



# TECHNICAL DATA SHEET

## UPS 705 RS Epoxy Screed

### Three Component Solvent Free Epoxy Screed

**UPS 705 RS** is a high performance resurfacing screed designed for use for concrete floors subject to abrasion and chemical attack.

**UPS 705 RS** is based on a unique blend of epoxy resins and polyamino adducts with a blend of reinforced silica quartz minerals which have been specifically selected to provide optimum application properties together with a high level of adhesion, abrasion, impact and chemical resistance.

**UPS 705 RS** is a unique resurfacing system which provides excellent long term protection to industrial floors operating in even the most aggressive environment and is ideal for use in abattoirs, dairies, food factories and industrial factories etc.

**Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.**

### SURFACE PREPARATION

All surfaces should be clean, dry and free from oil, grease and loose material. Heavy oil deposits may require burning out.

Concrete surfaces should be abrasive blasted, scabbled or scarified and any existing coating removed. The prepared surface should then be vacuumed to remove dust etc.

Other surfaces should be abraded, steel surfaces should be grit blasted.

### PRIMING

After cleaning, the surface should be primed with **UPS 902 SP**

**Primer** .Care should be taken to avoid ponding and excessive thickness of the primer.

The primer should not be allowed to dry prior to the application of **UPS 705 RS** Any primed area that has been allowed to dry must be re-primed.

On very porous substrates two coats of primer may be required.

### MIXING

**UPS 705 RS** is supplied in three components, a base component, activator component and aggregate contained in a large plastic bucket. These three components should be removed from the outer bucket, then the resin components can be mixed together in this bucket.

The aggregate should then be added slowly to the mixed resins.

To ensure complete mixing, it is recommended that a mechanical mixer of the Mixal, Hobart or Danes type be used, with mixing continuing for 3-4 minutes after addition of the aggregate.

The mixed material should be used within 1 hour of commencing mixing at 20°C.

### APPLICATION

#### Screeding

The mixed **UPS 705 RS**. can be poured onto the wet primed area and generally spread out with a trowel or steel float, with a float being used to smooth the product out.

To ensure the correct application thickness is achieved, wooden lats cut to the thickness required for the screed should be used, and the mixed material levelled to this thickness.

At the end of a working day the edge of the **UPS 705 RS** screed should be cut at right angles to the floor using the edge of the steel float. This edge then provides a working level for the next application of screed, with the primer being applied up the vertical edge. Feather edging is not recommended for joining up bays but can be used to form ramps at door openings etc.

#### Coving Formation

The mixed **UPS 705 RS**. should be applied into the primed wall/floor interface by trowel, whilst the primer is still tacky.

The **UPS705 RS** should be compacted into the corner and angled off with the point of the trowel. The material can then be curved using a coving trowel or a plastic pipe of double the diameter of size of coving required.

For estimating covering quantities the following are approximate lengths which 1 unit of **UPS 705 RS** will provide:-

1 inch / 25 mm	78.3 linear metres
1½ inch / 38 mm	34.8 linear metres
2 inch / 50 mm	19.6 linear metres
3 inch / 75 mm	8.7 linear metres
4 inch / 100 mm	4.9 linear metres
6 inch / 150 mm	2.2 linear metres

**NOTE:** The minimum temperature for application is 10°C (50°F).

All equipment must be cleaned **IMMEDIATELY** after use with **UPS Universal Cleaner**.

#### Theoretical Coverage Rate

0.068m<sup>2</sup>/kilo at 6mm dft

#### Recommended Film Thickness

Wet	6 mm (240 mil)
Dry	6 mm (240 mil)

Detailed working recommendations are available from the Technica Centre of request.

## PHYSICAL CONSTANTS

<b>Mixing Ratio</b>	Mix as supplied.
<b>Appearance</b>	Base Clear Liquid Activator Clear Straw Coloured Liquid Aggregate Coloured Aggregate
<b>Drying &amp; Cure times at 20°C</b>	Usable Life 1 hour Hard Dry 8 hours Minimum Overcoating 8 hours Maximum Overcoating 24 hours Full Cure 7 days
<b>Volume Solids</b>	100%
<b>V.O.C.</b>	Nil
<b>Shelf Life</b>	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

<b>Compressive Strength</b> ASTM D695	880 kg/cm <sup>2</sup> (12500 psi)
<b>Flexural Strength</b> ASTM D790	460 kg/cm <sup>2</sup> (6500 psi)
<b>Shrinkage</b> ASTM C426	Nil
<b>Abrasion Resistance</b> ASTM D4060	45 mgm weight loss per 1000 cycles - 1 kg load CS17 wheel
<b>Impact Resistance</b> ASTM D2794	14 in lbs
<b>Scratch Resistance</b> BS 3900 Part E2	No failure 2.5 kg load
<b>Dry Heat Resistance</b> ASTM D248	135°C (275°F)
<b>Direct Pull Adhesion</b> ASTM D790	3.5Mpa (500psi) – concrete (Concrete failure)

## HEALTH AND SAFETY

As long as normal good practice is observed **UPS 705 RS** can be safely used.

The wearing of protective gloves is advisable during use.

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

## PACKAGING

Supplied in 25 kg 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.



**Unique Polymer Systems LTD**  
Unit 1 Bankside Industrial Estate, Ledbury, Herefordshire, HR8 2DR  
Tel: +44(0)1531 63 63 00  
E Mail: sales@uniquepolymersystems.com  
Web: www.uniquepolymersystems.com