

Section 02572

SYNTHETIC TRACK SURFACING- SPURTAN BV SPECIFICATION

PART 1- GENERAL

1.01 SUMMARY

- A. The contract work to be performed under this section consists of furnishing all required labor, materials, equipment, implements, parts and supplies necessary for the surfacing in accordance with these specifications indicated on the drawings.
 - 1. Spurtan BV Polyurethane bound layered impermeable running track surface with embedded EPDM finish.

1.02 CODES AND STANDARDS

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

1.03 SUBMITTALS AND SUBSTITUTIONS

- A. Request for deviations or substitutions from the specifications must be made in writing seven days prior to the bid date. Complete product data including specifications, application rates, mixing instructions and a sample shall be sent with the request to the district and/or its agent for an evaluation. Alternatives will be allowed only by addendum.
 - 1. Submit three (3) sets of manufacturers product data sheets including installation guidelines and maintenance instructions.

- 2. Submit three (3) representative track samples in the color of surfacing to be installed.
- 3. Submit Material Safety Data Sheets (MSDS) for all individual components of the surfacing to be installed.
- 4. Submit evidence that the synthetic surfacing contractor is a member of the American Sports Builders Association (ASBA)

1.04 QUALITY ASSURANCE

- A. The track surface will be applied by an installer authorized by APT. The contractor shall have a contractor's license, as well as a current sales tax and use tax number if applicable.
- B. Successful contractor will provide proof of insurance as well as performance and payment bonds if required.
- C. All polyurethanes used must be manufactured by an ISO 9001Certified company.

1.05 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. Site: While surfacing and striping are being done, sprinkler systems must be curtailed, shut off, or controlled so that no water falls on the track or event area surfaces. Other trades and school district personnel must stay off the wet or curing surfaces.
- C. Do not apply rubberized topping when base surface temperature is less than 40°F.
- D. Provide temporary barriers as required to prevent public entry to construction area and to protect adjacent properties from damage during construction operation.

1.06 WARRANTY

A. Provide manufacturers standard 5 year warranty

PART 2- PRODUCTS

2.01 MANUFACTURER

A. Advanced Polymer Technology 109 Conica Lane; PO Box 160 Harmony, PA 16037 724-452-1330

2.02 MATERIALS

A. Spurtan BV Running Track Surface: Polyurethane bound impermeable SBR basemat. The mat is sealed with a two-component Qualipur polyurethane mixed with EPDM powdered rubber. The track surface is then finished with a two component colored polyurethane with an embedded EPDM broadcast finish.

Materials include:

- 1. Qualipur Polyurethane primer
- 2. SBR Rubber- 1 3 mm or as specified
- 3. Qualipur Polyurethane Binder
- 4. EPDM Powdered Rubber
- 5. Two Component Qualipur Full Pour Polyurethane
- 6. Melos EPDM Rubber 1 3 mm (or approved equivalent) or as specified

PART 3- EXECUTION

3.01 EXAMINATION

- A. Verify asphalt concrete paving for dimensional accuracy, strength, and surface preparation. Notify owner of any deficiencies. Recommended compaction of asphalt and sub base is 95%.
- B. It is the responsibility of the paving contractor to water flood the surface with the use of a water truck. If after 30 minutes on a 70°F day, "bird bathes" are evident in a depth more than 1/8" the paving contractor, track surfacing contractor and the owner's representative will determine the best method of correction.
- C. Entire surface shall be clean and free of all dirt, oil, grease or any other foreign matter. It is the responsibility of the general contractor to thoroughly clean and/or pressure wash all areas of the new and/or existing asphalt or concrete base as necessary to ensure adhesion of the track surface.
- D. Minimum curing time for base prior to beginning of surfacing is 14 days for new asphalt paving and 28 days for new concrete. No concrete curing compounds are allowed.

E. Beginning installation stipulates track installer "accepts" existing conditions. Adhesion to the existing asphalt is the surfacing contractor's responsibility.

