

RESITOP URBAN – BIKE SYSTEM DATA SHEET

(On concrete base substrate)



1. Definition

Multi-layer coating applied to concrete slabs for cycle lanes, urban areas, and pedestrian pathways, ensuring a coloured, non-slip, and wear-resistant surface. Ideal for tread, signage and decoration of these types of pathways in urban areas

2. General characteristics

1 to 2 mm thick, continuous, coloured, waterproof coating, highly resistant to wear and tear and to the action of atmospheric agents in more extreme weather. Its micro-roughness makes it ideal for safer outdoor transit and tread.

3. Laying and installation

The concrete must be mechanically trowelled to a fine grade without being polished. It must be durable, cured, free of impurities and loose or foreign materials and must have an adequate slope to allow rainwater drainage without leaving pools deeper than the thickness of a Euro coin. If necessary, imperfections such as cracks or pools must be repaired before applying the finishing coats.

Always apply in good weather without any likelihood of rain and at temperatures above 10 degrees Celsius.

4. System Components

The system consists of the successive application of a series of complementary products.

The first product to be applied is RESIEPOX. It is composed of water-based epoxy resins and selected fine sand. It is available in 30 kg (base + catalyst) sets and is mixed on site with water. It is applied using a rubber rake at a rate of 1.0 kg/m². This product ensures optimal and durable anchoring to the concrete and serves as a binding agent to the subsequent system coats.

As a second coat, TOPSEAL is applied, a slurry-type mortar used for sealing and smoothing. It is composed of synthetic resins and selected fine sand. It is available 25 kg cans. It is mixed on site with water and applied using a rubber rake at a rate of 1.5 kg/m². Once the first coat has dried, a second coat of TOPSEAL is applied at a rate of 1.5 kg/m² to smooth and texturise the surface.

Once the sealing and smoothing coats have been applied, an optional final coloured finishing coat is applied, consisting of a CONCENTRADO coat applied at a rate of 0.300 Kg/m². This final coat is applied using a rubber rake, mechanical sprayer or roller.

CONCENTRADO is a pure, highly pigmented acrylic resins based mixture, which is highly resistant to abrasion as well as atmospheric agents. It is available in 20 kg cans.

5. Marking

Once the lines of play have been reconsidered, place the adhesive paper tape and seal it with the transparent PERFILADOR product. Once dry, this layer is painted between the tapes with the PINTALINE paint.

6. Technical characteristics of the finished coating

Approximate Thickness.....1 to 3 mm

Abrasion Resistance to Taber EN ISO 5470-1:2017

Rubbing against H-18 grinding wheels – 1000 cycles..... 1.66 g

After 5200 hours of UV aging

Rubbing against H-18 grinding wheels – 1000 cycles..... 2.19 g

Tensile strength UNE-EN ISO 4624

Tensile Adhesion to Concrete (MPa).....> 1.0

Friction Test (Slippery)

UNE-EN 14877 Criterion (55 to 110)

Dry..... 96 (UNE-EN 13036-4)

Wet..... 68 (UNE-EN 13036-4)

UNE 41901:2017 EX Criterion - Pedestrian Traffic Surfaces

Wet... Rd 68 (Rd >45) CLASS 3 Non-slip

Determination of weather resistance EN 14836:2021

After 5,200 hours of exposure - score 4-5 good - very good

Reaction to fire classification UNE-EN 13501-1:2007 + A1:2009

Classification Bf1 - S1

7. General observations

The application of the products that make up the system must be carried out by specialised personnel. A bad application due to lack of equipment or installing it in adverse conditions can lead to premature ageing.

The drying and polymerisation of the resins should be done in dry weather and always above +10 degrees Celsius.

The commissioning is done within fifteen days after the application of the last layer. Consequently, we achieve the total polymerisation of the resins in all its layers.

For the colour to be added to the rink, this must always be done at a distance of 10m and with the sun at your back. The entire surface must have a uniform colour.

The water retained on the rink should never exceed the thickness of a one-euro coin.

8. Conservation and maintenance

- Sweep or blow the track once a month and prevent the entry of loose sand that may contribute to abrasion due to accelerated wear of the coating
- Given the flexibility of the surface, it is sensitive to strong point loads, so they must be avoided or placed on appropriate distribution plates.
- Depending on the intensity in the use of the surface, the coating will suffer natural wear. A timely replacement of the finishing layers will prevent major damage and consequently savings in subsequent repair costs
- In conditions of medium intensity of use, with a favourable climate and a good degree of maintenance, it should not have to be recoated until after five years

