

PolyTurf Plus - Multipurpose Textured Polyurethane Athletic Flooring System Specifications

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide fluid applied **PolyTurf Plus** urethane flooring system with a **Multipurpose** texture where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- B. Related work:
 - i) Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- C. Description of the flooring system:
 - i) The fluid applied **PolyTurf Plus** urethane flooring system shall be a full depth, seamless system in which the topping component consists of urethane synthetic compounds and shall be continuously bonded to the substrate and produce a thin, monolithic **textured** wearing surface.

2.01 REFERENCES

- A. Applicable Publications: The following publications form a part of this specification to the extent of the referenced thereto.
 - i) American Society of Testing and Materials.

3.01 SUBMITTALS

- A. Product data: Submit the following in accordance with the approved submittal schedule:
 - i) Materials list of items proposed to be provided under this Section.
 - ii) Manufacturer's specifications and other data needed to prove compliance with the specified requirements.

- iii) *Color samples showing colors and finishes currently available in the proposed products.*
- iv) *Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.*
- v) *Manufacturer's recommended care and maintenance instructions.*
- vi) *Manufacturer's warranty.*

4.01 QUALITY ASSURANCE

- A. *The CONTRACTOR and the MANUFACTURER shall be the same.*
- B. *The CONTRACTOR shall have a minimum of 10 years experience in the application of poured-in-place polyurethane surfacing for athletic, interior applications.*
- C. *The MANUFACTURER shall have 5 years experience in the production of two-component polyurethanes.*
- D. *The CONTRACTOR must have completed at least 10 urethane flooring applications similar in type and size to that of this project.*
 - i) *All technicians/mechanics shall be factory trained and full-time employees of the manufacturer/installer, specializing in the installation of the flooring system.*

5.01 WARRANTY

- A. *Fluid-applied urethane flooring found to be defective as a result of faulty materials and/or workmanship shall be replaced or repaired at no charge to Owner upon receipt of notification in writing for a period not to exceed ONE year from the date of substantial completion.*

PART 2 – PRODUCTS

1.01 MANUFACTURERS

- A. *Provide **PolyTurf Plus** by Beynon Sports Surfaces, Inc., or approved equal.*
 - i) *Athletic floor system is based on Beynon Sports Surface, Inc. products.*

- ii) *Substitutions: Provide equal products of other manufacturers when approved ten (10) days prior to bid by the Architect;*

2.01 PERFORMANCE PROPERTIES

A. *The polyurethane must exhibit the following minimum properties:*

- *Weight* *≈ .81/# per 1/8" thickness*
- *Tensile Strength Range* *500 PSI to 700 PSI*
- *Hardness Range* *55-65 Shore A*
- *Temperature Stability* *Essentially unaffected from 0 degrees F to 120 degrees F*
- *Density* *1.20 to 1.30*
- *Moisture Absorption* *0.8% to 1.05% by weight*
- *Compression Set* *90% to 98% immediate recovery after 72 hours @ 50% compression set @ 72 degrees F*
- *Ultimate Elongation* *250% to 375%*
- *Compression Properties* *30 PSI to 60 PSI @ 10%*
- *Fungus Resistance* *Complete*

3.01 PRODUCT HANDLING

- A. *Deliver materials in original packages and containers, with seals unbroken, bearing manufacturers labels indicating brand name and directions for storing and mixing with other components.*
- B. *Store materials to comply with manufacturer's written instructions to prevent deterioration from moisture, heat, cold or other detrimental effects.*

PART 3 – EXECUTION

1.01 PROJECT CONDITIONS

- A. *Examine the areas and conditions under which work of this Section will be performed. Owner/General Contractor shall correct all conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.*
 - i) *Do not install flooring until spaces are enclosed and weatherproof; wet work in spaces is complete and dry; and overhead work, including installing mechanical systems, lighting, and athletic equipment is complete.*

ii) Maintain ambient temperature and humidity conditions in spaces to receive flooring recommended by manufacturer for 7 days before installation, during installation and for 72 hours after installation.

B. Close spaces to traffic during flooring application and for a period after application recommended by manufacturer to allow for the flooring system, including game-line and marker paint to cure.

