



RK - Toughseal

INDUSTRIAL FLOOR COATINGS

RX-Toughseal

Concrete floors form the primary working surface in most industries and, as such, their durability is of vital importance. The very nature of concrete makes it porous, prone to dusting and chemical attack and unable to resist impact and abrasion from the multitude of operations carried out on its surface. The result is premature deterioration resulting in an unsightly and pitted floor harbouring bacteria and other contaminants, making for an unsafe working surface. RX Toughseal urethane coatings have been designed to eliminate these defects in concrete floors and to provide a superior floor finish.

These urethane coatings penetrate the concrete to form a tough resilient material which reinforces the surface and binds the fragile matrix of the concrete together. In this way the concrete becomes capable of absorbing the flexural and impact loads characteristic of traffic on industrial floors. RX Toughseal will also extend the service life of the concrete because of its resistance to attack by a wide range of aggressive contaminants.

RX-Toughseal

A moisture cured urethane designed to provide a coating with both good wearing properties allied to flexibility, water resistance and resistance to most chemicals.

RX Toughseal is versatile in that it functions as a protective coating for rigid concrete flooring and it protects and enhances the appearance of wooden flooring by exhibiting excellent gloss and withstanding dimensional and flexural stresses.

RX Toughseal is based on a partially polymerised resin which permits penetration and cures to fill microcracks and crevices thereby reinforcing the surface and adding strength by binding the matrix together.

RX Toughseal also extends the service life of the surface because of its resistance to a wide range of contaminants. Cleaning of RX Toughseal surfaces is also made easier because of the smooth continuous finish.

Application Procedure for RX Toughseal to Concrete Floors

Surface Preparation:

1. Floor must be at least 28 days old before treatment. Make sure floor is free from dirt and loose particles.
2. Degrease with solvent base detergent and rinse with water. Repeat until all traces of grease are gone.
3. Acid etch with RX118. Use 1 part RX118 to 5 parts water. Pour onto floor with plastic watering can to form a continuous layer (approximate spreading rate is 1m²/litre of diluted solution.) Allow to react for ± 5 minutes until bubbling stops. Scrub vigorously with hard brooms while RX118 is reacting. Do not allow RX118 to dry on the surface.
CAUTION: Wear protective clothing i.e. gum boots, rubber gloves and goggles.
4. Rinse floor thoroughly with plenty of clean water and repeat rinsing operation until all RX118 is removed (see step 7)
5. If unable to rinse and remove rinsing water properly use wet vacuum machine.
6. If the glaze of the surface has not been removed, the etching operation must be repeated followed by the water rinse. The surface must be roughened equivalent to the surface of medium sandpaper. (80 grit).
7. Check pH. Must be neutral or slightly alkaline (i.e. pH 7 or higher). To check pH, pour a half cup of water on to a few representative areas of the floor and allow to stand 5 minutes. Dip a piece of pH paper in the wettest area. If pH is lower than 7 repeat water rinse.
8. Dry 24-28 hours before painting.

Painting:

Dilute 1st coat of Toughseal by 20-25% (by volume) with Toughseal thinners and apply with a roller or brush.

Within 6 to 12 hours apply full coat of Toughseal undiluted by brush or roller. An additional undiluted coat may be applied within a further 6 to 12 hours if desired

NOTE: If application by roller causes bubbling, 'lay-off' with a brush.

CAUTION: As this product gets very hard, it does not get softened by the solvents in the subsequent coat which could cause delamination if longer intervals than 12 hours are allowed between coats. If longer intervals are unavoidable, an additional coat may be applied after thorough sanding with No. 100 sandpaper to de-gloss the existing coating.

Before



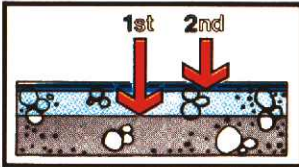
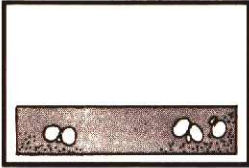
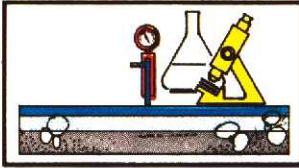
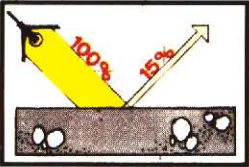
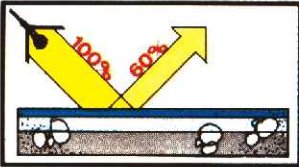
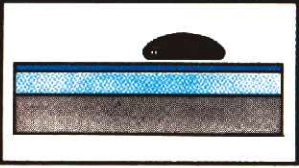
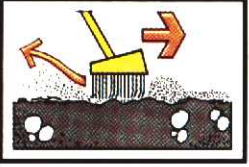
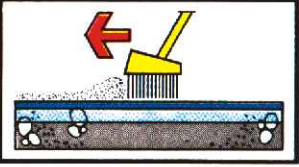
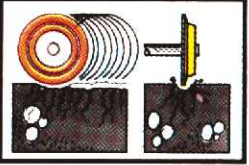
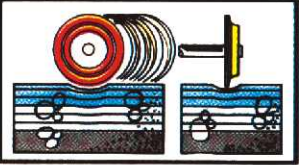
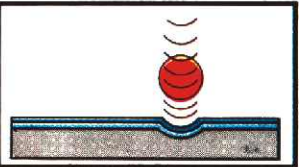
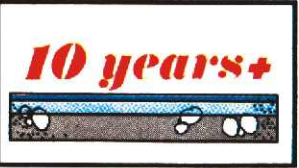
During Process



