

# UTELITE TURF STRUCTURAL SOIL FOR DRIVABLE TURF

## PART 1: GENERAL

### A. STRUCTURAL SOIL MIX FOR DRIVABLE TURF

A. Utelite "Fines" Lightweight Expanded Shale	60%
B. Root Zone Sand or Sandy Soil	30%
C. Organic Material	10%

### B. Minimum finished depth shall not be less than 8" (eight inches) deep.

## PART 2: COMPONENTS

### A. Utelite "Fines" Lightweight Rotary Kiln Expanded Shale

Acceptable Expanded Shale Manufacturer and Supplier:

**Utelite Corporation, Scott Jenson, 801-243-9348, sjenson@utelite.com  
PO Box 387, Coalville, UT 84017**

### B. Root Zone Sand or Sandy Soil

- a. Root Zone Sand should be screened and classified for turf establishment.
- b. Sandy Soil should have at least 45% sand content, be screened of gravel and have favorable physical and chemical properties as determined by a soil analysis.

### C. Organic Material

Compost, Peat, or Approved Equal

- a. Shall be a weed free, screened organic source material with favorable physical and chemical properties as determined by analysis.

## PART 3: MIXING PROCEDURE

1. Mechanically mix the sand or sandy soil and organic material thoroughly at ratio of 3 parts sand or sandy soil to 1-part organic material.
2. Mechanically mix 6 parts Utelite "Fines" with 3 parts sand/organic material blend until the structural soil is thoroughly blended.

3. When stockpiling the finished mix, cover the pile with a tarp to prevent drying out and separation from rain.
4. Install the mix within 48 hours of mixing.

#### **PART 4: PLACEMENT**

1. Prepare the subgrade by removing all organic matter, debris, loose material and large rocks. Dig out soft or mucky spots and replace with suitable material. Uniformly compact the subgrade to 90 - 95% of its maximum dry density. Place geotextile grid if required by engineer.
2. Place Turf Structural Soil over compacted subgrade.
3. The Turf Structural Soil shall be placed in a uniform lift over the entire area of the project not exceeding 10 inches. The area should be compacted to provide a finished lift of 8 inches. Construction equipment, other than for compaction, shall not operate on the exposed Turf Structural Soil.
4. Final compacted depth of mix shall not be less than 8 inches deep.

#### **COMPACTION**

1. Use of portable vibratory plate compacting machine (Recommended).
  - a. Place Turf Structural Soil in a lift not exceeding 8 inches of compacted depth. Use of minimum of four passes, of not less than 10 seconds per pass, before moving to the next adjacent location. Additional passes may be required and should be determined in the field by the engineer to insure stability of the layer.
2. Use of vibratory steel roller for large areas.
  - a. For large areas, a small vibratory steel roller can be used. Horizontal lifts should not exceed 10" compacted. The minimum number of passes is two and maximum number is four. Additional passes may be required and should be determined in the field by the engineer to insure stability of the layer.

#### **SOD INSTALLATION**

1. Sod grown in sand based soil is recommended for this application.
2. Place sod on Turf Structural Soil as specified by landscape architect.

- a. Optional – The placement of a 1” to 2” root zone layer might be required for seeding or sod establishment. The root zone layer is placed over the finished and compacted Turf Structural Soil and should not exceed a depth of 2”.