

# PERFORMANCE SPECIFICATIONS

## SECTION 1 INFIELD SKIN SURFACE PROFESSIONAL SPECIFICATION DURAEDGE® PROFESSIONAL INFIELD MIX

# PART 1 – GENERAL

# 1.1 SUMMARY

- A. This section includes the material and labor requirements for construction of a complete infield skin surface using the following material:
  - 1. DuraEdge Professional (Pro) Infield Mix
- B. Related Sections:
  - 1. Site Preparation
  - 2. Earthwork

## 1.2 SUBMITTALS

- A. Product Data: For the product specified, submit a 5-pound sample along with a private lab test result indicating the particle size analysis of the material specified. All tests shall be performed in accordance with ASTM F-1632.
- B. Approved Testing Lab: Turf & Soil Diagnostics 35 King Street Trumansburg, NY 14886 (607) 387-5694

# 1.3 **PROJECT/SITE CONDITIONS**

- A. All site work and earthwork shall be performed in accordance with the preceding sections. Sub- base material shall compact to 90 percent. If conditions do not warrant such compaction then an imported select granular fill shall be installed. Furthermore, the compacted sub-grade shall be installed in accordance with the final slope and shall mirror finish grade in order to ensure an even depth of material once placement has occurred.
- B. Under no circumstances are perforated pipe under drains necessary or recommended for use under any infield skin material. Geotextile fabric is not recommended between the compacted sub-base and the infield skin material.

C. In certain instances, and where warranted, a survey of the sub-grade elevations shall occur prior to placement of the infield skin material.

## 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Installers of materials specified shall have, at minimum, five successful installations of similar projects and materials. Installers shall be in possession of and demonstrate knowledge of the use of laser guided finishing equipment.
- B. Material: If quality control samples are specified, they shall be completed at a rate of one per 250 tons of material delivered to the jobsite. All tests shall be conducted by the lab specified in Section 1.2 (B). All testing will be compared to and be in accordance with the material specifications provided in Section 2.2.

# PART 2 - MATERIALS

## 2.1 MANUFACTURER

- A. DuraEdge Pro Infield Mix is produced in various locations throughout the United States of America by and at the direction of the following manufacturer:
  - DuraEdge Products, Inc.
    149 South Broad Street, Grove City, PA 16127
    Phone: (866) 867-0052 Fax: (724) 264-4174
    Email: info@duraedge.com Website: www.duraedge.com

## 2.2 MATERIALS

- A. DuraEdge Pro Infield Mix is an engineered soil product which is mechanically mixed offsite in a controlled environment using a pugmill-type mixer. This process ensures thorough mixing of the sand and clay components to exact specifications.
- B. Performance Specification
  - 1. Infield mix shall be clean, dry clay mixed with washed mason-type sand resulting in a weed-free mixture that is reddish brown in color having a yield of 1.35 tons per cubic yard when placed loose or 1.5 tons per cubic yard when compacted 85% 90% on a Standard Proctor Test (ASTM D 689-07). The material possesses the following particle size analysis:
    - a. Total sand content shall be 58-62 percent.
    - b. The combined amount of sand retained on the medium, coarse and very coarse sieves shall be greater than or equal to 40 percent.
    - c. The combined amount of silt and clay shall be 38-42 percent.
    - d. The ratio of silt divided by clay, otherwise known as the SCR, shall be 0.5 1.0.
    - e. No particles greater than 3 millimeters.
    - f. Equal to or less than 5 percent of particles shall be retained on the 2 millimeter.

Materials meeting this specification would be DuraEdge Pro Infield Mix as manufactured by DuraEdge Products, Inc., Grove City, PA, (866) 867-0052, or an approved equal.

#### C. Amendments

1. Certain amendments are approved for use with DuraEdge Pro Infield Mix and shall be installed at the architect's discretion in accordance with the manufacturer's recommendations. Contact the manufacturer for further instructions.

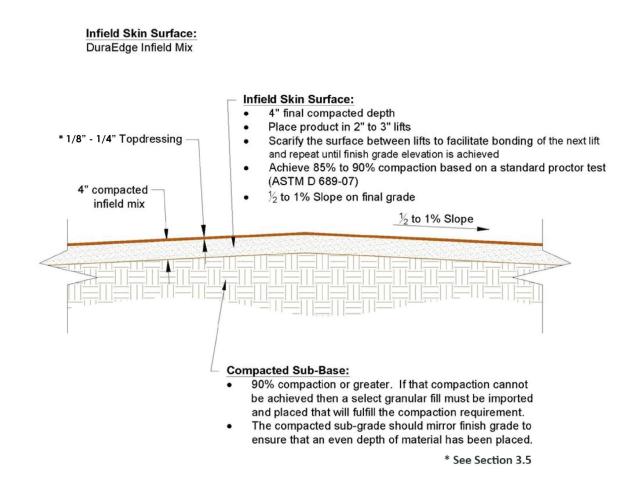
## 2.3 EXCESS MATERIALS

A. Provide the owners' authorized representative with a 10-ton stockpile of material for future use.

### PART 3 – EXECUTION

#### 3.1 PLACEMENT

- A. Place the material in lifts of 2 to 3 inches and lightly compact until an optimum compaction between 85 and 90 percent is achieved on a standard proctor test (ASTM D 689-07). Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved. Completing this process as described will minimize settling and improve the performance of the product. See diagram in 3.1.C
- B. Depth of the material shall be 4 inches for new construction when finished and compacted. See diagram in 3.1.
- C. Typical cross-section of infield skin:



## 3.2 WATERING

A. In most cases, the material is delivered with optimum moisture and adding water is not necessary. If unable to achieve optimum compaction, a light application of water may be needed.

## 3.3 FINISH GRADING

A. For best results the material shall be finish graded with a laser device that allows accuracy to +/- 1/8 inch. A slope of 1/2 percent to 1 percent shall be placed on the infield surface in order to facilitate surface drainage.

#### 3.4 INSPECTION

A. The finished surface of the infield shall be smooth and free from any visible dips, humps, bumps or other blemishes which would hinder the removal of water through positive surface drainage. Where warranted, a finished elevation survey shall be conducted to assure proper installation.

#### 3.5 TOPDRESSING & CONDITIONER

- A. Following successful inspection, topdressing shall be applied to the surface for optimum product performance. This topdressing is either expanded shale or calcined clay product and shall be added at a rate of 0.5 pounds per 1 square foot for maintenance, or 1 pound per 1 square foot for new construction.
- A. Product is either ProSlide Expanded Shale Topdressing, a ProSlide Calcined Clay Conditioner, or a combination of both. Both are available through DuraEdge Products, Inc., Grove City, PA, (866) 867-0052.

End of Section 1