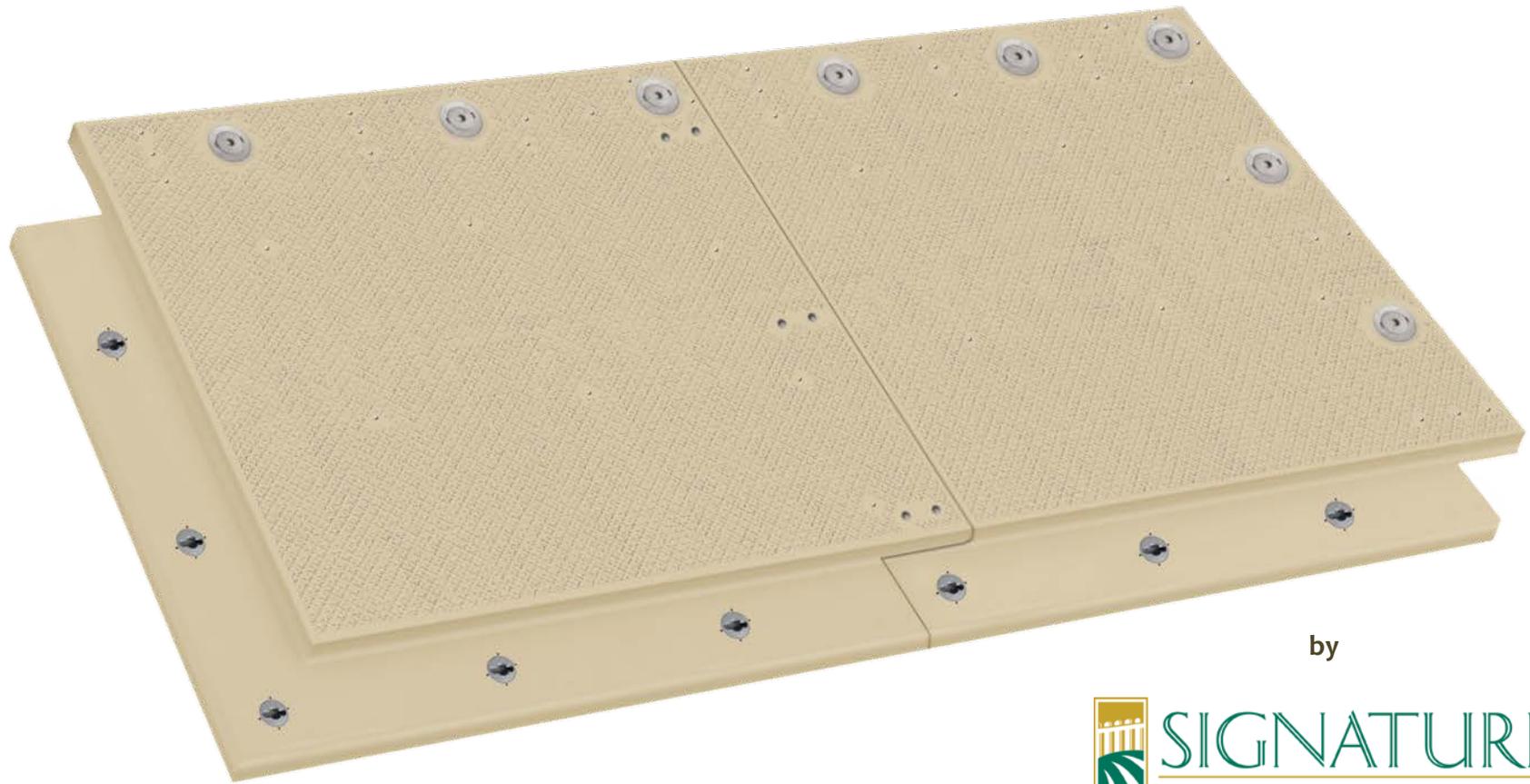


# MEGADECK®

## FIELD MANUAL



by



**MEGADECK FIELD MANUAL: Instructions for use and maintenance of your MegaDeck heavy duty matting system**

**THE MEGADECK SYSTEM**

Overview of MegaDeck	p2
Specifications of MegaDeck	p3
MegaDeck's Locking Pin System	p3

