



The Process of Installing Synthetic Grass Yourself

Step 1.) Overview and Tools Needed.

When it comes to installing your ez-grass™, you can certainly use your own crew. Most installs take one to two days depending on construction experience and the size of your crew. The installation information supplied below is for those individuals who wish to undertake this kind of project on their own. **ez-grass™ makes no representations or warranties regarding this installation information nor are any results guaranteed by utilizing this installation information. This information is not intended to include all information that may be need to install some specialized synthetic turf surfaces.**



TOOLS NEEDED

1. Hand roller or plate tamp
2. Shovel, Hoe, Tiller or Sod Cutter
3. Crushed stone
4. Vibratory or roller compactor
5. Seam scrim or tape
6. Commercial-grade adhesive
7. Chalk-line or spray paint
8. Scissors or razor knife
9. Industrial broom or power-broom (infill installation)
10. Silica sand and/or granulated rubber (infill installation)
11. Drop spreader (infill installation)
12. Landscape spikes or nailer board

Most, if not all. of these tools can be purchased or rented at your local hardware or home improvement store.

Step 2.) Layout the area, strip the sod and compact the soil.

PLANNING

1. The area for turf installation should be clearly defined and marked, if necessary.
2. In this planning stage, it should be noted which direction the turf rolls will be laid out.
3. **Always run the grain of the turf against any slope** , if possible.
4. Also, note the borders of the turf and determine which edging or curbing technique will be used.
5. Be sure to allow for drainage, runoff, wet or shady areas, etc.. when laying out your yard and keep in mind the turf arrives in 15' widths.



AREA PREPERATION

1. Remove all grasses, sods, mulches etc. from the marked area. (Sod removal in small areas can be done with a hoe or shovel and you can use a tiller or rented sod cutter for larger areas).
2. In-ground sprinklers may be capped or removed at this time.
3. You may want to add an optional soil sterilent at this time. (Be sure to follow the manufacturer's directions closely with these chemicals).
4. 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.
5. Remember to leave ample area uncovered around the bases of trees.

SOIL COMPACTION

1. It may be necessary to compact the native soil / sub grade prior to base construction with a hand roller or plate tamp.
2. 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.
3. 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, architect or quarryman of record.

Step 3.) Base preparation and laying the turf

BASE CONSTRUCTION

1. A crushed stone base layered should be spread evenly over the prepared area.
2. The crushed stone should be a D.O.T. Class 2 aggregate, with maximum particle size of three-fourths of an inch ($\frac{3}{4}$ "), or approved equal. Class 2 aggregate is available in most areas.
3. The crushed stone should be spread evenly, as smoothly as possible, and compacted to ninety percent (90%) proctor. A vibratory compactor will suffice on most small projects. A roller compactor may be necessary.
4. As a rule of thumb, in arid climates such as Edmonton, Calgary or Toronto, four (4) inches of base course material is sufficient. In climates with more rainfall or a higher water table, such as Victoria and Vancouver, six (6) inches may be necessary. The standard is four (4) inches of base course material for synthetic turf surfaces.



LEVELING LAYER

1. 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 (stone dust, screenings, manufactured sand, etc.) to fill in the low spots or create a smooth surface. This layer should be kept to a minimum , preferably no more than two (2) inches. This layer must be compacted with a heavy roller. Do not use a vibratory compactor.

TURF LAYING

1. Roll the synthetic turf surface out on top of your constructed based, 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.
2. If seaming is required (multiple roll widths), trim the selvage (un-tufted edge) off of one roll and lay it on the base, in the desired position.
3. 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.
4. With scissors or razor knife, trim the overlapped roll to match the trimmed edge of the first roll.
5. Make all cuts as close as possible without touching.
6. Repeat as needed for as many roll widths as the job requires.
7. Around the borders, trim the turf to match the edges.
8. If a secured or fastened edge is desired, do not secure the edge until most of the infill is installed.



