

**NRC** TRACK  
500



*BUILT FOR  
**SPEED.**  
BUILT FOR  
**CHAMPIONS.***

**NRC** TRACK  
SYSTEMS

877.779.4625  
INFO@GENERALSS.COM

8717 FORUM WAY  
FORT WORTH, TEXAS 76140

**GS** GENERAL  
SPORTS  
SURFACES

WWW.GENERALSPORTSSURFACES.COM

# NRG TRACK SYSTEMS

3-4MM LAYER OF COLORED EPDM RUBBER CAST INTO A POLYURETHANE FLOOD COAT

DURABLE WEAR LAYER THAT PROVIDES SUPERIOR TRACTION

IMPERMEABLE SEAL LAYER CONSISTING OF TWO COMPONENT POLYURETHANE

14MM SYSTEM

11MM LAYER OF SBR RUBBER BOUND IN POLYURETHANE



## NRG TRACK 500

### IMPERMEABLE SANDWICH SYSTEM

Our most durable running track system featuring our paved-in-place base mat, this value-added, impermeable, sandwich running track surface can withstand consistent, year-round use.

The NRG 500 running track system is comprised of a paved-in-place polyurethane base mat, topped with a two-component seal coat, which is then finished by hand with a flow-applied layer of two-component polyurethane that comes in a range of premium colors.

## HIGHLIGHTS

+ Impermeable Sandwich Style System

+ Available in Multiple Premium Colors

+ Delivers High Energy Return

+ World Class Performance for Competition

+ 14mm System

+ Unrivaled Force Reduction

## **NRG 500 – IMPERMEABLE SANDWICH SYSTEM**

### ***PART 1 – GENERAL***

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions as previously specified, apply to this section.

#### **1.2 SUMMARY**

- A. The contractor shall furnish all materials, labor, tools, and equipment necessary for the installation of the synthetic track surface and line markings on all areas detailed in the contract drawings.

#### **1.3 CODES AND STANDARDS**

- A. Codes and standards follow the current guidelines set forth by the National Federation of State High School Associations (NFHS), the National Collegiate Athletic Association (NCAA) and the International Association of Athletics Federations (IAAF).

#### **1.4 SUBMITTALS**

- A. Submit three (3) sets of manufacturer's product data sheets including installation guidelines and maintenance instructions.
- B. Submit three (3) representative track samples in the color of surfacing to be installed.
- C. Submit test reports that verify the manufacturer's specifications (data) for the product to be installed.
- D. Submit Material Safety Data Sheets (MSDS) for all individual components of the product being installed.
- E. Provide a letter stating that the surfacing contractor has reviewed the asphalt specification and accepts the specification as correct. Furthermore, the surfacing contractor shall provide a letter after checking the asphalt accepting it for synthetic surface installation. Should areas be found that do not meet specifications, they must be repaired or replaced by the asphalt contractor prior to the synthetic surfacing contractor issuing its letter of acceptance.
- F. Submit three (3) copies of a detailed drawing showing location and color of all lane lines, start, finishes and all related markings for the owner to review at least four weeks prior to their application.
- G. Submit evidence that the synthetic surfacing contractor holds the necessary contractor's license to install synthetic surfacing.
- H. Submit evidence that the synthetic surfacing contractor is a member of the American Sports Builders Association (ASBA).

#### **1.5 WARRANTY**

- A. Provide a Five (5) Year Warranty against faulty workmanship and materials for the synthetic surface. The warranty period shall commence at final completion of the surfacing.
- B. A Three (3) Year Warranty shall be provided for the line markings.

## 1.6 QUALITY ASSURANCE

- A. Provide, as a part of the Warranty, documents stating that the materials applied conform to the manufacturer's specifications and that the material will not separate from the asphalt or concrete base, blister, bubble, fade, crack or wear excessively during the life of the warranty.
- B. The materials will not foam, thus causing air bubbles and reduce the life expectancy of the surface.
- C. The synthetic surfacing contractor and owner will annually walk and inspect the synthetic surface during the life of the warranty. Warranty issues will be repaired and for non-warranty items a method for correction will be presented.
- D. The synthetic surfacing contractor shall maintain a clean and orderly job site. All excess materials shall be removed from the construction area and properly disposed of. Scrap shall be removed in the same manner.

## 1.7 SITE CONDITIONS

- A. Weather: Surfacing shall not be done when the threat of freezing exists for the following 24 hours, rain is imminent or gusting winds are occurring.
- B. While surfacing or striping is being done, the sprinkler systems must be curtailed, shut off, or controlled so that no water falls on the track or field events.
- C. Do not apply rubberized topping when base surface temperature is less than 40 degrees Fahrenheit.
- D. Provide temporary barriers as required to prevent public entry to construction area.
- E. Provide temporary barriers as required to prevent public entry to construction area.

## ***PART 2 - PRODUCTS***

### 2.1 SYNTHETIC SURFACING

The synthetic track surfacing shall be a 14 mm thick, impermeable, embedded finish, that consists of a paved in place rubber granule and polyurethane binder base layer sealed to render it impermeable, then, the track surface is topped with a two component colored polyurethane with an embedded EPDM broadcast finish.