**TRANSPORT, STORAGE, AND HANDLING OF MEGADECK**

Loading MegaDeck on Flatbed Trucks	p4
Loading in ISO Containers or Closed Vans	p5
Transport of MegaDeck Mats	p5

**BASIC INSTALLATION OF MEGADECK**

Discussion of CBR (California Bearing Ratio) and Loading Capabilities of MegaDeck on Varying Ground Surfaces	p5
Site Analysis and Ground Preparation	p7
Connecting MegaDeck Mats	p7
Installing MegaDeck Utilizing a Crane, Lull, or Other Similar Equipment	p8
Installing Mats in a Perpendicular Configuration	p9
Removing MegaDeck Mats	p11
Creating a MegaDeck Roadway	p11
Passing Lanes and Turning Areas	p12
Work Platforms, Bone Yards, and Contiguous Areas	p12
Bridging Situations	p13
Water Runoff Considerations	p13
Geo-textiles and MegaDeck	p13
Transitions and On/Off Ramps	p13
Double Stacking MegaDeck	p14

**CLEANING AND MAINTENANCE OF MEGADECK**

General Cleaning	p14
Snow and Ice Removal	p14

**REPAIRING DAMAGE TO MEGADECK**

Repairing Cracks and Surface Punctures	p14
Repairing Locking Pin Receiver Damage	p15

**SERIAL NUMBERS & IC (INVENTORY CONTROL) CHIP USAGE**

**LIMITED WARRANTY**

	p15
	p15

**THE MEGADECK SYSTEM**

**Overview of MegaDeck**

MegaDeck is designed to provide access over soft ground for vehicles, equipment, and personnel. The principal behind MegaDeck is distribution of heavy weights over a larger surface area, thus allowing heavy equipment to traverse varying ground conditions without problems.

MegaDeck can be used to create a temporary roadway, a work compound, and a support surface for all types of applications. From shoring and general construction applications to drilling and mining operations, MegaDeck is designed to provide stable access and superior ground protection.

MegaDeck matting can be used in all weather conditions, from the coldest regions to the warmest, and is manufactured using the highest quality plastics. Each mat incorporates extensive engineering, testing, and a unique material formulation that provides the ultimate in UV resistance, static dissipative properties, and tremendous strength and loading capabilities over a multitude of ground surfaces.

Each mat's molded traction surface and environmentally friendly, non-porous design allows sections to be used in marshlands and other sensitive environments where traction, access, and reusability is important. MegaDeck mats outlive traditional wooden mats and will never rot, delaminate, or become waterlogged.

Mats are fully modular and can be interconnected in any direction to form larger work areas, passing lanes, turns, and a variety of other configurations.

Mats incorporate a heavy-duty overlapping flange system that allows adjacent mats' flanges to nest for additional strength and rigidity. Each flange incorporates a unique proprietary connection system that enables mats to be locked to one another when overlapped, prevents mats from

slipping or detaching from each other during use, and prevents seepage of mud from the surface below.

### Specifications of MegaDeck

MegaDeck is available in two sizes: Full and Half. These mats may be used with one another as needed to create the desired dimensions.

#### Size

**Full Size Mat** (consists of two half mats permanently bolted together):

Actual: 4.2672m / 14ft (L) x 2.286m / 7.5ft (W) x 10.795cm / 4in (D)

Usable (due to flange): 3.9624m / 13ft (L) x 1.98m / 6.5ft (W) x 10.795cm / 4cm (D)

#### Half Size Mat:

Actual: 2.286m / 7.5ft (L) x 2.286m / 7.5ft (W) x 10.795cm / 4in (D)

Usable (due to flange): 1.98m / 6.5ft (L) x 1.98m / 6.5ft (W) x 10.795cm / 4cm (D)

**Flange Thickness:** 2" (5.08cm) 2" (5.08cm)

**Note:** Sizes are nominal and may vary slightly within standard production tolerances. Such minor variation will not affect mat performance or compatibility.

