#### PART 1 – GENERAL

# SECTION INCLUDES

## Supply and installation of the indoor multipurpose surfacing

## References for the correct construction and preparation of concrete slabs to receive resilient flooring.

# SUBMITTALS

## Product Data:

### Manufacturer’s promotional brochures, specifications and installation instructions

## Manufacturer Certifications:

### Provide certification that accurately identifies the Original Equipment Manufacturer (OEM) of flooring furnished for this project including manufacturer’s name, address and factory location.

### Suppliers of private label flooring for this project must identify themselves as such and fully disclose the OEM information listed above.

### All “manufacturer” requirements in these specifications must be complied with by the OEM, including warranties, certifications, qualifications, product data, test results, environmental requirements, performance data, etc.

## Samples:

### Submit for selection and approval three (3) sets of the indoor resilient multipurpose surfacing, manufacturer’s brochures, samples or sample boards of all of the available colors, textures and styles.

### Submit color samples of all the available game line paint colors for selection and approval.

## Closeout Submittals:

1. Submit three (3) copies of the indoor resilient multipurpose surfacing and manufacturer’s maintenance instructions.
2. Submit three (3) copies of the material and installation warranties as specified.
	1. *QUALITY ASSURANCE*

## Qualifications:

### The indoor multipurpose surfacing shall have been actively marketed for a minimum of ten (10) years.

### The indoor multipurpose surfacing supplier shall be an established firm, experienced in the field, and competent in the techniques required by the manufacturer.

### The installer of the indoor resilient multipurpose surfacing shall have a minimum of five (5) years of experience in the field installing indoor resilient multipurpose surfacing and have worked on at least five (5) projects of similar size, type and complexity.

## Certifications:

### Installer to submit the manufacturer’s certification attesting that they are a trained installer of the indoor resilient multipurpose surfacing.

## C. Testing:

### Tests shall be relative for multi-purpose use with certificates from independent testing resources to be made available upon request.

### Test results shall be no more than 5 years old and performed according to ASTM standard testing procedures.

* 1. *DELIVERY, STORAGE AND HANDLING*

## Delivery:Material shall not be delivered until all related work is in place and finished and/or proper storage facilities and conditions can be provided and guaranteed stable according to FieldTurf USA, Inc. recommendations.

## Storage:

### Store the material in a secure, clean and dry location.

### Maintain temperature between 55° and 85° Fahrenheit.

* 1. *PROJECT/SITE CONDITIONS*
1. It is the responsibility of the general contractor/construction manager to maintain project/site conditions acceptable for the installation of the indoor multipurpose flooring.
2. The area in which the surfacing will be installed shall be dry and weather tight. Permanent heat, light and ventilation shall be installed and operable.
3. All other trades shall have completed their work prior to the installation of the resilient athletic flooring. The general contractor or construction manager shall maintain a secure and clean working environment before, during and after the installation.
4. Maintain a stable room temperature of at least 65°F for a minimum of one (1) week prior to, during and thereafter installation.
5. An effective low-permeance vapor barrier is placed directly beneath the concrete subfloor. For “on” or “below grade” installations, it is recommended to provide a permanent vapor barrier resistant to long term hydrostatic pressure/moisture exposure. Protrusions should be sealed to prevent moisture migration into the slab. Moisture should not be allowed to enter the slab after the completed construction.
6. Concrete subfloor surface pH level within the 7 to 10 range dependent upon installation type.
7. Concrete subfloor should be no greater than 1/8" within a 10 ft diameter. This tolerance can be measured in accordance with ASTM E1155. A specified (FF) of 50 and an (FL) of 30 should reach this degree of floor flatness and floor level. There is no numerical correlation between F numbers and the deviation from the straight edge. However, the above specified numbers should achieve a flat floor with minimal deviation in the slab. Reference ACI 117 and ACI 302.1R. The general contractor should provide a certificate of compliance with the above recommendations.
8. Concrete subfloor must be clean and free of all foreign materials or objects including, but not limited to, curing compounds and sealers.
9. Fill cracks, grooves, voids, depressions, and other minor imperfections. Follow the manufacturer’s directions. Moveable joints must be treated utilizing specific transitioning joint devices depending upon the architect’s recommendations. Follow current ASTM F710 guidelines for the preparation of concrete slabs to receive resilient flooring.
10. Refer to ACI 302.2R “Guidelines for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials” for concrete design and construction.
11. Concrete slab shall be fortified with continual steel reinforcement. Fiber reinforcement alone shall not be considered adequate fortification.
	1. *WARRANTY*

## Limited Warranty: Product defects are warranted for 8 years.

* 1. *ADDITIONAL MATERIALS*

## Furnish to the owner additional materials containing a total of at least 1% of each different color or design of the indoor surfacing used on the project.