After



Industrial Floor Coatings

Problems	Untreated	Treated	Solutions
Untreated Surface Plain concrete is not aesthetically pleasing or a good working surface in many industrial environments where structural strength is required.			Treated Surface A simple 2 coat application can seal your floor and transform it into a pleasing surface whilst retaining the inherent structural strength.
Unsuitable Surface Concrete is often inadequate as a material of construction for the many arduous duties required of it as a floor.			Technical Design Our technical department will recommend the best solution to your specific requirements based on our knowledge of the chemical resistance of the particular coating.
Poor Light Reflectance Clean concrete will reflect 15% of incident light as best, and even less when dirty.			Good Light Reflectance Once coated with RX-Toughseal, the floor will produce up to 60% more light reflectance than an uncoated floor.
Unightly Staining Plain concrete is porous therefore allowing the penetration of many soils which are not only unsightly but often unhygienic as well.			Impervious Surface Once coated with Toughseal the surface will be impervious to a wide range of contaminants resulting in an attractive and hygienic finish.
High Maintenance Cost A deteriorating concrete floor gives rise to very expensive and usually temporary repairs often in an effort to maintain the production capability of the area.			Ease of cleaning A coated floor is very easy to clean and maintain in its original condition thereby cutting down the high maintenance costs normally associated with concrete floors.
Surface Deterioration Although concrete is inherently very strong, repeated traffic over its surface can cause premature failure and dusting.			Rolling Load Assistance Forklift and steel wheeled trolley presents no problem to a floor reinforced with Toughseal coating.
Surface Damage Concrete is particularly sensitive to impact damage which caused microcracking at first and later total structural failure.			Impact Resistance A coated floor will be considerably more resistant to impact damage due to the flexibility imparted to the concrete by the Toughseal treatment.
Limited Life The additive effect of these potential problems can lead to a very short lifespan for an industrial concrete floor.			Durability The life of a coated floor will be considerably extended due to its ability to withstand the aggressive conditions to which it is subjected during its normal lifespan.

DESCRIPTION	A high quality heavy duty moisture curing polyurethane industrial coating. It cures on exposure into a tough and yet flexible film with a high order of chemical resistance.
DILUTION	Use as supplied, however should thinning be necessary then dilute with toughseal thinners to a maximum of 20%
APPLICATION	Apply by brush or roller.
SOLVENT	Xylene
STANDARD COLOURS AVAILABLE	Grey; Green; Yellow; Black; Clear
HARDNESS	SET TO TOUCH 1-2 hours. TACK FREE SURFACE 4-6 hours. HARD DRY - Overnight.
SHELF LIFE	6 months in original unopened container.
CHEMICAL RESISTANCE	Acids, alkaline solutions. A full list of specific materials available on request.
FILM THICKNESS	2 coat system provides dry film thickness of 200 microns.
COVERAGE	8m ² -10m ² / Litre depending on porosity of Concrete.
FIRRA TYPE	3 Coating
PACKING	5l Tins
USES	Warehouses, factories, workshops, chemical plants, plant rooms, battery charging areas

CHEMICAL RESISTANCE TABLE

	SURFACE DETERIORATION	AFTER HOW MANY DAYS
Distilled Water	None	-
Tap Water	None	-
Sea Water	None	-
Sulphuric Acid 10%	Discoloration	-
Hydrochloric Acid 10%	Discoloration	-
Nitril Acid 10%	Discoloration	-
Acetic Acid 10%	Small blisters	10
Formic Acid 10%	Small blisters	8
Lactic Acid 25%	None	-
Citric Acid 10%	None	-
Tannic Acid Solution	None	-
Linseed Fatty Acid	None	-
Soda Solution 20%	None	-
Common Salt Solution 10%	None	-
Sugar Solution 30%	None	-
Caustic Pot Ash Solution 10%	None	-
Ammonia 10%	Blisters	20
Chlorine Solution 3% free chlorine	None	-
Hydrogen Peroxide 10%	None	-
Premium Grade Petrol (Gasoline)	None	-
Cresol	Destroyed	5
Cylene	None	-
Methylene Chloride	Destroyed	1
Ethyl Glycol Acetate	None	-
Acetone	Softened	10
Alcohol 10%	None	-

**Tests have been conducted against splash & spillage and not immersion conditions*

