



# BSS.1000



## DUAL DUROMETER TRACK SYSTEM

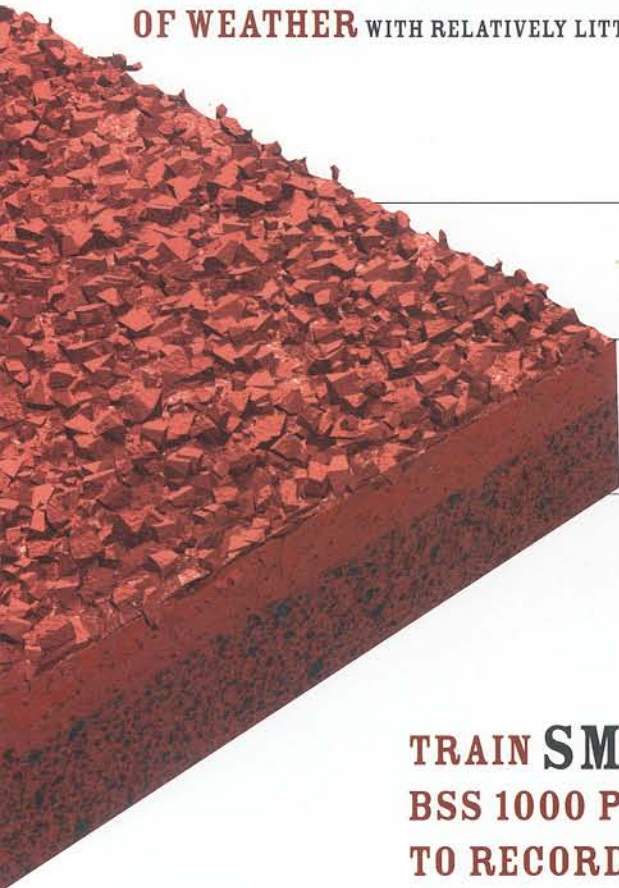
**AT EVERY PRACTICE, IN EVERY RACE, YOUR ATHLETES GIVE YOU THEIR ALL.**

THEY DESERVE A TRACK SYSTEM THAT ALLOWS THEM TO PUSH THEIR PERFORMANCE TO THE LIMIT—THE BSS 1000.



DESIGNED BY OUR EXPERIENCED TEAM OF CHEMISTS AND ENGINEERS, THE BSS 1000 IS **THE OPTIMUM TRAINING AND COMPETING SURFACE.** ITS BIO-ENGINEERED FORCE REDUCTION LAYER INTEGRATES VERY FINE SBR RUBBER WITH ENVIRONMENTALLY FRIENDLY POLYURETHANE TO CREATE AN IMPERMEABLE SHOCK-ABSORBING CUSHION. YOUR CHOICE OF EMBEDDED OR ENCAPSULATED EPDM GRANULES ARE MIXED THROUGHOUT THE TOP WEAR LAYER GIVING YOUR ATHLETES TOTAL CONTROL.

GUARANTEED BY A FIVE-YEAR WARRANTY, THE BSS 1000 IS DURABLE ENOUGH TO **RESIST THE ROUGHEST OF WEATHER** WITH RELATIVELY LITTLE MAINTENANCE.



○ Sharp, precise markings and a monolithic surface make this system ideal for world-class competitions.

○ EPDM granules are mixed throughout the top wearing surface to ensure traction over the life of your system.

○ The force reduction layer provides the resilience and shock absorption necessary to meet the rigorous demands of IAAF performance specifications.



MEETS IAAF PERFORMANCE SPECIFICATIONS

**TRAIN SMARTER. COMPETE HARDER. THE BSS 1000 PUSHES ATHLETIC PERFORMANCE TO RECORD-BREAKING LIMITS.**

# BSS 1000 EMBEDDED DUAL DUROMETER SYNTHETIC TRACK SURFACING SYSTEM

13 mm Thickness  
SECTION 02535  
SYNTHETIC TRACK SURFACING

## PART 1 - GENERAL

### 1.1 SCOPE

The synthetic surfacing contractor shall furnish all labor, materials, equipment, supervision and services necessary for the proper completion of the **BSS 1000** Dual Durometer synthetic track surfacing and related work indicated on the drawings and specified herein.

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 full-depth poured-in-place two-component UV stabilize delastomeric polyurethane Dual Durometer synthetic surfacing system with 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 Association (IAAF), 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.

