



## PLAYGROUND INSTALLATION MANUAL



This installation manual is provided for informational purposes only to give the consumer basic understanding of the installation process for XGrass, Inc. products. The following procedures are in accordance with standard synthetic turf installations. XGrass, Inc. makes no warranty as to, and bears no liability for, the content or use of this installation manual. XGrass will not be held liable for any "self-installed" playgrounds. For self-installed playgrounds, owner assumes all responsibility and liability. XGrass representatives will, however, remain available for any questions you may have during your installation.

## Installation Steps

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## 1. Tools Needed



Shovel



Rake



Hammer



Carpet Scissors



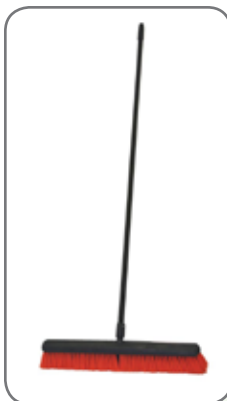
Loop Pile Cutter



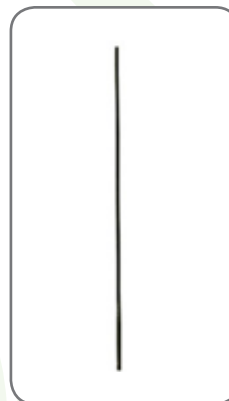
Razor Knife



Drop Spreader



Stiff Push Broom



Metal Stake



Pressure Treated Board

## 2. Formulas

- Yards of Rock = Tonage of rock/1.4
- Tonage Needed for Crusher Run Rock = Sq Ft/12 \* depth (in)/20
- # Bags of Infill Sand = (Sq ft of playground \* lbs of sand per sq ft)/50
- # Panels of Pad Needed = Actual Sq Ft/24
- Depth of Excavation = # Inches of Aggregate + Inches of Pad + Turf

## 3. Layout

- Determine area for playground installation.
- Record accurate measurements of playground area.
- Determine roll sizes needed to complete project.
- Place order with XGrass at least a week in advance.

### HELPFUL HINT:

Add a couple of feet to the length of your rolls, just to be safe. Also, try not to let your width fall on a 15 ft increment. Your rolls will typically be less than 15 ft wide after you trim the selvage!

## 4. Excavation

- **IMPORTANT: BE SURE TO LOCATE ANY WATER LINES, POWER LINES, FIBER OPTIC LINES, ETC. BEFORE BEGINNING EXCAVATION. DIGGING IN ANY WAY SHOULD BE POSTPONED UNTIL YOUR AREA IS CLEARED OF THESE POSSIBLE HAZARDS. CONTACT YOUR LOCAL COUNTY AUTHORITY AND ASK THEM TO MARK ANY UNDERGROUND POWER LINES IF NECESSARY.**
- Remove sod or any other existing material from selected area.
- Determine amount of removal needed.
- Begin excavation.
- Ensure correct measurement of excavation.
- Ensure correct grade of sub-base.
- Install any drainage system necessary.



## 5. Nailer Board

- Record accurate measurements of perimeter where nailer board is desired.
- Determine number of boards needed.
- Determine number of metal spikes needed.
- Securely install boards in desired areas, making sure to keep the correct grade.
- Be sure that pad will sit flush with top of nailer board, if pad is being used.
- XGrass recommends securing the nailing board so that the top of the board is approximately  $\frac{3}{4}$  inch below your finished grade.

### HELPFUL HINT:

It is recommended to use pressure treated lumber as your nailer board.



## 6. Base

- Determine amount of aggregate needed (Formula's page)
- Spread  $\frac{3}{4}$  inch (minus) aggregate to a depth of 4 inches across your sub-base.
- Smooth aggregate to a grade of less than 2% unless undulations are desired.
- Compact stone.
- ***IMPORTANT: If you find humps or dips in your base, continue to rake until base surface is smooth. Once smooth, compact base again.***
- Ensure that your completed base will produce the desired results once pad and turf are added.
- Finished base should allow the top of your pad to sit flush with boards.
- Concrete or asphalt surfaces that are free of cracks and debris may be suitable as alternative base options

### HELPFUL HINT:

Lightly mist stone dust with water to prevent stirring of dust.

