

# GRO Synthetic Turf

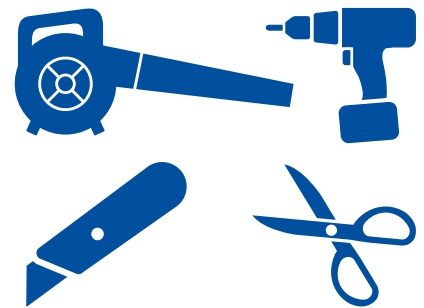
Carlisle's GRO Synthetic Turf System is a hassle-free, environmentally safe roof garden alternative for crafting a natural-looking play or leisure area on the roof. With a selection of six turf varieties, including pet-friendly and putting turf options, GRO Synthetic Turf delivers year-round beauty without the need for water, pesticides, or fertilizers typically associated with real grass.

Carlisle's GRO Synthetic Turf system is installed in an elevated fashion, allowing the system to sit above the roof membrane secured to structural grates supported on adjustable pedestals. The materials needed for installation include HP Protection Mat, GRO adjustable pedestals (available in different heights), GRO Structural Grate, Grate Fastening Kit, Seaming Fabric, Seaming Adhesive, Turf, and 1/2" to 3/4" self-tapping, flat head, stainless steel screws.



## Required Tools:

- » Broom or leaf blower
- » Drill with Phillips head bit
- » Utility knife
- » Roofing scissors



## Optional Tools when Seaming Is Required:

- » Large caulking gun for 29 oz tubes
- » 3/16" V-notched trowel (1/8" V-notched trowel can be used for Putting Turf)
- » Carpet tractor
- » 100-pound (min) weighted roller

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Prior to installation, inspect the GRO Turf and prepare the roof membrane for installation. Ensure that the roof membrane, as well as the back of the turf, the seam fabric (if required), and structural grate are free from debris and oils. Turf should be dry and free from any frost or condensation.

- 1 Loose lay Carlisle's HP Protective Mat (or 200V/300HV Protection Fabric) over the Carlisle approved roof assembly prior to system installation.
- 2 Lay out GRO Pedestals per design specifications. Place a GRO pedestal under each corner of the GRO Structural Grate so that the pedestal can support the corners of four GRO Grates. The GRO Structural Grate should be placed so that the solid side is facing up and the waffle side is facing down (See Image #1). In addition to the four corner pedestals, break away the tabs on a fifth pedestal and place it under the middle of each GRO Structural Grate for additional support.

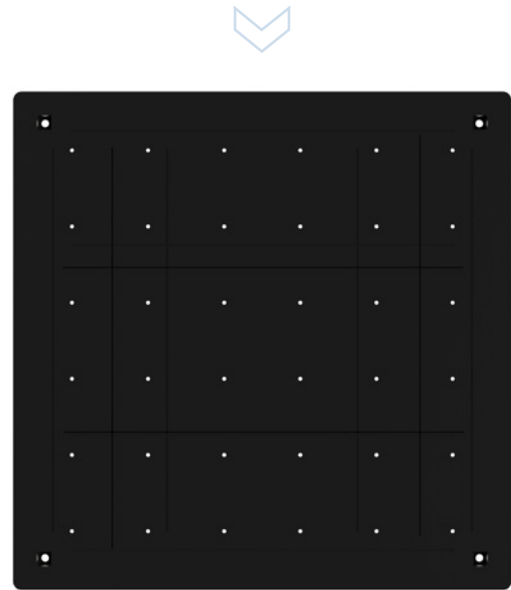


Image #1

- 3 Continue placement of GRO Grates until the desired design layout is achieved. Once the GRO Structural Grates are positioned, use a GRO Turf Grate Fastening Kit to secure the GRO Grate corners into the pedestal top using the supplied fastener. One GRO Turf Grate Fastening Kit can be used to secure the corners of four GRO Grates and each corner of the Grates shall be secured. Note: Fastening Kit is not required for the fifth supporting pedestal located in the middle of the grates – Fastening Kits are only required in the corners. (See Image #2 and #3)

