



Turf Specifications

Product: RamTurf – UVS

Product Description: Artificial grass specifically designed for sand beads and rubber infill.

Product Uses: Artificial grass for football, soccer and multipurpose

1.0 GENERAL

- 1.1 This specification covers the proper installation of a new RamTurf synthetic turf system using the revolutionary new FlexFiber UV* (FFUV) monofilament.
- 1.2 RamTurf – UV is a special monofilament grass fiber that has a thicker micron to stand up to the most punishing use and its unique chemical composition keeps it about 20% cooler in high temperatures. Keeping the field cooler makes it better for athletes while improving the life span of the product.
- 1.3 The turf system shall consist of an artificial grass like surface pile which shall be tufted into multiple layers of polypropylene. The backing of the turf shall then be coated with liquid polyurethane.
- 1.4 The entire system shall be resistant to weather, insects, rot, mildew, fungus growth, and will be non-allergic and non-toxic.
- 1.5 The turf, infill and sub base system (separately and or combined) shall be capable of draining a minimum of 10" of water per hour.
- 1.6 The pile surface shall provide excellent traction in all types of weather with the use of conventional athletic shoes typically used at natural grass athletic sports fields. See warranty for types of shoes allowed.

2.0 QUALITY ASSURANCE

- 2.1 Turf Manufacturer / Designer:
ATG Sports Industries, Inc.
- 2.2 Turf Product:
RamTurf – UVS
- 2.3 Tufting Facility:

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Must be located in the United States and an official licensee of ATG Sports turf products.

- 2.4 Certifications:
Contractor must be a current member of Sports Builder Association.
- 2.5 Turf General Contractor:
Must be 100% US ownership with its main office in the United States. Turf contractor must have had the same ownership for not less than 10 years with no previous bankruptcies or operations of same or similar nature under a different name.
- 2.6 Installer:
Must be an ATG Sports certified installer.
- 2.7 Materials:
All supplied and installed materials and products will meet or exceed the minimum specifications designated in this section.
- 2.8 Inspection:
Inspect all items prior to installation for quality standards set forth in these specifications
- 2.9 Verify Dimensions:
Re-check field size and marking measurements and dimensions to verify conformity to specifications and standards.
- 2.10 Submittals:
Prior to installation, submit complete and detailed drawings including layout of all component parts and materials installed under this section. Drawings shall show proposed locations of seams, lines, logos, numbers, hash marks and lettering specified.
- 2.11 Experience:
Only companies with proven experience in all types of athletic surfacing installations and construction.** A 5% bid preference will be given for each item met by bidders.
- a. Total years in athletic surfacing business.
 - b. Companies under the same name and that have not changed names or ownership in 10 years or more.
 - c. Companies with 100% US ownership.
 - d. Regional offices located within 300 miles of the project.

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- 2.12 Samples:
Supply artificial turf samples of the proposed product for evaluation 10 days prior to the bid date.
- 2.13 Maintenance and Operations Data:
Contractor shall submit all warranty and maintenance information prior to acceptance of the bid.
- 2.14 Warranty:
Eight years, see warranty & maintenance instruction under separate cover.

3.0 PERFORMANCE

3.1	ASTM D 1577 Denier (6 fibers per stitch)****	1,800 per filament
3.2	ASTM D 418 Pile Weight Minimum (total ounces are base on owner's spec.)	45 ounces base bid
3.3	ASTM F 1015 Abrasive Index	14-18
3.4	ASTM F 1015 G-max	Less than 130
3.5	ASTM F 1015 G-max/Lifespan	Less than 170
3.6	Primary Backing	Three layers
3.7	Secondary Backing	26 ounce polyurethane minimum
3.9	Pile Height	2 1/8" inches to 2 1/4" inches
3.10	Tuft Bind	9-18 pounds/foot
3.11	Gauge	3/8" or 1/2
3.12	Micron	360 minimum
3.13	ASTM D 2859 Flammability	Pass
3.14	Permeability	4 to 20 inches per hour
3.15	UNI EN ISO 2062 Elongation	Max 150 percent