### HELPFUL HINT:

Your base should allow room for your pad (if utilizing pad), and then allow an additional 1-2 inches to give sufficient room for turf fibers.



## 7. Pad (If Applicable)

- Begin installing panels along the straightest edge of the playground.
- Install panels in rows. You may wish to cut a panel in half and stagger every other row. That is your choice.
- Panels of pad may expand and contract during extreme temperatures so you may choose to leave a small gap (1/4 inch) between your panels, or if the ambient temperature is over 85 degrees, you may choose to leave no gap.
- Cut pad around poles and other obstacles on playground.



## 8. Turf

- Line first roll up with edge of playground.
- Be sure to have overlap along the edge.
- Unroll first roll of turf.
- Keeping first half of roll flat against ground, flip the second half back so that it is upside down. Roll the upside down turf across the pad until it meets the first pole.
- Make a smooth, straight cut down the turf to allow for the pole.
- Make subsequent cuts for additional poles.
- Ensure that no wrinkles are present.
- Trim selvage.
  - Flip edge of turf over a couple of feet so stitch rows are visible.
  - Use a razor knife to cut between two stitch rows, following one stitch row from end to end.
- Flip edge of turf over a couple of feet so stitch rows are visible.
- Use a razor knife to cut between two stitch rows, following one stitch row from end to end.
- Unroll second roll, leaving a few inches of overlap onto the first roll.
- Repeat previous steps until turf is cut in.
- Ensure that seam is no more than 1/4 inch wide and edges are not touching or overlapping.

### HELPFUL HINT:

Remove 2 – 3 stitch rows when trimming selvage.

### HELPFUL HINT:

When dealing with head seams, make sure that the seam touches with no gap.



## 9. Seaming

- Check seams to ensure gap width is no more than 1/4 inch and that pieces aren't touching or overlapping.
- Glue all small seams underneath equipment and any head seams within the first two rolls. Be sure to leave enough turf unglued so that you can fold the side seams back.
- Mark the midline of the seams on ground outside the turf.
- Flip the turf edges back.
- Unroll seam tape, making sure midline of tape is in line with the midline of the seam.
- Spread adhesive along seam tape with a 3/16 V-Notch trowel.
- Lay flipped edges back onto seam tape, making sure to control both edges so that turf fibers do not get into the adhesive.
- Firmly press the seam to adhere turf to the adhesive.
- Repeat steps for each seam.

### HELPFUL HINT:

Adhesive will dry much faster on hotter days.

### HELPFUL HINT:

Not closing both edges at the same time may trap fibers in adhesive leaving a noticeable "bald spot."



## 10. Trimming

- Trim outer perimeter as desired.
- Trim around all poles and other playground equipment.
- Making certain that pad or aggregate is flush with top of nailing board, use roofing tacks to secure the turf to the nailing board every 6 to 8 inches. **DO NOT** glue turf to pad in any situation.



## 11. Infill

- Use recommended Envirofill to infill your turf. Speak with an XGrass representative to determine the type and amount of infill needed for your playground.
- Use drop spreader to spread infill in even rows across your playground.
- Spread approximately 1/4 to 1/3 of your infill supply before brooming.
- Broom turf against the grain so that turf fibers stand up and allow the infill to work its way into the bottom of the turf.
- Spread another layer of infill over the playground (not quite as heavy this time).
- Continue to spread infill and broom until you have used your infill supply.







You have now completed the installation process for your playground. Speak with an XGrass customer service representative if you would like to submit a picture of your finished project to the company. If you encounter any issues during your installation process, feel free to call one of our XGrass installers at 877-881-8477 for advice. We thank you for choosing XGrass as your preferred turf source. We are confident that you will enjoy many years of fun on your new playground!

Watch the XGrass installation video to learn

**How to Install XGrass Artificial Turf**  
[www.xgrass.com/install](http://www.xgrass.com/install)