



Matrax 4x4 Portable Flooring System Installation Best Practices



Matrax[®]
THE POWER OF THE PANEL

INSTALLATION INSTRUCTIONS

Matrax 4x4 Portable Flooring System



Matrax 4x4 Portable Flooring System installation, Gillette Stadium

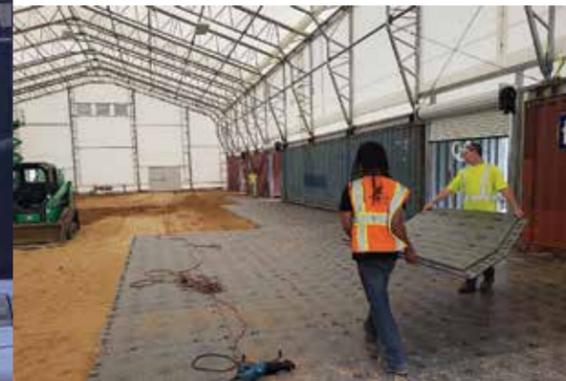


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1.0 Introduction

The Matrax 4x4 Portable Flooring System was engineered to support a range of large stadium events including concerts, commencements, tradeshow, and other events requiring turf protection. The system is also designed for other applications, including flooring in temporary structures, walkways, staging areas for construction applications and hardscape protection. The system was designed for rapid deployment and ease of installation and removal. With proper handling, care and maintenance, the system will deliver high performance over multiple uses.



Hardscape Protection

The Matrax 4x4 Portable Flooring System includes:

HD, Heavy-Duty Fully-Drivable Panels

LD, Light-Duty Pedestrian Panels

ADA Compliant Ramps

Edge Block Supports

T-Bar Locking Tools

For proper use and care of your system, read all instructions and handling precautions prior to beginning installation to ensure a safe and successful installation. View the Matrax installation videos on our website at matraxinc.com for additional information and instruction.

The installation best practices are the same for the Matrax LD, HD and combination systems.



Modular Structure Flooring

1.0 Introduction

Tools Required for Efficient Installation of the System

- Pre-build meeting with crew to review the installation process
- T-bar locking tools
- Tape measure and/or laser pointer to mark area
- String line (enough line to mark the installation area)
- Stakes or pins to anchor the string lines
- Fork lift (s) with balloon (air inflated) tires and/or pallet jacks
- Gloves and other personal safety wear, as required
- Electric screw driver (may be needed for build joint installation)
- Cutting tool (to construct corner ramps and custom fit panels on-site)



Stadium Event Flooring/Turf Protection

HDPE (High-density Polyethylene)

The panels and accessories are made of virgin high-density polyethylene (HDPE) plastic. All plastic expands and contracts when subjected to changing temperatures. This is the case with all flooring systems installed in outdoor environments.

During periods of rising temperatures, both the Matrax HD and LD systems will expand. While the system was designed to expand and not buckle, it is important to understand that building the system during periods of expansion can present challenges. For outdoor installations it is recommended that the system be installed when the ambient air temperature is relatively constant. As many events occur in the summer, several of our operators and owners will install the system at night or early morning. Other techniques include the use of build joints and keeping the product stacked in shady areas during deployment. Handlers develop their own methodologies based on metrics such as weather, surface type and their own experience with the system.

2.0 Parts of the System

2.1 Matrax 4x4 Panels: HD Heavy Duty and LD Light Duty

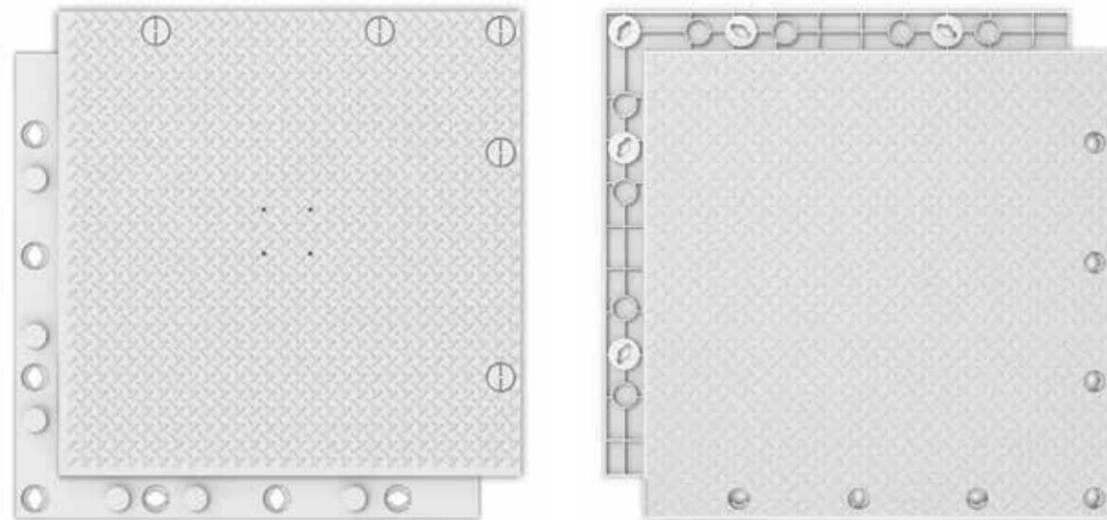
The Matrax 4x4 HD and LD panels have outside dimensions of 4 feet x 4 feet and a height of 1.5 inches. Each panel consists of male and female edges. The female, or leading edge, has receiving holes for the integrated cam lock pins and raised pegs for alignment. The male edge, or upper lip, has the aligning sockets and the cam lock pins extending from the overhanging lip. The overlapping lip, or flange, design provides lateral load transfer from panel to panel.

The molded textured surface provides non-slip traction for foot traffic and light rubber-tired vehicles.

The system is engineered to be durable, lightweight, and compact for easy installation, removal and storage and the materials used in fabrication are 100% recyclable.

Matrax 4x4 HD

The HD panels feature a closed, flat back which provides full contact with the underlying surface. This feature is designed for increased load spread to support heavy vehicular traffic, protecting turf from damage. Drainage holes reduce water buildup on the panels during rain events.



HD Front

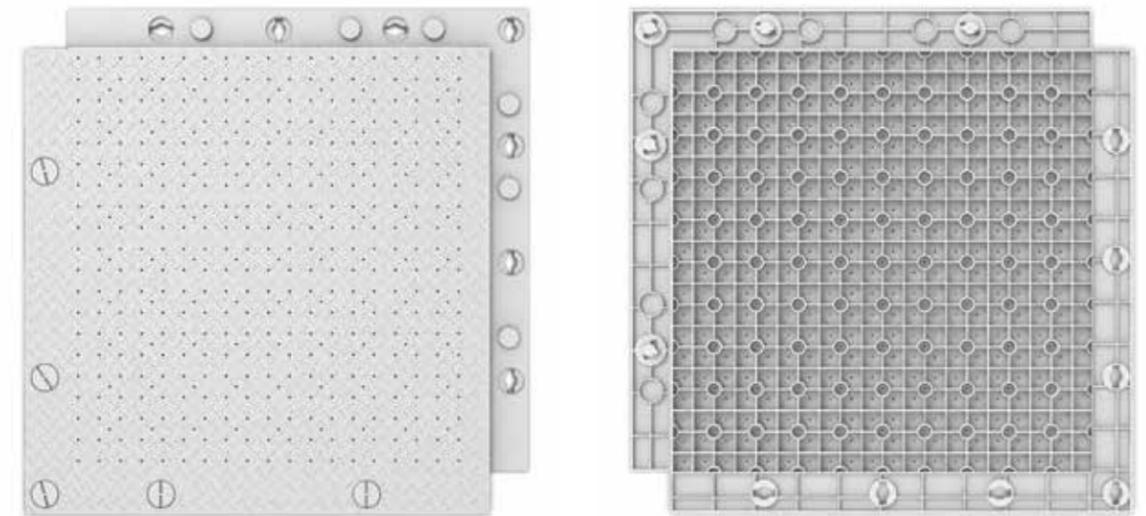
HD Back – Closed, Flat-Back

2.0 Parts of the System

2.1 Matrax 4x4 Panels: HD Heavy Duty and LD Light Duty

Matrax 4x4 LD

The LD panels feature an open-back design and include aeration holes that allow light, oxygen and water drainage. This is a pedestrian-grade product and was not designed to handle vehicular traffic associated with turf protection applications, as the soil bearing capacity associated with natural and synthetic turf is limited. There are other non-turf applications where the LD panels can be utilized. Please consult with one of Matrax's technical representatives for specific non-turf applications, such as temporary walkways, temporary structure flooring, warehouse flooring and hardscape protection.



