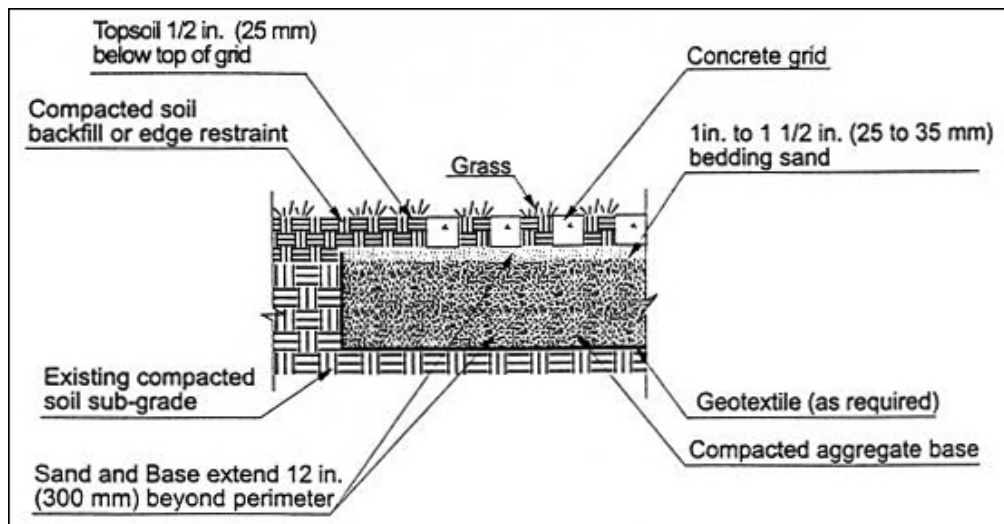


# TURFSTONE

## Installation Guidelines

**Excavate and compact the soil subgrade.** The soil subgrade should be uniformly compacted to 95% of its optimum density prior to placing the gravel, sand and the Turfstone units.

**Place and compact the gravel base.** Gravel used for road bases is acceptable for use with Turfstone units. The compacted gravel base should extend beyond the edge of the Turfstone units a minimum of 6" where possible. The thickness of the gravel base depends on the loads and the strength of the soil subbase. For residential uses on adequately drained soil, 6" of gravel base should be used. For heavy vehicular loads such as fire trucks or repeated loads from cars, a minimum of 8" of compacted gravel base should be used (Figure 1).



Filter cloth is recommended for use with low CBR soils (less than 4%), those with high clay and silt contents, soils in high water table areas, or soils in low lying areas subject to flooding. The filter cloth is placed over the compacted subgrade. The filter cloth should be fine enough to prevent migration of soil into the gravel base. Woven fabrics are preferred over non-woven materials when the cloth is placed directly under the sand layer in installations subject to traffic.

**Spread and screed the bedding sand.** Grading requirements for the concrete sand should conform to ASTM C 33. Do not use masonry sand. The sand should be screeded to proper elevations and have a uniform moisture content (not saturated) prior to placing the Turfstone units. The screeded sand should not be disturbed.

**Place the Turfstone units on the bedding sand.** The Turfstone units should be placed with the minimum joint spacing of at least 1/16" (2 mm). If the Turfstone units touch, they may chip and spall upon repetitive loading.

**Vibrate the Turfstone units into the sand.** Use a high-frequency (3500 - 5000 cycles per second), low amplitude plate vibrator. A rubber mat should be attached to the vibrator to protect the grids from cracking and chipping. Plywood sheets placed on the Turfstone units can be used for protection if a rubber mat is not available.

**Spread topsoil or gravel into the Turfstone units and vibrate again.** Grass seed and fertilizer can be mixed with the topsoil or broadcast directly on the surface and swept into the openings and joints. The Turfstone units should be vibrated again after the voids are full. The final level of the topsoil should be 1/2" (13mm) to 3/4" (20 mm) below the top surface. This will lend some protection to the grass from tires as it grows. When selecting grass for the openings, it's important that there be at least five hours of light on the Turfstone units each day.

#### **Turfstone Specifications:**

Dimensions (Inches):	15 5/8" x 23 7/16" x 3 1/8"
Bundle Content:	35 per Bundle
Bundle Weight:	2450 Lbs. per Bundle
Weight per Piece:	70 Lbs. per Piece
Aperture:	3 5/8" x 3 5/8" (43%)
Compressive Strength:	5000 PSI (ASTM C1319)