#### Weight

Full sized Mat: 1,050 lbs. (476.272kg)

Half Mat: 525 lbs. (238.136)

#### Material Composition

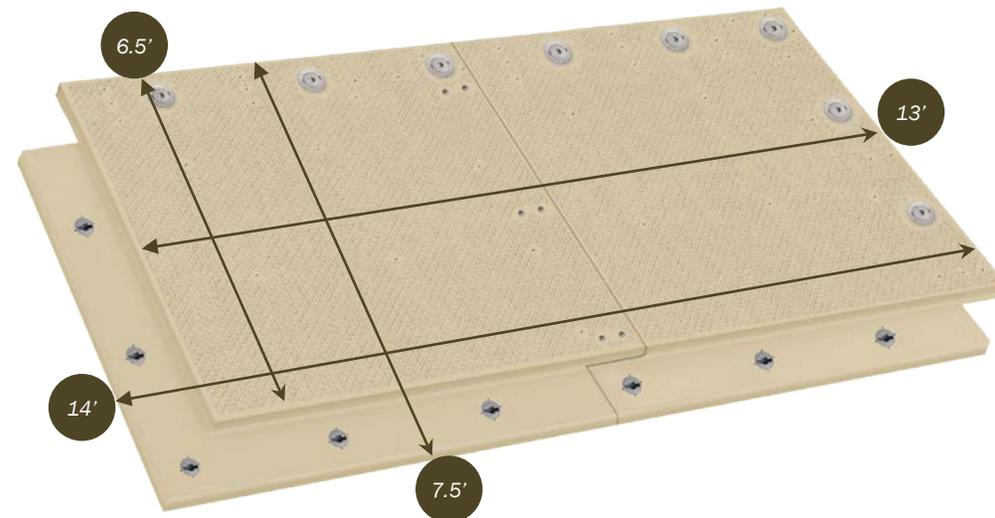
Base Material: High Density Polyethylene Copolymer

Additives: Anti Static Additive  
Color Pigments  
Proprietary Nano-Clay and other Fillers

UV Package: 5 year

Locking Pin and Receiver Material: Aluminum

Fire Rating: UL94HB



#### MegaDeck's Locking Pin System

MegaDeck incorporates the latest in connection technology to prevent mats from shifting or drifting under heavy weight or torque. By connecting mats in multiple locations, the unique connection system enables mats to handle tremendous moving weights.

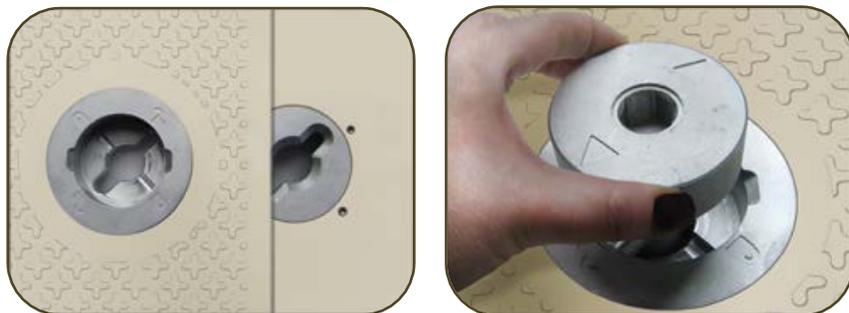
Each 14ft long x 7.5ft wide panel has 8 cam hole locations, ready to receive Locking Pins. These holes are reinforced with aluminum receivers (vs. plastic) and are designed to help guide and assist in the alignment of panels on-site. The aluminum Locking Pin Receivers prevent damage to the main mat and provide additional weight bearing capacity.

Each connection cam consists of a durable aluminum Locking Pin that is inserted through two panels and rotated 45 degrees to lock using a standard 3/4" hex tool, available in any hardware store. When locked, arrows on the Locking Pin will be aligned with the lock symbol on the Locking Pin Receiver, and the arrows will be aligned with the unlock symbol when unlocked.

To remove Locking Pins, a simple flat head screwdriver is inserted into one of two notches pre-molded into each pin.

MegaDeck's integrated locking system is designed for the rigors of heavy duty use. Components are manufactured using non-corroding aluminum that is capable of withstanding tremendous weights. In the event of damage or loss, Locking Pins and Pin Receivers are easily replaced with minimal effort and without having to sacrifice an entire MegaDeck panel.

For more permanent or longer term applications, Signature offers more permanent locking pins. These semi-permanent pins consist of two halves that are actually bolted together to lock panels in a more rigid manner. They can be unbolted as needed upon completion of the project and re-used if desired.



