

## Corrofloor 327

### Heavy duty epoxy floor screed

Reference No.	TDS / FLR / CFL327
Issue Date:	December 2015
Revision No.	3

#### Product Features

**Corrofloor 327** is a coloured, three component, solvent free, epoxy floor screed, consisting of epoxy resin, amine hardener and graded quartz filler, designed for use in heavy duty industrial flooring applications.

It has a trowel grade consistency that provides a dense, waterproof, non slip finish with excellent impact, abrasion and chemical resistance.

**Corrofloor 327** is supplied in pre weighed packs ready for on site mixing and use, giving consistent properties and performance, and is applied at a nominal thickness of 5 mm.

#### Typical Uses

**Corrofloor 327** is suitable for a wide range of industries & applications particularly in areas subject to heavy abrasion, impact and chemical exposure such as food & beverage manufacturing, factories, warehouses and loading areas, workshop facilities, chemical processing and industrial applications.

#### Technical Data

Properties	Test Standards	Typical Values
Appearance		: coloured, fine textured, impermeable, skid-proof surface
Compressive strength (50 x 50 cm cube) @ 6 h @ 24 h @ 3 days	ASTM C 579	: 20 N/mm <sup>2</sup> : 55 N/mm <sup>2</sup> : 85 N/mm <sup>2</sup>
Tensile strength @ 3 days	ASTM C 307	: 15 N/mm <sup>2</sup>
Flextural strength @ 3 days	ASTM C 580	: 18 N/mm <sup>2</sup>
Abrasion resistance, depth of wear after 20 min	ASTM C 779 method C	: 0.3 mm
Bond strength to concrete (greater than cohesive strength of concrete)	ASTM D 454	: 2 N/mm <sup>2</sup>
Density	ASTM D 1475	: 2000 kg/m <sup>3</sup>
Pot life @ 25°C @ 35°C		: 120 min : 60 min
Initial hardness @25°C @35°C		: 10 h : 6 h
Full cure		: 3 days
Minimum laying temperature		: 10°C
Chemical resistance	ASTM D 543	: resistance to dilute acids, alkalines, grease, petrol, detergents, etc.

Note: All values given are subject to 5 - 10% tolerance.

#### Directions for Use

##### Preparation

Long term durability and function can only be achieved with good preparation to give a strong adhesive & mechanical bond to the substrate.

New concrete should be fully cured with a maximum residual relative humidity (RH) of 75%.

It is recommended to have a vapour proof membrane / barrier to prevent rising damp through the concrete substrate.

It is also recommended that all cementitious substrates have a maximum penetration reading of 3 mm when tested using the BRE Screed Test equipment.

Prepare concrete surfaces preferably by mechanical methods such as grinding or vacuum shot blasting to remove laitance, curing compounds and other loose materials to provide a mechanical key for **Corrofloor 327**.

New concrete surfaces can be finished using a wood or plastic float to achieve a slightly textured finish that may reduce the level of additional preparation.

After preparation, fill all blow holes and surface imperfections using **Corromortar FC** (see separate data sheet) to provide a smooth even surface prior to priming. Allow 24 hours to cure and lightly abrade before over coating.

##### Priming

Prior to the application of **Corrofloor 327**, prime the prepared surface using **Corroprime 30S**.

Thoroughly stir both parts of **Corroprime 30S** together in full for at least 2 – 3 minutes until a uniform colour & consistency is achieved.

Apply **Corroprime 30S** using a brush or roller to the prepared concrete surface at a rate of 8 - 10 m<sup>2</sup> per litre per coat. Allow the primer to become tack free before applying **Corrofloor 327**.

Work the primer well into the concrete surface using a stiff brush to give an even, continuous, unbroken coating.

A solvent free primer option is available. Mix & apply **Corroprime EP SF** as per the above method to the prepared concrete surface at a rate of 8 - 10 m<sup>2</sup> per litre per coat. Allow the primer to become tack free before applying **Corrofloor 327**.

## Corrofloor 327

### Heavy duty epoxy floor screed

A second priming coat may be required if the substrate is particularly porous.

Re-prime if the primer coat has not been over coated within 16 hours.

Surface contamination, dust & debris must be removed prior to the subsequent application of **Corrofloor 327**.

#### Mixing

It is essential that the mixing instructions are carefully followed to ensure the correct characteristics of the product are achieved. Failure to do so can result in lower performance or even possible failure of the product.

