

# SPECIFICATION

## ALPHATURF DOG AGILITY AREA

## CUSHION SURFACING

### **PART 1 – GENERAL**

AlphaTurf Dog Agility Cushion System consists of a specifically blended light weight in-fill and soft grass like synthetic fiber monolithic surface on a prepared base.

#### **Summary**

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

1. Construction of a dog agility surface consisting of a grass-like network of tufted, ultraviolet resistant fibers interlocked with light weight, rounded sand in-fill.
2. {Asphalt} {Crushed Rock} base course.
3. Sub grade preparation
4. {Brick} {Asphalt} {Concrete} {Treated Wood} {none} curbing.

B. Related Sections

1. Section {01300:Submittals} {01340:Shop Drawings, Product Data and Samples}.
2. Section {02500:Paving and Surfacing} {02510: Asphaltic Concrete Paving}

### **1.01 QUALITY ASSURANCE**

- A. The AlphaTurf surface shall be constructed by an approved installer of NGI.
- B. Each roll shall be clearly marked
- C. Materials shall not be installed when rain is imminent or the temperature is below 40 degrees F.

### **1.03 WARRANTY**

- A. AlphaTurf materials shall have a five (5) minimum warranty for the system installed supplied by the manufacturer.
- B. Contractor to provide {Owner} {Architect} {Landscape Architect} {Engineer} written installation warranty at completion of project.

## **PART 2 – PRODUCTS**

### **2.01 ALPHATURF DOG AGILITY CUSHION SURFACING SYSTEM**

A. The AlphaTurf Dog Agility cushioned surfacing system shall consist of polyethylene fibers with a minimum 5-year ultraviolet stabilization package, and shall meet the following criteria:

- Elongation 17%
- Breaking Strength 52
- Melting Point 220° F
- Pill Test Pass
- Construction Tufted
- Tensile Strength Length.50N/5cm,/width1400N/5cm,/diag375N/5cm
- Seam Tensile Strength 55 lbs/inch, minimum
- Fiber System Fibrillated Polyethylene
- Pile Height .625 inches to .75 inches
- Primary Backing Dual Polyester
- Back Coating Natural Urethane
- Line System Sportline
- Infill 6 lbs psf

Testing methods match or exceed standards as set through ASTM 418; D789; D162; & D2859\*

- B. The color shall be Irish Green and all fibers in each roll applied to the tennis court shall be from the same dye lot.
- C. Granular Fill Material: Specially selected grade and shape light weight granules as specified for the system to be installed. Available in natural brown or Rubico green.
- D. Joint Adhesive: Single strength industrial adhesive.
- E. Joint tape: High quality polyester tape minimum 10” wide.

### **BASE MATERIALS – OPTION 1**

### **2.02 ASPHALT BASE**

A. Asphalt base course, minimum 4” thick composed of aggregate and bituminous material mixed in a central plant, and constructed on a prepared sub grade in accordance with this section and in conformity with the dimensions and typical cross section shown on plans.

B. Aggregates for Asphalt Base: Unless otherwise specified, aggregates shall be clean, washed, graded gravel, sand and mineral filler, in any combination, with all material complying with the quality, sieve analysis and plasticity requirements specified herein.

1. The combination of aggregate and mineral filler used for bituminous construction shall be uniformly graded from coarse to fine.

2. The sieve analysis of the combined aggregates immediately prior to mixing with bituminous material shall comply with the following.

A.	Retained on the 1-1/2" sieve	-0-%
B.	Retained on the 1" sieve	0-30%
C.	Retained on the 3/8" sieve	1-30%
D.	Retained on the No. 8 sieve	20-50%
E.	Retained on the No. 30 sieve	Not More than 80%
F.	Retained on the No. 200 sieve	88-94%
G.	Plastic Index	0-6%

**BASE MATERIALS – OPTION 2**

**2.02 ROCK BASE**

A. Minimum 5" 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 the {Owner} {Architect} {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 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 sub grade by blading, rolling, and lightly scarifying until a ½% to 1% slope, side-to-side or end-to-end is achieved; apply soil sterilent.
- C. Contours of the sub grade shall conform to those of the proposed finished grade.
  - 1. Prior to placing succeeding layers of material, the top of the under layer shall be significantly moist to ensure uniform moisture between layers
  - 2. 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.
  - 3. The surface of the compacted finish sub grade shall not vary from specified grades by more than ¼".
  - 4. The sub grade shall be treated with an EPA approved soil sterilent prior to installation of base.
  - 5. Install geotextile fabric on top of sub grade prior to installation of base materials.