## TRANSPORT, STORAGE, AND HANDLING OF MEGADECK

### Loading MegaDeck on Flatbed Trucks

Following are guidelines for loading and transporting MegaDeck on truck and in standard ISO containers. Proper safety procedures, material handling equipment, and Personal Protective Equipment should always be utilized when handling MegaDeck or any other heavy load.

MegaDeck mats are designed to stack neatly both while in storage and during transport. It is important to stack mats carefully and to align the edges consistently when transporting mats over the road.

Depending on the capability of your forklift or crane, the size of MegaDeck stacks will vary. Extended forklift forks are highly recommended for the safe transport of mats, and it is recommended that sections be picked up from the long side when loading onto flatbeds or transporting on-site.

As each full MegaDeck mat weighs 1,030 lbs, it is possible to calculate the total number of mats that can be transported in a single stack, based on the weight loading capabilities of your forklift.

As over the road loads in the United States are often limited to approximately 50,000 lbs, it is generally possible to transport 42 mats on a typical flat bed truck. Generally, this consists of 2 stacks of 14 mats and 1 stack of 13 mats.

It is recommended not to exceed a stack height of 14 mats on a typical flat bed truck. It is important to use heavy duty ratchet straps to secure mat stacks on a typical flat bed trailer. Be sure that all straps are fastened tightly so that loads do not shift in transit. 3-4 heavy duty ratchet straps/bands are recommended per mat stack, or 9 to 12 straps per trailer.

It is important to place MegaDeck mats on 3" x 3" or 4" x 4" stringers (3 stringers per mat length) to enable easy access for forklifts. Stringers may be used every 4-5 mats to help separate stacks of MegaDeck for easier transport using a smaller forklift.

#### Loading in ISO Containers or Closed Vans

MegaDeck mats can be transported in closed vans and ISO containers. Extended forks are recommended for placement of the mats into the container. As fork lift extensions affect truck capacity, please refer to your lift truck manufacturer for a derated capacity, when using extended forks.

As each mat is 14ft long, it is recommended that an extended fork length be utilized when loading mats lengthwise into a closed truck or container.

Great care should be taken when loading mats into an enclosed van to avoid potentially damaging contact with the sidewall or roof of the container. Mats should be loaded **one by one**, using a loading dock. Never stand inside the container and in front of MegaDeck when loading and use only appropriately rated equipment when positioning and loading mats.

#### Transport of MegaDeck Mats

- 20ft ISO Containers – 20 full sized mats
- 40ft ISO Containers – 40 full sized mats
- 48ft Truck – Flat Bed – 40 full sized mats

### BASIC INSTALLATION OF MEGADECK

#### Discussion of CBR (California Bearing Ratio) and loading capabilities of MegaDeck on varying ground surfaces

Soil properties are generally determined using California Bearing Ratio (CBR) guidelines. By understanding the CBR of the subgrade that MegaDeck will sit on, it is possible to better understand the loads that can be traversed and placed over MegaDeck.

CBR strength tests yield a value for comparing load bearing capacity of a subgrade material to that of well-graded crushed stone. CBR is a penetration test for evaluating the mechanical strength of road subgrades and has been in use since before World War II.

CBR tests are performed by measuring the pressure required to penetrate a soil sample with a plunger of a particular size. Several companies manufacture soil plungers to perform this test (ASTM D4429 for soils tested in the field; also AASHTO T193:BS1366: Soils for civil engineering purposes: Part 4, compaction related tests).

The harder the surface, the higher the CBR rating. The higher the CBR rating, the greater the support under MegaDeck, and the heavier the loads that can traverse the system.

A CBR of 3 equates to tilled farmland, a CBR of 4.75 equates to turf or moist clay, while moist sand may have a CBR of 10. High quality crushed rock has a CBR over 80. The standard material for this test is crushed California limestone which has a value of 100.

$$CBR = P/P_s * 100$$

$$CBR = CBR (\%)$$

P= measured pressure for site soils (N/mm<sup>2</sup>)

Subgrade type	CBR value	Modulus of elasticity (psi)
Crushed stone – high range	100	48,700
Crushed stone – low range	50	31,200
Sandy soil	25	20,000
Clay soil	10	11,200
Organic soil	2	4,000
Very soft sub grade	0.5	1,640

P<sub>s</sub> = pressure to achieve equal penetration on standard soil [N/mm<sup>2</sup>]

