



Installation Manual

Project Preparation

Get ready to install your synthetic lawn

This information, and videos which are available online at www.synlawn.com, review all the necessary tools required and provide measurement tips to help you prepare your lawn area for artificial grass. All of the steps may not be necessary for your individual installation.

Artificial Turf Installation Tools



Before installing SYNLawn you need to have the proper tools for the job. Some of the tools may not be necessary for all projects, however it helps to understand what each tool does and how it applies to synthetic grass. Many of the power tools can be rented at local home improvement establishments or tool rental companies. In many cases power tools can be substituted with hand tools, they just help make the process easier and more efficient. Below is a listing of all the tools applicable to synthetic turf installation with brief descriptions:

- **Sod cutter** - used to cut sod into long strips for easy roll-up and removal. The sod cutter can be rented at most home improvement establishments.
- **Wheelbarrow** - used to haul decomposed aggregate to various locations on the job site. Be sure to use a wheelbarrow designed to carry heavy loads.
- **Shovels** - used to shovel decomposed aggregate into wheelbarrow and used for smaller digging projects such as capping sprinkler heads or removing small areas of sod.
- **Measuring tape** - used to measure areas into 15-foot widths (width of turf roll). Measure each area and mark with spray paint before cutting the turf.
- **Spray paint** - used to mark areas for turf installation. Areas are marked at 15-foot widths to prepare for turf roll application.

- **Landscape rake** - used to spread decomposed aggregate to even depths. Larger than the standard rake, the landscape rake covers a wider area and has a flat surface on top for better smoothing of the aggregate.
- **Plate compactor** - used to compact the decomposed aggregate for a hard flat surface. Plate compactors can be rented from most tool rental companies.
- **Hand tamp** - used to tamp or compact aggregate in smaller areas or areas where the plate compactor cannot reach. Use the hand tamp to finalize the compaction process and clean up any lines or grooves left by the plate compactor.
- **Trowel** - used to smooth outer edges of aggregate as a final step in construction the base. The outer edges of the aggregate base should be as smooth as possible after the compaction process.
- **Carpet knives** - used to cut and trim the synthetic turf with clean edges. A slotted blade carpet knife is used for fine cuts such as those around trees or other landscape items. A loop pile carpet knife with a push handle is used to shape the turf and to make broad cuts.
- **Trimming shears** - used to make detail cuts around edges or borders. Make you use sharp, heavy-duty outdoor shears for detail work.
- **Seaming cloth** - used to join to pieces of turf together for seaming. Seaming adhesive is spread over the seaming cloth and spread with a trowel before joining the turf pieces.
- **Seaming adhesive** - used to adhere turf to seaming cloth to form a seam. 3M 1059 Rubber and Gasket Adhesive is recommended for outdoor use.
- **Carpet kicker** - used to stretch turf and remove all wrinkles before securing edges.
- **Hammer** - used to drive in landscape spikes or nails to secure turf edges around area perimeter. Spikes or nails are used about every 6 inches around perimeter.
- **Drop spreader** - used to drop sand infill into turf fibers. Once sand is dropped, brush infill into fibers with a stiff bristle broom or power broom.
- **Power broom** - used to brush fibers up when turf is initially unpacked and as a final step in the infill process. Power brooms are also used on turf not requiring infill as a final step of the installation process to help the fibers stand up.
- **Stiff bristle broom** - used to brush infill into fibers and as a final step in the installation process. This broom may also be used when a power broom is not available.
- **Blower** - used to clean off any excess sand or debris from turf after installation. Blowers are also used for turf maintenance to keep leaves and debris off the grass.

Measuring Lawn Area



In preparing for synthetic turf installation preliminary measurements are made to define the area for installation. While taking measurements, use spray paint to determine final shape of your lawn. You will need to take into account how the grass will border against other landscape elements and you will need to make sure you have enough material for the project.

When your project was initially estimated, either by yourself or a professional, the turf length direction was determined, where seams would be and where shape cuts would be made. Now is the time to verify the estimates. Following the plan estimate, mark turf widths of 15 feet, final lengths, seam locations and final shape outlines.

Once all measurements are made on the area, verify that you have enough material on hand. Add all lengths together and compare to roll(s) length. If possible, do not trim the turf into smaller portions at this stage of the installation. Wait until you have completed the base and re-measure before cutting turf.

- Start measuring and marketing shapes and borders of the grass.
- Measure and mark around landscape elements such as rocks and flower beds.
- Measure and mark widths of 15 feet and final lengths.

Disabling Irrigation System



Capping sprinkler heads, if any exist, is a very simple procedure. Sprinkler system caps can be purchased at most hardware or home improvement stores. Count the number of sprinkler heads to be capped and purchase the caps prior to starting the installation.

You will need spray paint, a shovel and a pair of large pliers for this task. Mark each location of the sprinklers on the lawn with spray paint. Dig around each sprinkler head to expose the head and pipe. Give yourself plenty of room to work and take care not to cut into the pipe with your shovel.

Once the area is prepared, simply unscrew the head from the pipe and discard. Screw cap over now exposed opening in the sprinkler pipe. Plumber's tape is recommended to cover the threads of the pipe and reduce the chance of leaks. When done with cap, replace dirt to a level surface.

- After marking areas with paint, start digging around sprinkler head.
- Take care when digging not to cut pipes with shovel.
- Keep working until you have exposed plenty of room to work around sprinkler.
- Replace sprinkler head with cap and tighten with pliers. Do not over tighten.

Using a Sod Cutter



Sod cutters make the whole task of removing grass a snap. The blades of the sod cutter go down to just below the root level of natural grass and separate the roots from the soil while making perfectly straight cuts. This makes for easy roll up and removal. Sod cutters can be rented at most home improvement or equipment rental stores.

To use, start engine and position cutter at the start of your first row. Be sure to have the cutter over the sod before engaging the blades. Cut along long strips of lawn almost as if you were mowing it. When you come to a sidewalk or edge, try to get as close as possible without letting the blades hit. If blades were to come into contact with a sidewalk or similar surface, you would run the risk of damaging the sod cutter and/or sidewalk. Disengage blade mechanism and reposition for the next strip before proceeding. Continue this process until you have cut as much of the natural sod as possible.

Once the sod cutting is complete, simply roll up sections and remove from the area. It is a good idea to trim and only roll up a smaller, more manageable size rather than trying to remove the entire strip all at once. Any remaining grass not reachable with sod cutter should be removed with shovel.

- Position sod cutter over lawn area before engaging cutting blades.
- Cut sod as close to sidewalk or concrete without hitting.
- Roll up cut sod strips into small, manageable sizes and remove from area.

Base Preparation

Building the foundation for your artificial lawn

This information, and the videos available online at www.synlawn.com, show all the steps necessary for a solid base foundation for artificial lawn grass. It is important to take time on preparing your synthetic lawn base for drainage.

Delivery and Moving Aggregate



When having aggregate delivered to the job site, try to have the load placed as close to the installation area as possible. Always check aggregate before having it dumped to make sure it is the correct rock size and verify your order. You don't want to have to return the aggregate once it has been dumped onto your property. You will need crushed aggregate that has a 1/4-inch to 3/8-inch minus rock size to build the proper base.

If you own or rent the dump truck for the aggregate, try to dump out only what is needed. If you have a large area you can try to dump the aggregate in convenient locations throughout the job site. This makes it easier to spread the aggregate around the installation area.

- Dump aggregate as close to the job site as possible.
- Dump only what it is needed if possible.

Spreading Aggregate to Start Sub Base



Spreading aggregate over the installation area is the first step in creating your sub base for SYNLawn. When complete, the sub base will be a hard, smooth surface for the turf to lie over. The sub base gives the turf a solid foundation while providing proper drainage dispersion.

Using a shovel, load your wheelbarrow with as much aggregate as you can safely carry. Dump the aggregate into several piles spaced throughout the installation area. With a landscape rake, work to spread the aggregate into a 2-4 inch layer. Using the flat edge of the landscape rake, smooth the aggregate until you have achieved the desired look. Keep working the aggregate until it is as smooth as possible to prepare for compaction.

- Load wheelbarrow with aggregate and carry to installation area.
- Use landscape rake to spread aggregate around installation area.
- Spread and add aggregate until you have a 2-4 inch layer.
- With the flat side of the rake smooth surface as much as possible.

Using Motorized Kanga to Move Aggregate



When the job site is in a backyard and dumping access is limited try renting a Kanga lift. A Kanga lift is a front-loading tractor small enough to squeeze through gates or narrow access areas. You can rent these machines or something similar from a local equipment rental company.

Simple to operate, the Kanga lift makes the task of hauling aggregate to the installation area a breeze. Simply scoop a load, which is about twice the amount of a typical wheelbarrow, and haul it to the areas on job site. Depending on the size of the project, this speeds up the moving process considerably.

- When access is limited use the Kanga lift to squeeze through the gate.
- Haul aggregate to needed areas of the installation area for easy spreading.

Compacting Aggregate Around Perimeter



Using a plate compactor start the compaction process with the outside perimeter. Compact around the perimeter 3-4 times moving inward with each pass before working your way through the inside of the installation area.

Once you have completed compacting the perimeter you are ready to start the main installation area.

- Start the compaction process by compacting the perimeter of the area first.
- Continue to circle around perimeter 3 or 4 times moving inward with each pass.

Compacting Main Lawn Area



Once the perimeter is completed start compacting the main area end to end like you would if you were mowing the lawn. Starting at one end, move up and down the area in strips as wide as the plate compactor. Similar to mowing, you want to overlap the prior pass slightly. Take your time and don't rush this stage of installation. You may need to repeat this process more than once to achieve proper compaction. Continue compacting until you can no longer make footprints or indentions in the aggregate.

Use a hand tamp for areas unreachable by the plate compactor or smaller areas in corners. You may also need to use the hand tamp to clean up ridges or grooves left by the plate compactor.

- Like a lawn mower, work end to end moving one strip over with each pass.
- Work your way back to compacted edge to turn around.

Compacting Defined Areas.

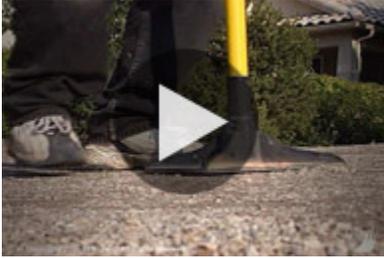


Areas that are bordered by sidewalks, concrete or other defined space require special care. Like the other compaction methods mentioned, start with the perimeter. Working with caution, guide the plate compactor slowly around the defined border. Be aware of your surroundings and work to not run into the concrete or border.

Work the perimeter 2-3 times moving inward with each pass. Once you are satisfied with the outside perimeter you can start compacting the main area end to end. Use hand tamp to compact corners or small areas unreachable by the plate compactor.

- Work slowly around perimeter 2-3 times moving inward with each pass.
- Take your time and work to not hit concrete or border with plate compactor.
- Use hand tamp in corners or other small areas.

Using Hand Tamp



The hand tamp is used to clean up ridges and grooves left behind from the plate compactor. It also comes in handy for smaller areas, corners or places where the plate compactor will not fit. For small installations, hand tamping might be all that is necessary for compaction.

To use simply lift up and down on the areas needing extra attention. Be sure to lift straight up and straight down as to not create uneven spots in the aggregate base. Its better to work an area a couple of times rather than trying to achieve total compaction with one blow. Work the area in question with several tamps to work aggregate to level.

- Use the hand tamp to clean up grooves left by the plate compactor.
- Work the problem areas until the base is smooth and level.

Smoothing Edges With Trowel



Depending on the landscape, you may not be able to achieve a level edge around the area using the plate compactor. Use a trowel followed by a hand tamp for these areas before continuing the installation process.

After you have compacted as much of the area as possible with the plate compactor spray down the aggregate with water. It is important that the base be wet before using the trowel. The trowel draws the water to the surface and makes it easier to work with the aggregate. Use the side of the trowel to move the granite to needed areas. And use the flat bottom of the trowel to smooth and level the area. Always follow with a hand tamp to ensure proper compaction around the edges.

- Move aggregate to needed areas with the side of the trowel.
- Smooth areas with the flat bottom of the trowel and follow with a hand tamp.

Screening Aggregate to Remove Rocks



As an optional final step in compacting the sub base, use a screen or drag rake over the entire area. This helps level any inconsistencies on the base surface and removes larger rocks and debris.

Start by loosening the top of the base surface with a landscape rake. In a circular motion, drag the screen over the entire area. Start with the perimeter and work your way towards the center. Once you have completed screening the aggregate, spray down the base with a garden hose and re-compact the base with the plate compactor and hand tamp.

This final step is recommended to ensure a level sub base but not required.

- Start at the perimeter and work towards the center.
- Screening helps remove larger rocks and debris.
- When complete, hose down and re-compact base.

Wetting Down Aggregate



The last step in building your sub base is to wet down the aggregate. This creates a harder top layer for your base. Sometimes, it's a good idea to compact the base with the plate compactor and hand tamp one final time. If you do re-compact the base, you will may need to spray it down again before proceeding.

To do this properly, spray down the entire surface until it is almost to the saturation point. Do not spray too much water on the base. You want to avoid making puddles or over saturating.

- Spray down entire base area until it is almost to the saturation point.
- Do not spray too much water or over saturate the base.

Artificial Turf Preparation

Getting SYNLawn ready for installation

Before laying out the artificial grass rolls onto your base you must prepare it for final installation. This information, and the videos available online at www.synlawn.com, show how to prepare the artificial turf fibers, mark your base in sections and trimming excess materials from the turf rolls.

Power Broom Fibers



Before your turf is ready for installation the fibers need to be brushed upright. The turf fibers become completely flat as they are rolled and packaged for shipping. By brooming the fibers you create a more natural multi-directional appearance and prepare the turf for infill (if infill is necessary). The preferred method for brushing the fibers is to use a power broom. You can usually rent these from local equipment rental stores. If a power broom is not available, you can use a stiff bristle broom as an alternative. Be advised, it will take several vigorous passes to completely brush fibers up using this method.

When possible, it is recommended that you power broom the fibers before lying over the sub base. To use the power broom on the fibers, position the turf so that the grain of the fibers is pointing downward. Make sure you are facing the turf against the grain and start brooming from the top edge moving side to side. Apply slight downward pressure on the power broom as you move along. It is important to keep the broom moving, do not stay in one place to long as you could damage the turf fibers. When the fibers are all standing upright you are ready for installation and infill application.

If you are using a stiff bristle broom, position the fibers with the grain pointing downward. Push the broom from the bottom edge facing the grain. Use short, hard strokes as you move up the turf. Repeat this process several times until all the fibers are brushed up completely.

- Work against the grain of the fibers and move side to side.
- Apply slight downward pressure on the broom as you move along.

Measuring on Base



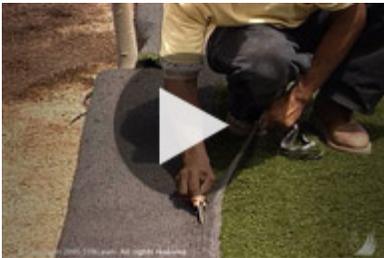
Before you cut a single piece of turf plan your cuts by measuring and marking on your base. This will help you determine the section sizes of the turf and determine seam locations. It is recommended that you make your general size cuts somewhere other than on your base, like a driveway or other large flat surface, before laying them into position.

Following your initial plan or estimate, determine the location of the sections. First, measure and mark widths of 15 feet (the width of the turf rolls). With spray paint mark a dashed line down the length of the section. This can be used as a guide when positioning seams.

When each section width is marked, measure and mark the final lengths. It is a good idea to mark the actual measurements directly on the sub base for easy reference.

- Start measuring and marking 15 foot widths.
- Mark a dashed line down the length of the section.
- Measure lengths and mark dimensions directly on base.

Trimming Edges



When turf is manufactured, an extra couple of inches of backing material remains along the edge of the turf. This extension runs the length of the turf roll on both sides after the last stitching row of yarn. Before you can seam two pieces of turf together you must remove the extra material.

To trim the excess material, flip the turf over and work from the backside. Find the first row of stitching. Start cutting between the first and second stitch row with a carpet knife. By doing this you are using the groove formed by the stitching rows to help achieve a straight cut. You will lose one row of stitching as you cut along the length of the turf. It is

not recommended that you cut on the outside of the first stitching row. It is more important to get a straight cut then to try to save a single stitched row of yarn.

- Trim off excess material before seaming two pieces of turf.
- Cut just inside the first row of stitching to get a straight cut.

Turf Installation

Installing SYNLawn synthetic lawn grass

After successfully building your sub-base, you will be ready to install your SYNLawn synthetic grass. This information, and the videos available online at www.synlawn.com, show the most common installation techniques for cutting, shaping and securing your new artificial lawn. Not all of these techniques will be necessary for your individual situation.

Rolling Out Turf

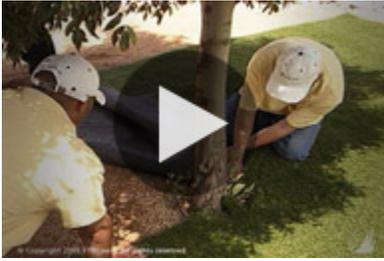


After you have measured and marked your sections, roll the turf over the base and cut each section. It is a good idea to leave a little extra length while you trim and position the turf. You will trim off the extra length once you have all the turf in position and are ready to cut the final shape.

Position turf along one side of the installation area. Roll the turf to the desired length and trim. You will want to make sure that you roll out the turf in the same direction each time. In other words, when you finish rolling out a section, pick up the roll and move it back to the side you originally started rolling. This will ensure that the grain is consistent across each section. Do not slide the roll over and roll it back in the opposite direction you started.

- Pick one side of the installation area to start.
- Roll the turf out from the same starting location each time.

Cutting Around Trees



The key to cutting turf around the base of a tree is planning and patience. You will want to make small, general cuts that get the turf to lie flat around the trunk of the tree without wrinkles. Do not try to remove large sections of the turf all at once.

With the turf in position, start by making a perpendicular cut from the base of the tree to one edge of the turf. Whenever possible work with an edge the shortest distance from the tree. Position one side of the edge on one side of the tree and work your way around the trunk. As you move around the tree and from the backside of the turf, cut slits in the turf to create smaller pieces. This allows you to position the turf without wrinkles. Continue positioning and cutting slits until you have the turf lying completely flat. As you bring the turf around make sure it lines up perfectly with the prior perpendicular cut without bubbles or wrinkles.

Once you have the turf wrapped around the tree and the seams lined up you are ready to make the final trim. If you are creating a shape like a circle around the tree, draw the shape in the fibers or use outdoor chalk. With trimming shears cut from the inside of the tree to your line in the turf. Use a loop pile cutter to cut the final shape. If you are butting the turf up to the base of the tree, use a slotted blade carpet knife to trim the small pieces away. Always cut from the back side of the turf to ensure a clean cut and to not accidentally cut off the fibers.

- Work around the base of the tree making small cuts to position turf.
- Continue making small slits until you can line up the seam perfectly.
- Create shapes around the tree by using shears and loop pile cutter.
- Cut perpendicular line from tree to outside edge and position turf.
- Use trimming shears for clean up and detail cuts for shapes.

Cutting Around Rocks



Cutting around rocks or other odd-shapes requires many small cuts to position the turf properly. Be sure to plan each cut and only remove as much turf that is absolutely necessary. Take your time and don't try to remove large sections of turf all at once.

Start from one edge of the turf and make small slits as you work your way around the rock. You want keep the turf right up to the rock edge and get the turf to lay flat on the ground without wrinkles. Make as many small cuts as necessary to achieve this. Remove any excess turf and work with smaller pieces. It is much easier to maneuver without large pieces or turf flapping down hindering your movement.

When you have the turf in position around the rocks without wrinkles you are ready to make the final trim. Keep removing turf in smaller pieces until you make the final trim. Working down to the final trim in steps helps you achieve a clean cut without gaps. As you get to the final cuts try to work from the backside of the turf whenever possible. If you are unable to cut from the backside you can trim the turf from the top. However, you must work slowly and precisely. Cutting from the top side can remove too many of the fibers along the edge causing gaps or an uneven appearance.

- Make small slits as you work around the rock.
- Make general shape cuts as you move around the rock.
- Cut from the back side of the turf whenever possible.
- Take caution when cutting from top side to not remove too many fibers.

Cutting Against Wall



When cutting along the side of a wall or similar structure, keep the turf snug up against the wall edge. Always try to cut from the backside of the turf whenever possible. If cutting from the top side use caution to not cut away too many fibers.

Position turf along wall edge and keep it taught the whole time you are trimming. Cut small slits to create narrow flaps along the edge. Using a sharp carpet knife, start trimming away the small flaps along the edge checking the position as you move. Working in smaller sections helps you maintain a clean, snug edge. When finished trimming use heavy-duty shears to clean up stray fibers or rough cuts.

- Keep turf snug up against wall edge as you make cuts.
- Use sharp slot bladed carpet knife to trim final edges.
- Remove only small sections at a time to achieve clean edges.

Shaping Bordered Edges



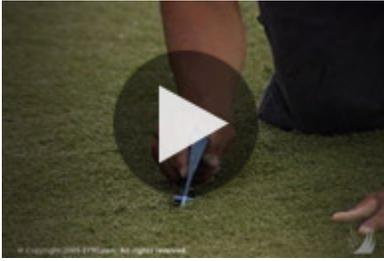
Shaping the edges within a defined area or border is a simple process. By using the border as a guide you are able to achieve clean edges all along the defined area.

With the turf overlapping the bordered area make general shape cuts using the loop pile cutting tool. For easier cutting hold the handle at a slight angle as you push along the turf. You will want to have about 4-8 inches of overlap when you are done making the general shape.

Using heavy-duty trimming shears trim along the bordered edge using the concrete curbing or brick as a guide. Be sure to check your work every couple of feet as you trim. If necessary, use the trimming shears to clean up edges or excess fibers.

- With turf overlapping the border, use loop pile cutter to make general shape cuts.
- Use border edge as a guide and cut edge using heavy-duty trimming shears.
- Check your work as you go to ensure a clean edge.
- Make final detail cuts using the shears to remove excess fibers and backing.

Shaping Over Seams

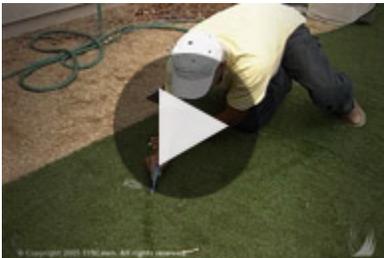


Cutting shapes over seams takes extra care. Whenever possible get the help of another person while doing this task.

Define the shape in the turf or draw shape with chalk. Use the loop pile cutter at a slight angle and push along the defined shape. Slow down when approaching the seam and get help securing the turf as you cut over the seam. You want to make sure you do not disrupt the integrity of the seam by disturbing the seaming cloth or adhesive. Also, be sure to wait at least 4 hours after the seam has been set before attempting to cut your shape.

- Get assistance securing the turf as you cut over the seam.

Shaping Curved Edges

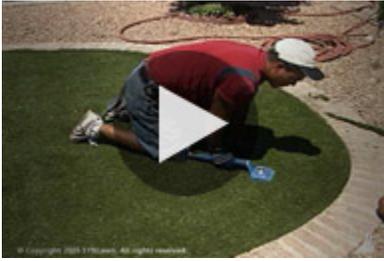


Cutting curved or circular edges is a fairly simple task with the right tool. Be sure to use a loop pile cutter to cut along the curved path. A loop pile cutter is usually available at local home improvement stores in the carpet or flooring section.

Define the curve(s) by drawing a line in the turf fibers or by using chalk. Use the loop pile cutter at a slight angle for easier cutting. Follow the path, use caution over seams and discard excess turf.

- Create curved line in turf fibers or draw with chalk.
- Keep loop pile cutter at slight angle for easier cutting.

Using Carpet Kicker



Before securing edges stretch the turf to remove wrinkles by using a carpet kicker. Carpet kickers can be found at most home improvement stores in the carpet or flooring sections.

Use from a kneeling position and place gripper end of carpet kicker down into the fibers. With a swift motion, kick the padded end with your knee. Continue stretching the turf around the entire area until all wrinkles are eliminated. Secure edges immediately with landscape staples or spikes around perimeter.

- From a kneeling position place gripper into fibers and kick with your knee.
- Stretch entire area and immediately secure with staples or spikes.

Stapling Edges

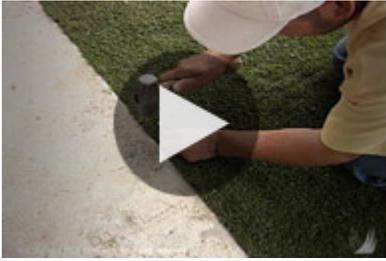


Using yard staples is a recommended method of securing the turf edges around the perimeter of the installation area. Yard staples are generally found at landscape nurseries or home improvement stores in the landscaping section.

Simply place staple approximately 1 inch from turf edge and tap in with a hammer. It is a good idea to start tapping in at an angle and straighten as you finish securing staple. This helps stretch the turf a little and creates a firm fit along the edge. Add staples every 6-8 inches along the perimeter. You may need to add staples inside the installation area if you have any slopes or trees. Use at your discretion.

- Tap in staples at an angle and straighten to finish securing edge.
- Add staples every 6-8 inches and use your discretion in other areas.

Nailing Edges



Using yard nails or spikes is another recommended method of securing the turf edges around the perimeter of the installation area. It is important to use nails that are 6-8 inches in length and are galvanized for outdoor use. For this reason, yard spikes are better than landscape staples in humid climates or areas with a lot of precipitation.

Simply tap in nails along the perimeter every 6-8 inches. Before completely hammering in, it is a good idea to use a spare nail to clear the fibers from under the head of the nail. Once you have cleared the fibers finish tapping in the nail. You may need to add nails inside the installation area if you have any slopes or trees. Use at your discretion.

- Tap in nails every 6-8 inches along the perimeter.
- Use nails throughout the yard at your discretion.

Seaming SYNLawn

Attaching multiple sections of artificial turf

Seaming together sections of artificial turf is necessary for areas larger than 15 feet wide (the width of a standard roll of SYNLawn synthetic grass). It is very important to take your time during this process and carefully plan where your seams will occur for the least amount of waste. When done properly, seamed areas in your artificial lawn will be as strong if not stronger than the rest of your turf.

Seaming Long Edge



To seam two large pieces together you will need urethane seaming cloth, 3M 1099 Rubber and Gasket adhesive, a trowel and landscape nails. It is recommended that you have at least two people working together when seaming the turf. Whenever possible, your seams should go the same direction as the stitching rows of the fibers. Look on the backside of the turf to determine the stitch row direction. End seams are possible (seams going against the stitching rows) but discouraged. Before cutting the turf to make your seams, always make sure the grain of the fibers is facing the same direction on both sections of turf.

Before starting the seams, be sure to secure the turf with landscape nails to keep it from moving during the process. You can secure the turf down the seaming edge about 1 foot from the seam. Start with clean cuts down one of the stitching rows on each section of turf. Be sure to trim off the manufactured edge of backing material before attempting the seam. Check and double-check the fit of the two sections making sure there is no overlap. Any overlapping of the two pieces will cause a crowning effect or bulge in the seam. Flip over each side of the turf about 10-12 inches to allow for positioning of the seaming cloth. It is a good idea to pin these flaps back with landscape nails to keep them out of the way during this part of the process. Roll out the seaming cloth down the entire length of the seam extending the cloth approximately 6 inches past the edge. This also should be pinned down with landscaping nails as a small breeze can move the cloth while you are getting it into position.

Pour an adequate amount of adhesive in a circular motion down the seaming cloth. Keep moving as you pour and try not to spill any excess onto the base. Use a trowel or a scrap

piece of folded turf to spread the adhesive on the cloth. You will want a consistent eighth of an inch of adhesive on top of the seaming cloth. In cooler climates wait about 5-10 minutes to allow the adhesive to set before setting the turf into position. When the adhesive is set and ready, ease the two sides together slowly. With a partner holding one end, start bringing the pieces together checking the fit as you go. After the seam is in place, walk along the seam pressing down with each step to ensure a tight bond.

The seam will need 4-8 hours to properly cure. Wait until the seams are cured before attempting any final shaping or stretching.

- Flip each side back about 1 foot and secure with landscape nails.
- Roll out seaming cloth down the length of the seam extending 6 inches past edge.
- Position seaming cloth in the middle and secure with landscape nails.
- Pour adhesive in circular motion down cloth and spread with trowel.
- Bring sides together slowly and walk down seam to ensure a good bond.

Seaming Multiple Edges



To seam multiple edges together you will need urethane seaming cloth, 3M 1099 Rubber and Gasket adhesive, a trowel and landscape nails. It is recommended that you have at least two people working together when seaming the turf. Whenever possible, your seams should go the same direction as the stitching rows of the fibers. Look on the backside of the turf to determine the stitch row direction. End seams are possible (seams going against the stitching rows) but discouraged. Before cutting the turf to make your seams, always make sure the grain of the fibers is facing the same direction on all sections of turf.

Before starting the seams, be sure to secure the turf with landscape nails to keep it from moving during the process. You can secure the turf down the seaming edge about 1 foot from the seam. Start with clean cuts down one of the stitching rows on each section of turf. Be sure to trim off the manufactured edge of backing material before attempting the seam. When seaming multiple sections, check and double-check all seams making sure there is no overlap. Any overlapping of the pieces will cause a crowning effect or bulge in the seam. Flip over each side of the turf about 10-12 inches to allow for positioning of the seaming cloth. It is a good idea to pin these flaps back with landscape nails to keep them out of the way during this part of the process. Starting with the longest seam, roll out the seaming cloth down the length of the turf extending the cloth approximately 6 inches past the edge. Pin the large section with landscape nails before proceeding to the next seam. Cut the smaller section of seaming cloth, position and secure with nails.

Pour an adequate amount of adhesive in a circular motion down the seaming cloth. Keep moving as you pour and try not to spill any excess onto the base. Use a trowel or a scrap piece of folded turf to spread the adhesive on the cloth. You will want a consistent eighth of an inch of adhesive on top of the seaming cloth. In cooler climates wait about 5-10 minutes to allow the adhesive to set before setting the turf into position. When the adhesive is ready bring together the large section slowly. With a partner holding one end, start bringing the pieces together checking the fit as you go. As you get to the other seams, have another person assist you in bringing the other flaps of turf together. After the seam is in place, walk along the seam pressing down with each step to ensure a tight bond.

The seam will need 4-8 hours to properly cure. Wait until the seams are cured before attempting any final shaping or stretching.

- Position the long piece of seaming cloth before proceeding with the smaller piece.
- Pour adhesive down seaming cloth and spread with trowel.
- With a partner, start joining the large sections slowly.
- With the assistance of another person, bring all sections together in secession.

Seaming Wide-Angle View



To seam two large pieces together you will need urethane seaming cloth, 3M 1099 Rubber and Gasket adhesive, a trowel and landscape nails. It is recommended that you have at least two people working together when seaming the turf. Whenever possible, your seams should go the same direction as the stitching rows of the fibers. Look on the back side of the turf to determine the stitch row direction. End seams are possible (seams going against the stitching rows) but discouraged. Before cutting the turf to make your seams, always make sure the grain of the fibers is facing the same direction on both sections of turf.

Before starting the seams, be sure to secure the turf with landscape nails to keep it from moving during the process. You can secure the turf down the seaming edge about 1 foot from the seam. Start with clean cuts down one of the stitching rows on each section of turf. Be sure to trim off the manufactured edge of backing material before attempting the seam. Check and double-check the fit of the two sections making sure there is no overlap. Any overlapping of the two pieces will cause a crowning effect or bulge in the seam. Flip over each side of the turf about 10-12 inches to allow for positioning of the seaming cloth. It is a good idea to pin these flaps back with landscape nails to keep them out of the way during this part of the process. Roll out the seaming cloth down the entire length of the seam extending the cloth approximately 6 inches past the edge. This also should be

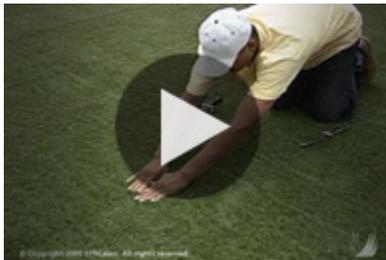
pinned down with landscaping nails as a small breeze can move the cloth while you are getting it into position.

Pour an adequate amount of adhesive in a circular motion down the seaming cloth. Keep moving as you pour and try not to spill any excess onto the base. Use a trowel or a scrap piece of folded turf to spread the adhesive on the cloth. You will want a consistent eighth of an inch of adhesive on top of the seaming cloth. In cooler climates wait about 5-10 minutes to allow the adhesive to set before setting the turf into position. When the adhesive is set and ready, ease the two sides together slowly. With a partner holding one end, start bringing the pieces together checking the fit as you go. After the seam is in place, walk along the seam pressing down with each step to ensure a tight bond.

The seam will need 4-8 hours to properly cure. Wait until the seams are cured before attempting any final shaping or stretching.

- Secure seaming cloth with nails before applying adhesive.
- Spread with trowel and allow adhesive to set for 5 minutes.
- With assistance, bring the two pieces together checking the seam as you go.

Trimming Seam Edges



After seaming two sections of turf together you may need to do some additional trimming to hide the appearance of the seam. This is done with heavy-duty shears and a spiked carpet roller.

Before working the seam, be sure the adhesive has had adequate time to cure. Start by brushing the fibers over the seam with your hand or carpet roller to expose any tall fibers or excess material. Trim excess with heavy-duty shears. Following with the spiked carpet roller, roll over the seam to blend the fibers together. Continue trimming and rolling until the seam has disappeared. Do not trim too much of the fiber material as this will cause the seam to appear uneven or patchy.

- Trim excess material with shears followed by spiked carpet roller.
- Continue trimming and rolling until the seam is well blended.

Artificial Turf Infill Process

Adding infill artificial grass if necessary

Rubber grinds and/or sand add strength, support and cushion to several types of artificial turf. However, many SYNLawn synthetic grass products do not require infill. Be sure to verify the infill specifications of your SYNLawn synthetic lawn before adding infill. This information and the videos available online at www.synlawn.com, show the most common infill installation techniques.

Spreading Rubber Grinds



Not all SYNLawn landscape products require the infill of rubber grinds. Only the polyethylene products like SYNTipede and SYNfescue require the added support of infill.

Spreading rubber grinds is best done by hand. It is not possible to use a drop spreader with rubber grinds as it is with most other infill materials. The rubber crumb is too big for most drop spreaders and has a tendency of clogging the spreader. However, due to its characteristics it is much easier to disperse once it is on the turf.

To get started, fill your wheelbarrow with the rubber crumb material. Position the wheelbarrow in a needed area, reach in with both hands and grab as much as you can carry. Simply throw the rubber crumb onto the turf until you have the entire area filled. You will want enough infill material to fill in between the fibers without completely covering the tips of the fiber. It is all right if some areas have more infill than others at this point of the process. You will be brushing the infill in with a power broom or stiff bristle broom to even out the rubber grinds.

- From a loaded wheelbarrow, reach in with both hands and apply the rubber grinds.
- Continue applying the rubber grinds until the area is filled.

Using Drop Spreader



Not all SYNLawn landscape products require the infill of sand into the fibers. It is mostly used with the polyethylene products like SYNTipede and SYNfescue. However, some people prefer a small quantity of sand in the nylon products to add ballast.

The drop spreader is used to evenly disperse sand infill into the turf fibers. Unlike rubber grinds, it is important that you apply a measured amount of sand with each pass of the spreader. Take every possible step to ensure that you keep a consistent flow of sand as you walk behind the spreader.

Fill your drop spreader with sand and start at one corner of your lawn. Like spreading fertilizer on natural grass, walk behind the spreader at a steady pace dropping a measured amount around the perimeter a couple of times. You can either continue walking in a circle until you reach the middle or start spreading using up and down passes. The key is to spread the sand as evenly as possible. It usually takes 2-3 passes with the spreader to completely fill the turf with sand.

- Walk behind spreader at a steady pace dropping an even amount with each pass.

Brooming Rubber Grinds

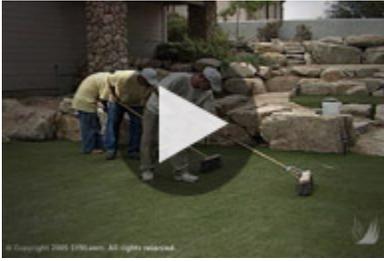


Brooming the rubber grinds is a required step to work the infill down into the fibers of the turf. It also helps disperse the infill and even out the high spots created during the application of the rubber grinds.

Using a stiff bristle broom, use short brisk strokes against the grain to work the rubber down into the fibers and to the backing material. Continue brooming until the blades are standing up and you have an even layer of rubber.

- Use short brisk strokes to work the rubber into the fibers.
- Continue brooming until the blades are standing upright.

Brooming Sand Infill

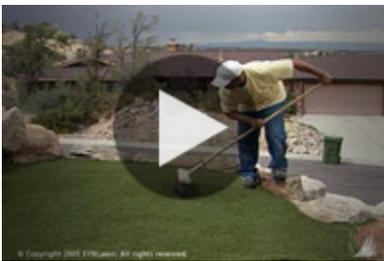


Brooming sand infill into the turf fibers is a necessary final step in the installation process. You must work the sand down into the turf to give the fibers added support and to stand upright.

After the sand is spread using a drop spreader, use a stiff bristle broom to brush in the sand infill. Use short brisk strokes against the grain to work the sand down into the fibers and to the backing material. Continue brushing the sand until the blades are standing up and you see no visible sand on the surface.

- Use short brisk strokes to work the sand down into the fibers.
- Continue brooming until the blades are standing up with no visible sand.

Finish Brooming



As a finishing touch, you will want to make one final pass over the turf fibers with your broom. This is the time where you add sand where necessary and finalize its appearance.

After you have made one pass with your broom working the sand into the fibers, you need to go over the turf one final time. Look closely at all areas and add sand with a drop spreader where it is needed. Work in those areas with your broom. Then start from one end making smooth strokes against the grain over the entire area. This finishes the installation off and gives the lawn a natural appearance. From time to time you will want to replenish the infill where needed and finish broom the area to maintain the appearance of your lawn.

- Add sand where needed and use smooth strokes against the grain.
- Use this technique to maintain the appearance of your lawn.

Power Brooming Infill



Using a power broom to work the infill down into the fibers is a quicker, more efficient method. Not only does it speed the process along, it helps disperse both sand and rubber evenly throughout the lawn. It also defibrillates or breaks up the polyethylene fibers to create various blade widths for a more natural appearance.

Make sure you are facing the turf against the grain and start brooming from the top edge moving side to side. Apply slight downward pressure on the power broom as you move along. Others in the installation area should stay clear of the power broom as you move over the infill as they could run the risk of getting hit with flying debris and sand. It is important to keep the broom moving, do not stay in one place too long as you could damage the turf fibers and/or remove too much infill. Continue brooming until all of the infill has been worked down into the fibers and the blades are standing upright. Take your time and be sure to work heavily infilled areas until they are evenly dispersed.

- Apply downward pressure as you move the power broom side to side.
- Keep the broom moving at all times as to not remove too much infill.
- Work heavy areas until the infill is evenly dispersed.

Wetting Down Turf



The final step of the infill process is wetting down the turf with a garden hose. This helps drop the infill material down into the fibers and to the base. It also helps clean excess dust and debris left behind during the infill process.

Simply hose down the area side to side with your garden hose. Make sure to wet down the entire area to ensure all infill materials are settled. Repeat as often as necessary.

- Spray entire area making sure all infill material is settled.
- Helps remove dust and debris left behind.

Artificial Turf Maintenance

Taking care of your new artificial lawn

With SYNLawn synthetic grass you will never have to mow, water or fertilize your lawn ever again. However, you will have times when you will want to clean the artificial turf fibers or need to clear off fallen leaves in the fall. Unfortunately, your new green synthetic lawn can't solve all of your lawn maintenance issues. This information and the videos available online at www.synlawn.com, illustrate the simple maintenance of your SYNLawn.

Washing Artificial Grass

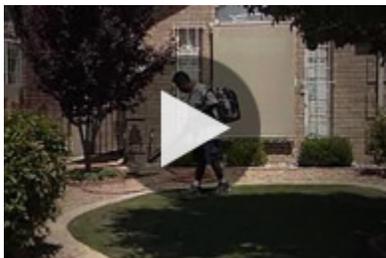


While SYNLawn does not require routine lawn maintenance, you will need to clean it periodically to maintain its appearance. Depending on how your lawn is used and whether you have a pet, you may need to wash your lawn more or less often. A cleaning detergent can be used if needed to remove pet wastes or oxidation from nearby sprinklers. We recommend cleaners like Simple Green for most jobs. For sprinkler oxidation we find CLR works the best.

Simply spray down the lawn as if you were hosing down a driveway or patio. If using cleaners, apply in problem areas and let it sit for several minutes. When ready, simply rinse off cleaner.

- Simply spray off lawn like you were hosing down a driveway or patio.
- Cleaning detergents may be used if necessary.

Blowing Off Lawn



To remove leaves and other debris, it is best to use a power blower. While a plastic leaf rake will not hurt the turf fibers, using one of these rakes can break up the leaves making it tougher to remove from the fibers.

Start from one side of your lawn and blow off any leaves or debris. Sweep up after you have removed the debris and discard.

- Using a power blower is the easiest way to remove leaves and debris.
- Using plastic rakes can break up leaves making it hard to remove from fibers.