

SYSTEM POLYFLEX AEL – EX

Total thickness of 6mm – 14mm

Certified by I.T.F. - International Tennis Federation



Outdoor highly flexible, acrylic system ideal for tennis, basketball, volleyball, handball, football, multipurpose courts, as well as any other outdoor sports court. Combination of prefabricated shock-pads and acrylic coating in average total thickness of 6 mm – 14mm.

Steps :

1. **PU FLEX 140 – Special, polyurethane, two component, adhesive.** It is applied on dry waterproof surfaces of concrete without rising humidity issues or smooth asphalt surfaces. Used for the application of **ISOPOL 854** shock-pads or other prefabricated shock-absorbent rolls made from recycled rubber or EPDM.
2. **ISOPOL 854 – Shock-pad.** Elastic, prefabricated shock-pad made of recycled rubber providing shock – absorbency, in thickness of 4mm–12mm. Used as cushion substrate before the application of polyurethane or acrylic systems.
3. **ELASTOTURF 851 - Acrylic, elastic, slip resistant coating for sports floors systems.** Consists of acrylic resins, quartz sand and special improvers. It is combined with ISOPOL 854 as substrate to create multi-purpose sports flooring systems. Highly resistant to adverse weather conditions (snow, frost, heat waves etc.) after drying. Applied by squeegee in 3 layers at least.

Preparation – Application

Applied only on dry asphalt and concrete surfaces (over 30 days old from date of placement) without rising humidity issues and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. 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 with vacuum cleaner and squeegees.
- Priming of the surface with **PU FLEX 140** for the proper adhesion on the sub-floor.
- Then place the **ISOPOL 854** rolls on the floor in their final positions without gluing them. Lift each side of each roll and apply the PU glue by either notched (toothed) trowel with 3mm teeth (better and recommended) or by flat (straightedge) trowel and then glue the rolls immediately without waiting. In case there are small bulges (humps, swollen parts) on the ISOPOL after its application, you'll have to tear it around the edge of the hump without removing it completely (with a knife or something), raise that small part, put some PU glue underneath and glue the hump part again, making sure this time it's flat. Then you let everything dry. Do not overlap the rolls but bring them as close together as possible to eliminate gaps. If you use the notched trowel, do not put any weights on the edges or anywhere else, it's not needed. If you use the flat trowel, you could use a light cylinder (10-15kg maximum) to compact the rolls on the floor, but we stress it's recommended to use the toothed trowel and no weights. After the ISOPOL rolls are glued on the surface one next to the other in a tight way (without overlapping), it is recommended that the joints (only) are covered flush with ELASTOTURF (or PU FLEX 140) with a flat trowel (or a brush) along their whole length, so that the surface is leveled out. Next day the joints are ground lightly with sandpaper or other grinding device to smooth out the joints with the rest of the surface and create the required roughness, and then ELASTOTURF 851 layers are laid as usual over the whole surface in at least 3 crossing layers.
- Depending on the ambient temperature **ELASTOTURF 851** is diluted with 3-4% water, prior to application, in order to achieve better fluidity. It is applied in 2mm total thickness, in two or three coatings by squeegee, depending on the desired thickness. The next layer follows the other after the previous starts to dry.

Important Remarks

- ✓ During summer or during temperatures over 35 degrees, ideal time for the application of **POLYFLEX AEL SYSTEM** is between 21:00 and 06:00 and temperature less than 30°C, while in the winter, 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.
- ✓ In case it gets damaged, it is simply repaired and recoated on the spot.

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 all solvents from the asphalt evaporate.**

The asphalt subfloor should be applied on well compacted 150 mm road base subfloor and asphalt should be laid in one layer (and not 2) in 6 to 8 cm 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.

B. CONCRETE SURFACES

Concrete surface must be powerroweled and must be smooth with a slope of 0,7-1%.

Then concrete must dry at least for 40 days and then the application takes place if there is no arising humidity for the subfloor. Before the application takes place, there must **be a proper gridding** of the surface by a grinder machine to open the porous 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 subfloor and there may be problems **with arising humidity, especially in areas where the sea level is really high and when the sea is close.**

Always make expansion joints in large areas of concrete, in order to avoid uncontrollable cracks and failures.

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