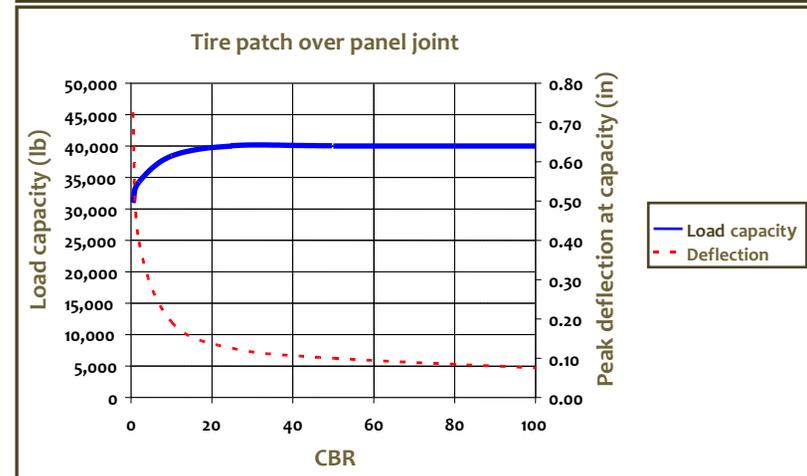
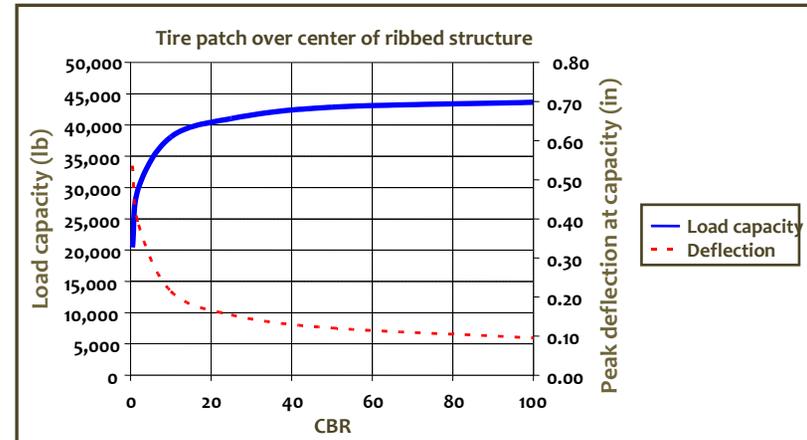
The American Association of State Highway and Transportation Officials (AASHTO) published the Mechanistic Empirical Pavement Design Guide (MEPDG) in 2008. AASHTO MEPDG uses the formula below to convert CBR to resilient modulus (M<sub>R</sub>) (in psi), which is itself an approximation of modulus of elasticity.

$$M_R \cong 2555 \times CBR^{0.64}$$

The following chart shows approximate CBR values for various ground types as well as the corresponding Modulus of Elasticity (PSI) for each surface type, according to the calculation above.

Finite Analysis Testing (FEA) was done on the MegaDeck panel, simulating a 10x20 inch tire patch over the center of the panel's ribbed structure and at the joint between panels. The tire load was increased until peak stress reached 1,500 PSI (Material tensile strength) for CBR values of 0.5, 2, 10, 25, 50, and 100.

Following is a graph showing estimated loading capacity and expected deflection at each loading level.



Note that the above FEA calculations are for a single tire patch that is 10" x 20" and a typical vehicle will have multiple tires, thus the weight of the overall vehicle (assuming uniform weight distribution) would approximate Load Capacity x Number of Tires. Tire patch size may vary as well, and this should be considered when assessing loading.

It is important to note that ground surfaces can vary dramatically from the controlled model above and such variances in ground surfaces can affect

loading capability. As such it is always better to factor in safety when considering loading of MegaDeck panels, as well as common sense and experience to dictate appropriate loading.

## Site Analysis and Ground Preparation

MegaDeck is designed to be used over a variety of ground surfaces and types and is able to handle reasonable ground variations and undulations.

Before installing MegaDeck it is always a good idea to review the site in advance of delivery to ensure suitability of the ground surface. Our team is ready to assist your engineering team in reviewing the suitability of a particular jobsite and in assessing the overall weight loading capacity of MegaDeck specific to the sub-grade and expected traffic.