### **BASE INSTALLATION - OPTION 1**

#### **3.02 PLACING OF ASPHALT MIXTURE**

- A. The mixed asphalt material shall be spread and finished true to crown and grade by machine methods. Bituminous mixtures may be spread and finished by hand methods only where machine methods are impractical, as is the case of special areas which because of irregularity or other unavoidable obstacles, do not lend themselves to machine placing.

- B. The machine shall spread the bituminous mixtures and shall strike a finish that is smooth, true to cross section, uniform in density and texture, and free from hollows, transverse corrugations and other irregularities.
- C. After spreading and strike-off and as soon as the temperature and mix conditions permit the rolling to be performed without excessive shoving, the moisture shall be thoroughly and uniformly compacted by rolling. Compaction shall be accomplished by either a self propelled rubber-tired roller, two axle tandem steel roller or vibratory roller.
  - 1. Rollers shall be kept in operation continuously if necessary so that all parts of the pavement will receive substantially equal compaction at the time desired.
  - 2. The {Owner} {Architect} {Landscape Architect} {Engineer} shall order the mixing plant to cease operation at any time proper rolling is not being performed.

Any mixture that becomes loose, broken, mixed with foreign material or does not comply in all other respects with the requirements of this Section shall be removed, replaced with suitable material, and finished in accordance with this Section.

#### **LEVELING COURSE INSTALLATION – OPTION 2.A**

##### **3.03 HOT MIX ASPHALT LEVELING COURSE**

- A. Provide a leveling course using hot plant mix having a maximum aggregate size of 3/8"-3/4" in accordance with the Asphalt Institute. Min. compacted thickness, 1".
- B. The hot plant mix shall be spread by methods proposed by the contractor to meet the tolerance specified herein.
- C. The hot plant mix shall be thoroughly compacted by rolling with a powered steel wheel tandem roller weighing not less than four tons nor more than 6 tons.
- D. The finished surface of the leveling course shall not vary from the specified grade more than 1/8" in 10' when measured in any direction.

#### **LEVELING COURSE INSTALLATION – OPTION 2.B**

##### **3.03 CRUSHED SCREENINGS LEVELING COURSE**

- A. After the completion of the rock base, a 1"- 2" layer of stone dust screenings shall be applied to make sure the surface is level.
  - 1. Screenings shall be spread thoroughly and compacted.

Finished surface of the leveling course shall not vary from the specified grade more than 1/8" in 10' when measured in any direction.

### 3.05 SURFACE PREPARATION

- A. The dog agility surfacing system shall be installed on sound base surface with a surface tolerance not exceeding 1/8" in 10' when measured in any direction with a minimum slope in one direction of 1%.
- B. Rock Base:
  - 1. The entire surface shall be checked for any depressions. Depressions 1/8" or deeper shall be filled and leveled. Use limestone screenings to level.
- C. Asphalt Base:
  - 1. Once the surface has been thoroughly cleaned and is free of all loose material, dirt or dust, the court should be flooded with water and allowed to drain. Any area that holds water in a depth greater than 1/16" (thickness of a nickel) shall be outlined and patched.
  - 2. Surface leveling: Birdbaths shall be leveled using one of the following:
    - a. NGI Surface Deep Patch: 5 Gallons NGI Surface Patch, 200 lbs silica sand, and 2-3 gallons Type I portland cement. Applied in layers up to 3/4" deep.
      - 1. The area to be patched shall be primed, using two parts water to one part Surface Patch.
      - 2. The primer shall be brushed into place and allowed to dry prior to placement of the patch.
      - 3. Cracks shall be cleaned, primed and filled with dry silica sand covered with NGI Surface Patch mix. NGI seam tape shall be laid on crack 1/8" to prevent reflection.

### 3.06 DOG AGILITY SURFACING SYSTEM

- A. The surface shall be installed according to NGI specifications.
- B. All surface course materials are to be installed after the surface has been inspected and approved by the {Owner} {Architect}{Landscape Architect}{Engineer}.

- C. All joints and seams may be attached with a high quality seaming tape and adhesive. Heat seaming method is not allowed.
- D. Sand Layer: Using a special mechanical devise to filter the sand into the fiber, the sand shall be placed into the AlphatTurf material in several layers and brushed. Sand color shall be (Rubico green), (natural).
- E. Do not allow petroleum products to be spilled on the AlphaTurf surface.

### **3.07 CLEAN UP**

- A. Upon completion of the work, contractor shall remove all containers, surplus materials and debris and have the site in a clean and orderly condition acceptable to the {Owner} {Architect} {Engineer} {Landscape Architect}.
- B. Maintenance: Periodic brushing for routine maintenance. Refer to owner's manual for yearly program.
- C. Provide {Owner} {Architect} {Engineer} {Landscape Architect} with maintenance manual upon completion of project.

**END OF SECTION**