resin products should be avoided. Barrier creams should be used and operatives should wear protective clothing including gloves. Working areas should be well ventilated. The hardener content is alkaline and labelled as corrosive. The resin content is labelled as an irritant, the flash point of all components is in excess of 100°C. In the event of fire use foam, dry chemical, carbon dioxide or water fog extinguishers.

For detailed information on safe handling, please refer to the Material Safe Handling Guide.

#### Quality assurance

A policy of strict quality control has always been followed and the requirements of all relevant test standards are strictly adhered.

#### Technical service

We can provide technical service at the specification stage and/or during application through our Technical Department or Laboratory. Detail specification or further information can be provided for specific projects or more general works. Site visits and on-site demostrations can be arranged on request.



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to the best of our knowledge and belief, the information contained in this leaflet is true and accurate, but a onditions of use and any labour involved are beyond our control, the end user must satisfy himself by prior testing that the roduct is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our depresentatives, Agents or Distributors. Test results shown reflect typical figures based on laboratory testing under

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