The ideal method of analysis is testing CBR, but this is often unrealistic in remote locations and as such an estimate of CBR may be used to calculate estimated loading capabilities (for more information on estimating CBR see the section “Discussion of CBR” above). Of course, it is always advisable to use a safety margin when considering loading requirements.

As testing shows, MegaDeck is capable of handling tremendous loads over a variety of ground surfaces, but MegaDeck is not designed as a bridging device. While small ground variations will not seriously impact the performance of MegaDeck, it is always preferable to grade and/or smooth the ground surface prior to installation. This will create a more uniform work surface, facilitate easier installation, and enable mats to handle heavier loads. This process also eliminates pockets under MegaDeck, into which water can seep.

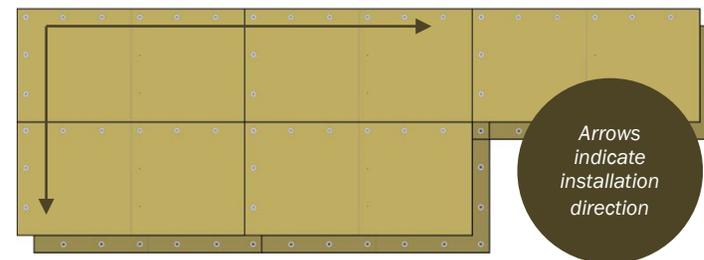
MegaDeck mats have a natural built-in flexibility which allows some contouring to the ground surface and enables the system to handle ground undulations and variances.

It is important to remove large boulders or rocks from the site as these can interfere with connection and alignment of mats, and could cause damage.

## Connecting MegaDeck mats

MegaDeck mats incorporate a nesting flange system, which allows mats to overlap one another for a secure connection and additional strength. This system is designed to provide the greatest strength at the intersection, while easing installation and positioning.

Connection of the mats occurs when the flanges are overlapped (i.e. mats are positioned adjacent to each other) and the cam locks are aligned. The Locking Pin is then inserted and rotated 45 degrees, locking the mats to each other.



As a general rule, it is best to position mats so that the projecting flange (under-lapping) on the first mat is open to receiving an overlapping mat flange. The surface of the flanges should be free of debris that could interfere with proper connection. Consideration should be given upfront to laying the first mat in such a way that the under-lapping flanges (2 sides) are always open in the direction(s) of installation.

Installation teams should assign one team member to the task of aligning and positioning mats, using a positioning bar if needed. As the second mat is positioned and aligned, a Locking Pin can be dropped through the receiver hole in the overlapping mat and into the receiver hole in the under-lapping mat. Each connection point can be locked with a 45 degree turn of an Allen key. Depending on the subsurface conditions, not every hole necessarily requires a locking pin for lightweight applications, though for optimal

performance on softer subsurfaces, we recommend that all connector holes/locks be utilized.

When connecting mats, it can sometimes become difficult to lock the pin into place. This is likely due to ground variation or debris such as in muddy environments. It is often helpful to put pressure on the overlapping mat flange to press the two mats together. This should assist in such situations.

Once the first series of mats are laid, mats may be continuously laid in the direction of the projecting under-lapping flanges. Should positioning of a mat underneath a projecting flange be required, a mat can generally be nudged with a forklift underneath the overhanging flange, due to the unique round design of the flange end, which guides the under-lapping flange underneath the overlapping flange.



*Radius edge allows forklifts to nudge mats underneath projecting flanges*

Note: Each MegaDeck mat incorporates a proprietary radius edge at the end of each flange that tapers towards the inside of the flange. This radius corresponds to the adjacent mat's radius located between the main body and the flange of each mat, and is designed to allow easier positioning of mats. As a result of this radius, mats may be nudged into position more easily (vs. straight edges that would stop the movement and positioning of the mat without one mat being lifted over the opposing flat edge). It is important to use these radiuses to assist with positioning as needed.