2.01 INSTALLATION – GENERAL

A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

B. Install the work of this Section in strict accordance with the original design, the approved Shop Drawings, pertinent requirements of governmental agencies having jurisdiction, and the manufacturer's recommended installation procedures as approved by the Architect.

3.01 SUBSTRATE CONDITIONS AND PREPARATION

A. It shall be the General Contractors responsibility to perform all substrate preparation, correction and cleaning procedures in compliance with the manufacturer's instructions for the particular substrate conditions specified for this project and to provide the following environmental conditions.

B. Dryness:

i) Provide a minimum drying time of sixty (60) days after the slab is installed prior to the commencement of the installation of the urethane flooring system. Moisture content shall not exceed 5%.

ii) The building shall be dry and fully enclosed.

iii) The work shall not commence until the completion of spackling, masonry and wet-trade work.

iv) The room temperature shall be maintained at a minimum level of 70 degrees F for two weeks before and during the installation.

v) The relative humidity shall not exceed 68 per cent during the application of materials and for at least eight hours after the completion of each process.

C. Concrete:

i) The concrete surface shall be installed as per flooring manufacturer's recommendations and shall be completely free of oil, dust, dirt, paint, bond

breakers or other foreign substances, which can interfere with the adhesion of the flooring system to the concrete. No surface added curing agents or sealers will be acceptable.

- ii) Concrete, which is damaged or has spalled or has been contaminated by a bond breaker shall be removed and repaired to provide a sound surface.*
- iii) Expansion joints shall be treated in accordance with the manufacturer's recommendations.*

D. Concrete Levels:

- i) Variations in concrete slab levels shall not exceed 1/8" in any ten foot direction, non cumulative.*
- ii) Required leveling work that is necessary shall be accomplished by grinding high spots and filling low spots using urethane leveling materials or an approved underlayment adhered with a bonding agent as approved by the flooring system manufacturer.*
- iii) A representative of the installer shall take instrument readings on check points to be marked five feet on center on the slab scheduled to receive the flooring system.*
- iv) All receiving surface corrections shall be the responsibility of the General Contractor.*

4.01 FLOOR INSTALLATION

A. Priming:

- i) Clean concrete as required.*
- ii) Apply manufacturer's approved primer so that the surface is thoroughly wet but no puddles are left standing.*

B. Pouring:

- i) Force Reduction Layer: The fine mesh Styrene Butadiene Rubber (SBR) and PolyTurf Plus urethane shall be metered and mixed together on site to regulate the ratio/quantity of SBR. The SBR shall not exceed 20% in the force reduction layer. The SBR shall not exceed #20 mesh in size.*
- ii) Finish Layer: Mix 100% PolyTurf urethane materials utilizing electronically controlled metering and mixing equipment.*

- iii) *Use a poured-in-place technique to achieve a monolithic surface to the maximum extent possible.*
- iv) *The completed thickness of material shall average 3/8”.*

C. Finishing and Game Lines:

- i) *Allow the urethane flooring materials to cure.*
- ii) *Introduce vinyl dust granulate into prepared pigmented polyurethane finish at ratio of 1:5 by volume*
- iii) *Apply manufacturer’s approved single component aliphatic 100% moisture cured pigmented polyurethane finish. Color to match the base elastomer and shall be applied to a thickness of three (3) dry mils.*
- iv) *The final coat of finish shall be matte.*
- v) *Layout and paint all gamelines and other required markings according to approved shop drawings. Colors shall be selected from manufacturer’s standard available colors and as approved by architect.*

D. Protection:

- i) *No other trades shall be permitted in the area scheduled to receive the flooring system from the time of the application of the primer until ten (10) days after the application of the final coat of surface finish.*
- ii) *Adequate protection of the finished floor shall be provided by the General Contractor.*
- iii) *No smoking, open flames, or sparking from electrical outlets, telephones or electric motors shall be permitted in the area during application of the primer, floor surfacing material, or finishing materials.*

5.01 CLEAN UP

- i) *Upon completion of the installation, the flooring contractor shall remove from the job site unused materials, tools, equipment and properly dispose of rubbish.*

END OF SECTION