**NOTE TO PROJECT ARCHITECT—**THIS FLOORING IS 3/8” THICK. SPECIFY REDUCER STRIPS AT DOOR THRESHOLD OR PROVIDE A SLAB DEPRESSION — CONFIRM WITH MANUFACTURER.

**PART 1 - GENERAL**

**1.01 SUMMARY**

A. Provisions of Division 01 apply to this section.

B. Section Includes:

1. Resilient synthetic athletic flooring.

C. Related Sections:

1. Section 03 30 00: Cast-in-Place Concrete
2. Section 08 71 00: Door Hardware.

**1.02 DEFINITIONS**

A. Pop-up: A pop-up is defined as any surface deviation or looseness of substrate that is equal to or greater than 1/64 (0.015625) inch above the concrete floor level, regardless of the size.

**1.03 SUBMITTALS**

A. Product Data: Submit manufacturers published technical data describing materials, construction, and recommended installation procedures.

B. Samples: Submit Samples of each type of synthetic athletic flooring in each available color. Submit pint cans of each type of adhesive.

C. Installers Experience Qualifications: Submit list of not less than 5 projects, extending over period of not less than 5 years, indicating installers experience record. Submit letter from manufacturer showing manufacturer's approval for installer of the products.

D. Closeout Submittals: Submit manufacturer's cleaning, maintenance, and repair instructions.

**1.04 QUALITY ASSURANCE**

A. Comply with the following as a minimum requirement:

1. Qualifications of Installer: Minimum 5 years experience in successfully installing the same or similar flooring materials.

1. Installed surfaces and level changes shall be ADA compliant.
2. Permanent heat, light, and ventilation shall be installed and operating during and after installation, maintaining a temperature range of 55 degrees to 78 degrees F. and a relative humidity range of 35 to 50 percent.

4. Environmental Limitations:

a. Comply with requirements of athletic flooring material supplier's requirements.

* 1. Adhere to all MSDS requirements for materials installed in the Work of the section. Protect all persons from exposure to hazardous materials.

5. Material Fire Safety:

a. ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials: Class A Flame Spread Rating of 25 or less.

b. Fire Test Data: ASTM E 648 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source, NFPA 253.

B. Qualifications:

1. Supplier: Synthetic athletic flooring manufacturer shall have been regularly engaged in business of manufacturing products of this section for at least 5 years.

2. Installer: Trained and certified by flooring manufacturer.

**1.05 DELIVERY, STORAGE AND HANDLING**

A. Materials shall be delivered to the Project site in original unopened manufacturer’s packaging clearly labeled with manufacturer’s name. Materials shall be stored at not less than 55 degrees F and 50 percent relative humidity for not less than 48 hours before installation.

**1.06 PROJECT CONDITIONS**

A. Ventilation and Temperature: Verify areas that are to receive new flooring are ventilated to remove fumes from installation materials and areas are within temperature range recommended by the material manufactures for Project site installation conditions.

**1.07 WARRANTY**

1. Manufacturer shall provide a 2 year material warranty.

B. Installer shall provide a 2 year labor warranty.

**PART 2 - PRODUCTS**

**2.01 ACCEPTABLE MANUFACTURERS**

A. Connor Sport Court, ElastiMat Sports Flooring System, or equal.

**2.02 MATERIALS**

A. ElastiMat: One piece floor mats consisting of polymeric bound vulcanized recycled rubber mixed with EPDM granules and Nike Grind.

* 1. Size: 3/8 inch thick and 36 inch by 36 inch square.
  2. Colors: as specified by the Architect.

B. Concrete Primer: Non-staining type recommended by manufacturer of synthetic athletic flooring.

C. Crack Filler and Leveling Compound: Cementitious type, shall be Durabond's Webcrete # 95, Ardex SD-F, Armstrong S-194 or as recommended by flooring manufacturer.

D. Moisture Detection Equipment: Calcium chloride testing system, consisting of pre-packaged anhydrous calcium chloride crystal test kits, and an electronic gram weight scale measurable in 1/10 grams. Equipment as manufactured by one of the following:

1. Sealflex Industries, Inc., 2925 College Avenue, Suite B-4, Costa Mesa, CA 92626.

2. Vaprecision Professional Emission Testing Systems, 2941 West Mac Arthur Blvd., Suite 138, Santa Ana, CA 92704.

E. ElastiMat Adhesive – two-component polyurethane as supplied by Connor Sports Flooring, or equal.

1. An epoxy adhesive for questionable substrates shall be as submitted and reviewed by the Architect.

F. Optional Base: Vinyl wall base, 4” high; or as detailed in the Drawings.

**PART 3 - EXECUTION**

**3.01 COORDINATION**

1. Coordinate with related Work to assure level, smooth, and clean finish surfaces to receive Work of this section.
2. Inspect concrete slab for proper tolerance and dryness.