# PART 2 - PRODUCTS

2.1 *MANUFACTURERS*

## The basis of the design for the indoor resilient multipurpose surfacing is Dropturf provided by Tarkett Sports.

## All other installation accessories and related components must be either made or approved by the manufacturer.

## Other products may be approved as equal if deemed qualified and submitted in accordance with the General Conditions.

2.2 *MATERIALS*

## Dropturf and provided by Tarkett Sports. Dropturf is a synthetic cushioned non-fill turf system that is fully adhered.

## Physical properties of the surfacing shall conform to the following minimums:

|  |  |  |
| --- | --- | --- |
| **Property**  | **Value**  | **Description** |
| Fiber Type |  — |   |
| Fiber Weight | 5600 Denier | TXT PE |
| Tufted Pile Height | .56 (14.22 mm) |  — |
| Tufted Face Weight | 36.0 oz/sq.yd. |  — |
| Tufting Gauge | 3/16" |  — |
| Primary Backing | 7.1 oz/sq.yd. | Woven Polypropylene |
| Secondary Backing | 74 oz/sq.yd.  | 5mm Foam with Scrim |
| Total Weight | 117.6 oz/sq.yd. |  — |
| Roll Width | 15 ft. |  — |
| Infill  | No Infill |  — |
| Flammability | Passed | ASTM D-2859 |
| Surface Texture |  — | Slight |
|  Total Thickness  |  — | 22.5 mm (0.886˝) |

1. Color: As available from the manufacturer’s standard range.
2. Texture: Texture to remain consistent when blending colors.

## Adhesive: As approved by the manufacturer.

##

#### PART 3 - EXECUTION

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3.1 *EXAMINATION*

## It is the responsibility of the general contractor/construction manager to ensure that project/site conditions are acceptable for the installation.

## Verify that the area in which the surfacing will be installed is dry and weather tight. Verify that permanent heat, light and ventilation are installed and operable.

## Verify that all other work that could cause damage, dirt and dust or interrupt the normal pace of the indoor resilient athletic flooring installation is completed or suspended.

## Verify that there is a stable room temperature of at least 65°F.

## Verify that there are no foreign materials or objects on the subfloor and that the subfloor is clean and ready for installation.

## *Adhesive moisture tolerances are dependent upon the adhesive type used.*

## Follow Fieldturf USA, Inc. installation recommendations.

## Do not average the results of the tests. Report all field test results in writing to the General Contractor, Architect, and End User prior to installation.

## Verify that the concrete subfloor surface pH level is within the 7 - 10 range.

## Document the results confirming the slab is within manufacturer’s tolerances for slab deviation.

3.2 *PREPARATION OF SURFACES*

## A. Sand the entire surface of the concrete slab.

## Sweep the concrete slab so as to remove all dirt and dust. If a sweeping compound is to be used it must be a sweeping compound that does not contain oil or other items that may inhibit the adhesive bond.

## Slab must be dust free. In the event that dust impairs adhesive bond, priming the slab prior to application of adhesive may be necessary. Follow installation guidelines.

## Follow OSHA guidelines.

3.3 *INSTALLATION*

## The installation area shall be closed to all traffic and activity for a period to be set by the indoor resilient athletic surfacing installer. The surfacing installation shall not begin until the installer is familiar with the existing conditions.

## All necessary precautions should be taken to minimize noise, smell, dust, the use of hazardous materials and any other items that may inconvenience others.

## Install the surfacing in strict accordance with the manufacturer’s written instructions.

## Install the surfacing minimizing cross seams. Provide a seam diagram during the submittal process for approval prior to installation.

## Install appropriate threshold plates or transition strips where necessary.

2.0 *CLEANING*

## Remove all unused materials, tools, and equipment and dispose of any debris properly.

3.6 *PROTECTION*

## If required, protect the surfacing from damage using coverings approved by the manufacturer until acceptance of work by the customer or their authorized representative.

* 1. *RELATED STANDARDS AND GUIDELINES*

## ASTM F2170 “Standard Test Method for Determining Relative Humidity In Concrete Floor Slabs Using In-Situ Probes”

## ASTM F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring”

## ACI 302.2R-06 “Guideline for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials”

### ASTM F2772-11 “Standard Specification for Athletic Performance Properties of Indoor Sports Floor Systems”

**END OF SECTION**