Do-It-Yourself Installation for StarPro Lawn Turf

All of our turfs have a thick thatch layer that when raked hold the filaments erect like real grass. For small jobs, some homeowners are satisfied with rolling the turf out, staking it and then raking. But, we recommend:

BASIC installation instructions (best practice short form) for a level dry site:

1. String trimmer (weed eat) existing vegetation to the roots.

2. Add one inch (any-type) crushed rock, 3/8 inch maximum diameter, (no pea gravel or round stones) mixed 50:50 with sand. However, if #8 crusher rock with fines is available in your area, we recommend it, then there is no need for sand. One inch of sub-base equals 8 lbs. of sub-base per square foot of turf area.

- 3. Compact with hand tamper or roller.
- 4. Roll out turf paying attention to grain direction for leaf blowing, and cut edges as desired.
- 5. Tack edges with 6 inch spikes or 6 inch nails every 18 inches, 1 inch from the edge.

6. Infill by broadcasting sand evenly onto the turf and soft raking the sand into the filaments against the grain. We recommend multiplying the pile height of the turf, times the area (length x width) of the turf to calculate the number of pounds of sand needed.

Example: StarPro Fescue which has a 1.75" pile height installed in a 10' x 15' area. 1.75" (pile height) x 150' (turf area) = 262.5. You would need 262.5 pounds of sand for the infill.

TOOLS LIST – Small Jobs	SEAMING TOOLS LIST
 Garden rake Leaf rake Flat nose shovel Round nose shovel String trimmer Leaf blower 3' level 2 x 4 - 4' - 8' long Tamper - hand or gas powered Rolling broadcaster 	 Razor knife with blades Tile Trowel (1/8" – 1/4" cuts) Seam tape Roberts 6700 Adhesive Bricks to weigh the seams 6" Nails or lawn spikes

DETAILED installation instructions and helpful hints. Designing your lawn installation.

Grass turf blades lay in one direction ("grain") because of the manufacturing process and the fact that it is kept on a roll. Planning the design should be done with a pattern drawing on graph paper to ensure minimal waste and to match turf grain direction. Please call our engineers at 404-295-0601 with questions.

For planning and ordering, the turf grain always runs perpendicular to the 15' width of the turf roll, example a 15' x 26' piece of turf will have the grain running in the 26' direction, a 5' x 15' strip will have the grain running in the 5' direction. It is important to match turf grains. All units ordered are 15' wide. **Helpful hint:** It isn't recommended to totally cover tree and ornamental shrub roots with turf.

Sub-Base

1. Remove the existing vegetation to the roots and create the desired grade (grade should always slope away from structures), then compact the exposed soil. **Helpful Hint:** The compacted soil should be level. If there are any bumps, cut with a flat nose shovel or compact them flat. Depending on the size of the job, a hand tamper, gas powered plate compactor, roller or Bobcat should be used.

2. Add one inch (any-type) crushed rock, 3/8 inch maximum diameter, (no pea gravel or round stones) mixed 50:50 with sand. However, if #8 crusher rock with fines is available in your area, we recommend it, then there is no need for sand. One inch of sub-base equates to 8 lbs. of sub-base per square foot of turf area.

A metal rake or concrete smoother works best to finish (smooth) the base material. Turf will be as smooth as the base. For wetter climates, softer soils, or large jobs, a sub-base of road gravel topped with 1 to 2 inches of the base material crushed rock may be the best practice. **WARNING**: Never use pee-gravel or round stone.

3. Compact the sub-base. Depending on the size of the job, a hand tamper, gas powered plate compactor, or roller should be used.

Setting the Turf

4. **WARNING:** Turf rolls may weigh in excess of 200 lbs., so assistance will be required in moving the rolls.

5. Roll out the turf over the area with the grain running in the desired direction for leaf blowing or debris washing (turf blades should be lay in the direction you want to blow or wash). Stake or nail the edges of the turf with grass spikes or 6 inch nails every 18 inches, 1 inch from the edge. It may be desirable to stake the interior of the turf depending upon the terrain. **WARNING**: In high wind areas additional staking and/or weighing the turf down may be necessary.

6. Leaf rake, soft rake or brush the fibers against the grain to stand the fibers up. See Infill.

Cutting

7. Synthetic Turf can be cut with a razor knife or carpet knife. <u>Helpful Hint</u>: When cutting turf, remember to replace the blades of the knife often to keep them sharp.

8. **WARNING:** THE TURF BACKING HAS VARYING THICKNESSES. USE EXTREME CAUTION AND DO NOT PULL THE CUTTING TOOL TOWARD THE NON-TOOL HAND OR YOUR BODY. SEVERE LACERATION MAY OCCUR.