- A. Thickness Average - 12mm, Minimum - 10mm
- B. Force Reduction 35 to 50
- C. Modified Vertical Deformation 0.6 to 1.8
- D. Friction TRRL Skid Resistance  $\geq 47$
- E. Tensile Strength  $\geq 0.5$
- F. Elongation at break  $\geq 40$

## PART 3 - QUALITY ASSURANCE

### 3.1 CONTRACTOR QUALIFICATIONS

- A. The synthetic surfacing contractor must have a minimum of five (5) years of experience in the installation of full-depth poured-in-place two-component elastomeric polyurethane synthetic track surfacing.
- B. The polyurethane manufacturer must have a minimum of ten (10) years of experience with the compounding of two-part polyurethane for athletic surfaces.
- C. The supervisor for the installation must have installed a minimum of five (5) full-depth two-component polyurethane tracks with embedded texture in the last 3 years. A reference list must be submitted.

### 3.2 SUBMITTALS

The following submittals must be received with 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 manufacturer's currently published specifications and any modifications outlined in those technical specifications.
- C. A synthetic track surfacing sample, 12" x 12" in size, color, texture, thickness, etc. of the same synthetic surfacing system specified herein.

D. A list of completed facilities, including the installing supervisor, of the exact Dual Durometer synthetic track surfacing system.

## PART 4 - MATERIALS

### 4.1 ELASTOMERIC POLYURETHANE

- A. Two-component UV stabilized elastomeric polyurethane compounded from polyol and isocyanate components, based on 100% MDI.
- B. The elastomeric polyurethane shall be red in color.

### 4.2 EPDM GRANULATE

- A. 1 to 3 millimeter peroxide cured EPDM granulate.
- B. The EPDM granulate shall be red in color and match the UV stabilized elastomeric polyurethane.

### 4.3 RUBBER GRANULATE

- A. Fine mesh Styrene Butadiene Rubber (SBR) processed ground to a graded size not to exceed 20 mesh in size.
- B. A maximum of twenty (20) percent, by weight of the SBR will be allowed in the force reduction layer.

### 4.4 LINE MARKING PAINT

Two-component aliphatic paint.

## PART 5 - INSTALLATION

### 5.1 SUBBASE

The synthetic track surfacing system shall be laid on an approved subbase. The General Contractor shall provide compaction test results of 95% or greater for the installed subbase and asphalt surface.

For NCAA and IAAF 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 scope outside to inside of 1% and maximum slope of 1% in any running direction. The finished asphalt shall not vary under a 10' straightedge 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 and replaced with either polyurethane or new, keyed in asphalt. The minimum 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 the 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

Total thickness of the **BSS 1000** Dual Durometer synthetic track surfacing system shall average 13mm.

### 5.3 EQUIPMENT

The **BSS 1000** Dual Durometer synthetic track surfacing system components shall be processed and installed by specially designed machinery with automatic electronic portioning, which provides continuous mixing, feeding and finishing for accurate quality controlled installation.

No hand mixing will be allowed.

## 5.4 MATERIALS

### A. Force Reduction Layer

The fine mesh SBR granules and UV stabilized elastomeric polyurethane shall be metered and mixed together on site to regulate the ratio/quantity of SBR, not to exceed fourteen (14) percent in the system and to insure an even distribution of the granules throughout the 8mm force reduction layer. No multi-layered system allowed.

### B. Resilient Wearing Layer

The 1 to 3 millimeter EPDM granules shall be mechanically integrated with an UV stabilized elastomeric polyurethane to the full-depth of the 5mm wearing layer. The resilient textured finish shall be a dense matrix of embedded EPDM granules.

## 5.5 SITE CONDITIONS

A. Installation shall not take place if adjacent or concurrent construction generates excessive dust, abrasives or any other byproduct 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. Preferred installed temperature is 50 degrees F and rising. Installation shall be executed only in dry conditions.

## PART 6 - LINE STRIPPING AND EVENT MARKINGS

### 6.1 LAYOUT

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

### 6.2 CERTIFICATION

Upon completion 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

Synthetic track surfacing system 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.



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410.771.9473 (p)  
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## CERTIFICATE

THE IAAF IS PLEASED TO CERTIFY HEREBY  
THAT THE FOLLOWING PRODUCT

of the Company : **Beynon Sports Surface, Inc.**

Title of Product : **Synthetic surface, BSS-1000, 13mm**

Colour / Thickness : \_\_\_\_\_

Catalogue Number : \_\_\_\_\_

Certification N° : **S-03-0034**

HAS BEEN TESTED AND MEETS THE TECHNICAL REQUIREMENTS FOR  
USE IN ALL INTERNATIONAL ATHLETIC COMPETITIONS.

THIS CERTIFICATE IS ISSUED IN ACCORDANCE WITH THE TERMS AND  
CONDITIONS OF THE IAAF CERTIFICATION SYSTEM OF TRACK AND  
FIELD FACILITIES, IMPLEMENTS AND COMPETITION EQUIPMENT.

This certificate is valid from : **1 November 2003**

until the last day of **November 2007**

*Istvan Gyulai*

ISTVAN GYULAI  
IAAF General Secretary



*Jorge Salcedo*

JORGE SALCEDO  
IAAF Technical Committee Chairman