

ProTXcoat 357

Chemical Resistant Epoxy based concrete repair screed

357 is a high performance mortar designed for use as a heavy duty repair system for concrete and mineral surfaces subject to chemical attack.

357 is based on a blend of solvent free epoxy novolac resins and polyamino amine adducts reinforced with a special blend of silica quartz minerals and inorganic fillers which have been specially selected to provide optimum application and performance properties together with a high level of adhesion, abrasion, impact and chemical resistance.

357 is a unique repair system, easy to apply by trowel or float with no shrinkage or volume change during cure and is ideal for the repair of damaged concrete, floors, containment areas, plinths, ramps and walkways.

SURFACE PREPARATION

Surfaces to be repaired with **357** must be clean, dry and free from contamination. Old concrete surfaces must be thoroughly cleaned with a detergent solution and then washed with clean water and allowed to dry.

New concrete surfaces will generally have laitence on the surface and this must be removed by mechanical means.

All existing coatings must be removed from the surface before any repair is carried out. Failure to do this will mean the **357** bond is only as good as the existing coating.

Thorough cleaning and roughening of any surface to which **357** is being applied is absolutely essential for a successful repair.

Abrasion of surfaces will cause dusting and therefore all loose dust should be vacuumed clear before the application commences.

PRIMING

To obtain maximum penetration and adhesion, the repair area should always be primed with **ProTXcoat 302 Primer**. **ProTXcoat 302 Primer** consists of a base component and an activator component. The contents of the activator component should be added to the base unit. Mix thoroughly to produce a uniform material.

The mixed primer should be applied immediately using a stiff bristle brush, working the material into the prepared surface to obtain maximum penetration. **ProTXcoat 302 Primer** will generally apply at coverage rate of 0.37m^2 (4ft^2) per 100 gms of primer.

ProTXcoat 302 Primer must be used as a tack coat and should not be allowed to dry - any areas of primer which have been allowed to dry should be reprimed for optimum results.

MIXING

357 is a three component material comprising a base component, activator component and aggregate.

The aggregate component should be removed from the plastic container. The base and activator components should be emptied into this container and mixed thoroughly to produce a uniform material. The **357** aggregate should immediately be added to the base and activator mix until the desired consistency is achieved. For bonding and grouting applications approximately two thirds of the aggregate should be added.

For resurfacing and general repairs, all the aggregate should be added. The complete material should be mixed thoroughly for 2-3 minutes to produce a uniform material. Prolonged hand mixing or mixing by mechanical mixer will produce a wetter mix.

The mixed material should be used within 25 minutes of mixing at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

APPLICATION

The mixed **357** should be applied to the primed area by float or trowel. The material should be spread firmly and evenly onto the surface and then smoothed over with a steel trowel or float. On horizontal surfaces **357** can be applied to virtually any thickness. A thickness of 6 mm (0.25 inches) is recommended. On vertical surfaces, the maximum thickness which can be achieved without sagging is 12.5 mm (0.5 inches). An application thickness of 6 mm (0.25 inches) is recommended.

When applied at 6 mm (0.25 inches) **357** will provide a coverage rate of 0.37m^2 (4ft^2) per 5 kg unit. **357** cannot be readily applied to overhead surfaces without the use of shuttering. Where applications to overhead surfaces are being considered, customers should consult the **ProTXcoat Technical Service Department**.

NOTE: The minimum temperature of application is 5°C (50°F).

Volume Capacity

450 cc (29 cu ins) per kilo

PHYSICAL CONSTANTS

Mixing Ratio	Resin	Aggregate
	1	4.6 By weight
Appearance	Resin Base	Red or Grey liquid
	Resin Activator	Amber fluid
	Aggregate	Natural or light grey

Drying & Cure Times at 20°C (68°F)

Usable Life	25 minutes
Initial Set	6 hours
Min Overcoat	6 hours
Max Overcoat	8 hours

Volume Solids 100%

V.O.C. Nil

Shelf Life Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

PHYSICAL PROPERTIES

Abrasion Resistance ASTM D4060	85 mgm weight loss per 1000 cycles - 1 kg load - CS17 Wheel
Impact Resistance ASTM D256	1.8 Joules (16 in lbs)
Direct Pull Adhesion ASTM D4541	35 kg/cm ² (500 psi) - concrete (Concrete Failure)
Compressive Strength ASTMD695	880 kg/cm ² (12500 psi)
Flexural Strength ASTMD790	490 kg/cm ² (7000 psi)
Shrinkage ASTM C246	Nil

HEALTH & SAFETY

As long as normal good practice is observed **357** can be safely used.

Protective gloves should be worn during use.

A fully detailed **Safety Data Sheet** is either included with the material or is available on request.

PACKAGING

Supplied in 30kg packs

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



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