LD Front

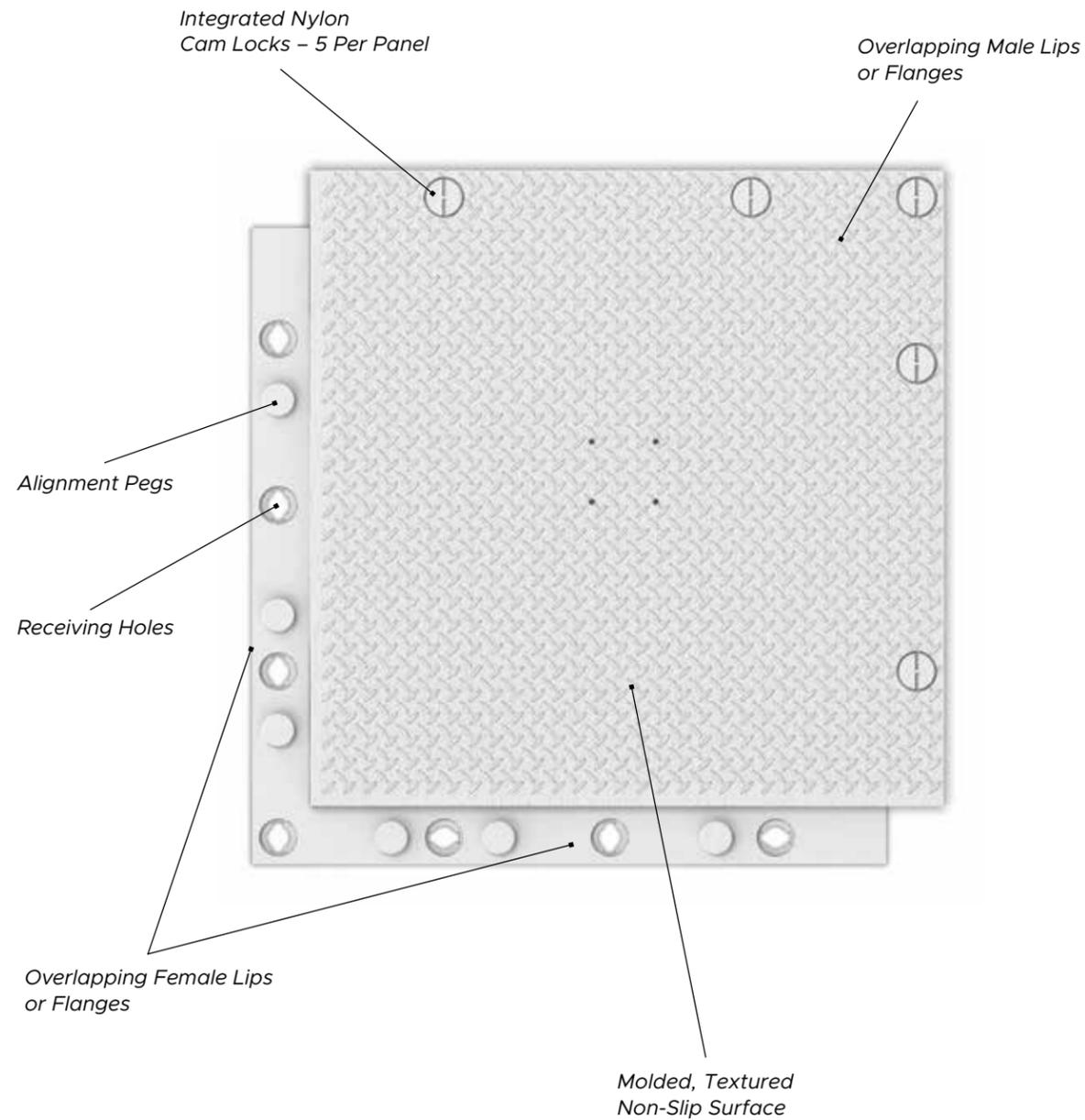
LD Back - Open Back

2.0 Parts of the System

2.2 Overlapping Lips or Flanges

Each panel has 2 male and 2 female edges. These overlapping lips, or flanges, help to spread the load and create a safe, smooth surface free of trip hazards.

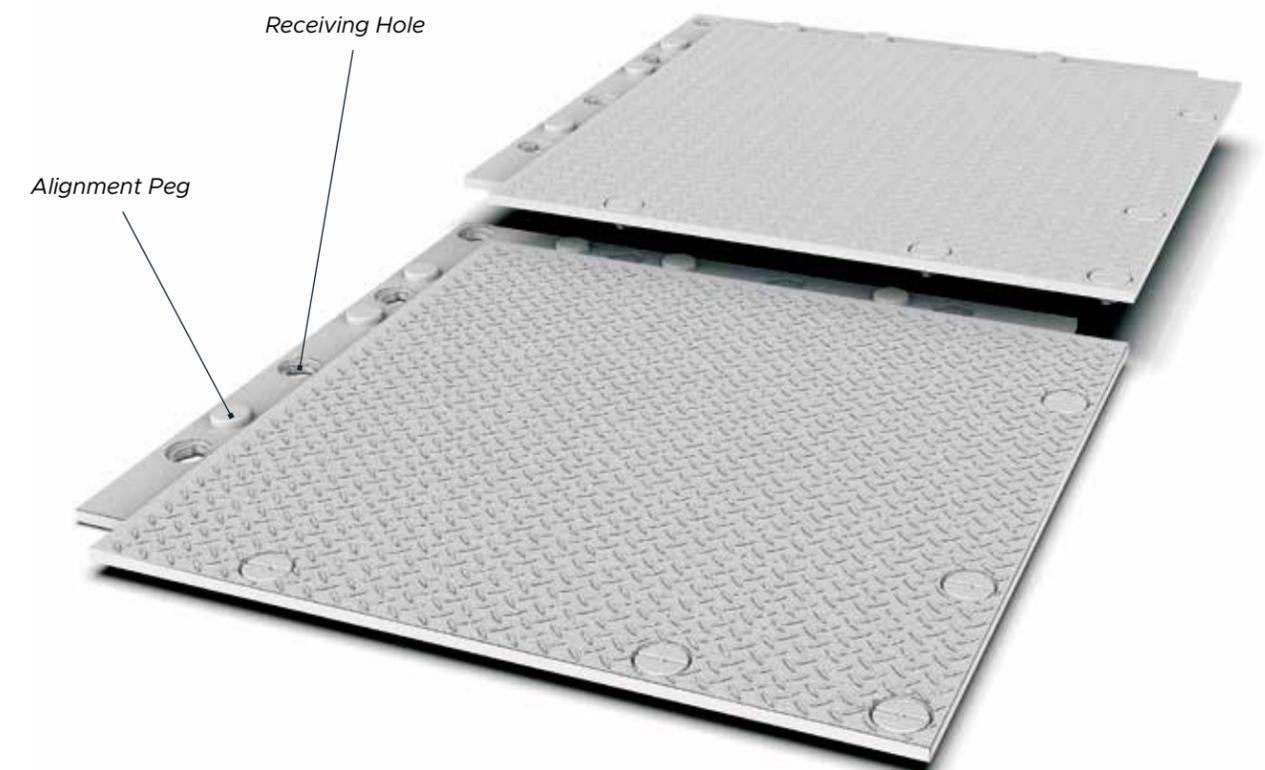
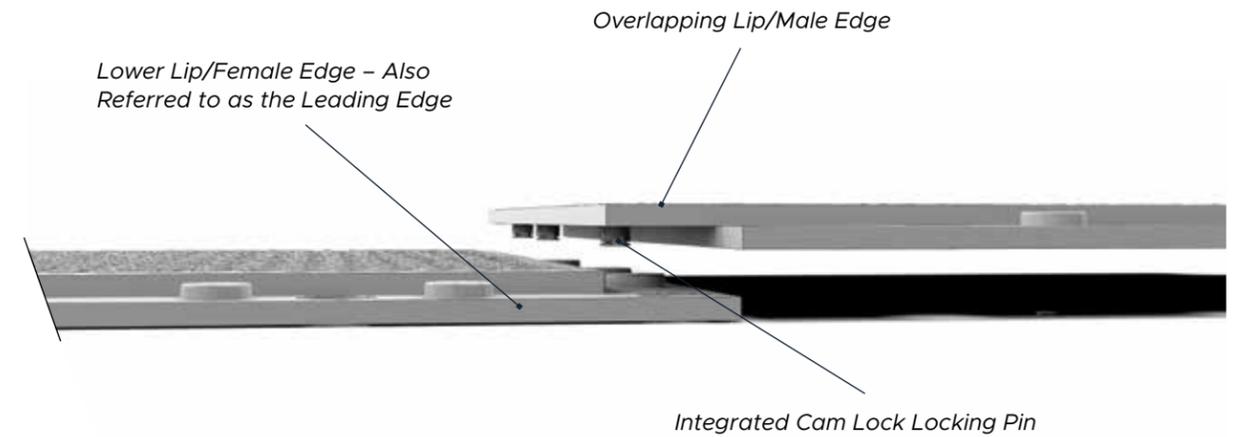
Figure 1 – HD and LD Panel Parts and Features



2.0 Parts of the System

2.2 Overlapping Lips or Flanges

Figure 2 – HD and LD Panel Parts and Features



2.0 Parts of the System

2.3 Locking System

Tough nylon cam locks, or pins, pre-installed into each panel make up the vertical locking system. Locking pins function as quarter-turn bolts. When lined up properly with an adjacent panel, the pins lock and hold the panels together. Lock and unlock symbols on the top side of the panels clearly mark the position of the pin (see *Figure 3 - Locked and Unlocked Pin Position*). The waist-height T-Bar (see *Figure 4 - T-Bar*) locking tool fits into the notched top of the pins to provide quick and comfortable assembly. To lock, rotate the cam lock 90 degrees, listening for two clicks. To assist with alignment and positioning of the system, it is critical all cam locks are locked as each panel is installed. Dedicated “lockers” should be assigned on each build to ensure 100% of the cam locks are fully locked as the panels are set in place.

Do not force the locks to rotate. If necessary, check the alignment and check for debris that could be causing an obstruction. The nylon cam locks will not rust or corrode. With proper use, they will last the life of the panel.

Figure 3 – Locked and Unlocked Pin Position

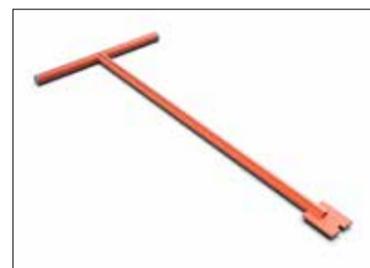


Replacing Damaged Cam Locks

Should damage occur, cam locks can be easily replaced:

- Turn the mat over so the underside is facing up
- Using pliers or a wrench, turn the lock so the butterfly tabs match the butterfly holes in the panel
- Push the lock through until it falls out of the panel
- While the panel is upside down, push the replacement cam lock through the hole
- Using the pliers or wrench, turn the cam lock until it clicks

Figure 4 – T-Bar



T-Bar

2.0 Parts of the System

2.4 ADA Compliant Ramps

Ramps come in female and male configurations to adjoin and lock with the appropriate edge of the panels. Pairs of male and female ramps are also used to create a build joint. (See *section 5.5.4, page 28 for build joint installation instructions.*) Ramps measure 43.75 x 18 inches and weigh 13.5 lbs.



