



Unique Polymer Systems

ADVANCED POLYMER SURFACE ENGINEERING TECHNOLOGY

Unique Polymer Systems – Single Component Water-Based Waterproofing Coating



UPS Poly-Tech CSM is a high performance universal roof protection system specifically developed for long term protection of all types of roof surfaces.

UPS Poly-Tech CSM is formulated on a complex blend of acrylic resins and aliphatic hydrocarbon polymers reinforced with inorganic fibres and reinforcing agents to produce a system which offers outstanding weatherproofing and waterproofing properties with optimum levels of UV resistance, flexibility, adhesion and durability for any roof surface including asphalt, bitumen, mineral felt, asbestos, aluminium, concrete, galvanising and any metal surface.

UPS Poly-Tech CSM is designed for applications by roller or spray incorporating **UPS CSM** to give 15 and 20 year performance.

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

SURFACE PREPARATION

The **UPS Poly-Tech CSM** system should only be applied to structurally sound roof areas. On flat roofs which have been dressed with large or medium size chippings, these must be removed prior to application. A mechanical flail should be used to remove the chippings and then the area swept down to remove all loose dirt and dust.

On asphalt roofs, blisters should be cut out and the void filled with polymer concrete screed. On felt roofs, severe blisters should be cut open and bonded flat.

Any areas of moss or lichen growth should be treated with **UPS Fungicidal Wash** in accordance with the instructions.

Any surface to be protected must be clean, dry and firm, and this is especially important with metallic, glass or plastic surfaces.

At any wide joints (such as joints on corrugated roofs or poor fitting flashings) or where excessive movements can be expected (such as valley gutter joints) it is advisable to apply **UPS Poly-Tech Bridging Tape** over these areas.

To apply the **UPS Poly-Tech Bridging Tape** simply peel off the protective film and press down firmly, following the contour as far as possible. Finally, ensure the edges of the **UPS Poly-Tech Bridging Tape** are pressed down to be flush with the surface.

MIXING AND APPLYING THE UPS POLY-TECH PRIMERS

Bituminous and Porous Surfaces: Surfaces should be primed with **UPS Poly-Tech BP Primer**. **UPS Poly-Tech BP Primer** is supplied ready to use - no mixing is required but it is advisable to shake the container prior to use to obtain a consistent product.

Detailed application procedures are given on the **UPS Poly-Tech B.P. Primer Tech Sheet**.

Glass, Previously Painted Surfaces and Most Metal Surfaces:

Surfaces should be primed with **UPS Uni-Tech GP Primer**. Detailed application procedures are given on the **UPS Uni-Tech GP Primer Tech Sheet**.

Copper and Ferrous Metal Surfaces: Surfaces should be primed with **UPS Uni-Tech MC Primer**. Detailed application procedures are given on the **UPS Uni-Tech MC Primer Tech Sheet**.

For coverage rates of primers refer to appropriate primer tech sheet.

APPLICATION

UPS Poly-Tech CSM should not be applied below 5°C, when rain is falling or when rain is imminent, or when humidity exceeds 90%. In winter months due consideration must be given to the early onset of condensation formation in early afternoon and application of **UPS Poly-Tech CSM** should be discontinued well before this time.

UPS Poly-Tech 15 Year System: The **UPS Poly-Tech 15 year** system is a two coat system using **UPS Poly-Tech CSM** with **UPS CSM** embedded into the first coat. All movement joints should be reinforced with the standard **UPS Poly-Tech Reinforcing Sheet**.

UPS CSM should now be rolled out into the wet coat of **UPS Poly-Tech CSM** and rolled in, with further material being applied by roller as required to ensure full embedding.

The second coat of **UPS Poly-Tech CSM** should be applied a minimum of 2-4 hours after the first coat, the minimum overcoating interval will depend upon roof temperature and drying conditions. Provided the first coat of **UPS Poly-Tech CSM** is clean there is no maximum overcoating time.

UPS Poly-Tech 20 Year System: The **UPS Poly-Tech 20 year** system is a three coat system using **UPS Poly-Tech CSM** with **UPS CSM Embedment** into the first coat. Application procedures are as for the **UPS Poly-Tech 15 year** system with an additional third coat of **UPS Poly-Tech CSM** applied a minimum of 2-4 hours after application of the second coat.

SPRAY APPLICATION OF UPS POLY-TECH CSM

Spray application of **UPS Poly-Tech CSM** should only be used on sound, problem free roof areas or for applying the final coats of the **UPS Poly-Tech 15 and 20 year** systems. All edges, joints, seams etc. should be first treated with the standard **UPS Poly-Tech Reinforced** system.

TECHNICAL DATASHEET UPS-PolyTech

Unique Polymer Systems – Single Component Water-Based Waterproofing Coating

UPS Poly-Tech CSM should be applied by large capacity airless spray equipment, a typical set up is as follows:

60:1 pump ratio, 25-30 thou spray tip, 2,500-3,000 psi tip pressure. Spray application should be carried out to give a uniform even coating at a nominal thickness of 500 microns (20 mils) dry.