Mechanically mix the entire contents of the resin components together for at least 1 – 2 minutes until a uniform colour & consistency is achieved. **DO NOT UNDER ANY CIRCUMSTANCES PART MIX MATERIALS.**

Empty the mixed resin into a suitable empty container with sufficient volume to accommodate the total yield of the material.

Add the aggregate component to the mixed resin component and mix using a slow speed drill and paddle or forced action mixer for an additional 2 – 3 minutes, until a uniform colour & consistency is achieved. **ALWAYS ADD THE AGGREGATE TO THE RESIN.**

#### Application

Apply the mixed material onto the prepared surface using a plastic or wood float. Spread out and tamp or compact to provide a dense topping to a minimum thickness of 5 mm, at a theoretical coverage rate of 1.6 m<sup>2</sup> per pack.

For large areas we recommend applying **Corrofloor 327** in 5 mm thick accurate spots, in a 1.5 – 2 m grid across the floor area, then spreading out and compacting using a 3 m straight edge to provide a dense, level topping.

Finish with a plastic float, wood float or steel trowel depending on the surface texture required.

The application should be carried out in a continuous operation without breaks therefore please ensure sufficient materials, equipment and labour are available to achieve this. If the entire area cannot be finished in one go, we recommend creating day joints, or working to movement joints to provide a neat edge to work to with the subsequent application.

Expansion joints must be reflected through the **Corrofloor 327** and preferably sealed with a sealant from the **Corroseal** range.

An additional coating of **Corrofloor SB140** or **Corrofloor SF500** can be applied to seal **Corrofloor 327** if a more hygienic and easy to clean surface is required.

#### Curing

Allow **Corrofloor 327** to cure fully for 4 - 7 days depending on local conditions, before exposing to full mechanical, chemical or environmental conditions.

#### Hot Weather Conditions

For application above 40°C we recommend adopting the following guidelines:

Store unmixed materials in a cool preferably air conditioned environment.

Avoid exposure of mixed & unmixed materials to direct sunlight.

Keep equipment that will be in contact with the product cool and away from direct sunlight.

Avoid application during the hottest time of day.

#### Cleaning

Clean tools and equipment immediately after use with **Corroclean**.

#### Limitations

Any joints that are deemed to be live or for movement, must be reflected through the floor finish.

Substrate temperatures should be above 5°C and rising.

For application in temperatures above 40°C please refer to hot weather condition recommendations.

Avoid application if the work area may be subject to the onset of rain or moving water.

Do not part mix under any circumstances.

Chemical spillages should be cleaned quickly in accordance with good house keeping to maximise the life of the product.

Colour fading may occur in areas subject to prolonged UV exposure however the performance of the material will not be affected.

All products should be used within the pot life. Materials not used within the specified time should be discarded.

The product should not be thinned with any type of solvent under any circumstances.

## Corrofloor 327

### Heavy duty epoxy floor screed

If the above general application details do not meet with your requirements, please contact Corrotech for a project specific method statement.

#### Estimating

**Corrofloor 327** pack size: 16 kg. Coverage rate approximately 1.6 m<sup>2</sup> per pack @ 5 mm thickness

**Corromortar FC** pack size: 8 kg. Coverage rate approximately 4 - 5 m<sup>2</sup> per pack @ 1 mm thickness

**Corroprime 30S** pack size: 5 & 20 litres. Coverage rate approximately 8 - 10 m<sup>2</sup> per litre

**Corroprime EP SF** pack size: 5 & 20 litres. Coverage rate approximately 8 - 10 m<sup>2</sup> per litre

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish practical consumption particularly for primers.

#### Health & safety

Always use appropriate PPE including gloves, goggles and a barrier cream to avoid contact with skin and eyes.

Should contact with skin or eyes occur, wash immediately with plenty of clean water and seek medical advice.

If swallowed, seek medical attention immediately. Do not induce vomiting.

Avoid inhalation and ensure adequate ventilation or suitable respiratory equipment if working in confined spaces.

Do not expose products to fire or naked flames under any circumstances.

Always refer to the product Material Safety Data Sheet (MSDS) for full health & safety and handling recommendations.

#### Storage

**Corrofloor 327** has a maximum shelf life of 12 months from the date of manufacture.

To maximize shelf life always store products in their original, unopened packaging in a dry environment, away from direct sunlight with a minimum temperature of 10°C.

Damaged packaging, high humidity or extreme temperatures may reduce the shelf life.