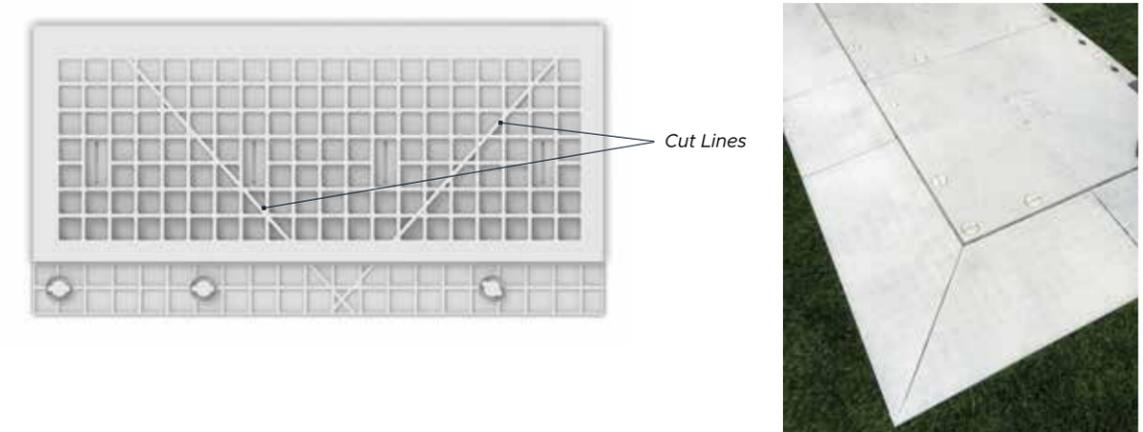
Female Ramp (No Cam Locks)

Male Ramp (With Cam Locks)

Creating Ramped Corners

In areas where ramps are installed on adjacent sides of a panel, corners can be made from regular ramps. To create the corner, cut along the diagonal lines on the underside of the ramps. (See *Figure 5.*) Corners create a smooth transition from either direction of ingress or egress, help prevent trip hazards and help protect the corners of the panels.

Figure 5 – Cutting Ramps to Make a Corner



2.5 Edge Support Blocks

Matrax edge support blocks protect the exposed overhanging edges of the panels from damage, helping to extend the life-span of the system. They are available in white in locking and non-locking configurations.

3.0 Specifications and Features

3.1 Specification Table

Figure 6 - Matrax 4x4 HD (Heavy Duty)

	Standard	Metric
Net Working Surface	13.5 ft ²	1.25 m ²
Weight per Panel	50 lbs	22.68 kg
Surface Dimensions	4 ft x 4 ft	1.22 m x 1.22 m
Height	1.5 in	38.1 mm
Net Working Surface per Truck [Based on GVR rating of 80,000 lbs.]	11,340 ft ²	1,054 m ²
Shipping and Storage [Max pallet height not to exceed 51 inches]	30 panels / 4 x 4 pallet 60 panels / 4 x 8 pallet	N/A
Compression Strength [Based on an intermittent load on a 8" x 8" area]	450 psi	3,100 kps
Maximum Wheel Load [Rubber tire at < 5 mph with a minimum contact area of 9 in ² over level surface at 72°F]	300 psi	2,068 kps
Minimum Contact Area For Static Loads [> 250 lbs. at 72°F]	16 in ²	10.16 cm ²
Maximum Allowable Deflection	3 in	7.62 cm
Temperature Range [For temperatures out of range, use de-rating. See Figure 8 - Service Rating Chart]	-4°F to 113°F	-20°C to 45°C
Burn Rating [Data is based on the materials used in manufacturing]	UL 94-HB	N/A
Colors	Translucent, Gray	Translucent, Gray

3.0 Specifications and Features

3.1 Specification Table

Figure 7 - Matrax 4x4 LD (Light Duty)

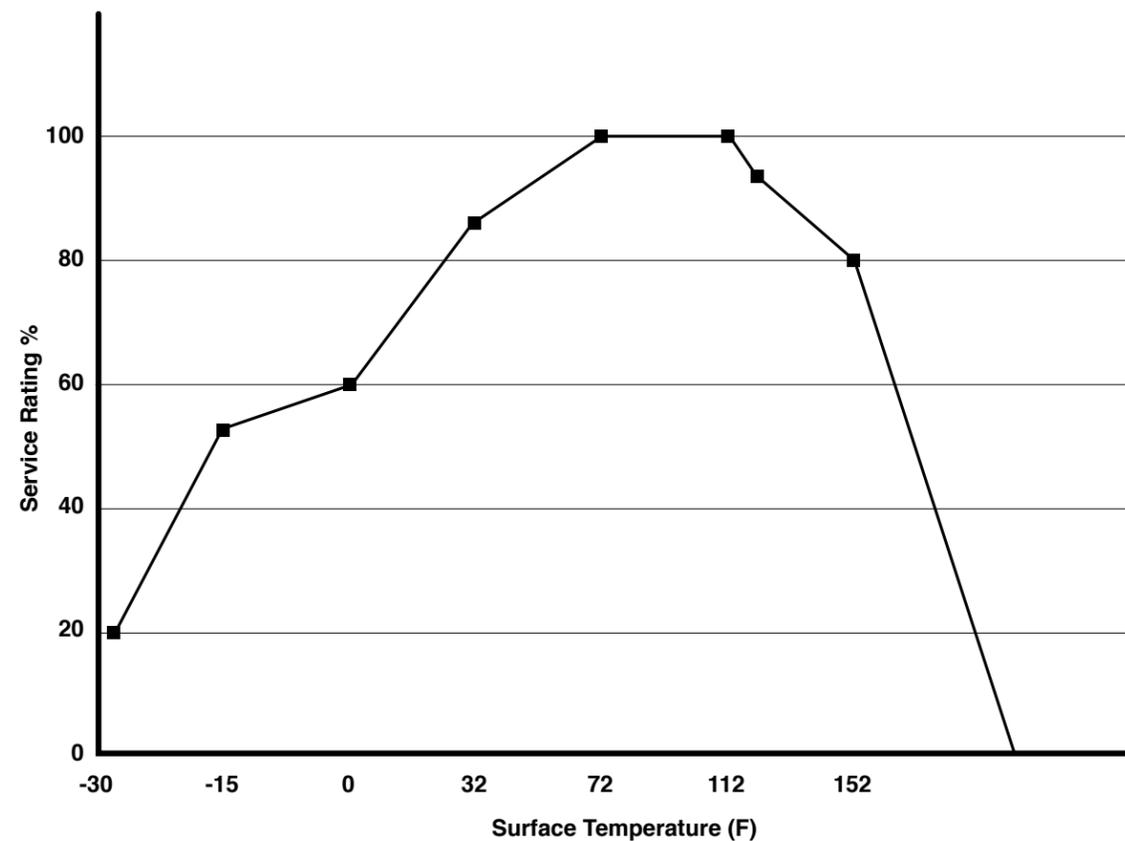
	Standard	Metric
Net Working Surface	13.5 ft ²	1.25 m ²
Weight per Panel	34 lbs	15.42 kg
Surface Dimensions	4 ft x 4 ft	1.22 m x 1.22 m
Height	1.5 in	38.1 mm
Net Working Surface per Truck [Based on GVR rating of 80,000 lbs.]	16,200 ft ²	1,505 m ²
Shipping and Storage [Max pallet height not to exceed 51 inches]	30 panels / 4 x 4 pallet 60 panels / 4 x 8 pallet	N/A
Compression Strength [Based on an intermittent load on a 8" x 8" area]	225 psi	1551.32 kps
Minimum Contact Area for Static Loads [> 250 lbs. at 72°F]	16 in ²	10.16 cm ²
Maximum Allowable Deflection	3 in	7.62 cm
Temperature Range [For temperatures out of range, use de-rating. See Figure 8 - Service Rating Chart]	-4°F to 113°F	-20°C to 45°C
Burn Rating [Data is based on the materials used in manufacturing]	UL 94-HB	N/A
Colors	Translucent, Gray	Translucent, Gray

3.0 Specifications and Features

3.2 Service Rating / Surface Temperature

The Service Rating Chart depicts the percentage of the load bearing ability of the 4x4 Portable Flooring System at surface temperatures ranging from -30°F to greater than 152°F. The weight bearing capability of the system is at its optimal performance levels (100%) when the surface temperatures range from 45°F to 112°F.

Figure 8 – Service Rating Chart



4.0 Safety and Handling Precautions

4.1 Worksite Safety and Precautions

The installation worksite must be treated with as much caution as any construction worksite. For a safe working environment, adhere to the following guidelines:

- Have a safety/pre-build meeting prior to the start of work
- Use the appropriate personal protective equipment
- Comply with all local and federal occupational safety and health regulations
- Train personnel to safely handle the product to avoid injury
- Keep the worksite clean
- Clear away any debris on the lower lips of the panels before placing and connecting the adjoining panels
- Clearly mark or restrict access to any areas that pose a hazard to people or equipment
- Ramp exposed edges to prevent personal injury or damage to the panels



4.2 Damaged Product

Panels with any of the following indications must be immediately repaired, discarded, or returned to Matrax for recycling or replacement. Check each panel for:

- Punctures
- Tears
- Cracks
- Damaged pins that prevent secure locking
- Warping or bending that does not allow panels to lie flat or align with adjacent panels

4.3 Cleaning

Use warm water at a low pressure with a mild cleaning solution to clean the panels. A scrub brush may be used if necessary.

