



**SPORT TRACKS® 300
SEALED STRUCTURALLY SPRAYED BASE MAT SYSTEM
PRODUCT SPECIFICATIONS**

A. PRODUCT

SPORT TRACKS® 300 is an impermeable, synthetic sports surface, designed for track and field activities. The system consists of a base mat made of recycled rubber granules (SBR) bound with a polyurethane binder and an impermeable layer of a bi-component urethane coating, and a pigmented spray-applied top finish of polyurethane spray-coating and EPDM rubber granules and is installed on site (insitu-installation). It is usually applied over asphalt or concrete, but other stable substrates may also be used.

The SPORT TRACKS 300 system is an excellent medium priced polyurethane surface chosen as the ideal training facility by owners with high-exposure Stadia, major universities, colleges, but also by high schools, smaller colleges and other communities, and wherever an extended durability is required.

SPORT TRACKS 300 is warranted against defects in workmanship, labor and materials under normal use and service for a period of sixty months. The warranty excludes any damage or defects caused by improper design or engineering, by an inadequate or defective base, by normal wear and tear, vandalism, abuse, neglect, lack of maintenance or acts of God.

B. MATERIALS

1. Primers
Polyurethane-based primers specifically formulated to be compatible with the base and track surfacing materials.
2. Black SBR Granules
The rubber granules for the base mat shall be recycled SBR rubber, processed and chopped to 1 to 3mm size, containing less than 4% dust.
3. Polyurethane Binder
Binder for the black rubber mat shall be MDI-based and or MDI/TDI mixture, monocomponent, polyurethane binding agent. The binding agent shall not have a free TDI monomer level above 0.2%, must be clear or black in color, not milky, and must be solvent free. The binding agent must be specially formulated for compatibility with SBR stranded or rubber crumb.
4. EPDM Granules
The rubber granules for the structural spray wearing coats shall be EPDM peroxide cured, man-made rubber containing a minimum 20% EPDM, with a specific gravity of 1.5 +/-0.08, and chopped to 0.5-1.5mm. The EPDM rubber will be the same color as chosen by the owner for the track surface.



5. Impermeable Layer

The resin for this application shall be a pigmented, thixotropic, two-component, polyol and isocyanate, moisture cured, urethane compound and shall be squeegee applied.

6. Structural Spray Coating

The spray coating shall be one or two component moisture-cured, pigmented polyurethane, specifically formulated for compatibility with EPDM granules. The coating shall be the color red, or as chosen by the owner of the track surface.

7. Line Marking Paint

The line marking paint shall be polyurethane-based paint specifically manufactured to be compatible with polyurethane synthetic track surfaces.

C. EXECUTION

1. Sub-base

For NCAA certification the following criteria must be followed. The track surface i.e., asphalt substrate, shall not vary from planned cross slope by more than +/- .1 % with a maximum lateral slope outside to inside of 1% and a maximum slope of .1% in any running direction. The finished asphalt shall not vary under a 10' straight edge more than 1/8".

It should be the responsibility of the asphalt-paving contractor to flood the surface immediately after the asphalt is capable of handling traffic, but within 24 hours. If, after 20 minutes of drying time, there are birdbaths evident, it shall be the responsibility of the architect, in conjunction with the surfacing contractor to determine the method of correction. No cold tar patching, skin patching or sand mix patching will be acceptable.

Any oil spills (hydraulic, diesel, motor oil, etc.) must be completely removed, either by chipping out or removing and replacing with new, keyed in asphalt. The minimum depth of any asphalt replacement shall be one inch. The curing time for the asphalt is 14 -21 days. It shall be the responsibility of the surfacing contractor to determine if the asphalt substrate has cured sufficiently prior to the application of polyurethane surfacing system.

It shall be the responsibility of the general contractor to determine if the asphalt substrate meets all design specifications, i.e. cross slopes, planarity and specific project criteria.

Upon completion of surface test and correction of any defects, track surface contractor shall submit to Engineer or Owner a signed certificate stating the existing surface is acceptable and satisfactory for the installation of his track surface system.



