

SPECIFICATION:
MP SPORT ELITE,
*Synthetic Sports Flooring*

**SECTION 096566-Resilient Athletic Flooring**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

 **A. Related work specified under other sections.**

 **1. CONCRETE SUBFLOORS - SECTION 03**

 a. The general contractor shall furnish and install the concrete to receive the synthetic sports flooring. The slab shall be steel troweled and finished smooth to a tolerance of 1/8" in any 10' radius. FF and FL numbers are not recognized. **Do NOT over trowel!** High spots shall be ground level, and low spots filled in with a polyurethane leveler from the manufacturer, Ardex K-15 or an approved leveling compound. Gypsum based products cannot be used. **Do not use any additives, add-mixtures, densifiers, curing or hardening agents on/in the concrete subfloor without approval from the manufacturer. These products may cause adhesion challenges.**

 **2. MEMBRANE WATERPROOFING - SECTION 07**

1. Concrete floors on or below grade shall be adequately waterproofed beneath and anywhere else moisture is likely to influence the installation or performance of the synthetic sports flooring. It is the responsibility of the architect to determine the need of the waterproofing.

 **3. CONCRETE MOISTURE VAPOR EMISSION AND PH TESTING - SECTION 01450**

 a. Moisture vapor emission and PH of concrete shall be tested and must not exceed 4 lbs./1000 SF per 24 hours as verified using calcium chloride test per ASTM F 1869-04, <4% when tested with a Tramex meter or 75% RH when tested after 14 days of continuous HVAC operation. PH level should be in the range of 7 to 8.5.

**1.2 QUALITY ASSURANCE**

 **A. MANUFACTURER:** The synthetic sports flooring manufacturer shall be headquartered in the USA and an ISO 9001-2008 firm specializing in manufacturing products specified in this section. Manufacturer must be a recognized sports flooring business with a minimum of ten (10) years in business of same type and complexity of specified flooring.

 **B. INSTALLER:** The installation described in this scope shall be carried out by experienced synthetic sports flooring installer who is ISO 9001-2008 certified and approved by the manufacturer. The work shall be performed in accordance with the most recent manufacturer instructions. Installer must have a minimum of five (5) floors installed within the last five years of the same type and complexity.

**1.3 SUBMITTALS**

 **A.** Submit (INSERT NAME) specification sheets.

 **B. Sample** - Submit one sample of each specified system.

 **C. Maintenance** - Upon floor installation, send to owner a maintenance letter. These instructions shall be followed without variation to achieve a long floor life and not to void the warranty.

**1.4 WORKING CONDITIONS**

 **A.** Synthetic athletic flooring shall not be installed until all masonry, painting, plaster, tile, marble, terrazzo work, overhead mechanical trades, and painters have finished in the synthetic floor areas and all adjoining areas. The building must have all windows and doors installed with no water leaks anywhere.

 **B.** Permanent heat, light and ventilation shall be installed and operating 14 days prior to, during and after installation. The general contractor shall provide an area where the stored materials can be maintained between 65 degrees and 75 degrees with relative humidity under 65%.

 **C.** Subfloors shall be clean, dry and free from oil, grease, paint, concrete curing agents, adhesive residue or other foreign materials. Moderate room temperature of 65-75 degrees shall be maintained for a week prior to, during and for 7 days following installation.

 **D.** The installation area shall be closed to all activity during installation and during the cure time.

 **E.** Moisture content of the concrete slab must not exceed 4 pounds per 1,000 sq ft in 24 hours when using the calcium chloride test or 75% RH or under 4.25% when using a Tramex meter. A floating, non-adhered version is available. If needed, moisture mitigation systems and high moisture glue are available at an additional charge.

 **F.** Flooring perimeter termination, excluding interior doorways is the responsibility of the general contractor. A 3-4" toe board is recommended on all handrails.

 **G.** After the synthetic sports floor is fully installed and a walk through with the contractor has occurred no one is allowed on floor until fully accepted by owner.

**1.5 WARRANTY**

 **A.**  Manufacturer warrants that the materials supplied, and installation will be free from defects for a period of two (2) years. This warranty does not cover floor damage due to but not limited to normal wear, water, chemicals, misuse, abuse, negligent, aging, faulty building construction, concrete separation. (Other warranties may be available but may create an additional charge.)

 **B.**  Manufacturer must be notified in writing within thirty days of the discovery of any warranty claims, any delay beyond this period may void the liability due to excessive destruction because of neglect on the owner’s behalf.

**PART 2 - PRODUCTS**

**2.1 ACCEPTABLE MANUFACTURERS**

 **A.**  Floor system subject to compliance with requirements listed within this spec sheet. Manufacturer must be ISO 9001/2008 certified and headquartered in the USA.

