

## UNICHEM FLEXIHYBRID PU ROOFCOAT

### PU MODIFIED ACRYLIC ELASTOMERIC WATERPROOF COATING

UCA-WP-11-0722

#### DESCRIPTION

UNICHEM FLEXIHYBRID PU ROOFCOAT is a flexible, cold applied waterborne liquid applied waterproofing coating based on PU modified acrylic dispersion. Applied as a liquid it cures to form a durable, protective, waterproof membrane. It is highly elastic and UV resistant with good crack bridging capacity.

It is applied by brush or roller to a thick highly durable coating. It can be applied on concrete asbestos, wood, brick/stone, tile and textiles. It is a single component emulsion containing inert pigments and has a brushable consistency.

#### USES

- ❖ UNICHEM FLEXIHYBRID PU ROOFCOAT is primarily used for protection of roofs and designed for the protection of concrete structures against carbonation and chloride ingress.
- ❖ The product is also suitable as a seamless and elastomeric waterproofing coating for under terrazzo or tile floors, shower pans, kitchen, laundry and bathroom floors, timber, asbestos/fiber cement and zinc sheets, asphalt, built-up felt and tile

#### ADVANTAGES

- Durability: High Acrylic polymer content combined with Polyurethane dispersion ensures excellent durability
- Elastomeric: Improved tensile strength and crack bridging properties.
- Ease of use: Very easy to apply by brush, roller or airless spray and is ready to use.

- Protective: Barrier against salts and atmospheric gases.
- High build: Masking imperfections on substrates.
- Waterproof: Protects concrete from waterborne salts.
- U. V. Stable: Maintains its appearance, resistant to yellowing

#### STANDARDS

UNICHEM FLEXIHYBRID PU ROOFCOAT meets the performance requirements of BS EN 1504-2 & BS EN 12390- PART 8

#### TYPICAL PROPERTIES

PROPERTY	RESULT
<b>PHYSICAL APPEARANCE</b>	WHITE / GREY PASTE
<b>DENSITY</b>	1.25 ± 0.2 Kg/ltr
<b>FINISH</b>	SMOOTH
<b>PACKAGING</b>	5 , 20 kg
<b>COVERAGE*</b>	Apply each coat at a rate of 0.6 to 0.9 kg/m <sup>2</sup> . One coat applied at this rate will ideally yield 300 to 400 microns W.F.T
	*The exact coverage will depend upon the porosity, smoothness of surface, wastage and application method
<b>WET FILM THICKNESS (W.F.T)</b>	0.7 TO 0.9 mm per coat
<b>DRY FILM THICKNESS (D.F.T)</b>	0.3 TO 0.4 mm per coat
<b>SOLIDS %</b>	50 - 60 (BY WEIGHT)
<b>WORKING TEMPERATURE</b>	5 TO 50 °C

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### MECHANICAL PROPERTIES

PROPERTY	RESULT
<b>ELONGATION (ASTM D412)</b>	>320%
<b>TENSILE STRENGTH (ASTM D412)</b>	>2 N/mm <sup>2</sup>
<b>WATER PERMEABILITY (BS EN 12390- PART 8)</b>	Less than 6 mm
<b>PULL OFF ADHESION STRENGTH (ASTM C1583)</b>	>2 N/mm <sup>2</sup>
<b>SHORE A HARDNESS [ASTM D2240 (15 “)]</b>	62
<b>UV RESISTANCE (ASTM D822)</b>	No visual defect observed

The values given above for typical properties are average figures achieved in controlled laboratory conditions. Actual values obtained on site may show minor variations from those quote

### INSTRUCTIONS FOR USE

#### SURFACE PREPARATION

The surface must be clean & free of oil, grease or other foreign matters. Surfaces must be primed by applying UNICHEM FLEXIHYBRID PU ROOFCOAT diluted with water (max. 10% by weight)

#### APPLICATION

UNICHEM FLEXIHYBRID PU ROOFCOAT can be applied by brush, roller or airless spray.

A typical four coat application system applied at the rate of 300 to 400 microns per coat would yield a total thickness of 1.5mm (1500 microns).

In order to achieve this the application should be carried out at the rate of 0.6 to 0.9 kg per m<sup>2</sup> per coat.

#### DRYING TIME\*

Temp.	Dry to Touch	Hard Dry
25°C	8 Hrs	24 Hrs
35°C	7 Hrs	20 Hrs
45°C	6 Hrs	18 Hrs

Allow 24 hours between coats. A final curing time of 48 hours is adequate at normal working temperatures. Low temperatures and high atmospheric humidity will slow down the curing rate and vice versa.

Note: Never apply in rain or substrate immersed in water. Do not clean the cured coat with brooms that have bristles.

\*Exact drying times will vary depending on the humidity, temperature and other factors. The above values must be treated only as a guideline

#### MIXING AND THINNING

Materials must be carefully mixed and thinned to application consistency with fresh water only. Care should be taken during mixing in order to avoid aeration of the material.

#### CLEANING

UNICHEM FLEXIHYBRID PU ROOFCOAT can be removed from equipment & tools with water .

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## SAFETY PRECAUTIONS

Take precautions to prevent material entering the eyes. Wear goggles while applying. Provide adequate ventilation. Wear face masks during application

## LIMITATION OF LIABILITY

This information is based on our current level of knowledge. It is given in a good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.

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