2. Priming

The primer shall be spray-applied in accordance with the manufacturer's specifications. Only those areas that can be installed the same day should be primed.

3. Base Mat

Mix the black SBR granules and the Binder at a ratio of approximately 5:1 by weight. The exact ratio depends on the dust content of the granules, which should be reduced to a minimum. Mixing time is 2 to 4 minutes, depending on the size of the mixing-batches and the type of mixer used.

The blended materials are then spread onto the asphalt or concrete base using a mechanical tandem leveler. The tandem leveler shall have a heated oscillating screed bar to obtain both smoothness and compaction. The heated screed bar normally works at a temperature of 158 to 176 degrees F.

The laying procedure shall be bay-to-bay and limiting the length of the passes so as not to have any cold (cured) joints between the bays. At the beginning of each new day's work, the traverse joint from the previous day's work shall be tack coated to ensure a good bond. Small irregularities remaining in the surface after the tandem leveler has passed may be removed using a light polyethylene or Teflon roller or hand trowelled.

The surface hardens through the reaction of the binding agent with humidity. The speed of the reaction depends on temperature and relative humidity. Usually the surface may be walked upon the next day.

4. Impermeable Layer

The "A" and "B" components are mixed at the prescribed ratio homogeneously with a suitable mixing device. This may be a strong drilling machine with a mixing paddle, a static mixing machine or an automatic mixer. The mixing process may last approximately 2 to 4 minutes per batch, depending on the employed mixing unit. This coating is squeegee-applied to the base mat, making it impermeable.

5. Structural Spray Wear Coats

After the black rubber and sealer coat have cured, the top layer installation consists of the use of SPORT TRACKS™ structural spray coating and EPDM granules. The base mat must be dry, clean, and free of dust, oils and grease. The SPORT TRACKS™ structural spray coating material is mixed with the EPDM granules in a suitable device. Application of the mixture is to be effected by use of a structural spray machine. To avoid cloud formations and to achieve total coverage of the base mat, we recommend two applications of the mixture in alternate directions with approximately 0.7 kg per sq. m. (1.5 lbs. per square yard) per coat. Resistance to abrasion, track spike damage and atmospheric corrosion; and to achieve the longest possible durability, requires installation of the materials in these quantities.



6. Line Markings

All line and event markings shall be applied by experienced personnel utilizing polyurethane based paint compatible with the synthetic track surfacing. All markings dimensions will be certified in accordance with the specifications issued by the appropriate sanctioning or governing body such as IAAF, NCAA, NFSHSA, etc.

7. Physical Properties (ASTM/IAAF)

Thickness: 13mm or as specified by architect/engineer or owner
Shore A Hardness (ASTM D-2240): 55 +/- 5
Elongation at break (ASTM D-412): Approx 110%
Tensile Strength (ASTM D-412): 0.80 N/mm²@ 70F
Compression Set Recovery (ASTM D-395): 90% to 95% @ 70F over 24-hour period
Abrasion Resistance (ASTM D-501): 0.25 grams loss after 1000 cycles
Chalking (ASTM D-822): No change after 1000 hours in weather meter.
Coefficient of Friction (ASTM D-1984): Dry: 0.70 to 0.75
Wet: 0.60 to 0.65
Resilience (ASTM D-2632): 38% to 42%
Tear Resistance (ASTM D-624): 60 - 75 psi
Colors: Red, yellow, green, gray, blue as specified by Owner. Colors other than red must be custom blended and carry additional cost.

D. CONTRACTOR QUALIFICATIONS

Contractors wishing to be considered as an “or equal” must provide documentation for their Products 10 days prior to the bid opening.

E. INSTALLER

SPORT TRACKS 300 shall be installed only by trained craftsmen, who are full-time employees of HELLAS Sport Surfaces a division of Hellas Construction Inc. No outside installer or distributor will be sold or furnished with material for installation.



F. MANUFACTURER

SPORT TRACKS 300 is manufactured by HELLAS Sport Surfaces a division of Hellas Construction Inc.

Hellas Construction Inc.
12710 Research Blvd.
Austin, Texas 78759
T 512.250.2910
F 512.250.1960
www.hellasconstruction.com

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