*Radius edge eases positioning of flanges.*

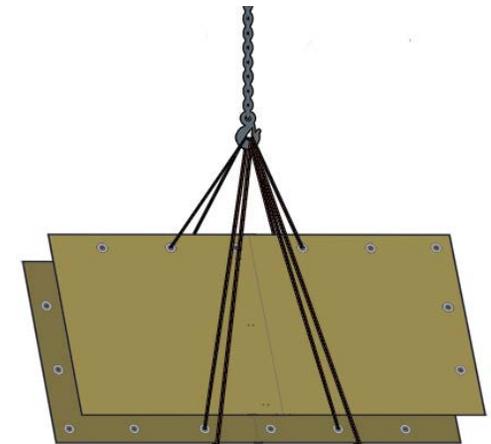
### Installing MegaDeck Utilizing a Crane, Lull, or Other Similar Equipment:

MegaDeck may be installed utilizing a crane or similar equipment with a cable, hoisting hook, and 4 properly sized lifting straps.

By utilizing 4 lifting straps it is possible to lift mats in a perfectly horizontal position, while maintaining balance. This eases the positioning of the mats to be installed and allows the overlapping flange of mats to be positioned by the crane directly over the under-lapping flange. Alignment of Cam/connector holes can be done before placement of the mat, easing final connection.

Installing the lifting straps: It is important to run the lifting straps through 4 holes at the center of the panel (See diagram), NOT the 4 holes on the corners of the mat. This provides additional stability and keeps mats flatter during positioning. Ideally, loop straps through the cam holes and connect the other side to the main crane hook or to the strap itself using a Carabineer or hook with safety latch.

Positioning the mat for connection: Once lifting straps are in place, use the controls of the crane or other equipment to position the mat such that the mats overlapping flange is positioned over under-lapping flange of the already positioned mat. Confirm that cam holes of the overlapping and under-lapping mats are aligned before lowering.



Lowering mats and removing the lifting straps: When lowering mats into place, be sure to place a 1"-2" pipe, bar, or piece of wood underneath 2 positions of the not-yet-connected overlapping flange.

Ensure a safe installation: Be sure to check lifting strap stability and connection prior to lifting mats. Always use hooks with safety latches. For added safety, never lift mats higher than 1ft, unless necessary to overcome obstacles. Two persons should be on hand to maneuver mats

### Removing MegaDeck Mats

MegaDeck mats are removed in the opposite direction in which they were laid. In other words, mats with flanges overlapping adjacent mats should be removed first, thus freeing the next mat for removal.

To remove mats, simply unlock the Locking Pins, thus disengaging mats from adjacent mats. Remove locking pins and store in a safe place for future use.

A forklift should be used to remove mats from their location. To facilitate future transport, it is advised that mats be stacked on 4" x 4" or 8" x 8" wooden beams, 20 mats to a stack, thus allowing the forks of a forklift to be positioned easily under the stack. Additional wooden beams may be placed between mat stacks as needed for fork access.

Consideration should always be given to the weight of mats and the capabilities of your forklift, when considering movement of mats and mats should be secured with proper safety banding, as is appropriate.

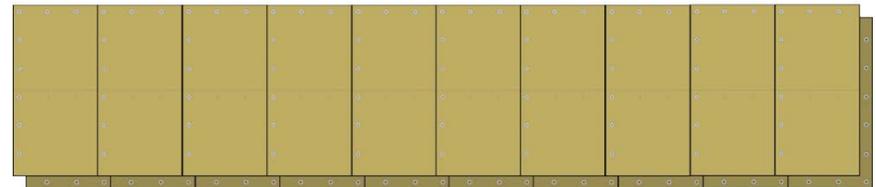
Forklift forks should always be spaced evenly to ensure a balanced load and extended forks are advised for smaller forklifts.

### Creating a MegaDeck Roadway

MegaDeck is designed to connect in two directions, thus allowing flexibility in roadway design. Typical full sized mats are 7.5ft Wide x 14ft Long and mats can be connected lengthwise and widthwise.

For typical roadways, it is recommended that mats be connected long-side to long-side, which creates a 13ft wide roadway, suitable for typical vehicles and equipment.

Connect mats along 14' edge for 13' wide roadways

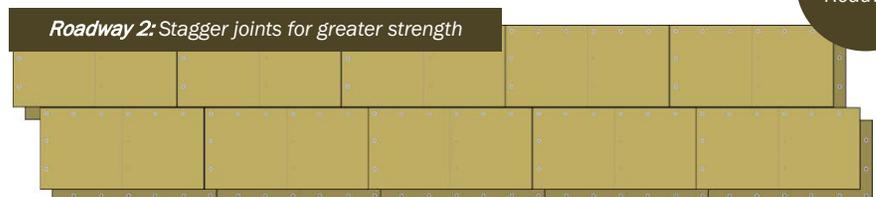


Alternatively, mats may be connected two mats wide, short-side to short-side. Mats may be laid side by side or staggered, depending on the need for additional strength. It is generally recommended that when connecting roadways using the short-side to short-side method that mats be staggered for greater strength.

