### **EPOXY EFFECTS**



**UVR RESIN BOUND KITS** 



Epoxy Effects UVR two-component polyurethane resin is used to create seamless decorative stone driveways & pathways. Some of the benefits of our UVR polyurethane resin are UV resistant, SUDS Compliant, Weed Resistant, Slip Resistant, Frost Resistant, Seamless & Puddle Free.

The UVR Polyurethane Resin System can be specified for both residential and commercial applications. It is an affordable surface consisting of polyurethane binder mixed with stone aggregates. This creates a seamless flexible finish, which is both decorative and slip-resistant whether the floor is wet or dry.

The pot open time is approximately 30 mins at a temperature of 25°c. The "Wet Edge" is workable for about 1 hour and the screed is cured to the touch between 2 and 3 hours. The product should only be used between the temperatures of 5° and 45°c. Epoxy Effects UVR Resin exhibits excellent adhesion to most stone aggregates and gives a strong performance in both tensile strength and durability.

#### RECOMMENED USAGE

#### **INTERNAL**

Stone Carpets, Infinity Flooring, Car Showrooms

#### **EXTERNAL**

Driveways, Steps, Walkways, Patios, Stone Paths, Pools, Decking Areas, Car Parks

## OVERVIEW, PACKAGING AND STORAGE

Epoxy Effects UVR Resin is supplied in kits, comprising of a Part A (the resin) and a Part B (the hardener). The product should be stored in dry conditions at a temperature of between 3°c and 35°c.

Avoid long term storage of partially used containers as contact of atmospheric moisture with the resin will result in skinning of the product. The shelf life of unopened containers stored under the recommended conditions is 6 months.

#### **HOW TO USE**

The Resin Part B should be poured into the larger Resin Part A container ensuring all the Resin Part B is scraped out of the smaller kit component bucket. The two resin components should be thoroughly mixed for 30 to 60 seconds until homogenous. The resin should then be added to the aggregate and mixed for 2 to 3 minutes with a paddle mixer or in a suitable forced action mixer to ensure all the aggregate is full coated.

All tools and equipment should be at hand before any mixing commences and the area to be screeded should be fully prepared to ensure there is no loss of working time once the screed is mixed.

TYPICAL SCREED MIX		
Resin	7.5 Kg	
2-5mm Kiln Dried Stone Aggregate	75 Kg	
1-3mm Kiln Aggregate	25 Kg	
Kiln Dried Sand	6.25Kg	
Approx m² Coverage at 18mm	3.5m <sup>2</sup>	

TECHNICAL SPECIFICATION	
Mixed Colour	Pale Amber
Mixed Viscosity (Poise @ 25°c)	30-50
Mixed Specific Gravity (@ 25°c)	1.1
Non-Volatiles (%)	100
Cure Time (Hrs @ 25°c and 50% RH)	2 – 3 Hours
Flash Points (°c)	>93
Flexural Strength* (MPa)	10 – 12
Maximum Deflection* (mm)	5 – 10

#### PERSONAL PROTECTION

Whenever handling & pouring resin.

You should wear appropriate eye protection and gloves



#### SUB-BASE CONDITION

One of the motivations for laying a resin bound surface is to revitalize an older path or driveway. The success of the installtion is reliant upon the sub-base being suitable for overlaying with resin bound aggregate.

#### **SUB-BASE**

Solid monolithic sub-bases like recently laid and cured concrete or Tarmac are the best surfaces to install on to providing that the underlying layers of the surfacing are stable and have the sufficient load spreading capabilities to support the screed during the installation and its working lifetime. Some installers have successfully laid screed over very well compacted granular sub-bases such as a layer of Type 1.

We would not recommend this as the bond at the interface between the screed and the sub-base can never be as strong as with monolithic surfaces. Inevitably there will be movement and settlement of the granular sub-base over time and this will be reflected through to the screed causing stresses and weak points and a reduction of the strength and durability.

Damp rising up from a base which is often sodden can affect the resin long-term sometimes causing opaqueness. For the same reason monolithic subbases should have a fall to drain and no potholes.

Under no circumstances do we endorse the laying of screed over paving stones or block paving. Due to the nature of reflective cracking the gaps between the flags/blocks will inevitably transfer through to the surface of the screed causing wholesale cracking of the surface.

#### INSTALLATION

Before starting the installation the subbase must be dry, fully intact and free of dust, dirt and loose material. Any cracks in the sub-base must be chased out and repaired otherwise the newly laid screed will be susceptible to reflective cracking within a relatively short time.

Reflective cracking is a phenomenon which affects all surfacing types. The new screed will have a certain level of flexibility which will help it cope with the stresses induced by underlying cracks but it is inevitable that the crack will reflect through over time leading to an expensive return visits to site.

Cracking of the screed due to poor subbase conditions is the number one cause of return visits to an installation. Before any work is carried out the existing area will offer clues as to which sections have been a problem in the past e.g., cracks, puddles (dry, or wet), patches of different surfacing, slumping or voids etc. These problematic areas should be rectified and stabilized before overlaying with screed.

It is recommended that large areas of screed are sympathetically designed and installed in sections using either expansion strips or contrasting screed boarders or other surfacing materials. This approach will offer a number of advantages to the installer. The biggest advantage is that the installation can then be done in sections thus allowing the installation team time to approach the job in stages.

This is important when a small team is being used when trying to maintain a wet edge and consistent surface texture especially during hot summer days when the increased temperatures mean that there is less time to manipulate the screed before it sets. (continued next page)

Another advantage is to minimize or mitigate the risk of problems due to unknown areas of instability in the sub-base. Should a reflective crack appear or a problem with subsidence causes stress to the screed then the repair is isolated to a smaller section and this can if necessary be replaced in its entirety and the underlying problem rectified without affecting the rest of the install. The same approach will help limit repair work necessary if the screed is damaged in some other way at a later date say if an area has to be dug up to access gas,water,electricity pipes and cables.

## OTHER PRODUCTS AVAILABLE

CHECK OUT OUR WEBSITE FOR FULL RANGE OF ALL OUR PRODUCTS.
WWW.EPOXYEFFECTS.COM

# EPOXY EFFECTS COUNTERTOP RESIN KITS

Our two-component 1:1 CounterTop Epoxy system is was designed to deliver an advanced level of shine, clarity and depth and locks in optical qualities of natural wood and art. Used in a variety of applications such as: Counter Tops, Bar Tops, Furniture, Art Work and other applications requiring a strong, durable plastic coating.

Crystal-clear, Excellent UV resistance, Self-Leveling, Self-Degassing, 100% VOCfree, 100% solid and odour free.

# EPOXY EFFECTS UVR RESIN BOUND / BOND KITS

Our two-component 2:1 Internal Epoxy Floor system is 100% VOC-free, 100% solid and odour free. Specially formulated for Excellent UV Protection, Scratch Resistance, long pot life and working time.

## EPOXY EFFECTS DEEP POUR KITS

Our two-component 3:1 Deep Pour Casting system is Crystal Clear, UV resistant, High Strength & Hardness.

## EPOXY EFFECTS INFINITY FLOOR KITS

Here at Epoxy Effects we have designed our Infinity Internal Floor Range with some of the finest crushed stone including Marbles, Granites & Quartz.

Our full kit allows you to have all the advantages of our Epoxy Effects UVR Resin Bound / Bonded Kits with our seal coat to create a unique floor with high gloss shine.

#### **TOOLS & ACCESSORIES**

Here at Epoxy Effects we strive to become a one stop shop for everything resin and our Tooling & Accessories Range is growing every day. Here you can find everything you need to complete your project start to finish.