The final drying time of the **UPS Poly-Tech** system will depend on the temperature and humidity. Under normal conditions the complete system will be showerproof within 30 minutes and completely resistant to water within 2 hours. At lower temperatures and high humidity levels, these times will be extended.

All equipment should be cleaned immediately after use with clean water. For cleaning of Airless Spray Equipment, equipment should be first flushed with water to remove bulk deposits. Equipment should then be washed through with **UPS Graffiti Remover** to remove residual product then finally rinsed with water or water miscible solvent ready for further use.

Recommended Minimum Film Thickness Per Coat

Wet	300 microns (12 mils)
Dry	180 microns (7 mils)

Theoretical Coverage Rate

The Theoretical coverage rate for **UPS Poly-Tech CSM** (unreinforced) is :- 3.3 m² / litre at 180 microns dft (35.5 ft²/litre at 7 mils dft).

In practice, the coverage will be reduced significantly depending on the surface involved and a guide to practical coverage rates for the **UPS Poly-Tech** system is given in the table below:-

Detailed working recommendations are available from the Technical Centre on request.

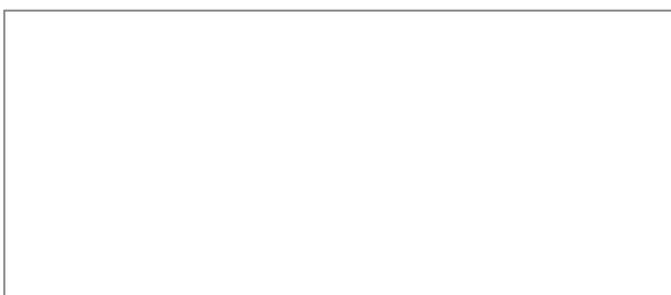
POLY-TECH COVERAGE RATES

In hot and windy conditions or when coverage rates are lower, water can be added to **UPS Poly-Tech CSM** to improve coverage

UPSPoly-Tech Coverage Rates	Smooth Asphalt or Felt	Mineral Felt or small Chippings	De-Chipped Felt	Concrete or Brick	Asbestos Cement New	Asbestos Cement Weathered	Glazing Repairs Metal Bars	Glazing Repairs Wood Bars	Metals, Lead, Aluminium, Galvanised, Steel Painted Surface	Copper Ferrous Metals
First coat Poly-Tech CSM with UPSCSM	15 ft ² 1.37 m ²	Will Range From 7 - 13 ft ² 0.65 - 1.2 m ²			15 ft ² 1.37 m ²	11 ft ² 1.0 m ²	15 ft ² 1.37 m ²	13 ft ² 1.2 m ²	15 ft ² 1.37 m ²	15 ft ² 1.37 m ²
Poly-Tech 2nd coat/litre	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²	35 ft ² 3.3 m ²
*Poly-Tech 15 year System two coats/litre	11 ft ² 1.0 m ²	Will Range From 8-12 ft ² 0.75 - 1.1 m ²			11 ft ² 1.0 m ²	9.0 ft ² 0.85 m ²	11 ft ² 1.2 m ²	10 ft ² 0.9 m ²	11 ft ² 1.0 m ²	11 ft ² 1.0 m ²
*Poly-Tech 20 year system three coats/litre	8 ft ² 0.75 m ²	Will Range From 4.9 - 7.4 ft ² 0.46 - 0.7 m ²			8 ft ² 0.75 m ²	6.5 ft ² 0.6 m ²	8 ft ² 7.5 m ²	7.4 ft ² 0.7 m ²	8 ft ² 0.75 m ²	8 ft ² 0.75 m ²

*To aid estimating the **Poly-Tech** two and threecoat figures can be used. However in practice, the first coat is applied with **Poly-Tech Reinforcing**. This results in more **Poly-Tech** being used with the first coat. The first coat and second/third coat coverage rates for **Poly-Tech** reflect this difference.

FOR FURTHER INFORMATION PLEASE CONTACT



PHYSICAL CONSTANTS

Mixing Ratio Supplied ready for use.
Appearance Viscous coloured thixotropic liquid.

Drying & Cure times at 20°C

Touch Dry	1-2 Hours
Minimum Overcoating	2-4 Hours
Maximum Overcoating	Indefinite provided surface clean.
Shower Resistant	30 minutes
Water Resistant	2 hours

Volume Solids 60%

V.O.C. Nil

Shelf Lif: Use within 2 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F). **PROTECT FROM FROST.**

HEALTH AND SAFETY

As long as normal good practice is observed **Unique Polymer Systems 'Super Low Friction Efficiency Coating'** can be safely used.

Protective gloves should be worn during use.

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

PACKAGING

Supplied in 20 litre units.

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

www.UniquePolymerSystems.com
Quarry House, Hollybush, Ledbury,
Herefordshire. HR8 1ET. UK
Tel: +44(0)1531 636300
Fax: +44(0)8700 558801

Email: sales@UniquePolymerSystems.com