3.02 PRODUCT AND MATERIAL DESCRIPTION

- A. Spurtan BV is a 14 mm, three-layer sandwich style polyurethane track system. Its base layer consists of a black mat of SBR rubber granules bond in a Qualipur polyurethane. The second layer is a seal coat using a two-component Qualipur polyurethane and EPDM powdered rubber. The final surface layer is made up of colored EPDM rubber granules cast into a Qualipur full pour polyurethane flood coat.
- B. Rubber (SBR): The basemat rubber shall be specifically graded Styrene Butadiene Rubber (SBR). Final gradation is to be 1.0 3.0 mm granulated SBR. SBR is to be dried to no less than 2.5% moisture and sealed in bags.
- C. Basemat Binder: The basemat shall be bound by a moisture-cured liquid Qualipur polyurethane, compatible with the base mat rubber. No asphaltic emulsions or epoxies are allowed in the basemat. The basemat is to be installed with a specially designed track-paving machine to a minimum depth of 10 mm. No machine sprayed basemat systems will be allowed.
- D. Full Pour Polyurethane: The full pour layer polyurethane shall be a two component Qualipur polyurethane with no solvents or fillers added. The specified products are Qualipur 5050 (A & B). No product shall be considered an equal if the Polyol to Isocyanate mix ratio exceeds 3 to 1. Proposed alternative systems using an 8 to 1 mix ratio are not allowed as an equal to the Spurtan BV system.

3.03 APPLICATIONS PROCEDURES

- A. The entire surface shall be clean and free of dirt, oil, grease or any other matter upon arrival of the installation team. Any dirt, etc. shall be pressure washed off the base by the general contractor. Recommended compaction of asphalt and sub base is 95%.
- B. Prime entire surface area with a compatible Qualipur polyurethane primer. Qualipur 1020 for asphalt and Qualipur 1220 for concrete or over an existing surface at an approximate rate of .16 kgs/m² (.30 lbs/yd²).
- C. The basemat is to be applied at a approximate total rate of 10.17 kgs/m² (18.75 lbs/yd²). 8.13 kgs/m² (15.00 lbs/yd²) of SBR rubber combined with 2.03 kgs/m² (3.75 lbs/yd²) of Qualipur binder is needed to achieve an average finished depth of 10 mm. The installation of the basemat is to be done with the use of a paving machine that is specifically designed for this type of application.
- D. The seal coat is a layer of two-component Qualipur full pour polyurethane mixed with EPDM powdered rubber that is applied to the basemat by means of spreading the material with a rubber squeegee to "choke" off the mat. The preferred method is

to mix the two-component Qualipur polyurethane with EPDM rubber dust and apply the mix over the basemat to seal the surface at a rate of .54 kgs/m² (1.00 lb/yd²) of EPDM powdered rubber and 1.19 kgs/m² (2.20 lbs/yd²) of Qualipur 5050.

E. After curing of the full pour seal coat, but not more than 24 hrs, flow apply the final coat of mixed Qulipur 5050 A and Qualipur 5050 B at a rate of 2.99 kgs/m² (5.53 lbs/yd²) by using a notched trowel or squeegee. Broadcast to excess with 1 - 3 mm colored EPDM rubber ensuring all of the coating is covered. Approximately 4.19 kgs/m² (7.74 lbs/yd²) of EPDM rubber will be needed for thorough coverage. After initial cure the excess rubber granules are removed by means of mechanical sweeper. The estimated reclaim of the rubber is measurable at an approximate rate of 1.19 kgs/m² (2.21 lbs/yd²). Depth to measure a minimum of 4 mm.

Mixing Ratio: Qualipur 5050 2.27:1 A & B

3.04 STRIPING AND RACE MONUMENTATION

- A. The contractor shall consult with the owner prior to the start of their calculations for determination of the finish line location, events to be run, location of lane numbers and additional paint markings.
- B. All line marking paint is to be approved by they synthetic surfacing manufacturer. Only an experienced track striping specialist shall perform the line striping.

END OF SPECIFICATION- SPURTAN BV