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- 3.16 Warranty - As Specified 8 years
- 3.17 Stitch Rate Minimum Based on Gauge
- 3.18 Infill*** Sand beads and Rubber
- 3.19 Proprietary Infill (black) .5 to 1.5
- 3.20 Total Proprietary Infill Up to 5 lbs/f2
- 3.21 All lines shall be permanently tufted into the field.
- 3.22 The fabric surface will be installed in 15-foot widths.
- 3.23 The RamTurf UV systems can be sewn or glued as specified by the owner / architect. System shall meet or exceed the warranty period.
- 3.24 The dynamic cushioning of the turf shall not exceed an average maximum value of 130g's at 70 degrees upon installation and 170g's over the lifetime.
- 3.25 All seaming materials shall be resistant to moisture, bacterial and fungus attacks.
- 3.26 FlexFiber UV polyethylene monofilament shall be a unique size and shape designed to help the fiber spring back to its natural shape in the same manner as natural grass.

4.0 FABRIC SURFACE

- 4.1 All fibers are tufted into multiple layers of backing and coated with polyurethane at minimum 26 oz.y2.
- 4.1 The fibers shall be uniform in color and will resemble freshly mowed fescue or blue grass in appearance, texture and color.
- 4.2 The pile surface will be nominally uniform in length.
- 4.3 The pile fiber will have an anchorage or tuft bind of at least 9 lbs./ft

5.0 LINE MARKING, NUMBERS AND LOGOS

- 5.1 Lines will be tufted-in place or inlaid as specified. All colors shall be manufactured with a specially formulated fiber to ensure against premature UV degradation.

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6.0 INSTALLATION – TURF & DRAINAGE

- 6.1 All installation shall be done in strict accordance with ATG Sports current printed installation instructions.
- 6.2 Weather conditions are important. No work under this section will proceed when:
 - a. Conditions exist or are imminent, which will be unsuitable to installation requirements of the systems specified herein.
- 6.3 Verify rock elevations prior to installation.
- 6.4 Using marking paint layout football field in exact location on finished rock base. Once rock is painted, check for low spots or dips, repair as needed.
- 6.5 Install main playing field, end zones and sidelines prior to installation of any numbers or logos.
- 6.6 Once main field is complete, layout per regulations all numbers, lettering and logos.
- 6.7 Brush field with a mechanical sweeper in preparation of all infill. Remove all debris prior to infill installation.
- 6.8 Upon completion of all installation and infill, turf shall be fastened to treated wood headers at all edges. All wood headers shall be anchored and glued to concrete curbs.
- 6.9 Cleaning:

Per the contract general conditions, remove all excess material, equipment and debris from site immediately after completion of the work. Leave work in clean condition, ready for use by the owner.
- 6.10 Optional – Bid shall include a bi-yearly cleaning, inspection and brushing of the field. Brushing shall be performed using a ride on mechanical sweeper with an 8' all polyethylene broom.
- 6.11 ATG's bid is based on the owner / general contractor providing ATG proper access to the jobsite at all times. Proper access includes, but may not be limited to, a paved or gravel road from the nearest county or city street to the work area.



* **FlexFiber UV** - a uniquely shaped fiber designed to stand up under heavy use while looking and performing like natural grass. This fibers unique chemical composition makes it cooler in higher temperatures than any other system.

****Experience** – Visit www.atgsports.com to see more on how this level of experience results in better quality.

*****Infill** – ATG Sports provides a proprietary blend for the most natural feel under foot. For more information on infill products, contact ATG Sports.

**** **Denier** – Denier is one of the most confused items in specifications. The best way to compare denier is the denier per fiber strand. Monofilaments fibers vary between 4, 6 and 8 fibers per needle in the tufting process. When comparing denier between products you need to consider the number of threads per roll.