

## PU FLEX 140

SPECIAL PU GLUE FOR THE APPLICATION OF PREFABRICATED SHOCK ABSORBENT ROLLS

### GENERAL CHARACTERISTICS

**PU FLEX 140** is a two component, solvent free adhesive for the application of prefabricated shock-absorbent rolls made of recycled rubber or from EPDM granules and also for the safety tiles.

- It is applied on dry, sealed surfaces of mosaic, concrete or asphalt.
- Suitable for interior and exterior use.
- Provides good filling properties.
- Non shrinking, non flammable adhesive, that doesn't affect the appearance of the covering material.

### TECHNICAL DATA

Mixing ratio:	7 : 1 (By weight)
Density of mixture (20°C):	approx. 1,75±0.1 gr/cm <sup>3</sup>
Density of Comp. A (20°C):	approx. 1,88±0.1 gr/cm <sup>3</sup>
Density of Comp. B (20°C):	approx. 1,22±0.05 gr/cm <sup>3</sup>
Pot-life (23°C):	30-40 min.
Application temperature:	Min 5°C
Curing (20°C and %60 relative humidity):	6 hours
Color and odor:	Creme

## PREPARATION- APPLICATION

**Applied only on dry, level surfaces. Protected from arising humidity 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 using brushes and air spray.
- Caution must be taken so that the temperature remains between 15 and 25 °C during mixing, application and for the first 24 hours in order to retain proper bonding and curing.
- Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. Mixing should be performed using a 300-600 rpm mixer for 2-3 min until a uniform mass is obtained. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve uniform dispersion of the hardener.
- The mixed adhesive **PU FLEX 140** is applied under each roll using a notched trowel, as soon as possible in order to avoid any problems with the limited pot life. A roller should be used on the top of the shock absorbent rolls within an hour after the adhesive has been mixed.
- After the absorbent rolls have been rolled, avoid any traffic that is not necessary. The floor can receive a second rolling in about two hours, in order to assure very close contact of the tiles at every spot.
- Light foot traffic is permitted after 6 hours. Full curing needs 2 days.

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## CONSUMPTION

0,8 kg/m<sup>2</sup> depending on the sub-floor and type of floor covering.

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## APPLICATION TOOLS

Notched trowels. Tools should be cleaned with **PU SOLVENT** immediately after use.

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## PACKAGING

Supplied in set of 20 kg, 10 kg, and 3,5 kg (two drums). Components A and B have the fixed weight proportion.

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## STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 28 °C.

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## REMARKS

- Working time of **PU FLEX 140** decreases when ambient temperature rises.
- Avoid application of **PU FLEX 140** during rain, moist or foggy weather.
- Prolonged storage of partially used containers containing **PU FLEX 140** must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.
- When laying flooring over an underfloor heating system, caution must be taken so that the heating system is left in full operation for at least 8-10 days before the application. The screed must be dry prior application. Before laying, however, the heating system must be switched off or reduced, so that a surface temperature of 20-22 °C is not exceeded.
- After hardening **PU FLEX 140** is completely safe for health.
- Our recommendation is that 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.

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## CAUTION

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water. Flammable before application.

**For more information consult the material safety data sheet.**

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## ISOPOL 854

### SHOCK ABSORBENT UNDERFLOOR

#### GENERAL CHARACTERISTICS

Elastic, prefabricated roll made of polymerically bound recycled rubber particles for shock-absorbency, in thickness 3-14mm. It offers noise abatement, it has excellent performance in slip resistance and fire behavior, it is flexible and environmentally friendly. It is covered with the acrylic coating **ELASTOTURF 851** or self-leveling PU coating, in thickness of 2mm, for the creation of athletic floorings for interior & exterior surfaces like basketball, volleyball, handball, football and tennis courts as well as for playgrounds. Its special cushion properties are indeed recommended for multipurpose.

It is fully elastic, resistant against moisture, heat and mildew. It is environmentally safe and is not health hazardous. It is easily installed using simple techniques, with the parallel use of PU elastic glue.

SUITABLE FOR EXTERNAL&INTERNAL COURTS WITH ACRYLIC TOP COATINGS, INTERNAL HALLS WITH P. U. TOP COATING, GYMS, CROSSING AREAS AND GENERALLY AREAS WHICH NEED HIGH ELASTIC FLOORING. IDEAL ALSO AS SUB-FLOOR FOR ATHLETIC TRACKS AND SYNTHETIC.

## PREPARATION- APPLICATION

The sub-surface on which the material will be installed must be completely dry and clear of all foreign matter and free of dust, dirt, oil or any kind of spills.

The material surface will follow the contours of the sub-surface, which it covers. The smoother the sub-surface, the better the shock-absorbent material surfacing finishes.

