

Conversion of a BSS 100 to a BSS 300 Track Surfacing System Specifications

Part 1 – General

1.1 – Scope

*The synthetic surfacing contractor shall furnish all labor, materials, equipment, supervision and services necessary for the proper upgrade of the **BSS 100 (Basemat, Structural Spray) Synthetic Track Surfacing System to a BSS 300 (Sandwich System with an Embedded Texture)** and related work indicated on the drawings and specified herein.*

*The **BSS-300** is distributed by:*



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The synthetic surfacing contractor shall refer to the drawings for the required locations of synthetic track surfacing to be installed. All quantities and dimensions shall be field verified by the synthetic surfacing contractor.

1.2 – Specific Scope of Work

- A. *Install an impermeable polyurethane synthetic track system consisting of BEYPUR 200, two component polyurethane sealer and BEYPUR 250, a poured-in-place, two-component U.V. stabilized elastomeric polyurethane wearing layer with an Embedded textured finish.*
- B. *Layout and paint all track lines and event markings as required and specified by current IAAF and NCAA rules.*

1.3 - Coordination

The synthetic surfacing contractor shall coordinate the work specified with an authorized and appointed representative of the owner so as to perform the work during a period and in a manner acceptable to the owner.

Part 2 – Codes and Standards

2.1 – Applicable Publications

Codes and standards follow the current guidelines set forth by the International Amateur Athletic Federation (IAAF) and the National Collegiate Athletic Association (NCAA), along with the current material testing guidelines as published by the American Society of Testing and Materials (ASTM).

2.2 – Performance Standards

The new synthetic track surfacing system shall exhibit the following minimum performance standards as required by IAAF:

A.	Thickness	≥ 18 mm total thickness including resurfacing.
B.	Force Reduction	35 to 50%
C.	Modified Vertical Deformation	0.6 to 1.8mm
D.	Friction	≥ 47 TRRL Skid Resistance
E.	Tensile Strength	≥ 0.5MPa
F.	Elongation at Break	≥ 40%

2.3 – Product Substitutions

All substitutions must be completely submitted for review a minimum of ten (10) days prior to the opening of the bid.

Part 3 – Quality Assurance

3.1 – Contractor and Manufacturer Qualifications

- A. The CONTRACTOR must have a minimum of 5 years experience in the installation of poured-in-place, two-component elastomeric polyurethane synthetic track surfacing.*
- B. The CONTRACTOR shall be able to furnish evidence that they have been in business for a period of not less than 5 years, under the present name, and if required, furnish financial statements for each of the past 5 years.*
- C. The CONTRACTOR shall also be required to have a full time employee on staff with a “Certified Track Builder (CTB)” designation as awarded by the American Sports Builder’s Association. A current CTB certificate shall be included with the bid package for this project.*

- D. *The CONTRACTOR is required to provide documentation that shows the selected specified and installed product meets IAAF Performance Specification for Synthetic Surfaced Athletics Tracks (Outdoor) and is certified in terms of the IAAF certification system as updated to present day.*
- E. *The CONTRACTOR is to provide a list of completed facilities, minimum of 10 outdoor track facilities in the last 2 years using the exact, IAAF certified, poured-in-place, two-component elastomeric polyurethane synthetic track surfacing, as specified herein with the contractor bidding this project.*
- F. *The MANUFACTURER must have a minimum of 10 years of experience with compound two-part polyurethane for athletic surfaces.*
- G. *The MANUFACTURER must offer a minimum of four (4) IAAF Certified Track Systems.*

3.2 – Submittals

The following submittals must be received with the bid submittal:

- A. *Standard printed specifications of the synthetic track surfacing system to be installed on this project.*
- B. *An affidavit attesting that the synthetic track surfacing material to be installed meets the requirements defined by the manufacturers currently published specifications and any modifications outlined in those technical specifications.*
- C. *A synthetic track surfacing system sample, 6" x 6" in size, of the same synthetic track surfacing system to be installed on this project.*
- D. *An installation list of outdoor track facilities installed within the last two years, using the exact synthetic track surfacing system specified herein.*
- E. *Test results from an approved IAAF Testing Laboratory confirming compliance to the performance of athletic tracks test according to the IAAF.*

