

# TURFSTONE INSTALLATION GUIDELINES

1

Excavate site area to the design levels and compact the sub grade to the required density.



2

Place and compact the base in layers not exceeding 6" (150mm) to a smooth uniform surface to the grade and cross section required. The minimum surface tolerance of the compacted base should be  $\pm 3/8"$  ( $\pm 10\text{mm}$ ) over a 10 ft (3m) straightedge. The base should extend beyond the perimeter of the grids a minimum of 12" (300mm) when there is no building or curb to restrain them. The extended perimeter increases the stability of the Turfstone and allows for installation of edge restraints.



3

The gradation of the bedding sand should conform to ASTM: C 33 (6) or CSA: A23 (7). Limestone screenings, stone dust, or masonry sand should not be used. The thickness of the bedding sand should be 1 to 1 1/2" (25-40mm). Use a screed board over the screed rails or bars to establish a consistent sand thickness. The sand should have a consistent moisture content but not be saturated. Do not disturb the screed sand prior to placing the grids.



4

Do not allow any vehicular traffic on the Turfstone installation until the grid openings have been filled. Turfstone are typically placed on the screeded bedding sand in a running bond pattern with a minimum joint spacing of 1/16 to 3/16" (2 to 4 mm). If the grids touch, they may crack, chip, or spall under repeated traffic. The smooth side is the bottom of each unit. After the grids are placed, go over them with a plate compactor. It should have a minimum centrifugal compaction force of 5,000 lbs (22kN). A rubber or neoprene mat should be attached to the plate of the compactor to protect the grids from cracking and chipping. The units should be cut to fill any spaces along the edges prior to compaction. All installed units should be compacted into the bedding sand at the end of each day. If bedding sand is left uncompact, it should be covered with plastic to protect it from rain (rainfall settles non-compacted sand, preventing the grids from pressing into the sand when compacted). Otherwise, bedding sand saturated with rainfall prior to compaction will need to dry, be raked and re-screeded, or be replaced. If left uncorrected, the grids will settle unevenly and may move under traffic. Should be adjusted to account for the concrete surface.



5

**For Grass Fill:** After the grids are installed and compacted, a mix of topsoil and grass seed can be spread across the grids and swept into the openings. Compact the Turfstone again until the final level of the topsoil is about 1/2" (13mm) to 3/4" (20mm) below the top surface. This will lend protection from tires as the grass grows. Straw can be applied to protect the grass while it is growing. While labor-intensive, sod plugs can be inserted into the openings as an alternative to topsoil and seeding. If using sod, it should be applied after the second or final compaction of the grids, but with a reduced amount of topsoil in the openings so space is available for the plugs.



**Note: If using fertilizer, be sure to remove any excess from the surface of Turfstone as it may cause staining.**

6

**For Gravel Fill:** After the grids are installed and compacted, fill and sweep gravel in all open cells of Turfstone. It is recommended to use angular ASTM No. 8, 89, or 9 stone or gravel, as this will allow stormwater to freely infiltrate through the pavement surface.