Spread special PU glue elastic evenly with consumption 700-800gr/m<sup>2</sup>. Weights such as sand bags have to be used on the edges, corners and seams of the shock absorbent roll surface installation until the PU glue elastic is cured. Do not overlap adhesive applications as this will cause butt-joints to 'stand up' along the seams.

Lay shock absorbent roll and form a tight butt together and eliminate any gaps.

To achieve tight seams, it will be necessary to trim sides and/or the ends of the rolls.

After the shock absorbent roll is placed onto the adhesive, it is recommended that the entire surface be rolled using a 50 kg. hand-held flooring roller. This is done to embed shock absorbent roll into the adhesive and eliminate any entrapped air and must be done simultaneously.



Application of the special acrylic material **ELASTOTURF (851)** as final coating, in 2mm thickness in three or more layers, the next layer after the previous starts to dry or application of **POLYFLEX-PU indoor system**, comprising three different materials.

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## COLOR

Black.

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## SURFACE

fine tuned granules structure.

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## PACKAGING

rolls with dimensions:

Width : 1050mm or 1250mm ± 1,5% &

Length (± 1,5%) : 30m in 4mm thickness, 24m in 5mm thickness, 20m in 6mm thickness, 17m in 7mm thickness, 15m in 8mm thickness, 13m in 9mm thickness, 12m in 10mm thickness.

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## THICKNESS

Available in 4, 5, 6, 7, 8, 9, 10 and 12mm.

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## DENSITY

Ca.820 kg/m<sup>3</sup>

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## TEST RESULTS

Tensile strength: approx. 0,6 MPa (DIN 53571)

Tear resistance: approx. 60 % (DIN 53571)

Force reduction\*:

- 8 mm Isopol 27 %
- 10 mm Isopol 32 %
- 12 mm Isopol 35 %

Standard deformation\*:

- 8 mm Isopol 1,0 mm
- 10 mm Isopol 1,2 mm
- 12 mm Isopol 1,3 mm

\* Values measured on a sport hall system sample.  
10 and 12 mm systems with polyester mash.

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## ELASTOTURF 851

SPECIAL, ELASTIC, LEVELING COATING FOR INTERNAL AND EXTERNAL SPORT FIELDS

### GENERAL CHARACTERISTICS

**ELASTOTURF 851** is acrylic-based, elastic, colored, non-slip coating for external and internal sport fields, certified by the **INTERNATIONAL TENNIS FEDERATION (I.T.F.)**.

- Applied on asphalt and cement waterproofed surfaces without rising humidity issues, following the application of **ELASTOSPORT 853** or **SUPER ELASTOCOAT 842**.
- It can be also combined with prefabricated shock-absorbent rolls in thickness 4-14mm or elastic cushion sub floor **SUPER ELASTOCOAT 842**.
- Ideal for basketball, volleyball, handball, football and tennis external courts. Suitable for sports centers, schools, fitness centers, pavements, hallways.
- Applied easily, having low cost.
- Provides a safe, high quality game.
- Prevents high temperatures of the underlay.
- For interior surfaces, the smooth version of **ELASTOTURF** is used (**ELASTOTURF 851-S**). This should be combined with prefabricated shock-absorbent roll in thickness 4-12 mm or a rubber mixture of **SBR plus PU BINDER** and then at least 3,5 kg/m<sup>2</sup> of ELASTOTURF 851S in order to seal the pores and plasticize the flooring.
- For the creation of lines in sport courts it is recommended the use of acrylic paint **ELASTOMARK 818** in any desirable color.

### TECHNICAL DATA

Basis:	one-component acrylic resin
Appearance:	viscous liquid
Colors:	Indian red, green, ochre, light and dark blue, light and dark grey and on request
Viscosity:	
Density:	24000 ± 1250 mPa•s at 23°C
Temperature for the application and drying of the material:	1,61 ± 0,01 gr/cm <sup>3</sup> 10 – 35°C
Walkability:	after 24 hours
Total Hardening:	5 days at 23°C
Adhesive strength:	1,20 ± 0,08 N/mm <sup>2</sup>

## PREPARATION-APPLICATION

Applied only on dry surfaces, 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, except in case of using shock-absorbent rolls, with bonding resin primer **RITIVEX 1102** for the proper adhesion of the sub-floor. Application of one or more layers until the surface is saturated. Avoid the creation of puddles of the material. Consumption: 150-200gr/m<sup>2</sup> in two layers, depending on the absorption of the underlay.

