Applications

Parking Lawns - Turfstone support the vehicular load that would normally compact the soil to such a degree as to prohibit the growth of vegetation. The openings serve the dual purpose of allowing the grass to grow through and water to drain back to the soil. Ideal for driveways, parking lawns, golf course pathway, walkways, parts, and campuses.

Emergency access and Fire Lanes - Turfstone preserve the landscape while ensuring that fire trucks and other emergency vehicles don’t get bogged down in mud. Also well-suited for highway shoulders and median crossovers.

Erosion Control - Turfstone stabilize the soil to provide a permanent solution to soil erosion on slopes, stream banks, spillways, wash outs, ponds and other problem areas where there is no extreme wave action.

Manufacturer’s Specifications

Nicolock’s Turfstone meets or exceeds industry standards for grid pavers (ASTM C1319), with a minimum compressive strength of 5,000 psi and a maximum average water absorption of 10. lb/ft³. There is a 40% surface opening.

Residential and Commercial Turfstone Grid Pavement Installation

All installation contractors should follow the Interlocking Concrete Pavement Institute’s Tech Spec No. 8 Concrete Grid Pavements, guidelines for design and installation procedures. Key installation steps include:

1. Excavate to the depth required for particular application and compact the soil subgrade to at least 95% of Proctor density. The compacted subgrade should extend beyond the edge of the Turfstone pavement a minimum of 12”.

2. The base for Turfstone is typically compacted dense-graded aggregate. The thickness of the base depends on the load and the strength of the soil subbase, but a minimum of 8 inches is recommended. If the subgrade soil is weak (< 5% CBR) a thicker base will be required. The base should also be compacted to 95% of Proctor density.

3. The setting bed should be concrete sand conforming to ASTM C33. Thickness of the sand layer should be 1”. The sand should be screed to proper elevation allowing 3-1/8” for the Turfstone thickness. The screed sand should not be saturated nor disturbed.

4. Place Turfstone (core bar slots down, although up does not impact performance) on the sand bed, aligning using string lines, and allowing approximately 1/8” spacing between units (maximum 3/16”). To avoid potential edge cracking, do not allow the grid pavers to touch each other. Openings must be filled with stone or with topsoil if vegetation growth is desired. Seat the Turfstone into the sand setting bed using a high frequency, low amplitude plate compactor with rollers or a mat attached to the plate. Do not compact within 6 ft. of an unrestrained edge. Edge restraints are required for all applications.

5. Openings should be completely filled with topsoil to create a turf pavement. The choice of turf is important and should have a high tolerance for wear, a high potential for recovery, and have a low tendency for thatch build-up. Minor and occasional cracks in grid pavers do not impact pavement performance. Cracks or chips can occur during installation/compaction, or when grids are not seated properly. In most situations, one or two cracks in a unit will not diminish structural or functional performance.

Note: There may be special installation requirements for erosion control, slopes, stream banks, and lake side applications.