

DIY INSTALLATION GUIDELINES FOR ASTROLAWN ARTIFICIAL GRASS



MEASURING BEFORE

AFTER THE AREA

- Mistakes can cost money. Measure your job carefully. If you have many curves and irregular shapes, we recommend adding 10- 20% more turf than your area's actual square footage. When designing, keep in mind the turf comes in 15' foot wide sections. The turf is sold in 15' widths by whatever linear feet you order (example 15' x 20'). Use graph paper or a sketchpad to draw out the area and record all measurements. Be sure to note the grain direction on your drawing.
- When designing, always keep the grain direction the same and try to face it toward the direction it will be seen most often. Sometimes you will need to lay the turf in a direction that isn't best, but it may make sense to eliminate unnecessary waste. We suggest you measure as close to exact numbers as possible rather than estimating by total square footage.
- In high traffic paths, we recommend installing a pathway of stepping stone or pavers. This will help prevent the turf from matting down and the need for more frequent maintenance.

Note: Like other textile products, artificial grass has a grain direction. It is important to remember to keep the same grain direction for all pieces installed in the same area.

Suggested tools: measuring wheel, tape measure, marking paint, sketchpad or iPad

Calculations: (measure in 15' wide sections when possible)

Area 1: length (at longest point) x width = _____

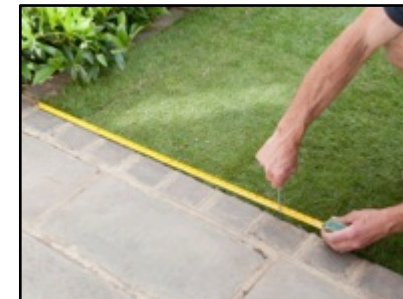
Area 2: length x width = _____

Area 3: length x width = _____

Area 1+Area 2+ Area 3 = _____ total sq. ft.

Total sq. ft. / 15 = _____ total linear feet needed

Order turf as 15' x _____ (total from above)



MEASURING AND ESTIMATING MATERIALS

Example:

The drawing to the right indicates a sketch for a typical yard. In this case, there is an area with plants (bottom left) that will not require turf. As you can see there is a 15'x16' area and a 9'x7' area so this project would require a seam, indicated by the dotted line between the 2 sections.

Note: be sure to always measure to the longest point.

To estimate artificial grass needed:

Area 1: $15' \times 16' = 240$ sq. ft.

This requires a 15'x16' piece of turf.

Area 2: $7' \times 9' = 63$ sq. ft.

This will require a 15' x 9' piece of turf.

Note for Area 2: Even though this area is only 7' wide, you must purchase in 15' widths. So you would need a 15' x 9' piece of turf for this area and would have an 8' x 9' piece of turf leftover.

Total turf needed:

$15' \times 16' + 15' \times 9' = 15' \times 24'$ or 360 sq. ft. of turf.

To estimate base material:

Figure out the total square feet for the area requiring turf:

Area 1: 240 sq. ft. + Area 2: 63 = 303 sq. ft.