5.0 Installation

5.1 Site Selection

When selecting a site, consider the type, frequency and weight of the traffic the system will be required to support. First, conduct an inspection of the site. A proper site is level, free of obstructions, elevated, well drained and has a suitable subgrade bearing capacity. Sub-grade bearing capacity is considered acceptable when the panel is able to bear the anticipated load weight without deflecting greater than 3 in., or 7.62 cm. Obstructions must be removed and voids filled to ensure uniform contact of the system to the build surface. Full contact enables vertical and lateral loads to be dispersed uniformly.

In certain situations, site selection is not an option. When this is the case, identify unacceptable site conditions and take corrective action to ensure a safe and stable Installation.

Unacceptable Condition	Corrective Action
Obstructions creating point loads (rocks, stumps, roots, etc.)	Remove the obstructions or fill around them to eliminate point loading
Low lying topography that could result in standing or running water under the system	Fill low areas with a suitable material; improve drainage in the area – fine aggregate stone is one option
Sub-grades (other than sand) void of vegetation	Lay a woven geo-textile fabric down prior to installing the panels
Unsuitable sub-grade bearing capacity	Add additional layers of mats; use fill material with geo-textile fabric
Extremely uneven terrain	Level area by grading or filling to stay within spec; Matrax may also be used as elevated flooring with a beam system to create a level surface. See page 35
Depressions that will create voids under the panels	Fill in areas with a suitable fill to stay within spec (see Figure 9 – Spanning a Void)

CAUTION: *Do not use the Matrax 4x4 Portable Flooring System on any site where unacceptable conditions exist and cannot or have not been corrected.*

5.0 Installation

5.1 Site Selection

Spanning a Void

Small pockets or gaps in the sub-grade do not pose a problem for lightweight foot traffic. Provided the panel is adequately supported and the void is less than one inch deep, using panels to span shallow dips in the surface is appropriate. However, Matrax 4x4 Portable Flooring System is not designed to support vehicles or equipment without proper sub-grade support and is not suitable for use as a bridging mechanism. Matrax 4x4 panels may be used with other products in certain bridging applications. An engineering analysis and design are required for each unique situation.

Figure 9 – Spanning a Void



5.0 Installation

5.2 Planning the Layout

Prepare the site subgrade and plan the layout before beginning installation of the system. Calculate the amount of product necessary for the desired configuration. Each mat provides 13.5 ft² (1.25 m²) of usable surface.

If planning an integrated HD/LD installation, determine where the transition will occur and mark the location for insertion of a build joint.

5.3 Establish String Lines

Establishing controls before starting the build is critical. The Matrax 4x4 Portable Flooring System is designed for ease of installation, but can be accidentally built out of alignment if not carefully managed. A typical method of establishing controls is the use of string lines. Using stakes or pins at the corners, mark the perimeter of the build areas with string lines. Lasers can be used as well. Marking a perimeter in this way keeps the panels square and prevents gradual shifting of the layout as the panels are installed. It is important to lock each panel as it is set in place.



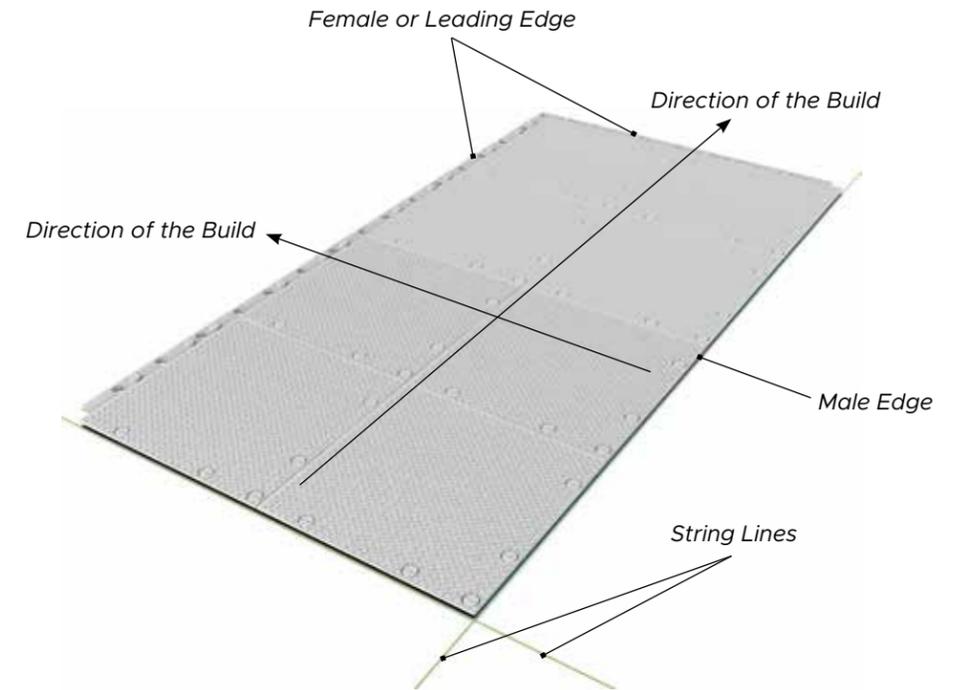
Mark a Perimeter

- Establish the corners and intermediate lengths of the perimeter with stakes
- Run string lines from stake to stake, creating an outline for the build area
- Use the string lines as guides during installation to ensure the mats are laid straight and evenly

5.0 Installation

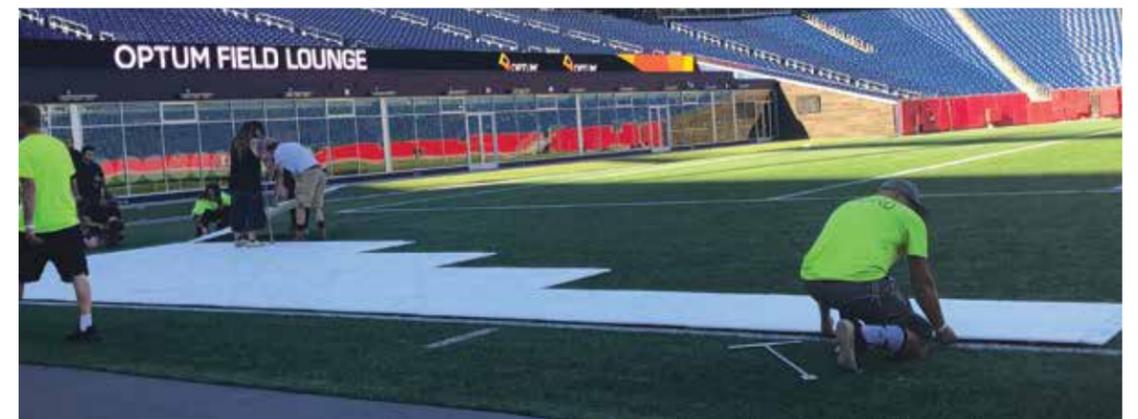
5.3 Establish String Lines

Figure 10 – Establishing String Lines



Check and Re-check Alignment

While the set-up process can be slow, it is critical the first four rows of panels be checked and re-checked for alignment. 100% of the cam locks must be locked as the panels are placed. It is also recommended that fork lift and other vehicular traffic stay off the initial several rows of the build. The panels are designed to move and can be easily misaligned during installation. Care and attention to detail are paramount. These subtle adjustments in the beginning will result in a smooth and efficient installation.



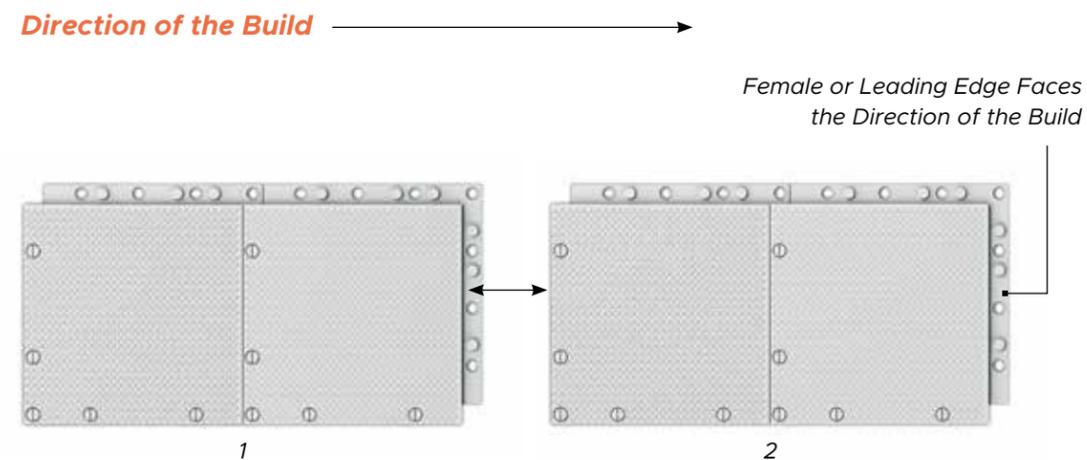
5.0 Installation

5.4 Beginning the Build

The system is usually shipped in pairs, stacked on 4ft x 8ft pallets. Laying the panels in pairs increases the rate of production for installation and removal.

1. Place the first paired set of panels on the ground with the leading or female edge facing the direction of the build. If building from left to right, one male flange will be on the left corner of the string line with one female edge facing the direction of the build. The other female edge to the right. Make sure lip areas are clean and free of debris.
2. The next set of paired panels are placed in the same orientation and so on, ensuring the growing line of panels stays flush with string lines.
3. Using the alignment pegs and sockets, fit the panels together.
4. Lock each panel as it is set in place using the T-Bar locking tool. Turn the pin ninety degrees so the slot points to the LOCKED symbol, listening for 2 clicks to signal the pin is properly locked.

Figure 11 – Beginning the Build



Note: Panels are properly aligned when the surface of the second mat is flush with first panel.