**Note: GRO Synthetic Turf Systems shall be installed with a perimeter of concrete pavers sharing the perimeter GRO Turf Pedestals. The weight of the pavers will provide ballast for the turf system, ensuring additional wind resistance. If the system butts to a vertical curb or wall, use a metal counterflashing fastened to the vertical condition that extends over the turf system a minimum of 2" (5 cm) to prevent uplift in the perimeters.**

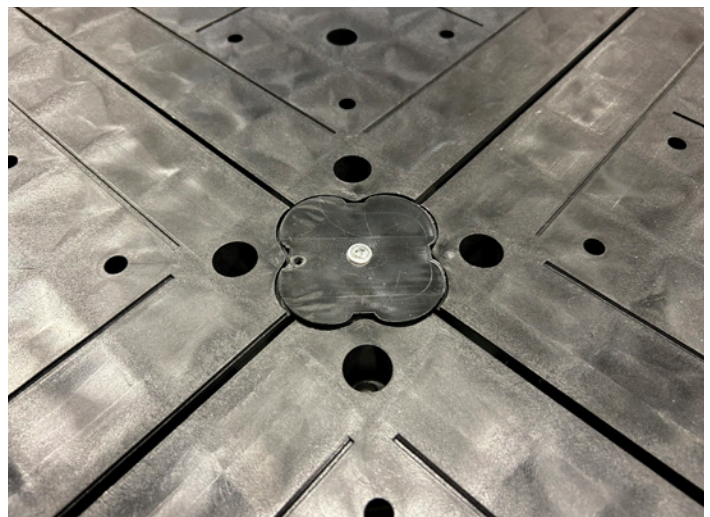


Image #2

- 4 Roll out the GRO Turf on top of the GRO Grates. Position and cut to fit. Please note that, much like natural grass, almost all synthetic turf varieties are directional, giving color variation depending on the way the turf blades are bent. Therefore, it is important to ensure the direction of the turf is correct to provide the desired aesthetics. Adjacent turf pieces should be butted tightly together to ensure proper seaming.

- 5 Using ½" to ¾" flat head, self-tapping, stainless steel screws, fasten the turf to the grates around the entire perimeter of the turf system, taking care not to overdrive the screws completely through the turf while also driving deep enough to ensure the screw heads are concealed. Screws should be spaced 8" apart and 1" from the edge of the grate. In the field of the turf system, screws should be placed at the corner of each grate to prevent flutter. Note: If seaming is required, do not install screws within three feet on either side of the seam area to allow for the turf pieces to be folded back to perform the seaming process.

**Note: If the turf system design features multiple pieces of turf, seaming will be required following steps 6 – 11:**

- 6 Once turf is dry fit and secured around the perimeter, seaming is required to create a permanent bond between adjacent pieces if multiple pieces of turf are used. Seams should be tightly butted prior to the seaming process. Start by folding one of the sides of turf back and center GRO Seaming Fabric so that 6" extends under the unfolded piece of turf. Note that centering the Seaming Fabric is critical to proper seaming so that proper adhesive coverage is maintained.

- 7 Once the Seaming Fabric is properly positioned, centered under the seam, apply the GRO Turf Seaming Adhesive to the Fabric centered on the GRO Seaming Fabric. Use a conservative amount at first to avoid having adhesive squeeze out of the seam and onto the turf. Using a V-notched trowel, trowel the adhesive to a minimum width of 8", with 4" under each piece of turf. Refer to Image #4.

