



# GUIDELINE SPECIFICATIONS

SECTION 02542

## NOVATURF RF

### SYNTHETIC GRASS WITH BLENDED INFILL FOR FIELD SPORT SURFACING New Construction

#### PART 1- GENERAL

##### 1.01 Summary

A. This section includes, and is not limited to:

1. Construction of a NovaTurf cushioned synthetic in-filled sports surface consisting of a grass-like network of tufted, ultraviolet resistant fibers interlocked with rubber and sand over a crushed rock base course.
2. {Crushed Rock} base course.
3. Sub-grade preparation.
4. {Brick} {Asphalt} {Concrete} {Treated Wood} {none} curbing as detailed.
5. {Leveling Course}

##### B. Related Sections

1. Section {01300:Submittals} {01340:Shop Drawings} {Product Data and Samples}.
2. Section {02500:Paving and Surfacing} {02510:Asphaltic Concrete Paving}.
3. Section {02520:Portland Cement Concrete Paving}{03300:Cast-in-Place Concrete}.

##### 1.02 QUALITY ASSURANCE

- A. NovaTurf field surfaces shall be constructed by an approved NGI installer or under direction of an NGI Technician.
- B. Each roll shall be clearly marked.
- C. Materials shall not be installed when rain is imminent or temperature is below 40° F.

**1.03 WARRANTY**

- a. Materials shall have a multi-year limited warranty supplied by the manufacturer.
- b. Contractor to provide {Architect} {Owner } {Landscape Architect} {Engineer} written warranty at completion of project in accordance with Section {01700} {01740} of the Project Manual.

**PART 2- PRODUCTS****2.01 SYNTHETIC TURF FIELD SURFACING SYSTEM**

A. The NovaTurf field surfacing system shall consist of synthetic polyethylene fibers with ultraviolet stabilization,, and shall meet the following criteria:

|                          |                      |
|--------------------------|----------------------|
| 1. Elongation            | 17%                  |
| 2. Breaking Strength     | 52                   |
| 3. Melting Point         | 334° F (168° C)      |
| 4. Pill Test             | Pass                 |
| 5. Construction          | Tufted               |
| 6. Grab Tear Strength    | 200 lbs (91 kg)      |
| 7. Seam Tensile Strength | 55 lbs/inch, minimum |
| 8. Warranty              | 12 months            |
| 9. Tuft Bind             | 6+ lbs               |

\*\*All testing methods match or exceed standards as set through ASTM D418, D1682, D789, and D2859\*\*

- A. The color shall be Merion green for the turf and white for the lines.
- B. Granular Fill Material: Specially selected rubber and sand granules supplied and installed as recommended by turf manufacturer.
- C. Joint Adhesive: Single strength industrial adhesive as recommended by turf manufacturer.
- D. Joint Tape: High quality weatherproof fibrous tape as recommended by turf manufacturer.

**BASE MATERIALS**

**2.02 ROCK (Crushed Stone or Road BASE**

- A. Minimum 4" crushed stone rock base shall be used.
  - 1. Materials for crushed stone base may be a combination of crushed stone, crushed or uncrushed gravel, sand gravel, limestone gravel, or other locally qualified binder materials approved by {Architect} {Owner} {Landscape Architect} {Engineer}.
  - 2. These materials shall be thoroughly mixed to insure the final product will have a uniform grading and plasticity.
  - 3. The crushed stone or gravel shall conform to local specifications for rock base construction and the following:

|                                  |        |
|----------------------------------|--------|
| A. Retained on the 2 sieve       | -0-%   |
| B. Retained on the 1 1/2" sieve  | 0-5%   |
| C. Retained on the 3/4" sieve    | 5-30%  |
| D. Retained on the No. 4 sieve   | 35-60% |
| E. Retained on the No. 8 sieve   | 45-70% |
| F. Retained on the No. 40 sieve  | 60-84% |
| G. Retained on the No. 200 sieve | 80-92% |

- B. Crushed Aggregate Base Course Construction: If the required compacted depth of the base course exceeds 6", the base shall be constructed in two or more layers of equal thickness.