Total sq. ft. / 100 = # of tons of aggregate at 3" depth

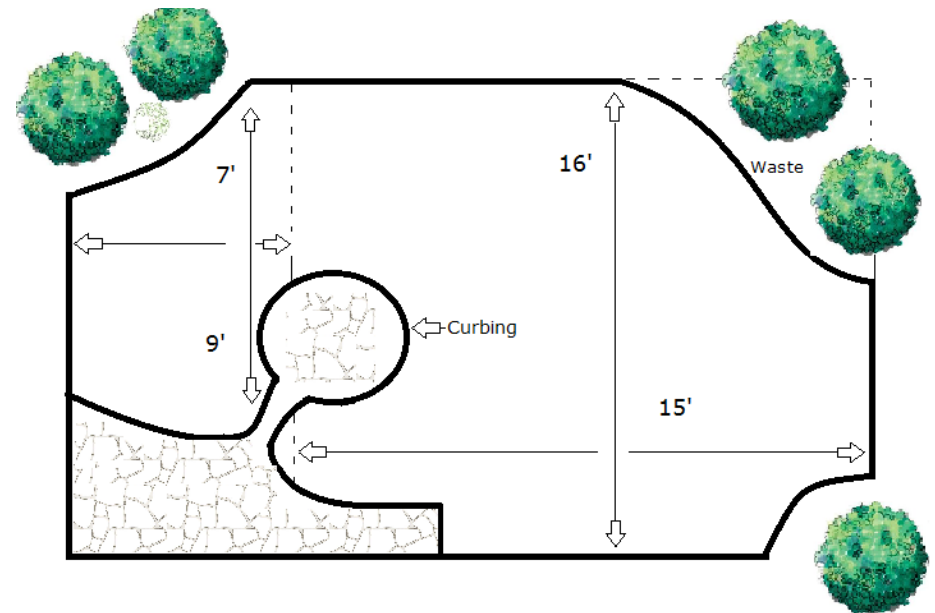
Note: You will need about 1 ton of aggregate or base material for every 100 sq. ft. at a 3" depth. This project would require approximately 3 tons of aggregate. For each ton of aggregate, you are looking at approximately 13-16 wheelbarrows full that will need to be hauled to the project area from the staged dumping area.

To estimate other materials:

Seaming cloth: measure full length of area to be seamed. In this case you would need about 12' of seam tape.

Adhesive: 1 qt. of Henry's glue will cover about 15-20' or one tube of Heavy Duty Liquid Nails covers about 20 linear ft.

Nails: Nails should be placed about every 6-8" around the perimeter and staggered along seam.



SITE PREPARATION

- Have the project site's water turned off a few days before starting the synthetic turf installation.
- Irrigation modifications: If you have irrigation lines existing in the area you will be installing turf, make sure all the project site's sprinklers are removed and capped off or cut the irrigation valves.

Note: Don't forget to run drip lines to trees or plants that were receiving water from this source.

- Treat any weed problems prior to the installation. Spray tough weeds before excavation to help prevent further growth. Weed barrier can also be installed on top of your base prior to laying turf to help deter weed growth.

Note: Although weed treatments and weed barrier can lower your risk of issues, it may not completely prevent weed growth.

- You will need to determine the proper amount of base material (decomposed granite or recommended base material for your area). This material will need to be ordered through a local rock yard and will be dumped in the street or driveway as directed by you.



EXCAVATION AND SOD REMOVAL

- You will need to remove the grass, dirt, rock, or whatever is in the area the AstroLawn will be installed. Depending on your area, you will need to remove between 3”- 4” to create an adequate drainage base.
- Use a sod cutter or flat shovel and haul away material.
- Grade sub grade level and compact if needed.
- If there is no grass and the yard consists of dirt, pay close attention to the depth in all areas to determine the amount of base material needed.

Note: It is highly recommended for any projects over 150 sq. ft. to use a sod cutter to remove existing sod.

Suggested tools: sod cutter, flat shovel

Calculations:

3” in depth – Total sq. ft. of area / 100 = _____

4” in depth – Total sq. ft. of area / 80 = _____

This calculation will provide you with the total TONS of base material needed.



INSTALLING THE BASE

- Rock yards use different materials to create Road Base. Please inquire with your local rock company to determine the best option for your area and which product is best suited for your compacted drainage bed.
- Install weed barrier on top of prepared sub grade if needed for tough weed problems.
- Haul base material from street using wheelbarrows and dump in desired area until you create a 3"-4" base.
- Using a grading rake, prepare the base level for proper drainage.

Note: When installing next to a concrete slab or walkway the compacted base should be 1" to 1.5" below the surrounding concrete. This depends on pile height of turf and project design.

- Water down graded base area to help with base compaction.
- Use a hand tamp or vibratory compactor to compact base until you reach an 80% compaction rate. Improper or incomplete compaction could result in improper drainage. Repeat as needed to acquire desired base.

Note: It is highly recommended to rent a vibratory plate compactor for any projects larger than 150 sq. ft.

