

RESITOP CONVERQUICK SYSTEM DATA SHEET

(Conversion of porous pavement to resin surface)



1. Definition

Multi-layer coating based on high quality acrylic resins, which applied on a porous concrete surface, serve to restore multi-purpose sports areas in basic facilities of schools, city councils and sports clubs for practicing basic sports such as tennis, basketball, handball, indoor football, etc. both indoors and outdoors.

2. General characteristics

A 2 to 3mm thick, continuous, coloured, waterproof coating that is highly resistant to wear and the effects of atmospheric agents in the most extreme climates. Its micro-roughness makes it ideal for safe sports practice both outdoors and indoors.

3. Laying and installation, system components.

To use this system, the porous concrete surface must be perfectly level. This means that all slabs must be level and free of any steps, indicating that the subsurface base is not affected by soft spots caused by water drainage.

The first step is to remove the existing neoprene joints in the paving and to then fill them with PATCH BINDER mortar or with RESIEPOX; either of these products saturated with silica to obtain a consistent filler and thereby prevent shrinkage. If necessary, fill them twice for optimal drying. Once filled and completely dry, we re-cut the expansion joints with a water jet, exactly where they were originally marked, as the concrete slab will continue to expand and move like a concrete slab.

The second step is thorough cleaning of the porous concrete surface to be coated with pressurised water, completely **unclogging** the pores and obtaining a totally clean, porous, resistant surface free of impurities and loose or foreign materials. Once cleaned, if necessary, imperfections such as cracks or puddles should be repaired with PATCH BINDER mortar. These repaired areas will be sanded and subsequently cleaned before applying the conditioning, sealing and finishing coats.

To condition and prepare the surface, a primer coat of PATCH BINDER, diluted with two parts water and one part product, is applied. The primer is sprayed onto the porous concrete using a spray gun, airless spray, backpack spray gun, or similar system. It is left to dry.

The first product applied is TOPSEAL, a mortar used to seal and smooth the surface. It is composed of synthetic resins and selected fine sand, supplied in 25kg cans. It is mixed on site with water and applied with a rubber trowel at a proportion of 2.0kg/m². On porous concrete surfaces with high porosity or disintegration of existing aggregates, a second coat of TOPSEAL may be necessary to ensure a complete seal and thereby prevent any damage or ripples from the surface from appearing in subsequent coats.

Next, once the TOPSEAL layer is dry and conditioned, a layer of RESURFACER is applied with a rubber trowel at a proportion of 0.9 - 1.0kg/m². This product is supplied concentrated in 18kg drums to be mixed on site with silica sand and water (0.4 RESURFACER + 0.6 sand) or in the RESURFACER PREMIX version in 25kg drums, which already have the sand incorporated and can be mixed with water on site for proper application.

Once the surface has been conditioned in this way, the coloured finish coats are applied, consisting of two coats of PREMIX at a proportion of 0.450kg/m² each. After applying the first layer of PREMIX, we again open the expansion joints of the surface with a water jet so that they are marked and the final surface obtained works through these joints. This prevents, as far as possible, the surface from cracking in other unwanted places. Next we wash the surface, removing impurities and debris that may have emerged during cutting, and leave it to dry. We then apply the second coat of PREMIX. The joints will be minimally sealed and perfectly marked to work on properly.

Finally, we seal the system with a final coat of CONCENTRATE at a proportion of 0.300kg/m².

The PREMIX is a mixture based on acrylic resins and sand, and the CONCENTRATE is a similar paint. Both are highly pigmented products available in quantities of 25kg and 20kg, respectively.

Always apply in good weather without the risk of rain, and at temperatures above 10 degrees Celsius.

4. Note.

To apply this system, it is necessary to know that the porous pavement (that we will cover) uses water drainage philosophy to filter water into the subsoil using the pavement planimetry. Applying the RESITOP CONVERQUICK system does not change the pavement runoff. Rather, the system replicates the existing surface, resulting in a flat, smooth and impermeable surface. This means that after rain, some puddles of water will remain, which must be removed mechanically or allowed to evaporate in order to be able to use the track in optimal conditions.

The client must take this condition into account and evaluate it. Once the system is applied, this requirement will be considered accepted.

5. Marking

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

6. Technical features of finished coating

Approximate thickness..... 2 to 3 mm

Abrasion resistance 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 adhesion UNE-EN ISO 4624

Adhesion to concrete (Mpa).....> 1.0

Friction test (Slipperyess)

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

ITF Resitop Standard Classification

ITF Classified Court Pace... CATEGORY 3 - Medium

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