**PART 3- EXECUTION**

- A. Area shall be cleared of all trees, stumps, vegetation and topsoil, and treated with a soil sterilent.
- B. Prepare a sub-grade by blading, rolling and lightly scarifying until a 1% slope, side to side or from center of field area to side is obtained, and apply soil sterilent.
- C. Contours of the sub-grade shall conform to those of the proposed finished grade of 1%.



## D. Fill and Compaction:

1. When fill is required, it shall be placed in 6" lifts, maximum, with approved material and each lift shall be thoroughly compacted to a density of 95% proctor.
2. All unstable or otherwise objectionable material shall be removed from the sub-grade and be replaced with an approved material.
3. All holes, ruts and depressions shall be filled, reshaped and compacted as required to place the sub-grade in acceptable condition to receive base material.
4. Prior to placing succeeding layers of material, the top of the under-layer shall be significantly moist to ensure uniform moisture between layers.
5. The edges and edge slopes of the sub-grade shall be bladed and otherwise depressed to conform to the lines and dimensions of the finished surface.
6. The surface of the compacted finish sub-grade shall not vary from specified grades by more than 1/4".
7. The sub-grade shall be treated with an EPA approved soil sterilent prior to installation of base.
8. A continuous, engineered two (2) mm thick (minimum) woven geotextile shall be installed over the entire sub-grade prior to installation of the base rock.

### LEVELING COURSE INSTALLATION

#### 3.02 CRUSHED SCREENINGS LEVELING COURSE

- A. After the completion of the rock base, 1" to 2" layer of stone dust screenings shall be applied to make sure the surface is level.
  1. Screenings shall be spread thoroughly and compacted.
  2. Finished surface of the leveling course shall not vary from the specified grade more the 1/8" in 10' when measured in any direction and a finished slope of 1% to 2.5%.

THE FINISH SURFACES ARE LOOSE LAID OVER A STABLE SUBBASE.  
THE WEIGHT OF THE AGGREGATE FILTERED INTO THE FIBERS PREVENTS MOVEMENT.



### 3.02 SURFACE PREPARATION

- A. NovaTurf surfacing system shall be installed on a sound base surface within surface tolerance not exceeding 1/8" in 10' when measured in any direction.
- B. The entire surface shall be checked for any depressions. Depressions of 1/16" or deeper shall be filled and leveled with stabilized screenings.
- C. The entire surface shall be thoroughly cleaned to remove dust, dirt and foreign debris.

### 3.03 NOVATURF SURFACING SYSTEM

- A. The surface course shall be installed according to manufacturer's specifications.
- B. Specifically engineered pad shall be placed over sub-base (*OPTIONAL*) with NovaTurf surface loose laid on top.
- C. All surface course materials are to be installed after the surface has been inspected and approved by the {Owner}{Architect}{Landscape Architect}{Engineer}.
- D. All sections of surface mat are to be laid out so that the fibers are laying in the same direction.
- E. All joints shall be attached with a single strength industrial adhesive and a high quality weatherproof tape.
- F. **Rubber Crumb or/and Aggregate Infill:** Using a special mechanical mix device to filter the material into the fiber, the material infill shall be filtered into the surface mat in several light layers and shall be brushed in to allow the fibers to stand erect.
- G. Do not allow petroleum products to be spilled on the NovaTurf surface.

### 3.04 CLEAN UP

- A. Upon completion of the work, the contractor shall remove all containers, surplus materials and debris and have the site in a clean and orderly condition acceptable to the {Owner} {Architect} {Landscape Architect} {Engineer}.
- B. Provide {Owner} {Architect} {Landscape Architect} {Engineer} with Maintenance Manual at completion of project in accordance with section {01700}{01730} of the project manual.

END OF SECTION

PLEASE NOTE THAT THIS SPECIFICATION IS TO BE USED AS A GUIDELINE.  
THIS INFORMATION MAY NOT BE PROPER UNDER ALL CONDITIONS.

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