**2.2 MATERIALS**

 **A.**  All polyurethane components shall be non-hazardous and not contain lead, mercury, or

 heavy metals.

|  |  |  |
| --- | --- | --- |
| Force Reduction | ASTM F2772 | Passed: Class 1 14-32% |
| Ball Rebound | ASTM F2772 | Passed: 99% |
| Vertical Deformation | ASTM F2772 | Passed |
| Surface Effect | ASTM F2772 | Passed |
| Rolling Load | EN 14904 | Passed: > 1500nM |
| Tensile Strength | ASTM D412 | ≥ 2049 psi |
| Surface Hardness | SHORE A | 80 Shore A (+/-5) |
| Elongation | ASTM D412 | Passed: 191% |
| Tear Strength | ASTM D624 | 206 PLI |
| Flammability | Class 1 | Inflammable |
| VOC | Zero | Adhesive, Seal, Resin |

 **A.** Mat adhesive – Two component urethane. (*Single component available)*

 **B.**  Basemat - prefabricated rubber mat made of recycled rubber granules and a polyurethane binder of consistent thickness. No VOC Adhesive.

 **1.** Basemat thickness – 7mm, also 4, 5, 6, 8, 9, 12 & 14 plus custom thicknesses
available

 **2.** Physical properties on request

 **C.**  Scratch Coat (mat sealer) - two-component, polyurethane.

 **D.** Wear Coat - seamless, pigmented, self-leveling two-component polyurethane. (Full depth color wear coat, that matches the topcoat color, is also available.)

 **1.** Total wear thickness - 2mm also 3mm available

 **2.** Physical properties on request

 **E.**  Topcoat (pigmented sealer) - three-component polyurethane, twelve (12) standard
colors. Custom colors also available. Water-based, ultra-low VOC.

* Champion Gold
* Sand
* Camel
* Grizzle Gray
* Serious Gray
* Blue Ribbon
* Honorable Blue
* Clay Red
* Green Field
* Stone Gray
* Husky Spice
* Misty Blue

 **F.**  Game Line Paint - three-component polyurethane, eight (8) standard colors. Custom colors also available. Water-based, ultra-low VOC.

* Black
* Blue
* Red
* Yellow
* White
* Green
* Purple
* Orange

**PART 3 - EXECUTION**

**3.1 INSPECTION**

 **A.** Inspect concrete slab for proper tolerance and dryness.

 Concrete slab shall be broom cleaned by general contractor.

 **B.**  Installer will notify the contractor of any unsatisfactory conditions.

**3.2 INSTALLATION**

Acceptable Installers must be ISO 9001/2008 Certified.

 **A. Basemat**

Thoroughly mix the two-component polyurethane adhesive. Apply directly to the concrete subfloor with a notched trowel at a rate of 400 sq.ft per unit. Immediately install base mat into adhesive. Do not compression fit any seams. Roll base mat with a 100-pound roller and repeat the rolling process on the entire mat continuously until 60 minutes after installation of each roll. Use brick pavers to hold roll ends down in the glue. Allow adhesive 8 to 12 hours to cure before applying scratch coat.

 **B. Scratch Coat**

Thoroughly mix two-component scratch coat. Apply two layers of scratch coat onto base mat with a flat trowel at a combined rate of 375 sq. ft per unit. Allow each layer to cure a minimum of 8 hours before proceeding to the next application. Inspect for gaps and or ridges in finial coat. Apply additional material as needed, sand down any ridges in cured scratch coat.

 **C. Wear Coat**

Thoroughly mix two-component wear coat. Apply mixed material using a notched squeegee in one layer at a coverage rate of 82 sq ft per unit @ 2mm creating a seamless surface. Allow wear coat to cure 14 hours before proceeding to the next application. Imperfections in the surface should be addressed with fine sandpaper.

 **D. Topcoat**

Thoroughly mix water based three-component polyurethane topcoat. Allow the topcoat to cure a minimum of 6 hours before applying game lines.

 **E. Game Lines**

Only use high quality masking tape. Thoroughly mix three-component game line paint. Provide game lines as indicated on drawings.

 **F. Clean-up**

Remove all excess and waste materials from the area of work. Dispose of empty containers in accordance with federal and local statutes.

**3.3 CURING**

**A.** It is the responsibility of the general contractor to protect the finished floor from damage by others.

 **B.** No foot traffic allowed for 7 days following installation.

**END OF SECTION 096566**

MP Sport Elite Specification

Revision Level A 2023

*Contact your Regional Sales Manager (1-877-582-1181) or the local Infinity Wood Floors/Aacer Flooring Authorized Dealer for more information.*