



SUPPLEMENTAL PUTTING GREEN INSTALLATION GUIDE

Planning

The planning for the installation of a putting green should be relatively similar to a standard synthetic turf project with the following considerations.

- A. How will your putting green be integrated into your existing landscape? If the area has excessive slope, a retaining wall may be necessary to construct a level green.
- B. What is the purpose of the putting green? Is it family leisure, or do you want to practice a specific type of putt? Do you want to practice long shots or chipping? The answer to these questions will influence the design that you create. A leisure putting green may include fringe or hardscape barriers, or contours. You may want to include sand bunkers or even a Tee box.
- C. A scale drawing should be created to show the final desired green and how it will fit into your existing space.
- D. You will probably want to rent a skid-steer loader and a plate compactor for the base construction portion of the installation.

Materials

- Shawgrass synthetic putting turf.
- Shawgrass synthetic fringe turf.
- (Optional) synthetic turf cushion or pad to provide a more realistic putting green performance.
- (Optional) animal barrier depending on the geographical location.
- 30/50 sand infill. Common silica sand may be used for the synthetic turf fringe.
- Seam tape and adhesive.
- (Optional) duct tape for pad seams
- Putting green cups with sleeves.
- (Optional) cup flags.
- Coarse stone base material.
- Fine stone base material.
- Pea gravel for the cup installation.
- Ready mix concrete for the cup installation.
- Landscape nails for the synthetic fringe.
- Post hole digger, narrow shovel or trowel for the cup installation.
- Asphalt or landscape rakes.
- Inverted marking spray paint.
- Push broom for brooming and compacting infill.
- 48 inch (or larger) level and a 2x4 stud.
- Drop spreader for infill.

Base Construction

Many putting greens are elevated above the ground surface and the base is placed on top of the ground. Mark the base area with inverted marking spray paint prior to installation. Use a Bobcat or a skid steer to place approximately 3 - 4 inches of base (i.e. crush and run) first. The minimum amount recommended is 3 inches. Ensure that the base is smooth and properly sloped prior to compaction. The base can be smoothed using the blade of the skid steer and shovels or landscape rakes. Then spray the base with water and compact with a plate compactor. You should look for a rate of 95% compaction. (Tip - You should not see footprints when it is compacted to 95 %.)

Use a Bobcat or a skid steer to place approximately 2 inches of fines on top of the smoothed and compacted coarse base material. Ensure that the base is smooth and properly sloped prior to compaction. Slope the base in your desired drainage direction and away from buildings at approximately 1 degree slope. (Tip - Mount a level or smart level on a 2x4 stud. Lay the stud on the putting green surface and gradually work from one end of the green to the other end filling holes and smoothing high spots as you go.) Spray with water and compact with a plate compactor. You should look for a rate of 95% compaction. (Tip - You should not see footprints when it is compacted to 95%)

Mark the edges of the base with inverted marking paint showing where the putting surface will extend and mark where your cups will be installed. Make multiple measurements of the distance from the cups to the desired edges of the putting surface. Record these measurements. These measurements will be used later when you trim your putting surface to the desired shape and dimensions. Mark approximately 18 to 36 inches from the edge of the putting surface to show how far the fringe will extend. Fringe will typically extend 18 inches from a 12 to 15 foot putting green, and 36 inches from a 24 to 30 foot putting green.

Use a hand trowel to smooth and taper the edge of the base to surrounding ground. An asphalt rake (smooth side) can be used for larger areas. Spend as much time as needed smoothing and leveling the base. This is critical to the final performance of the completed putting green. The final compacting/smoothing is completed using a water filled drum roller - your plate compactor should not be used for final smoothing because it will leave ridges in the surface. Use the roller in all directions for a smooth surface - i.e. left to right, forward and backwards, etc. (Tip - Use a basketball to verify that the final surface is smooth and breaks in the direction that you desire.) Continue this process until you have a smooth surface and breaks in the desired directions.

Cup Installation

Begin the cup installation by digging the cup hole with a hand trowel or small shovel. The top edge of the cup should be slightly below the level of the putting surface. Remember to include the thickness of the pad when determining this depth. Place a few handfuls of pea gravel in the bottom of the hole to improve drainage and provide a more professional appearance. Be sure that the base around the cup is perfectly smooth to ensure a consistent roll into the cup. Use ready mix cement around the cup to secure the cup. Use a cup with a sleeve, or use seam tape around the cup so that it can be replaced later if necessary. Ensure that the cup is level. Use a hand tamp around the cup if necessary to smooth the surface.

Pad Installation

Use pad to provide a more natural feel when walking on the putting surface, and also to minimize bouncing when practicing chip shots. Roll the pad over the base and cups. Try to minimize seams in the pad. If seams are necessary, use nails along the seam edge, and then cover with duct tape to conceal the nail dimples. Cut the pad from the center of the cups to the outside cup edge. Carefully cut around the edge of the cup, but do not leave a gap between the cup edge and the pad.

Putting Green Installation

Installation of synthetic turf for a putting green will be similar to normal turf installations once the base is level and flat. Begin by rolling the turf over the base material in the direction that will minimize any seams. Find the location of your cups under the turf, and then use your recorded measurements from earlier to mark the perimeter of the putting surface with chalk. Fold the edge of your putting surface over and trim the selvedge (first two rows), and then cut the perimeter to your desired dimensions. You should also trim your pad so that it does not extend past the edge of the putting surface. Carefully cut the putting surface around the edge of the cups. Do not leave a gap between the edge of the cup and the putting surface. Remove any wrinkles from the putting surface before proceeding.

Fringe Installation

Begin by placing seam tape under the edge of the putting surface. The seam tape should be equally distributed under the putting surface and fringe turf. Nails can be utilized to hold the seam tape in place during the fringe installation. Cut your fringe to the desired width and temporarily lay along the edge of the putting surface. When you are ready to begin gluing, fold the fringe away from the putting surface, apply your glue to the exposed seam tape that was under the fringe, and then lay the fringe back down onto the glue. Do the same to your putting surface. Drive nails through the fringe at an angle to hold the fringe closely to the putting surface. Place bags of infill on top of the fringe and putting surface while the glue dries.

Infill Installation

After the fringe is secured, installation of the infill can begin. Putting green infill is finer than normal silica sand to improve compaction. Approximately 2 to 3 pounds of infill should be used per square foot of putting surface. Additional infill can be added later for a faster green. Infill should be evenly applied initially with a drop spreader, and then forced into the putting surface fibers with a push broom. This should be done gradually to ensure that the infill is spread evenly across the putting surface. Brooming from different directions will also help to spread the infill evenly. *(Tip - Some streaks may be present during the initial infilling process. If present, simply water down the green after installation is complete.)*

Infill should be added to the fringe turf after the putting surface is completed. Normal silica sand can be used with the fringe turf if desired. A power broom can be used to stand up the fringe turf bristles during the infill process. Take care not to spill excess infill onto the putting surface.

Final Green Completion

A Stimp meter can be used at this point to measure the approximate speed of the putting green. This putting product will give you various stimp readings based on the amount of infill, rolling, and installer. A water filled drum roller can be used to press the fibers and compact the infill and provide a faster putting surface. The drum roller should be rolled in all directions over the green. Exercise caution— a green will speed up over time as the infill settles. Allow your green to settle to the desired speed—it is very difficult to later reduce the speed of a green.

Putting Green