Part 4 – Materials

4.1 – Elastomeric Polyurethane

- A. *BEYPUR 250, the two-component U.V. stabilized elastomeric polyurethane compounded from polyol and isocyanate components and mixed at a 2:1 ratio, based on one hundred percent (100%) Methylene Diphenyl Isocyanate (MDI). No Toluene Diisocyanate Isocyanate (TDI) will be allowed.*

B. *The elastomeric polyurethane shall be standard terra cotta red in color to match proposed EPDM..*

4.2 – EPDM Granulate

A. *The EPDM granulates shall be 1 to 3mm in size and peroxide cured.*

B. *The EPDM granulates and the U.V. stabilized elastomeric polyurethane shall be color matched.*

4.5 – Seal Coat

Shall be BEYPUR 200, a two-component polyurethane pore sealer use on paved rubber granule mats and over structural spray applications. The granular SBR and binder layer shall be sealed with the BEYPUR 200. The application of EPDM dust is not allowed or will be considered an equal.

4.6 – Line Marking Paint

Single-component, moisture cured, aliphatic polyurethane paint.

Part 5 – Installation

5.1 – Subbase

The Synthetic Track Surfacing System shall be laid on an existing basemat, structural spray track and field surface that was applied over an approved subbase.

The approved subbase must demonstrate the following characteristics and the General Contractor shall provide compaction test results of 95% or greater for the installed subbase and asphalt surface.

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 + .2%, with a maximum lateral slope outside to inside of 1%, and a maximum slope of 0.1% 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 base is 28 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. After all the above conditions are met, the synthetic surfacing contractor must, in writing, accept the planarity of the asphalt receiving base, before work can commence.

5.2 – Thickness

The thickness of the upgraded track and field surfacing system shall be 18mm.

5.3 – Equipment

The Synthetic Track Surfacing System components shall be processed and installed by specially designed machinery and equipment. The wearing course shall be installed using automatic electronic portioning, which provides continuous mixing and feeding for an accurate, quality controlled installation.

5.4 – Installation

A. Seal Coat

The two BEYPUR 200 components are mixed at the prescribed ratio homogeneously with a suitable mixing device. The coating is squeegee applied to the existing track surface, making it impermeable.

C. Wearing Course

The 1 to 3mm EPDM granules shall be integrated into the BEYPUR 250 to achieve the full depth of the 5 mm wearing course. The resilient embedded textured finish shall be a dense matrix of exposed EPDM granules. The homogeneous wearing course shall be applied in situ with the base course.

5.5 – Site Conditions

A. Installation shall not take place if adjacent or concurrent construction generates excessive dust, abrasives or any other by-product that, in the opinion of the installer, would be harmful to the track material, until

completion of such works.

- B. If, in the opinion of the installer of the synthetic material, the weather and/or climatic conditions are detrimental to the proper installation of the surfacing materials, work shall be delayed until conditions are acceptable. Required installation temperature is fifty degrees Fahrenheit and rising. Installation shall be executed only in dry conditions.*

Part 6 – Line Striping and Event Markings

6.1 – Layout

Line striping and event markings shall be laid out in accordance with current IAAF and NCAA rules.

6.2 – Certification

Upon completion of the installation, the owner shall be supplied with all necessary computations and drawings as well as a letter of certification attesting to the accuracy of the markings.

Part 7 – Guarantee

This scope of work shall be fully guaranteed against faulty workmanship and material failure for a period of five (5) years from the date of acceptance.

Synthetic surfacing material found to be defective as a result of faulty workmanship and/or material failure shall be replaced or repaired at no charge, upon written notification within the guarantee period.