9. MAKE SURE THE TURF GRAIN MATCHES YOUR PLAN (lay in the correct direction) FOR CUTTING. <u>Helpful Hint:</u> Cut the turf between the rows of stitching when possible. Avoid cutting on the stitch rows.

10. Cutting the turf from the back is much easier but requires turning the turf over. Cutting turf side up is more difficult but makes it easier to match the design to the site. <u>Helpful Hint</u>: If cutting turf side up, you may want to place a board under the turf before cutting.

11. Roll the turf out over the site matching the grains. Trim the mesh edges off the roll if seaming is not required. If seaming is required, we recommend trimming the mesh and 1" of turf off both sides using a chalk line, metal ruler or 2'x 4' board to guide your hand. Cut the patterned pieces as needed (remember the grain). Lay the cut turf pieces out and place the edges together as desired (match grains). Make sure the edges are flush.

12. The grass turf blades may be trimmed or contoured at the edges of the turf with sheers or scissors especially when seaming border grass to the lower pile height putting turf.

Seaming

13. There are many ways to seam turf. We recommend using 12" wide seam tape and Roberts 6700 Adhesive (Heavy Duty Liquid Nails for smaller jobs). All can be ordered through homedepot.com.

14. Place the seam tape on the subsurface (**gray side up**) half-way under the two turf pieces. **Helpful Hint:** You may want to put nails in the four corners of the seam tape to help keep it in place. **Important:** Glue the piece of turf with the grain laying away from the seam line first so when gluing the second piece, its blades can overlap the edge of the first piece.

15. Roll back the edge of the turf along the seam line to expose the seam tape and weigh the turf down with bricks. Check that the tape is clean. Apply glue to one half of the seam tape with an even thin coat leaving 1/2 inch on the outside clear (this will keep sub-surface rocks from gluing to the turf). <u>Helpful Hint</u>: Spread the glue using a grout trowel for best results.

16. Roll the edge back over the glued seam tape slowly and carefully so you do not push or blow subsurface rocks onto the seam tape. Press the turf to the seam tape by hand, foot or by pressing with the hand tamper. You may want to weigh down the seamed turf with bricks or boards while it dries. Allow to dry to a point where it is firm (per glue directions) and then apply glue to the other side of the seam tape and roll the edge of the next piece of turf onto the seam tape. The grain of the second turf should overlap and match. If you are experienced with seaming, you may be comfortable in gluing both sides at once. **Helpful Hint:** To keep the tape from bunching, don't stand on the side you are gluing. **Important**: You are gluing the turf backing to the seam tape and not the two pieces of grass together. Keep glue off the turf filaments and keep filaments out of the seam. Allow seam glue to dry thoroughly according to the manufacturer's instructions.

Infill

17. Infill is highly recommended. Infill makes the blades or filaments in the turf stand up and improves the look, weight, feel, drainage and life expectancy of the turf. For areas where infill is inappropriate (indoors or anywhere sand creates a problem), the thatch layer helps the filaments stand up. The most popular infill is sand for lawns because it is readily available, cost effective and environmentally neutral.

18. Infill only after the seam glue is completely dry according to manufacturer's instruction and the turf is staked. One to two pounds of sand per square foot of turf is recommended. A good

rule of thumb to estimate the amount of sand to use is: Pile Height of Turf (found on the turf description) x square foot area of the turf.

Example: StarPro Fescue which has a 1.75" pile height installed in a 10' x 15' area. 1.75" (pile height) x 150' (turf area) = 262.5. So, you would need 262.5 pounds of sand for the infill.

19. Disperse the sand infill with a rolling broadcaster. Broadcast the infill evenly across the turf grass and soft rake the sand into the surface by raking against the grain to stand the blades upright. <u>Helpful Hint</u>: A leaf blower can be used to even out the sand. WARNING: Infilling may draw the turf edges in slightly.

Drainage

20. Our lawn turfs have perforations that drain water through the turf at over 25 inches per hour.

Maintenance

21. Clean the turf by blowing it off, hosing it off, or scrubbing with mild dish soap. If the turf is in a high moisture area where mold and mildew are prevalent, spray an anti-microbial solution treatment every two years.

Dog Runs

22. Synthetic turf is popular for dog runs. It does absorb heat, so we recommend covering half the run and adequate shade should be present. Loose lay the turf with the turf grain lying toward the downhill side. Hose the surface off periodically. If solid waste is present, remove it and hose off the turf surface. Periodically hose off the black underside of the turf.

Local Laws

23. Notice: Local ordinances or neighborhood codes, covenants, restrictions or specifications may apply to the installation of synthetic lawns. Also, check with your local and state governments regarding incentives for the installation of synthetic turf.