



## Recommended Installation for TurfStone Concrete Grid Pavement

### **1. Excavate, compact the soil sub-grade and base**

Sub-grade should be uniformly compacted to at least 95% standard Proctor density per ASTM D 698. Place and compact the gravel base (Figure 1). Dense-graded aggregate bases should be compacted to a minimum of 98% standard Proctor density. The gravel base should extend beyond the TurfStone a min of 12" where possible. For residential use, 6 in. base is recommended. For fire trucks and trucks axle loads defined by AASHTO H20, as well as for parking lots and driveways, use a minimum of 8 in. Use filter cloth for low CBR (California Bearing Ratio), 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. Cloth should be fine enough to prevent migration of soil into the base. Placement of geotextile filter cloth is recommended to separate the compacted soil sub-grade from the base material if the application is for heavy vehicular use or the product will be used in areas subject to flooding.

### **2. Spread and screed the bedding sand - place the TurfStone Concrete Grid units**

The gradation of bedding sand should conform to ASTM C33. Limestone screenings, stone dust or masonry sand should not be used. Sand should be screeded to proper elevation and have consistent moisture content prior to placement in a consistent 1/2 to 1 inch thickness. The screeded sand should not be disturbed prior to placing the TurfStone concrete grid. A minimum joint spacing of at least 3/16" should be maintained throughout the placement. If the TurfStone units touch, they may chip or spall upon repetitive loading. Edge restraints are required for containment of grid pavements and prevent shifting under loading.

### **3. Vibrate the TurfStone into the bedding sand**

All installed units should be compacted into the bedding sand at the end of each day. Use a high-frequency (75-90 Hz), low amplitude plate compactor, maintaining a centrifugal compaction force of 4,000 lbs. A rubber mat should be attached to the vibrator to protect the grids from cracking and chipping. Plywood sheets may be placed on the TurfStones can be used for protection if a rubber mat is not available. An occasional cracked unit from compaction will not compromise performance.

### **4. Spread topsoil or gravel into the TurfStone and vibrate again**

Grass seed and fertilizer can be mixed with the topsoil or broadcast directly on the surface and swept into openings and joints. Vibrate again after voids are full. The final level of topsoil should be 1/2" to 3/4" below the top surface. This will lend some protection to the grass from tires as it grows.

Additional information and details can be found at: [www.ICPI.org](http://www.ICPI.org) See Tech Spec 8 - Concrete Grid Pavements