Suggested tools: hand tamp, vibratory plate compactor, rake, wheelbarrow



TURF INSTALLATION

- Unroll and cut turf in the client's driveway or in a large open area. Slightly over-measure being cautious so you are not left short on the job.
- Before laying the turf, be sure the grain direction aligns with the original design.
- Lay the turf in the desired area before you make any other cuts.
- The final detail cuts are made after turf is nailed in place. Always cut turf from the back-side.
- Place cut turf on the completed base in install location.
- Using 6" (60d) galvanized nails or garden staples, nail one end of the turf section, tightly pulling other end in place. If turf section is large, you can kick the turf forward using your feet, this helps tighten the turf into place. Nail the other end into base. All turf edges should be secured with nails every 8" to 12", nailing through the turf and into the base. Be careful not to crimp the turf fibers under the nail heads.
- Perform final detail cuts and nail into base.

Note: If turf is being installed over concrete, a glue-down method may be used and no base is required. Also note that it is highly recommended to have help carrying and moving custom cut turf rolls due to the weight of the product.

Suggested tools: carpet knife, garden staples or 6" galvanized nails



TURF INSTALLATION AND SEAMING

- With the turf sections side by side, make sure all of the rows are aligned in the same direction.
- Try to maintain equal spacing between the fiber rows.
- Nail each side of the turf into the base, staggering the nails every 8"- 12" apart.
- Use seam tape to connect the turf sections together. Use recommended adhesive and spread with a trowel onto the seam cloth and carefully lay the turf over onto the seam cloth. The seam will need time to dry or cure based on recommended curing times by adhesive manufacturer. Adding weight like bags of sand on the seams helps create a better bond.
- Take your time on the seams. The more time and attention you give to details on the seams, the better they will turn out.

Note: The seaming process can be tricky. Professional installers are trained to hide seams so they are almost invisible. Please be aware that non-professional installations could result in more visibility to the seams.

Suggested tools: trowel



TURF INSTALLATION – FINAL STEPS

- After all the turf is installed and secured to the base, we recommend adding a layer of sand onto the turf fibers. Coated sand, silica sand or zeolite can be used to infill the turf. Use a drop seed spreader, or your hands, to evenly disperse sand. Be sure to broom the sand into the turf so it migrates to the primary backing. We recommend about 1-2 lbs. of sand per sq. ft., depending on the application and the product. The sand acts as ballast and helps protect from UV rays.

Note: For projects larger than 150 sq. ft. it is highly recommended to use a drop seed spreader to add your sand.

- With each layer of sand, the turf needs to be vigorously brushed using a power broom, carpet rake or coarse bristle nylon broom. The sand will help support the fibers to stand upright. The turf should be brushed across the fibers.
- The turf seams should be cross-brushed in both directions. This will make the seams less visible.

Note: Be sure your levels of sand are consistent throughout.

Suggested tools: Carpet Rake, power broom, drop seed spreader



TURF INSTALLATION – FINAL STEPS

- After installation is complete, the entire area needs to be cleaned. All excess sand or debris should be removed and hauled away. Turf and surrounding concrete should be sprayed down with water. The synthetic turf is ready to enjoy!



Suggested tools: leaf blower



PROJECT CHECKLIST

- Ordered base material
- Double checked measurements for accuracy to ensure no material shortages
- Purchased AstroLawn

Purchased accessories:

- Sand
- Adhesive (if seams are needed)
- Seam Cloth (if seams are needed)
- Nails or landscape staples
- Irrigation items (if needed)

Have all required tools (below is a list of tools you may or may not need, depending on the size of the project)

- Measuring wheel/ tape measure
- Marking paint
- Sketchpad or drawing app
- Sod cutter (rentals available from Home Depot) or flat shovel
- Hand tamp or vibratory plate compactor (rentals available from Home Depot)
- Grading rake
- Wheelbarrow
- Carpet knife
- Trowel (if seaming is required)
- Power broom (optional)
- Drop seed spreader (rentals available from Home Depot)
- Leaf blower - cleaned area of all debris

Thank you for choosing **AstroLawn!**
www.astrolawn.com