**3.02 EXAMINATION**

A. Field verify all dimensions, examine surfaces and other conditions, and correct deficiencies before commencing the Work of this section.

**3.03 PREPARATION**

A. Concrete Slabs:

1. Leveling: Check sub-floors for level, and provide floor slabs true to level and plane within a tolerance of 1/8 inch in 10-feet. Test floor areas both ways with a 10-foot straightedge and repair high and low areas exceeding allowable tolerance. Pop ups shall be hammered out and floor filled with a cementitious leveling compound. Remove high areas by power sanding, stone rubbing or grinding, chipping off and filling with leveling compound, or equivalent method. Fill low areas with leveling compound. Repair and level the surfaces having abrupt changes in plane, such as trowel marks or ridges, whether or not within the allowable tolerance. Clean areas where repairs are performed.

2. Cleaning: After leveling, if required, clean substrates of all deleterious substances and foreign matter.

3. Cracks or Depressions: Fill void spaces with cementitious leveling compound of the type recommended by flooring manufacturer for the specific conditions.

4. Moisture Testing: Test new and old concrete slabs for adequate dryness. Testing shall conform to ASTM F 1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride, and the following minimum testing requirements of 3 calcium chloride tests for the first 1,000 square feet of floor area, and one for each additional 1,000 square feet or fraction thereof. Unless more stringent requirements are recommended by flooring manufacturer, maximum allowable moisture release at time of flooring installation shall be 3 pounds per 24 hours per 1,000 square feet. Provide report of test as specified above. For each test, perform the following steps:

a. Weigh the sealed dish of crystals immediately prior to exposure. Record starting weight, date, and time.

b. Open kit and set crystal dish on clean concrete surface. Immediately install plastic dome over the dish. Make sure the dome is gasketed to the concrete and is airtight.

c. Leave test to absorb moisture for 60 to 72 hours. Maintain room temperature above 55 degrees F for duration of test.

d. After exposure, remove and discard housing. Replace dish lid and tape shut. Weigh the sample within one hour of removal from floor.

e. Compute the vapor emission in pounds, indicate location of test and vapor emission on report.

f. Delay application of flooring until sub-floors are sufficiently dry, or perform remedial measures as recommended by flooring materials manufacturer.

5. Priming: Prime concrete floor slabs on grade; prime other slabs if so recommended by flooring manufacturer.

**3.04 INSTALLATION OF SHEET FLOORING**

1. Layout:

1. Square the room or area to be installed.

2. Mark the floor off in quarters.

3. Install the tile in straight tile pattern or broken joint pattern, as indicated on the Drawings.

B. ElastiMat Adhesive:

1. Start in center of room.

1. Thoroughly mix the two-component polyurethane adhesive and install directly to the concrete sub-floor with notched trowel per manufacturer’s instructions.
2. Only install as much adhesive as can be covered in 20 minutes.

C. ElastiMat:

1. Start in the center and progress toward borders. Install each ElastiMat mat firmly into the adhesive and butt adjacent mats. Roll with 70-100 lb. floor roller. When floor is complete, roll again. Clean and remove excess adhesive with recommended solvent.
2. Fit flooring neatly and tightly around penetrations. Scribe flooring to doorjambs. Terminate in center of doorways beneath closed doors.

D. Wall Base: Install vinyl base with recommended adhesive.

E. Installation of Trim Shapes: Provide reducer strips to cover all exposed edges of resilient flooring. Provide carpet-to-tile strips at junctions with carpet.

**3.05 CLEANING**

A. Maintain all floors in a clean condition as installation progresses.

B. Clean finished flooring and remove foreign substances.

C. Clean adjacent surfaces of adhesive or other materials. Replace all damaged or defective Work.

* 1. **CLEAN UP**

A. Remove rubbish, debris and waste material and legally dispose of off the Project site.

3.07 **PROTECTION**

1. Protect the Work of this section until Substantial Completion.

3.08 **INSTRUCTION**

A. After the Work of this section is complete, and prior to Substantial Completion, flooring manufacture’s technical representative shall provide a 4 hour instruction period to designated Owner staff in maintenance of installed flooring.

**END OF SECTION**