## EXTERNAL SURFACES

- When the primer begins to dry (approximately 1 hour depending on the ambient temperature), follows the application of **ELASTOSPORT 853**, or **SUPER ELASTOCOAT 842**, for sealing the pores of underlay. Alternatively, the substrate can be prefabricated shock-pad in thickness 4-12 mm or an in-situ rubber shock-pad of **SBR plus PU BINDER**.
- As soon as **ELASTOSPORT 853**, or **SUPER ELASTOCOAT 842**, dries (48 hours at 23<sup>0</sup>C), follows the application of **ELASTOTURF 851**.
- Depending on the ambient temperature **ELASTOTURF 851** is diluted with 2-5% water, prior to application, in order to achieve better fluidity. It is applied in 1mm thickness, in two or three coatings depending on the desirable thickness. The next layer follows the other after the previous starts to dry.

## INTERNAL SURFACES

- Application of the material on prefabricated shock-absorbent rolls in thickness 4-12mm or a rubber mixture of **SBR plus PU BINDER**, for sealing the pores of the underlay and plasticize the surface.
- Depending on the ambient temperature, **ELASTOTURF 851** is diluted with 2-5% water, prior to application, in order to achieve better fluidity. The next layer follows the other after the previous starts to dry.

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## CONSUMPTION

- 1 kg/m<sup>2</sup> (two layers on ELASTOSPORT 853 resurfacer)
- 1.3-1.5 kg/m<sup>2</sup> (three layers on ELASTOSPORT 853 resurfacer)
- 1.8 kg/m<sup>2</sup>/mm (three layers on ELASTOSPORT or SUPERELASTOCOAT)
- 3,8 kg/m<sup>2</sup>/mm (three or more layers on shock-pad)

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## APPLICATION TOOLS

Special squeegees. Tools should be cleaned with **WATER** immediately after use.

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## PACKAGING

Supplied in barrels.

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## STORAGE

Maximum 18 months in unopened containers in dry places with minimum temperature 5°C and maximum temperature 30°C.

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## REMARKS

- In case of extremely rough and sharp cement or asphalt surfaces it is recommended grinding of the surface with a mosaic machine, sandblast or rotor machine before the application of **ELASTOSPORT 853**.
  - **ELASTOTURF 851** should not be applied in more than 0.6 kg/m<sup>2</sup> per layer. In case of high temperature during summer, layers thicker than 1mm should be avoided because the material may crack due to the rapid evaporation of water. Lining thickness more than 1mm is achieved only by repeated layers.
  - During summer, ideal time for the application of **ELASTOTURF (851)** is between 6:00-9:00 a.m. and temperature less than 35°C, while in the winter, the minimum bearing temperature during application and drying should be 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.
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## CAUTION

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.

**For more information consult the material safety data sheet.**

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## ELASTOMARK 818

ACRYLIC-BASED PAINT FOR FLOORINGS FOR INTERNAL AND EXTERNAL SURFACES

### GENERAL CHARACTERISTICS

**ELASTOMARK 818** is acrylic-based paint for floorings, for internal and external surfaces.

- It can be applied quickly and easily, having low cost.
- Provides strong adhesion to the substrate and resistance to weather conditions.
- Suitable for painting athletic courts, cement floorings, mosaics and asphalt surfaces, as well as lining at athletic courts.
- Eliminates dust from decay in old & new floorings
- Ideal for athletic courts, schools, hotels, parking areas, pavements, hallways etc.

### TECHNICAL DATA

Basis:	one-component acrylic resin
Appearance:	viscous liquid
Colors:	white, indian red, green, grey, blue, ochre and on request from RAL color card for orders more than 300kg
Viscosity:	19.500 ± 500 mPa•s at 23°C
Density:	1,539 ± 0,047 gr/cm <sup>3</sup>
pH:	7,60 ± 0,1
Temperature for the application and drying of the material:	5 – 30°C
Walkability:	after 24 hours in 25 °C

## PREPARATION-APPLICATION

**Applied only on dry surfaces, protected from arising humidity 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 joining resin **RITIVEX (1102)** for the proper adhesion of the sub-floor. Application of one or more layers until the surface is saturated. Avoid the creation of puddles of the material. Consumption: 150-250gr/m<sup>2</sup>, depending on the absorption of the underlay.
  - When the primer begins to dry (approximately 1 hour depending on the ambient temperature), follows the application of **ELASTOMARK 818**.
  - Depending on the ambient temperature **ELASTOMARK 818** can be diluted with 15% water, prior to application, in order to achieve better fluidity. It is applied in two or more layers. The next layer follows as soon as the previous starts to dry.
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## CONSUMPTION

400 – 500 gr/m<sup>2</sup> in two layers, depending on the absorbency and roughness of the underlay.

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## APPLICATION TOOLS

Nappy rolls, brushes, spray. Tools should be cleaned with **WATER** immediately after use.

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## PACKAGING

Supplied in drums of 10kg and 25 kg.

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## STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 28 °C.

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## CAUTION

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.

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