

# **POLTRACK SANDWICH SYSTEM** Running track spike-proof system **Certified by WORLD ATHLETICS**



Synthetic outdoor system for running tracks in total thickness of 13.4mm.

It is applied on fine asphalt or smooth, waterproof concrete, without rising humidity issues. Consists of: a first, base layer, mixed at site, a mixture of the polyurethane binder POLAPLAST P13 and RECYCLED RUBBER 858, SBR granules, a second layer (sealing layer) the colored, polyurethane sealing coating POLAPLAST P22 on top of the cushion mixture, and a third layer (surface layer) the full-PU colored polyurethane coating POLAPLAST P20, before broadcasting EPDM granules on top to finish it off.

Certified system by WORLD ATHLETICS and according to EN 14877.

### Steps:

- 1. POLAPLAST P10 Polyurethane primer.
- Mixture of POLAPLAST P13 and RECYCLED RUBBER 858, applied by paving machine.
- 3. Application of POLAPLAST P22, sealing layer.
- 4. Application of POLAPLAST P20, top layer.
- 5. Broadcasting of EPDM granules.















# Preparation - Application

Applied on dry asphalt surfaces (30 days at least old) or smooth, waterproofed concrete surfaces (30 days at least old) without arising humidity issues and free of materials that might prevent bonding e.g. dust, loose particles etc (in case of asphalt or concrete). The success in the application depends on the right preparation of the underlay and use of the material.

- Good, dry cleaning of the surface from dust and residues.
- Priming of the surface with POLAPLAST P10 applied by airless spray or brush. The base coat of POLTRACK SYSTEM should be constructed while POLAPLAST P10 is still sticky (wet on wet procedure), within 30-60 minutes of primer application.
- Good mixing of POLAPLAST P13 with RECYCLED RUBBER 858, SBR granules (0.5-2.5mm) to create a flexible shock-absorbent layer.
- The mixture is poured on the surface and spread using a suitable paving machine or other appropriate machine or a hand straightedge. If the application will be done with hand straightedge then small irregularities in the surface may be removed by compacting the fresh surface using a metallic cylinder.
- After the surface is fully cured (depending on the temperature and humidity, the curing of the shock-pad cushion base coat of POLTRACK will take 48-72 hours), follows the application of PU pore filler POLAPLAST P22 in 2 crossing layers with a trowel. Any irregularities from application must be removed from the use of sandpaper machine generally or on the spot. Consumption: 1.5kg/m<sup>2</sup> for two layers.
- After 18-24 hours and when the pore filler has dried the top coating of the POLTRACK SANDWICH SYSTEM, POLAPLAST P20 is applied in one layer by a V-notch trowel (with 5-6mm notches) and a spiked roller. Consumption 2,5 kg per square meter.
- Then on the wet fresh PU self-leveling surface follows the broadcasting of the EPDM granules (granulometry 1-3mm) with consumption 3,6 - 4 kg/m<sup>2</sup>.
- After the top layer has cured (depending on conditions, this will usually take 9-12 hours at 25°C), it can be walked on. After 2 days, the top coating of POLTRACK SANDWICH SYSTEM is fully cured and can be put into service, after proper line marking is performed with the use of special two component polyurethane paint.

#### **Important Remarks**

During temperatures over 40 degrees, ideal time for the application of POLTRACK SANDWICH SYSTEM is between 22:00 and 09:00. The minimum bearing temperature during application and drying should be over 10°C.















✓ The freshly coated surface should be protected from high temperatures, wind, rain and frost for at least the first 24 hours.

### **Substrate**

Asphalt is the safer subfloor for sport floorings for sure and must be always preferred than concrete surfaces.

#### A. Asphalt Substrate

The asphalt must have a slope of 0.7-1% and must dry for at least 30 days so that all solvents from the asphalt can evaporate.

The asphalt sub-floor should be applied on well compacted 150mm road base sub-floor and asphalt should be laid in one layer (and not 2) in 6 to 8cm with fine and coarse aggregates (up to 15mm granulometry) like the kind of asphalt used in road construction.

So, new road-grade asphalt will have to be laid (minimum 60mm) in one layer containing coarse aggregates and then mature for 30 days at least, before any application takes place on top of the asphalt to avoid bubbles on the final layer of the sport or rubber floorings.

#### Asphalt Infrastructure

Fine asphalt base in thickness of 6cm with very fine aggregates by finisher
Asphalt primer
Good compaction by vibration
Fine gravel 10cm
Gravel stone in thickness of 15cm













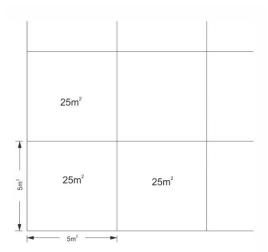
#### **B.** Concrete Surface

Concrete surface must be power-trowelled without cracks and must be smooth with a slope of 0.7-1% and humidity under 4% in 10cm depth of concrete.

Concrete must also be **dry at least for 40 days** and then the application takes place if there is no rising humidity for the sub-floor. Before the application takes place, there must be proper grinding of the surface by a grinding machine to open the pores accordingly and also a measurement by special instrument to measure humidity on the surface and in 10cm under the surface.

Generally concrete is a risky sub-floor and there may be problems with rising humidity, especially in areas where the sea level is really high and when the sea is close or in areas near greenery.

Always make expansion joints in large areas of concrete, in order to avoid uncontrollable cracks and failures. Joints should be every 25 square meters creating a grid of 5x5 meters or close to that.





### **Substrate requirements**

Concrete quality at least C20/25

Age: at least 40 days

Moisture content: below 4%

# Tools:















