

General Installation Guide

Overview: The purpose of this guide is to provide a very generalized description of the methods of synthetic turf installation. In no way does this document serve as a specific guide to all synthetic turf installation, as there are many installation techniques that may prove to be more effective and beneficial for specific installation projects.

1. Sub-Base Preparation

Ensure all sub-base preparations are complete and sufficient. All ground drainage, cables, etc. should be installed, covered, and/or prepped appropriately to have aggregate installed atop. Sub-base should be solidly compacted, using a vibratory plate compactor, roller, jumping jack, or other similar equipment if necessary to ensure collapsible voids underneath are minimized.

In circumstances where holes have been created in the sub-base, such to accommodate the installation of a playground post, or other like items, it is recommended to fill the hole (above the concrete) with aggregate rather than soil. This will aid in the prevention of future depressions which could develop around the poles. If soil is used to fill these depressions, it is likely that over time, the soil will continue to compact and settle, creating noticeable depressions underneath the turf. By installing aggregate in these depressions and compacting the aggregate in lifts of +/- two inches, the risk of settling can be mitigated.



2. Nailer Board/Turf Securement

Final securement of the turf perimeter is extremely important to ensuring the longevity of the installation. There are a variety of appropriate techniques for securing the perimeter of turf, with two of the most common techniques being the use of 6-inch landscape nails or the use of a nailer board. Typically, one of these methods will be appropriate for the vast majority of projects.

Various factors will influence which securement technique is appropriate for the installation such as type of installation, type of aggregate base being installed, etc. It is never advised to use a 6-inch landscape nail on a playground installation, nor on an installation utilizing clean (clear or washed) stone as the aggregate base. In these situations, a nailer board should always be utilized. Landscape and putting green projects will often utilize landscape nails although nailer boards are also acceptable in these applications.



3. Base Preparation

Proper base material selection and installation techniques are often dictated by a variety of factors. Some of these factors include drainage needs, aggregate availability, project specifications, etc. There is no “one size fits all” when selecting the most appropriate aggregate base material.

Regardless of which material is chosen for the aggregate base, it remains common that the final result of the base should be smooth, compacted, and to the levels that are appropriate for the final grade of the synthetic turf project. If the synthetic turf is to be installed directly over the aggregate base, then only the thickness of the turf should be considered between the final grade and the top of the completed, aggregate base. If other items are to be installed underneath the synthetic turf (i.e. play pad, drainage tile, etc.), then the thickness of these products should also be considered.

As the aggregate base is smoothed appropriately in relation to grading, use a roller or vibratory plate compactor to compact the stone in place. The type of aggregate used in the base installation will dictate the rate of compaction that is possible for that specific base.

Upon completion of the aggregate base, the base surface should be constructed in a manner that allows all other materials to install atop the surface, and then allow the synthetic turf to lay flush atop those materials and directly atop the nailer board, so that there is no change in grade. The turf will ultimately be trimmed along the outer edge of the nailer board, and secured to the board, leaving a smooth, flush transition across the full surface.



4. Play Pad Installation

With the thickness of the play pad taken into consideration when building the base, begin installing the play pad on a longer, straighter edge of the project. Once the first line of pad has been installed, go back to the beginning, and install a row of pad in a perpendicular orientation to the first row. Continue to alternate the direction that you install the padding. This will ensure that the head seams of the pad are staggered and do not line up with one another. As obstacles are encountered, use a razor knife (I recommend a 25mm, breakaway blade style razor knife) to trim the padding around the obstacle.

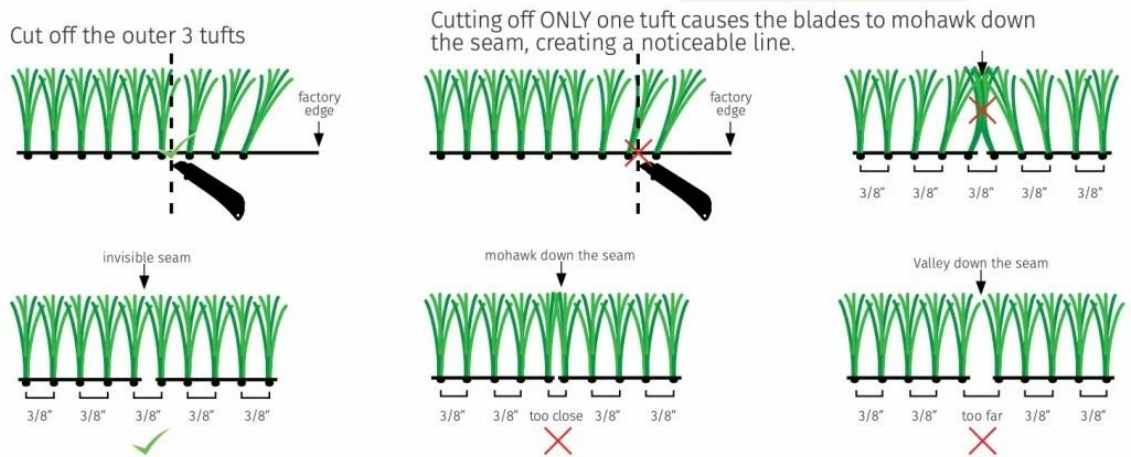
Do not use tapes or adhesives to mend the padding back together.



5. Synthetic Turf Layout

Begin the turf installation by trimming the selvage edge from the turf rolls. This will generally be seen as two layers of black edging along each edge of the turf roll. As the selvage is removed, it is common practice to remove a minimum of 3 stitch rows of turf fibers. With thicker, heavier turf products, it may be necessary to remove additional stitch rows to achieve a desired result.

It is generally common practice to install the rolls of turf with the pile direction laying toward the most prominent vantage point. This typically provides the most “desirable look” when facing the turf. Install the turf, using a razor knife to cut seams around all obstacles as the turf is installed. It is generally imperative that the turf be pulled tight and flat throughout this process.



6. Seaming

Align the adjacent rolls of turf so that there is approximately 1/4 of an inch gap between the two edges. Some products may require a larger spacing and some may require less spacing. You will need to determine this as you align your turf and determine which spacing provides the best, finished look.

Once your rolls are properly aligned, use an object to mark the location where the rolls meet. This may be as simple as placing a stick on the ground where the two edges meet. Do this on both ends of the turf roll. Once marked, carefully fold back the first edge of turf in a manner that allows the weight of the turf to hold itself back without assistance (approximately 2-3 feet). Now fold back the second edge of turf in the same fashion.

Place a roll of synthetic turf, seaming tape on the surface, with the center of the tape aligned with the object you used to mark the center line. Unroll your seaming tape

until it meets your object on the opposite side. Stretch the tape tightly, so the tape creates a straight line, and then allow the tape to relax. If you are using a glue box, your process may be slightly different, however, we will continue to review the seaming process as though a glue box is not involved.

Beginning at one end of the seaming tape (it doesn't really matter which end), begin applying synthetic turf adhesive to the seaming tape, using a hand trowel per the adhesive manufacturers recommendations. Continue to spread the adhesive from one end of the seaming tape to the other.

With the adhesive applied to the tape, place yourself in front of the rolls of turf so that the turf pile is laying toward you (not away from you). Carefully lay over the roll of turf on the **LEFT** first. Be careful not to allow the turf to flap over too abruptly. With the left roll of turf placed in the adhesive, now begin carefully placing the turf on the **RIGHT** into the adhesive. You will notice that the turf on the right has fibers that are laying toward the left roll. Had you placed the turf on the right in the adhesive first, then the fibers would be crushed into the adhesive as the turf on the left was installed.

After both rolls have been placed in the adhesive, it is advised to use a handheld, carpet tractor on the seam to assist with binding the adhesive with the turf backing. It is also common to place boards, bags of infill, or other heavy, flat objects on the seam for added pressure during the curing process. If this is done, take extreme care not to move the seam in any way.

****NOTE: Take extreme care not to allow the turf to become affixed to the play pad during the adhesion process. Playground pads will expand and contract due to climatic changes throughout the year. This will cause severe wrinkling and potential defects to the synthetic turf if adhered to the padding.**

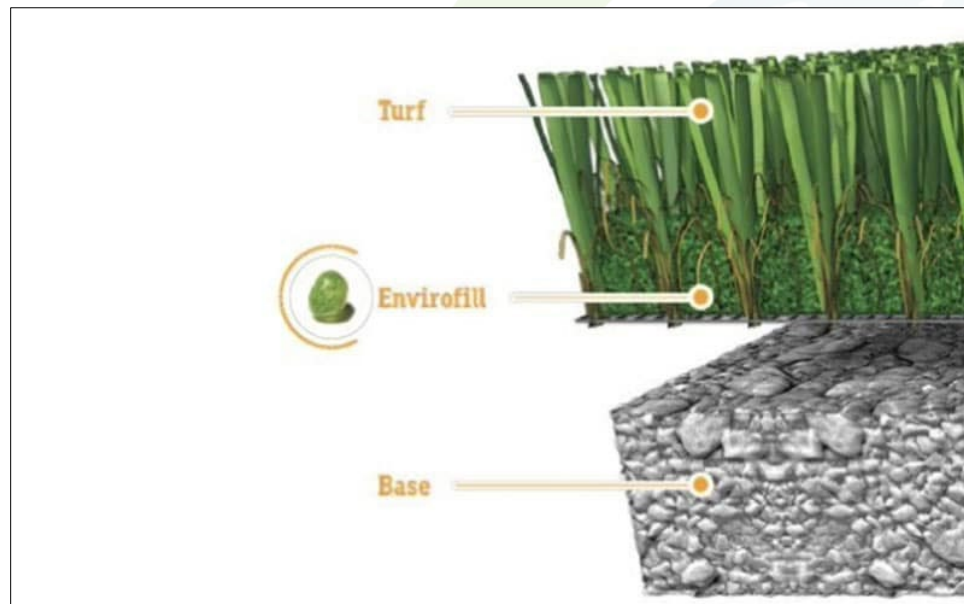


7. Trimming

After all adhesive has had a minimum of 24 hours to cure (and the adhesive is noticeably cured), use a knife, scissors, or other preferred tool to trim all turf edges, as necessary. This may include trimming the perimeter edges, trimming around poles and other obstacles, and anything else that requires a final trimming of the turf.

8. Infill

Most synthetic turf will require some sort of infill to be installed at this time. Generally, it is recommended that a layer of infill be installed and broomed into the turf prior to trimming and securing the outer perimeter. This will allow any potential wrinkles in the turf surface to work themselves out before trapping them in as you secure your edges. However you choose to install your infill is your prerogative. The objective here is to ensure the infill is evenly distributed and all edges have been properly secured.



This guideline is a general guide for the installation of synthetic turf. Recreational Group will be held harmless of any and all faults and discrepancies involved in the installation of synthetic turf by the use of this guideline. Consult a proper professional for additional advice.