



Technical Specification

SECTION 02792

EnvyLawn® Synthetic Lawn System

PART 1 - GENERAL

1.01 SUMMARY

- A. The Conditions of the Contract and all Sections of Division 1 are hereby made a part of this Section.

1.02 DESCRIPTION OF WORK

- A. Work Included:
 - a. Sandy gravel base course
 - b. EnvyLawn® synthetic turf products, anchors/pins, seam tape and adhesives.
 - c. Infill material (rounded silica sand, or granulated crumb rubber, manufactured acrylic coated sand, or a combination of any of the three).

- B. Related Work:
 - a. Subgrade preparation under Section 02200 - Earthwork.
 - b. Subsurface drainage materials - Section 02710 - Subsurface Drainage, (when needed).

1.03 QUALITY ASSURANCE

- A. Installer Qualifications: A firm experienced in and specializing in performing work of this type, and:
 - a. Approved by the manufacturer.

- b. Able to provide skilled work people with satisfactory record of performance on landscaping or synthetic turf projects of comparable size and quality.
- c. Able to furnish certificate indicating qualifications, upon request.

1.04 SUBMITTALS

- A. Submit manufacturer's descriptive product literature, product specification data, installation instructions and suggested infill volume requirements.
- B. Submit a 6" x 9" sample of EnvyLawn® product with infill for review.
- C. Submit EnvyLawn® seaming plan, identifying direction and location of seams, and seam construction method.
- D. Submit Manufacturer's limited warranty.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect EnvyLawn® synthetic turf rolls and accessories from damage during delivery and store in a dry area or elevate above ground, under an impermeable tarp when time from delivery to installation exceeds one week.

1.06 PROJECT CONDITIONS

- A. Review installation procedures and coordinate EnvyLawn® work with other work affected.
- B. All hard surface paving adjacent to EnvyLawn® areas, including concrete walks, retaining walls and asphalt paving, must be completed prior to installation of EnvyLawn®.
- C. Ensure that sub-base materials are structurally adequate to receive designed base course, wearing course, and designed loads. Ensure that grading and soil porosity of the sub-base will provide adequate surface and subsurface drainage.
- D. Examine subgrade and base course installed conditions. Do not start EnvyLawn® installation until unsatisfactory conditions are corrected. Check for poor drainage, improperly compacted trenches, debris, and improper gradients. Do not install EnvyLawn® on slopes greater than 6°.
- E. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance. If existing conditions are found unsatisfactory, contact Project Manager for resolution.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Manufacturer: (EnvyLawn®) Challenger Industries, Inc., 205 Boring Drive, Dalton, Georgia 30721. Call from USA and Canada 800-334-8873 toll free, (International 706-278-7707); Fax 706-278-3432. www.envylawn.com

2.02 MATERIALS

- A. Base Course: The stone shall be installed in two layers:
- a. 2” to 4” Sandy Gravel base course. Sources of the material can include ¾” minus “pit run” or “crusher run.”
 - i. Crusher run material will generally require sharp sand to be added to mixture (25 to 35% by volume) to ensure long term porosity.
 - ii. Alternative materials such as crushed shell, lime rock, and/or crushed lava may be considered for base course use, provided they are mixed with sharp sand (25 - 35%) to ensure long term porosity, and are brought to proper compaction. (Crushed shell and lime rock alone can set up like concrete unless sand is added.)
 - b. 1” to 2” leveling / finish course consisting of stone dust or fine material adequate for providing a compacted level surface.
- B. EnvyLawn® synthetic lawn turf:
- a. Composition:
 1. Sizes: rolls of 15’ widths and up to 100’ lengths. Turf may be pre-cut to site requirements prior to arrival at jobsite.
 2. Polyethylene grass fibers, woven dual-layered polypropylene primary backing, polyolefin adhesive and polypropylene nonwoven secondary backing.
 3. Permeability of up to 400 inches per hour per DIN 18-035, part 6.
 4. Tuft bind of 9 lbs.-force per ASTM D1335.
 5. Grab tensile strength in the Machine Direction and Cross-machine direction of at least 200 lbs. per ASTM D5034.
 6. Style(s) (Select one or more)

| | |
|-----------------|--------------|
| Envy Pro | Style # NVY1 |
| Envy Elite | Style # NVY2 |
| Envy Premier | Style # NVY3 |
| Superlawn Blend | Style # ELSB |
| Superlawn Pro | Style # ELSP |
| Superlawn Elite | Style # ELSE |
| Eco Grass Pro | Style # ELEG |

C. Granular Infill:

- a. Manufacturer will supply rounded (non-angular) granular infill consisting of one to three of any of the following materials.
 - 1. Clean, washed rounded silica sand
 - 2. Granulated ambient SBR rubber made from recycled tires
 - 3. Acrylic coated manufactured sand available in black and green.

D. Anchor Pins:

- a. Landscape nails or anchor pins of a minimum length of 8"

E. Seam Tape & Adhesive (if needed)

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Do not use frozen materials or materials mixed or coated with ice or frost.
- B. Do not build on frozen work or wet, saturated or muddy subgrade.

3.02 PREPARATION

- A. Remove any loose rocks or organic materials.
- B. Grade to within +/- 1" of required subgrade to insure drainage.

3.03 INSTALLATION

- A. Follow Manufacturer's Installation Guidelines including but not limited to:
 - a. Final grading and base preparation are required to insure adequate stability and drainage.
 - b. A leveling layer is installed to insure a smooth surface that allows intimate contact between the turf and base.
 - c. Lay Turf so that grain runs in one direction. Do not lay turf that has obvious defects.
 - d. Seams must be invisible after completion of installation. Seaming must be done in a manner to insure no trip hazards.
 - e. Infill should be installed in lifts and fibers must not be buried. Infill should be installed to a level where $\frac{3}{4}$ " +/- $\frac{1}{4}$ " of the fiber is exposed.

- f. Secure Edges After the main body of the turf area has been infilled and stabilized, the perimeter edges should be secured in a manner to avoid trip hazard, edge fray, etc.
 - g. Finish installing infill around the perimeter edges.
- B The turf installation contractor is responsible for assuring that at least 6" per square foot of drainage is provided in all turf areas. Any areas subject to surface ponding should be removed, re-graded and reinstalled. Any surface ponding voids the manufacturer's warranty.

3.04 FIELD QUALITY CONTROL

- A. Protect partially completed turf and base course against damage from other construction traffic when work is in progress.
- B. Protect adjacent work from damage during EnvyLawn® installation

3.06 CLEANING

- A. Remove and replace any defective sections of EnvyLawn® and re-install with a 1st quality section, with no evidence of replacement.
- B. Perform cleaning during the installation of work and upon completion of the work. Remove all excess materials, debris, and equipment from site. Repair any damage to adjacent materials and surfaces resulting from installation of this work.

END OF SECTION