



## Roka Enamel Shield

### Two Component Polyurethane Acrylic Enamel Coating

Roka Enamel Shield is a two component, solvent based polyurethane acrylic enamel protective coating for concrete, steel, timber and many other surfaces.

#### Uses & Advantages:

- Excellent weather resistance.
- Resistant to aliphatic solvents.
- Good resistance to dilute acids and alkalis.
- Non-toxic once cured.

#### Fields of Application:

Roka Enamel Shield is recommended as a protective layer against aggressive environments for substrates like concrete, steel, timber, iron etc to the following structures:

- Waste water treatment plants.
- Bridges and flyovers.
- Chemical plants.
- Cooling towers.



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## Technical Information:

Chemical Base	Polyurethane resin
Color	As per color card
Consistency	Liquid
Finish	High Gloss
Mixing Ratio	Base : Hardener = 8 : 1
Density	0.95 – 1.08 kg/l
Flash Point	17°C
VOC	43 ±2% pigments, 35% Clear
Dilution	5 – 10% of Roka Thinner EP
Pot Life	4-6 hours at 25°C
WFT	Pigmented: ~80µm Clear: ~60µm
DFT	Pigmented: ~40µm Clear: ~30µm
Theoretical Coverage	Pigmented: 12.50 m <sup>2</sup> /l Clear: 16.50 m <sup>2</sup> /l
Touch Dry	15 minutes at 25°C
Hard Dry	1 hour at 25°C
Full Cure	7 days at 25°C



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Chemical Resistance	Good resistance to dilute acids and alkalis
Solvent Resistance	Resists aliphatic solvents
Weather Resistance	Does not chalk
Distilled Water Resistance	Good
Toxicity	Non-toxic once cured
Packaging	5 liters
Shelf life	24 months

### Substrate Preparation

Roka Enamel Shield is applied over primed surfaces and therefore surface preparation is consistent with the primer being used. Before the application, it is important to ensure that the surface is clean, mechanically sound and dry. For concrete surfaces, Roka Primer EP-1 is recommended. For metallic surfaces, Roka Zinc Phosphate Primer or Roka ZR Primer is recommended.

If a high-quality finish is required on metallic surfaces, an undercoat of Roka Epo Tar should be applied over Roka Zinc Phosphate Primer / Roka ZR Primer. This should be followed by rubbing down the surface with sandpaper to get the best finish. If wet sanding is used, the surface must always be allowed to dry completely as any trace of moisture will result in bubbling.



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### Mixing:

Stir both the components thoroughly before mixing. Pour the base into a suitable container then add the hardener. Using a slow-speed electric drill fitted with a paddle, mix the components well together for at least 5 minutes to get a smooth homogenous color and consistency. Let the mixture stand for 20 minutes prior to the application.

### Thinning:

If thinning is required, only use Roka EP Thinner. Incorrect choice of thinners may cause bubbling in the film. For application with a brush/roller, the mixture can be diluted with up to 10% of Roka EP Thinner. For spray applications, 10 – 15% dilution with Roka EP Thinner can be added.

### Application:

Roka Enamel Shield can be applied using a brush/roller as well as airless/air assisted spray gun. The coating must be applied to the pre-primed surface within the over coating time stipulated for the relevant primer.

### Important Remarks:

- Never apply thicker films than recommended.
- Do not apply if the ambient temperature is below 8° C.
- If the surfaces are not at least 2° C above the dew point, a film of condensed moisture could be present resulting in bubbling and compromised adhesion.



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### Safety Measures:

- Roka Enamel Shield is toxic and flammable when wet. Eliminate all sources of ignition in and around the working area.
- Do not smoke in or around the working area.
- Ensure the working area is well ventilated and avoid inhalation of vapours and spray mist.

### Cleaning:

Wash all the tools and equipment with Roka Enamel Shield or Roka Xylene before the material is cured. Cured material can only be removed mechanically.

### Health and Safety:

Use of protective clothing, safety goggles, gloves and combined organic vapour respirator is recommended while handling Roka EP Screed. Avoid contact with skin and avoid vapours or mist inhalation. In case of any contact with skin, immediately clean with industrial skin cleanser followed by washing with soap and water. Any splashes in eyes should be cleaned with plenty of clean water and seek medical assistance immediately.

### Important Note:

The information provided in this data sheet is based on ongoing development efforts and extensive field experience. While we strive to ensure the accuracy and reliability of the information, we cannot assume responsibility for any work performed using our materials, as we have no control



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over application methods, site conditions, and other factors. Due to ongoing research and development in our laboratories, we recommend that customers verify that this data sheet has not been replaced by a more recent publication.

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