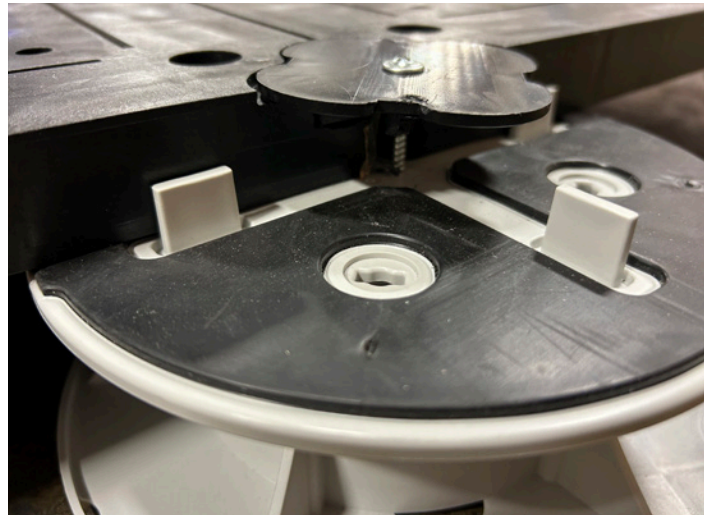


Image #3

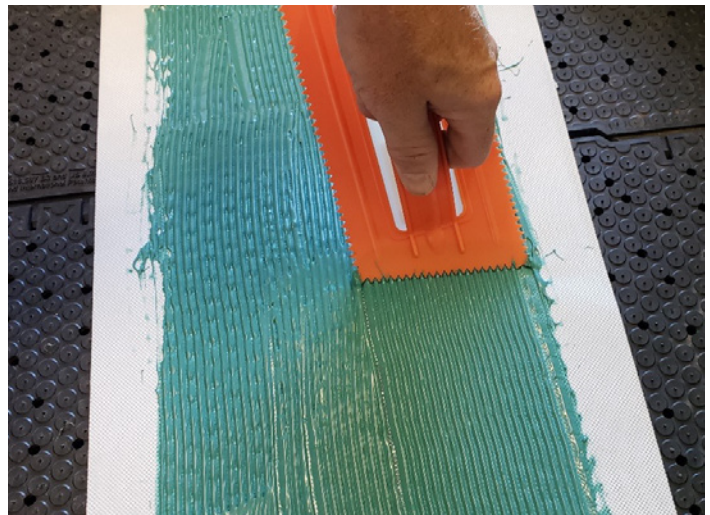


Image #4

# GRO Synthetic Turf

**8** Unfold the turf back into position, centered over the applied adhesive in a zipper-like fashion. See Image #5. Care must be taken to avoid getting adhesive on the exposed turf.

**9** Once turf is in place, the seams must be rolled in a 45-degree angle with a 100-pound minimum weighted roller. Adhesive takes between 2 – 4 hours to reach initial bond strength and up to 24 hours to fully cure. In windy situations, weight can be applied to the seams to avoid movement.

**10** Finish the seam by using a carpet tractor to help blend the seam. See Image #6.

**11** Once seaming is complete, continue using ½" to ¾" flat head, self-tapping, stainless steel screws to finish securing the perimeter of the turf system. In the field of the turf system, screws should be placed at the corner of each grate to prevent flutter.



Image #5

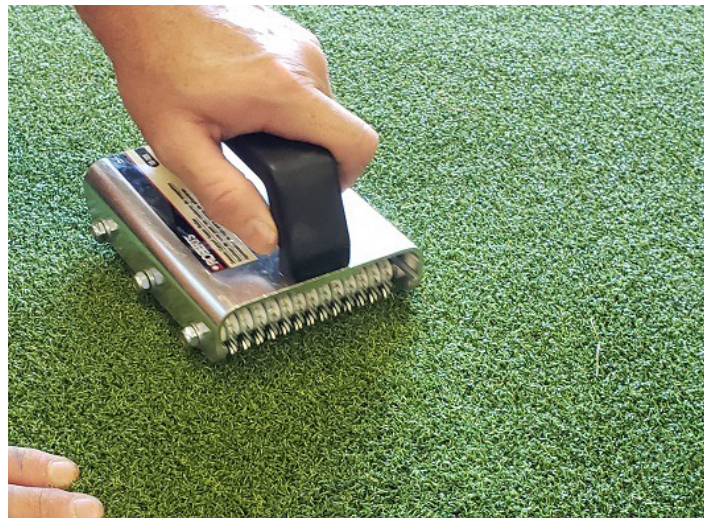


Image #6