### 2.2 PREQUALIFIED PRODUCT

- A. **NRG 500 – IMPERMEABLE SANDWICH SYSTEM**  
Installer: General Sports Surfaces LLC.  
Phone: 1.877.779.4625  
E-mail: [info@generalss.com](mailto:info@generalss.com)
- B. Prequalified Equal.

## 2.3 MATERIAL DESCRIPTION

- A. Polyurethane Primer (PU+Solvent) – shall be mixed 50/50 specifically for priming concrete/asphalt prior to installation of rubberized surface.
- B. Base Mat Binder – shall be a single component, moisture-cured, 100% polyurethane, compatible with SBR rubber. No asphaltic emulsions or epoxies are allowed in the base mat.
- C. Polyurethane Pore Filler (Sealer) – The sealer material shall be a two-component self-leveling colored polyurethane coating with no solvents or fillers added. The specified products shall be part A & part B with a mixing ratio of 2.27:1 A & B. No product should be considered equal if the polyol to isocyanate mix ratio exceeds 3 to 1.
- D. Polyurethane Full Pour – The full pour material shall be a two-component self-leveling colored polyurethane coating with no solvents or fillers added. The specified products shall be part A & part B with a mixing ratio of 2.27:1 A & B. No product should be considered equal if the polyol to isocyanate mix ratio exceeds 3 to 1.
- E. SBR Rubber – SBR rubber granules shall be recycled black rubber that is processed and graded to 1mm – 3.5mm in size containing no fiber or metal and contains less than 4% dust.
- F. EPDM Rubber – EPDM colored virgin rubber granules that are processed and graded to 1mm – 3mm or as specified. The rubber shall contain a minimum of 20% EPDM and be approved by the resin manufacturer. The specific density shall be 1.60 +/- 0.08 and Shore A hardness of 60.
- G. EPDM rubber dust is a residual product made from the excess granules listed in F above. The material is 0.0mm – 0.5mm in size.

## **PART 3 EXECUTION**

### 3.1 ASPHALT AND CONCRETE PREPARATION

- A. The asphalt will be checked with a 10 foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.
- B. Beginning installation stipulates that the track installer “accepts” existing conditions, adhesion to the existing asphalt is the surfacing contractor’s responsibility.
- C. Curing time for new asphalt is a minimum of 14 days prior to the synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater.
- D. All new concrete work curing time is a minimum of 28 days. No curing agents are to be used.
- E. All areas to receive synthetic track surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

### 3.2 SPECIFIC SLOPES

- A. Concrete curbs - All top elevations of any continuous concrete curbs shall be a constant elevation.
- B. Track oval – running direction 0.1 %; lateral slope 2.0 % max. NFHS, 1% NCAA and IAAF.
- C. D areas (high jump) – towards cross bar 1 % downward.
- D. Run ups same as oval unless located in the “D”.

### 3.3 APPLICATION PROCEDURES

- A. The entire surface shall be clean and free of dirt, oil, grease or any other foreign matter upon arrival of the installation team. If necessary, the asphalt and/or concrete must be clean or pressure washed to ensure adhesion of the track surface.
- B. Primer - All asphalt and concrete is primed using a mixture of polyurethane binder and solvent such as butyl acetate (1:1 w/w). Application rate is approximately 0.28 lbs./sq. yd. Only the area to be covered within the working day should be primed to ensure a good bond to the base.
- C. Base Layer – The base layer is to be applied at an approximate total rate of 15.88 pounds per square yard. 12.70 lbs. /sq. yd of 1mm-3.5mm SBR rubber combined with 3.18 lbs/sq yd of polyurethane binder is needed to achieve an average finished depth of 11mm. The materials are mixed until homogeneous using a mechanical mixer. The prepared rubber and polyurethane mix is then paved in place using a heated mechanical screed paver, specifically designed for this work.
- D. Seal Coat – The seal coat is a layer of two-component full pour polyurethane mixed with EPDM powdered rubber that is applied to the base mat by means of spreading the material with a rubber squeegee to “choke” off the base mat. The sealed surface must be checked for pin holes prior to further application. The seal coat consumption is approximately 2.20 lbs./sq. yd.
- E. Top Layer – After the seal coat has properly cured, but no more than 24 hours of its application, a layer of full pour polyurethane coating at approximately 3.87 lbs/sq yd is applied on top of the sealed base layer by using a notched trowel or squeegee. After the material has self-leveled and it is still liquid, 7.74 lbs/sq yd of 1mm – 3mm EPDM colored rubber granules are broadcast into the full pour material using a flat shovel or machine spreader ensuring that all of the coating is covered. After curing, the excess colored EPDM granules are removed by means of a mechanical sweeper, and approximately 5.53 lbs/sq yd of EPDM granules will remain in the surface. The depth of this top layer is 4 mm.
- F. All labor shall be full time employees of the surfacing contractor.

### 3.4 LINE MARKINGS

- A. All line marking paint is to be approved by the synthetic surfacing manufacturer.
- B. All markings will be in accordance to the desires of the owner.

END OF SECTION