DO NOT force the locks to rotate. Check for proper alignment of the panels and remove any debris from the edges and around the locks.

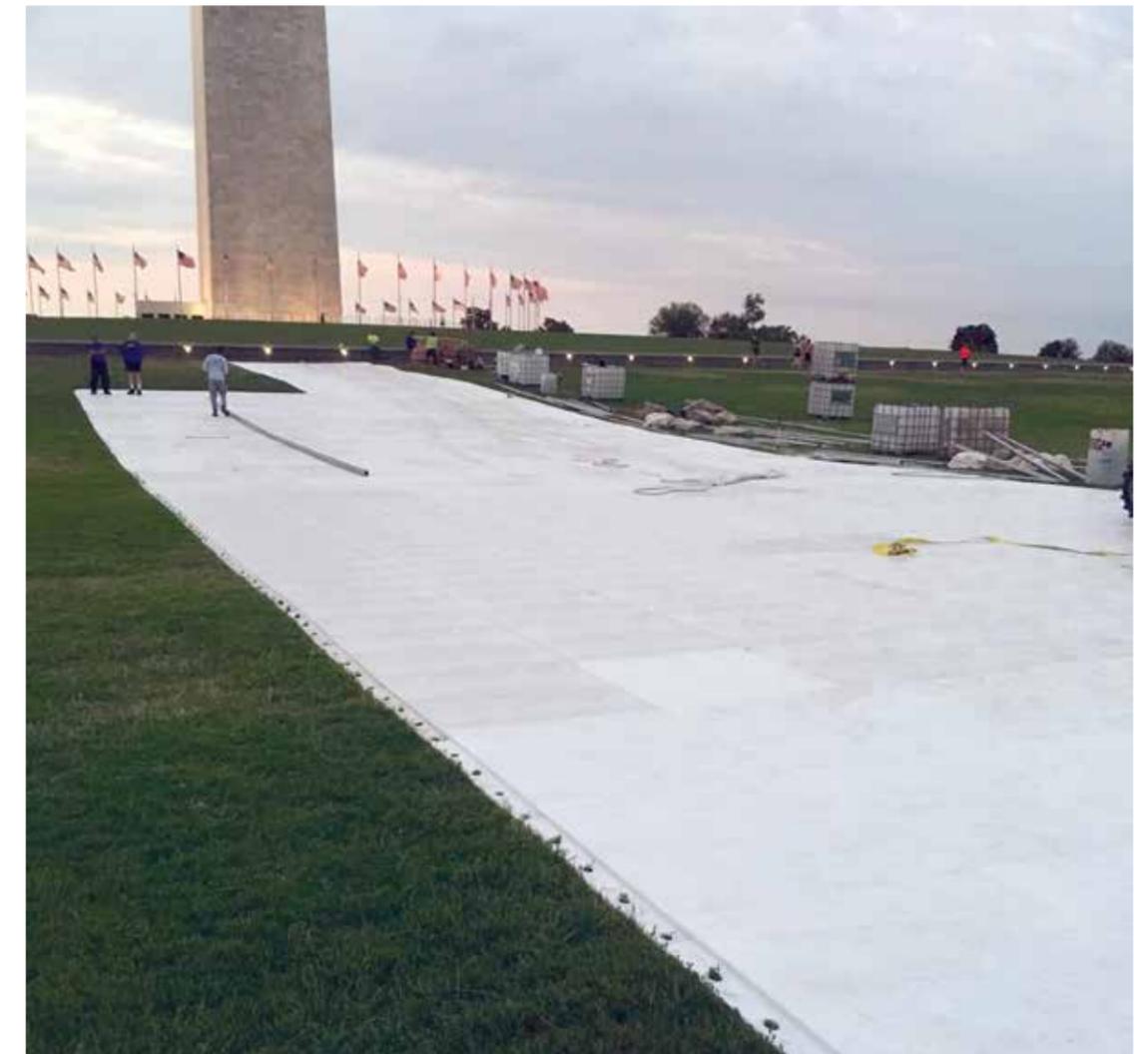
5.0 Installation

5.4 Beginning the Build

5. Repeat steps 1 through 4 until the desired area is installed.
6. Always work in one direction, placing the first panel of the next row over the first panel of the previous row.
7. Follow the established guidelines and keep each row as straight as possible.

The steps above are applicable to every configuration.

CAUTION: ALL panels must be locked immediately after placement without exception. Never use panels that have been damaged or are missing cam locks.



5.0 Installation

5.5 Installation Methodologies

There are two primary methodologies for installation: straight lines or rows and a right triangle hypotenuse. Both methods allow the system to stay aligned. The straight-line method works well for smaller builds, such as partial field coverage, walkways, roadways, and modular structure flooring. Do not create right angles or interior corners, always build out from the leading edge.

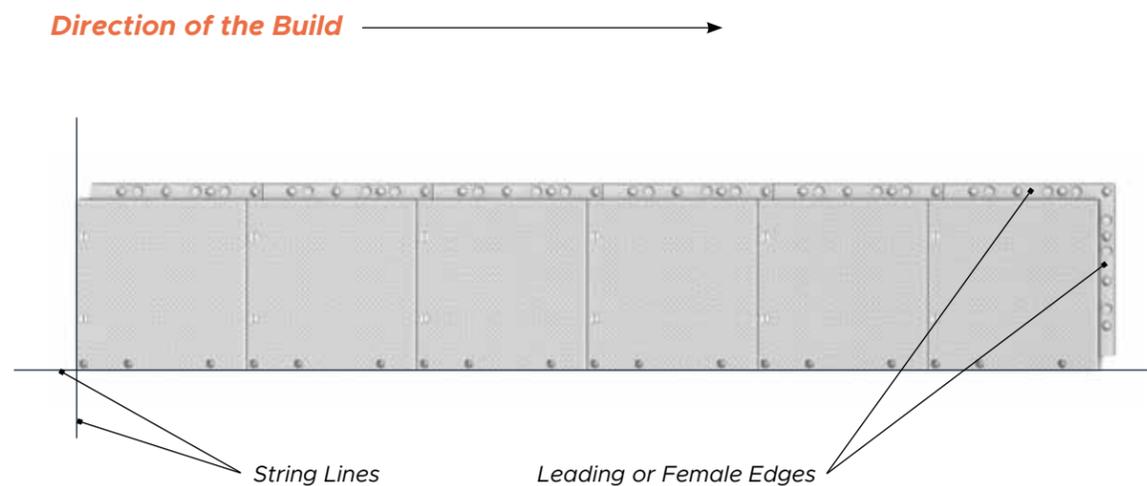
For larger installations, the hypotenuse method helps to keep the panels aligned as the size of the build progresses. For this method, the panels are laid in two directions off the first panel, building from the “legs” of the triangle to the hypotenuse. The floor extends out diagonally from the first corner. It is important that the crews be managed so that the system is built out uniformly.

5.5.1 Straight Lines and Walkways

For smaller areas, walkways and roadways, a simple end-to-end straight configuration is appropriate, as in *Figure 12 – Straight Lines and Walkways*. Mark the area to be matted from left to right. The male edges of panels are aligned at the corner of the lines. The female edge faces the direction of the build. Lay the panels end-to-end, locking each panel as it is set in place. Continually check alignment with the string lines to ensure a straight build. Complete a single row all the way across before beginning the next row.

To change direction of the path, rotate the last mat 90 degrees counter clockwise. Various configurations are show in *Figures 13 and 14*.

Figure 12 – Straight Lines and Walkways



5.0 Installation

5.5.1 Straight Lines and Walkways

Figure 13 – Curved Walkway

Gradual curves can be achieved by staggering the panels.

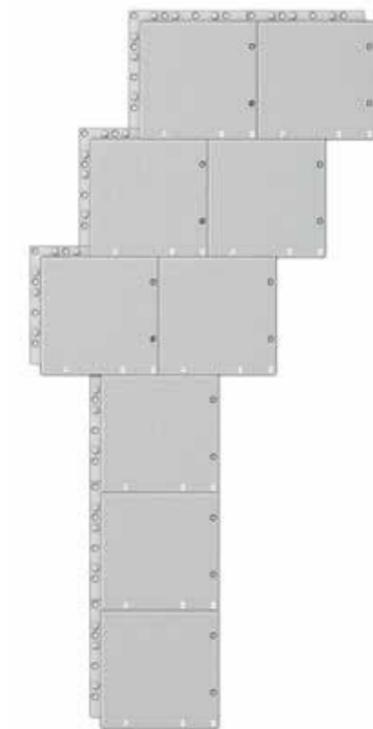
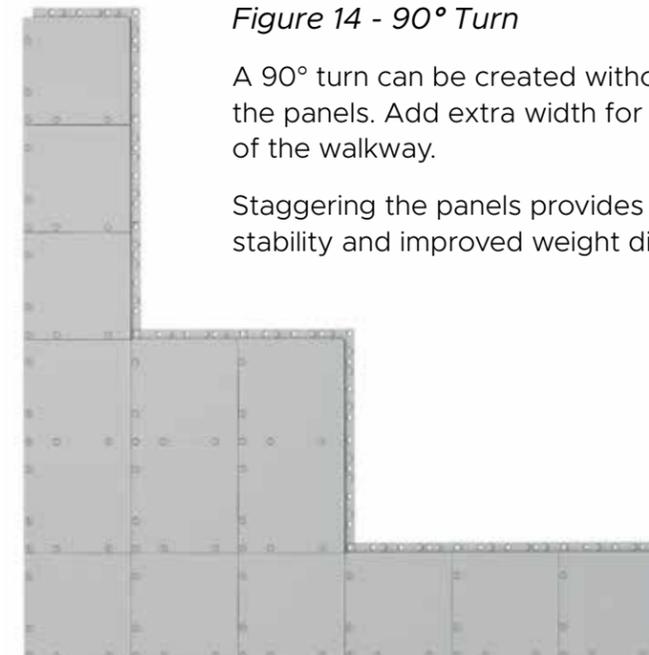


Figure 14 - 90° Turn

A 90° turn can be created without offsetting the panels. Add extra width for safer navigation of the walkway.

Staggering the panels provides increased stability and improved weight distribution.



5.0 Installation

5.5.2 Roadways

The Matrax 4x4 Portable Flooring System may be used as a temporary roadway for rubber-tired vehicles. Construct roadways as wide as necessary and offset the panels for more even weight distribution. (See Figure 17 - Roadway Offset Pattern)

Roadways must be able to accommodate the width of the vehicle plus a buffer of 24 inches on each side. (See Figure 15 - Roadway Width)

Figure 15 - Roadway Width



Always ramp the upper lip overhanging edge of the panels being used for vehicular entry or exit. Failure to ramp overhanging edges will result in damage to the panels. (See Figure 16 -Overhanging Upper Lips)

Figure 16 - Overhanging Upper Lips



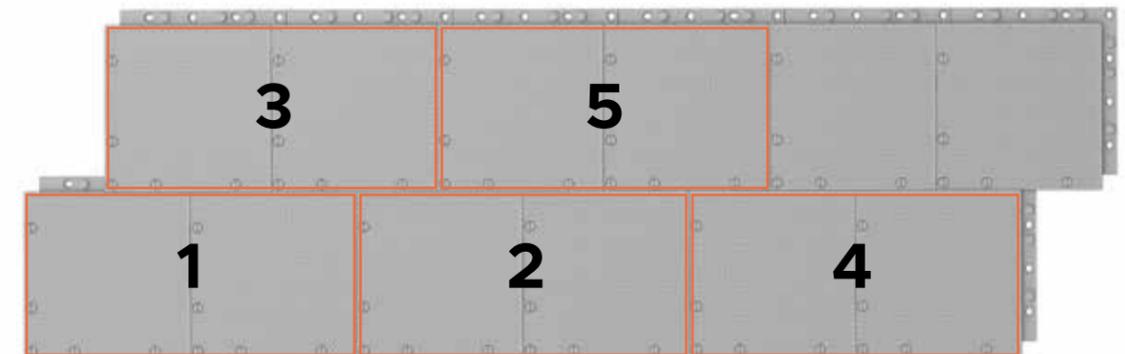
5.0 Installation

5.5.2 Roadways

Installing Roadway and Offset Configurations

1. Lay the first pair of panels, with the female edges oriented in the direction of progression.
2. Install the second pair of panels, aligned square with first pair.
3. Install the third pair of panels, beginning the second row increasing the width, spanning the seam created by the first two pairs of panels.
4. Install the fourth pair of panels, square with the first pairs of panels.
5. Install the fifth pair of panels, square with the third pair of panels, spanning the seam of the second and fourth pairs of panels. (See Figure 17 - Roadway Build Sequence)

Figure 17- Roadway Offset Pattern and Build Sequence



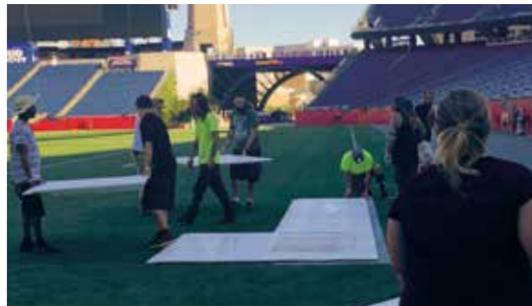
5.0 Installation

5.5.3 Large Areas – Hypotenuse Method

For stadiums and larger installations, the hypotenuse method helps to keep the panels aligned as the size of the build progresses.

For this method, the panels are laid in two directions off the first panel. The floor extends out diagonally from the first corner. It is important that the installation crew be managed so that the system is built out uniformly.

- As when building in straight rows, start by aligning the first panel with the male edges facing the string lines and the female edges facing the direction of the build.
- As shown in *Figure 18*, the panels are laid uniformly, extending out equally in two directions. It is imperative each panel is locked as it is set in place.
- The panels can be easily knocked out of alignment, so it is recommended that vehicles and installers stay off the installed panels until a substantial portion of the surface is covered.
- Alignments of the panels to the string lines should be checked throughout the build to ensure the panels stay aligned.



Set the first 2 pairs of panels in place along the string lines.



Lay the next pair of panels to extend the build in two directions.



Continue to build equally in two directions.

5.0 Installation

5.5.3 Large Areas – Hypotenuse Method



To avoid knocking panels out of alignment, keep installers and equipment off the panels until a substantial section of the flooring has been locked in place.



Check and recheck the alignment of the panels against the string lines to ensure panels stay straight.

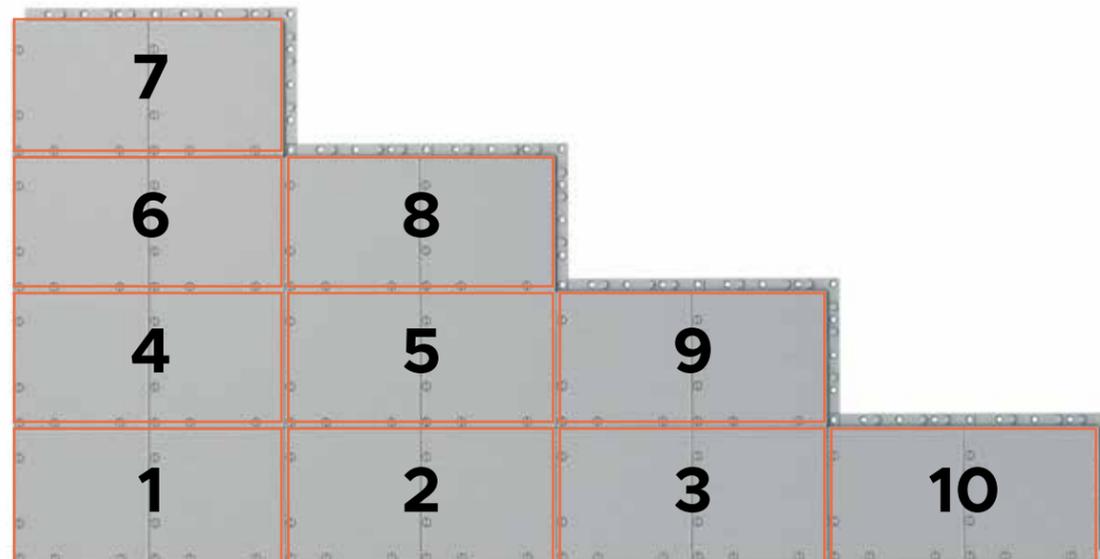
5.0 Installation

5.5.3 Large Areas – Hypotenuse Method

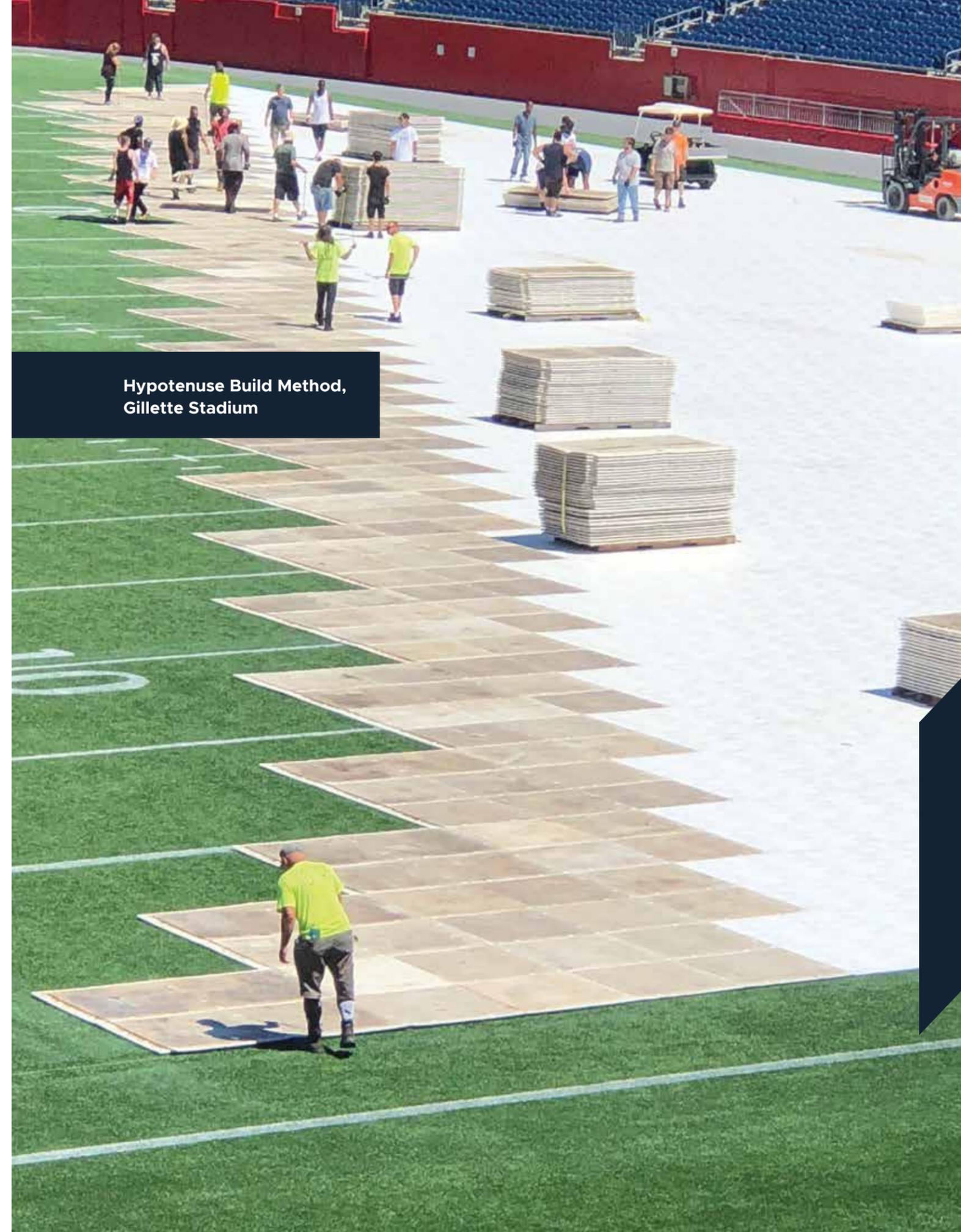


Manage the installation crew to ensure the system is built out uniformly.

Figure 18 - Hypotenuse Build Out Progression



The build progresses equally in two directions.



Hypotenuse Build Method,
Gillette Stadium

5.0 Installation

5.5.4 Build Joints – Required For HD/LD Transitions Greater Than 4 Panels

The Matrax 4x4 HD and LD Portable Flooring Systems are designed to provide operators and owners the flexibility to configure installations that fulfill the requirements of individual events to protect the turf, and to accommodate all aspects of the build.

For large installations using a combination of HD and LD panels, build joints are required to ensure integrated transitions. While the HD and LD panels are similar in dimension and will lock together in small quantities, a joint will be needed for runs greater than 4 panels. A build joint consisting of standard Matrax male and female ramps will be utilized at the HD/LD transition interface.



The leading edge of the HD/LD build joint is flush with the panels being adjoined.

5.0 Installation

5.5.4 Build Joints

For non-combination HD or LD installations, build joints may be deployed as a matter of operator or handler method, or to compensate for misalignment. The metrics associated with each build site will dictate which methods are needed for a successful build.

Beginning the Build

For installation of HD/LD build joints, the start of the joint will occur along the leading or female edge of the row of panels that have been installed. Pairs of male and female ramps are needed to create the joint. Lock a row of male ramps in place along the entire length of the leading female edge of panels.



The first step is to lock male ramps in place along the entire length of the leading female edge of the panels.

5.0 Installation

5.5.4 Build Joints

Add the Next Row of Panels

Next, a fresh row of panels will be placed along the leading edge of the ramps. As before, the female edge of the panel will be placed in the direction of the build. The row of panels will be placed along the lower edge of the installed ramp so that the male edge hangs over the tapered end of the ramp.



A fresh row of panels is placed along the leading edge of the male ramps.

5.0 Installation

5.5.4 Build Joints

Completing the Build Joint

A row of female ramps is attached to the male end of the newly installed row. The tapered end of the newly installed female ramp will be facing the opposite direction of the build. Connect a row of female ramps to the male edge of the panel and place over the existing row of ramps to create the transition.



Install a row of female ramps over the male ramps, connecting them to the fresh row of panels.



Complete the joint with a row of female ramps.

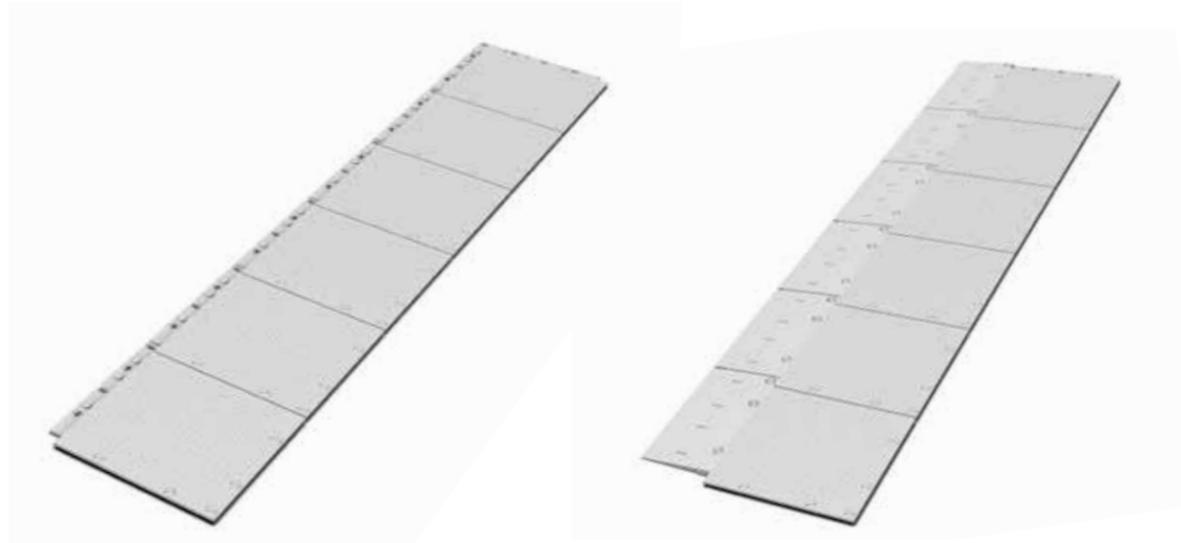


End of the HD/LD Build Joint.

5.0 Installation

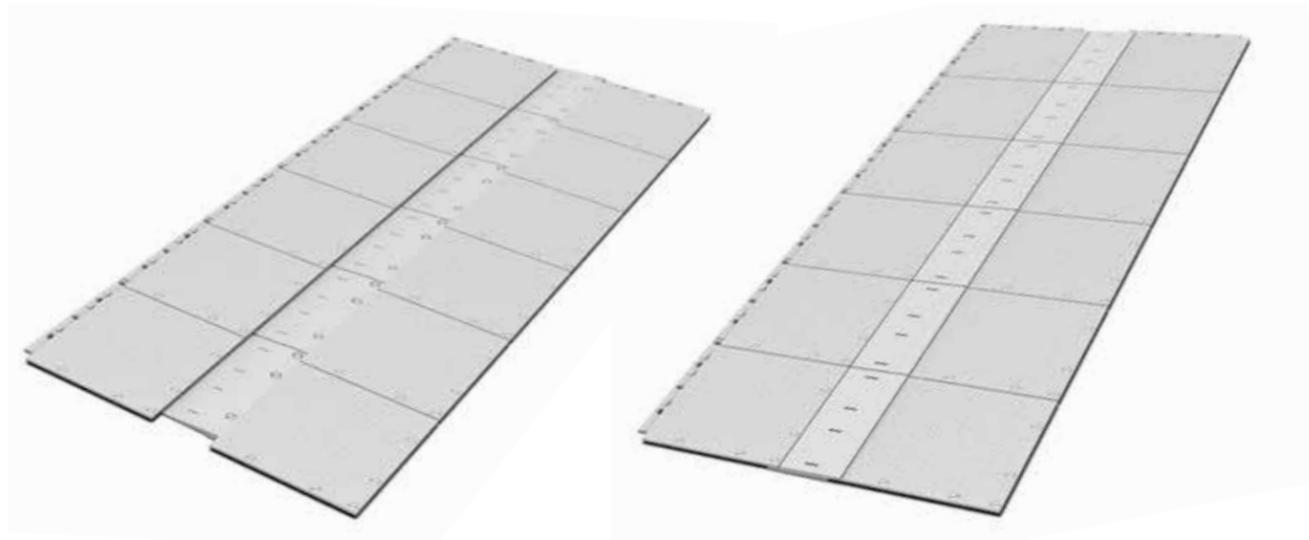
5.5.4 Build Joints

Figure 19: Build Joint Installation



Step 1: Start the build along the female or leading edge of the panels.

Step 2: Lock a row of male ramps to the full length of the row of panels.



Step 3: Lay a fresh row of panels along the edge of the ramps. The male edge of the panels will face the ramps with the female or leading edge facing the direction of the build.

Step 4: Attach a row of female ramps over the row of male ramps, sliding the overlapping lip under the male edge of the panel. Lock each ramp as it is set in place.

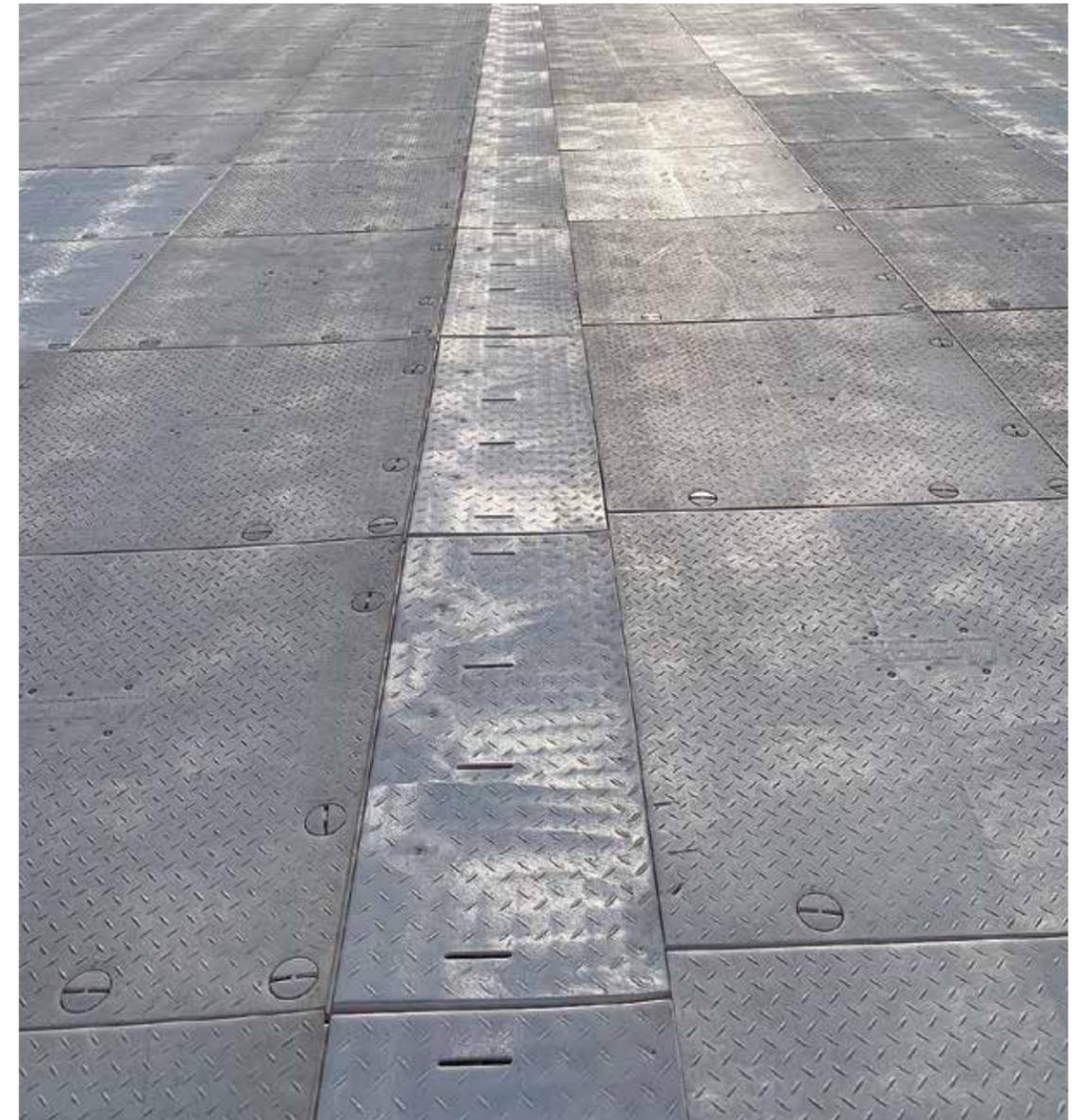
5.0 Installation

5.5.4 Build Joints

Achieving a Level Surface

Once the joint is installed it may be necessary to screw down some of the raised edges to ensure a level surface. Ramps can be screwed down at the corners directly into one another using one-inch long screws.

Build joints can also be implemented to correct a misalignment during installation. The joint allows the installer to start a fresh row of panels to reorient the direction of the build.



For additional build joint instruction, please consult the Build Joint Installation video at: MatraxInc.com/resources/

5.0 Installation

5.5.4 Tent and Temporary Structure Flooring

When installing the Matrax system as flooring for a tent or temporary structure, the hypotenuse method is recommended (pages 24-26). Begin the build in the far-right corner and work in the direction of the build, progressing equally in two directions.

Panels and ramps can be cut on site with a circular saw to create a tight fit at the edges and around posts and doorways.

In extremely dusty or muddy conditions, a geotextile fabric covering can be installed first to create a barrier between the substrate and the flooring. For long-term installations, ensure there is proper drainage to guard against pooling on the panels.



The hypotenuse installation method is recommended for tents and structures.

Panels and ramps can be cut on site.



A geotextile fabric covering can be installed first to create a barrier.

5.0 Installation

5.5.5 Elevated Flooring

Matrax 4x4 portable flooring is an excellent option for creating a stable, level platform on undulating, hilly grounds or in areas with poor drainage.

Support beams are positioned 22 inches apart so that one beam rests under the center of the panel and the next under the overlapping joint that connects the panels to each other. Each panel measures 44" wide once interlocked. Both the Matrax 4x4 LD (Light Duty) and HD (Heavy Duty) panels can be used in this application. The straight-line installation method (page 20) is recommended for this application.



Robust and long lasting, Matrax panels are an excellent alternative to plywood.



Support beams should be positioned 22" apart so one beam rests under the center of the panel.

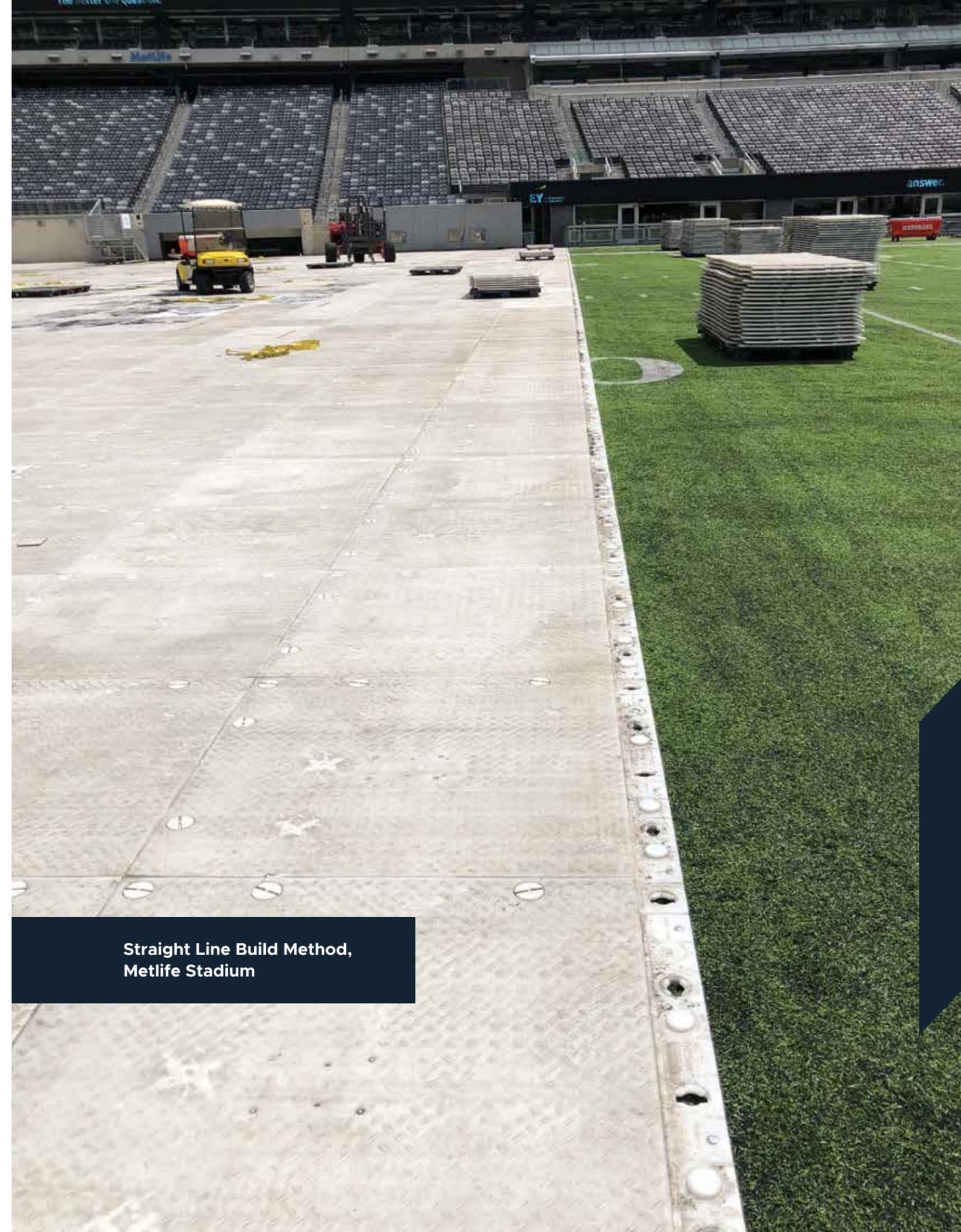
5.0 Installation

5.6 Installation Best Practices

- Avoid slippage and mis-alignment of panels by following the string lines and locking each panel as it is placed.
- Do not force the locks to rotate. If necessary, check the alignment and look for debris that could be causing an obstruction.
- To minimize knocking panels out of alignment, do not walk or drive on them until a substantial section of the flooring is locked in place.
- If voids, obstructions or drainage issues are identified on the site, consult page 14 of the installation handbook for corrective actions.
- To avoid damage, ensure the load does not cause panels to deflect more than 3 inches.
- To remove and/or replace a panel in the middle of a setup: unlock the locking pins of the panel to be removed and the surrounding panels. Work the panel out of the space and work in the replacement panel. Ensure all pins have been locked.



Be sure to lock each panel as it is set in place.



**Straight Line Build Method,
Metlife Stadium**

6.0 Removal

Work in the reverse order of installation to remove the Matrax Portable Flooring System. The last pair of panels placed is the first to be removed. Work with one pair of panels at a time to ensure the stability of the remaining panel configuration.

1. Begin with the last panel placed in the configuration.
2. Using the T-Bar, unlock each cam lock in the panel to be removed. (See Figure 3 - Locked and Unlocked Pin Position)
3. Lift and remove the pair of panels.
4. Safely stack the panels as they are removed.

- CAUTION:**
- Cam locks must be turned to the unlock position before attempting removal.
 - Remove the panel immediately after unlocking the fastener.
 - Do not unlock the pins of other panels.
 - Unlocking several panels at once results in an unstable, unsafe panel system, which may cause personal injury or damage to the panels.



7.0 Proper Storage

Matrax panels are typically stored on double pallets, 2 panels wide. Using this method, panels can be stacked 30 high for a total of 60 panels and 675 square feet (62.7 meters square) per pallet.

Pallets can be safely stacked 3 high so that each 4' x 8' footprint can hold 2,430 square feet (255.75 meters square) of flooring.

Additional stage tips:

- Do not exceed a pallet height of 51 inches.
- Clear away any debris that prevents a stable, even stack.
- Take care not to strap the pallets too tightly, as this could cause the panels to warp.



For additional information and instruction, please go to the resources section of our website to view the Matrax Installation Videos: MatraxInc.com/resources/

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Go to [Matraxinc.com/resources/](https://matraxinc.com/resources/) to view the Matrax Installation Best Practices and Matrax Build Joint Installation videos.