Step 4.) Seam the edges and infill installation (if needed)

SEAMING

1. Fold the adjacent trimmed edges of two rolls of turf approximately two feet apart the entire length of the seam.
2. Mark the centerline of the seam on the exposed base with a chalk line or spray paint.
3. Roll out seam scrim or 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.
4. 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.
5. Be sure to add weight (i.e. sandbags or rubberbags) 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.
6. 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 any manufacturer's warranty.
7. There may be more than one type of infill used on the same site. In many cases, a combination of silica sand and granulated rubber, or silica sand and manufactured sand top dressing, may be used in layers. In either case, the silica sand is installed first, followed by the granulated rubber or top dressing.
8. Be sure to follow the site specifications outlining the amount or depth of each infill material.



INFILL INSTALLATION

1. 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 half an inch ($\frac{1}{2}$ ") 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.
2. Do not use stiff steel bristle brooms that can damage the fiber.
3. Be sure not to pour the infill in large quantities on the synthetic turf. It is easier to work the fill in with smaller quantity sizes placed in the turf.



4. If the borders or edges are to be secured, save the infill installation for these areas for last.
5. Repeat the infill spread / fiber brooming process until the infill is evenly spread such that no more than three-fourths of an inch ($\frac{3}{4}$ ") of grass fiber tips are exposed above the level of the infill. A good rule of thumb is two (2) to two and a half ($2\frac{1}{2}$) pounds per square foot.
6. 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 any manufacturer's warranty.
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8. Be sure to follow the site specifications outlining the amount or depth of each infill material.

Step 5.) Securing the edges, finishing the infill process and the care of your ez-grass™

SECURE EDGES

1. In many cases, securing the edges or borders is not necessary and an optional installation activity. The weight of the infill alone is enough to keep the turf in intimate contact with the base.
2. If an exposed edge is a concern (because of a curious animal, high activity at the border, etc.), the edges can be secured in a number of ways:
 - Landscape spikes.
Simply hammer landscape spikes, timber spikes, sod staples, etc. into the edge at desired intervals. Afterwards, more edge trimming may be necessary.
 - Nailer Board.
When installed next to a concrete or asphalt curb, a nailer board / synthetic lumber can be installed (preferably in NUMERAL II, AREA PREPERATION) by nailing the board to the curb with concrete nails. The turf can then be nailed into the top of the installed nailer board with a landscape nail. Afterward, more edge trimming of the turf may be necessary.
 - Buried Edges.
Excavate a narrow trench around the border, deep enough to bury the exposed edge of the turf. Tuck the turf's edge into the trench (additional trimming of excess turf may be necessary). Backfill the excavated soil against the buried turf, and compact. The edge can then be hidden with mulch, straw, rock, etc.



FINISH INFILL INSTALLATION

1. If a secured edge was installed, it will probably be necessary to add infill around the border. Use the technique described in INFILL INSTALLATION.

CARE & MAINTENANCE

1. Rain is your best cleanser. Rainfall gently cleans the turf fibers of dust, pollen and airborne pollutants in way that is difficult to duplicate in any other fashion. In areas where rainfall is scarce--or during prolonged periods of drought--an occasional water flush is beneficial to soak and thus cleanse the turf system. This procedure is recommended for all turf systems.
2. Most "stains" on polyolefin fields can be removed with water or soap and water. The first rule is promptness. It is much easier to clean up a fresh spill before it has time to dry and harden. Remove any solid or putty-like deposit promptly using a dull knife or spatula-like tool. Blot up excess liquids with a stack of towels, cloth or paper. Dry absorbent clay-based materials, such as cat litter absorbers ("kitty litter") can be very useful. Such dry absorbers can be swept or vacuumed up.
3. Fill in "Hollow" spots. These are areas in the synthetic turf where the level of rubber may be slightly lower than the surface overall. They are generally discovered over several weeks after the initial placement of rubber in the turf. These areas generally cannot be seen but can be "felt" when walking on the turf--they feel like depressions or low spots on the surface.
4. Cross brushing your filled synthetic turf is the single most effective way to keep it in top form. Brushing a filled turf field keeps the fill uniform and suitably embedded in the fibers rather than on the tips of the surface. "Cross brushing" means that all brushing activities, no matter what kind of equipment is used, takes place against the grain, nap or sweep of the turf fibers. (All synthetic turf is made with a slight grain.)