



## Installation Guidelines

### PLANNING

- The area for turf installation should be clearly defined and marked, if necessary.
- In this planning stage, it should be noted which direction the turf rolls will be laid out.
- **Always run the grain of the turf against any slope**, if possible.
- Also, note the borders of the turf and determine which edging or curbing technique will be used.

### 1. AREA PREPARATION

- a. Remove all grasses, sods, mulches, etc. from the marked area (Approx. 3” in depth)
- b. If you are landscaping around trees, shrubbery, flowers, light poles, utilities, etc., remember to mark around those areas and account for the turf edge configuration.
- c. **Remember to leave ample area uncovered around the bases of trees.**

### 2. SOIL COMPACTION

- a. It may be necessary to compact the native soil / subgrade prior to base construction.
- b. In the case where the native soils are soft and/or saturated, it is advisable to install a geotextile to separate the soft soils from the crushed stone base. Mirafi 140N or equal should suffice.
- c. As a rule of thumb, if there is standing water, or if water comes to the surface under foot, a geotextile should be used. If applicable, consult the engineer or architect of record.

### 3. BASE CONSTRUCTION

- a. A crushed gravel base layered should be spread evenly over the prepared area.
- b. If using heavy equipment to do so, the equipment should not drive directly upon the prepared site.
- c. **The crushed gravel should be a 20mm crushed gravel.** 20mm crushed gravel is available in most areas.
- d. The crushed gravel should be spread evenly, as smoothly as possible, and compacted to 90% proctor. A vibratory compactor will suffice on most small projects. A roller compactor may be necessary.
- e. The depth of this base course should be determined by the engineer or architect of record. As a rule of thumb, in arid climates such as Prairie Provinces, 3 inches of base course is sufficient. In climates with more rainfall or a higher water table, such as East and West coast Canada, 5 inches may be necessary.

### 4. LEVELING LAYER (IF NECESSARY).

- a. If the base course layer is not as smooth as desired, or there are undesired undulations, it may be necessary to add a layer of fines (lime stone or red shale) to fill in the low spots or create a smooth surface (Not necessary for most lawns, but is used on most putting greens) . **This layer should be kept to a minimum**, preferably no more than 2 inches. This layer must be compacted with a heavy roller. Do not use a vibratory compactor.



## 5. LAY TURF

- a. Roll the synthetic turf out on top of your constructed base, as planned. **If the site requires multiple roll widths, be sure to have the grain of the fibers on each roll of turf running in the same direction.**
- b. If seaming is required (multiple roll widths), trim the selvedge (un-tufted edge) off of one roll with an undercut carpet cutter (with adjustable depth setting) and as straight as possible. Lay it on the base, in the desired position.
- c. Lay the next roll adjacent to the first and overlap one edge of the adjacent roll of turf on top of the trimmed edge of the first roll.
- d. With double sided carpet knife, trim the overlapped roll to match the trimmed edge of the first roll.
- e. Make all cuts as close as possible without touching. After each seam cut make sure turf is held down with sand bags to avoid any movement. Sand bags will be used again during the adhesive seaming process.
- f. Repeat as needed for as many roll widths as the job requires.

## 6. ADHESIVE SEAMING

- a. Fold the adjacent trimmed edges of two rolls of turf approximately two feet apart the entire length of the seam (use a sand bag to help keep fold in place if necessary).
- b. Mark the centerline of the seam on the exposed base with a chalk line or spray paint.
- c. Roll out mylar seam tape centered over the entire length of the seam line. Apply adhesive covering all of the seam tape from one end to the other. Depending on the type of adhesive used, you may need to allow time for vapors / gases to escape (flashing). Refer to the adhesive manufacturer's directions. The flashing time required may be dependent on ambient temperature and humidity.
- d. After adhesive has flashed, lay the edges of each roll of turf directly onto the adhesive/tape, making sure not to bury any grass fibers into the adhesive (two people are required for this step, one to prevent turf from falling in the the adhesive while the other places the seam together preventing the fibers from falling under).
- e. Be sure to add weight (i.e. sandbags) down the length of the freshly laid seam, or use a heavy roller along the seam length. The adhesive drying / curing time will vary with different adhesives dependent upon climatic conditions.
- f. Follow the adhesive manufacturer's instructions.
- g. Now you can trim the turf around the lawn to match the edges or borders,

## 8. SECURE EDGES (OPTIONAL).

- a. In many cases, securing the edges or borders is not necessary. The weight of the infill alone is enough to keep the turf in intimate contact with the base.
- b. If an exposed edge is a concern (because of a curious animal, high activity at the border, etc.), the edges can be secured
  - Landscape spikes.**  
Simply hammer landscape spikes, timber spikes, sod staples, etc. into the ground at desired intervals (leave about 2 inches from the edge to prevent curling).



## 8. INFILL INSTALLATION

- a. In synthetic lawn applications, a drop spreader (commonly used to spread grass seed, fertilizer, lime, etc.) should be used to spread the infill in lifts ranging from to no greater than ½" depths. In between the spreading of lifts or layers, the fibers should be brushed upright with a plastic bristle industrial broom or a power-broom. This keeps all of the grass fibers erect and exposed. Fibers trapped underneath the infill may not ever be recovered.
- b. Do not use stiff steel bristle brooms that can damage the fiber.
- c. Be sure not to "dump" the infill in large quantities on the turf.
- d. If the borders or edges are to be secured, save the infill installation for these areas for last.
- e. Repeat the infill spread / fiber brooming process until the infill is evenly spread such that no more than ¾" of grass fiber tips are exposed above the level of the infill.
- f. Caution: Too much fiber exposed (not enough infill) will cause the fibers to mat or crush with heavy foot traffic. This will lead to premature wearing of the fiber and will void the manufacturer's warranty.**
- g. There may be more than one type of infill used. In many cases, a silica sand (20/40 blend is preferred), or silica sand and manufactured sand topdressing, may be used in layers. In either case, the silica sand is installed first, followed by the manufactured sand topdressing. Be sure to follow the site specifications outlining the amount or depth of each infill material. (For a basic lawn the 20/40 silica is used only and to about 2lbs per sq/ft. The top dressing sand is mainly used for putting greens)