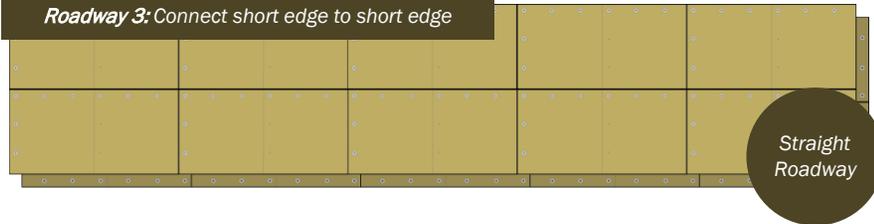
(Using the staggered methodology there are no 4 way intersecting seams, only 3 way intersecting seams and this assists in distributing weight. Remember to only stagger mats such that a 3 way seam intersection is created vs. another 4 way seam).

Remember to always connect MegaDeck in the direction of the underlying flange, so that they are always ready to receive the next overlapping mat.

Staggered Roadway



**Roadway 3: Connect short edge to short edge**

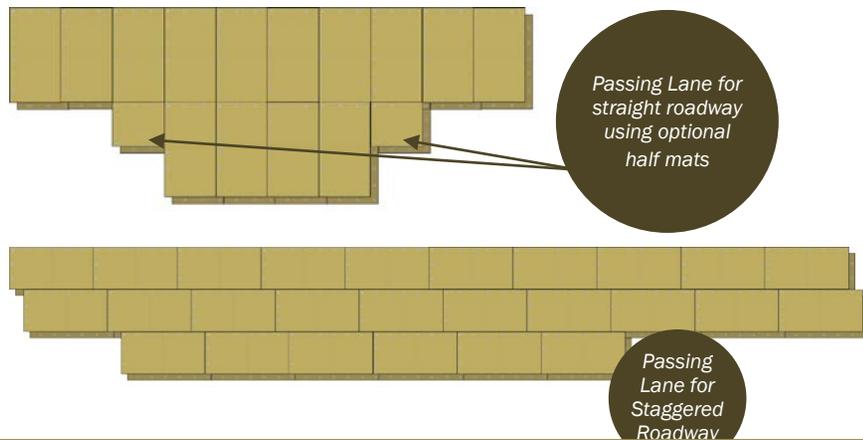


### Passing Lanes and Turning Areas

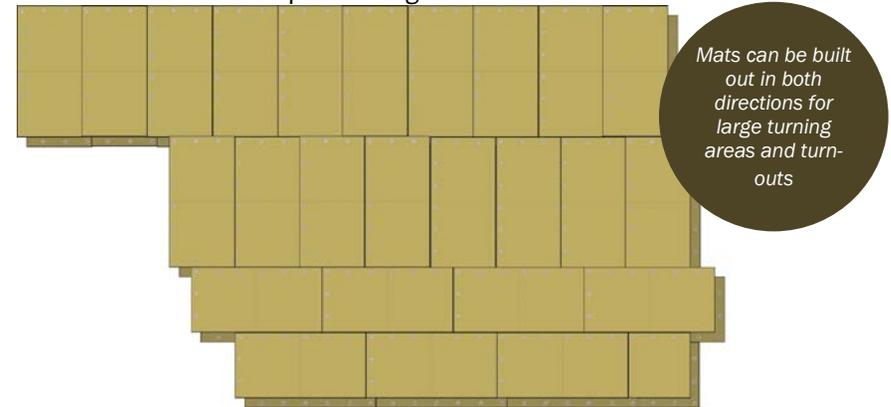
While straight roadways are ideal, there will always be situations where the length of the roadway would dictate the need for a passing area. For these situations, it is possible to add additional mats to the roadway for both the short-side and long-side connection methodologies.

Passing lane mats should be added to the side where the under-lapping flange is exposed, thus facilitating the connection and positioning of the passing lane mats. Depending on the length of the passing area required, additional MegaDeck sections can be added to the passing area, once again on the side where the under-lapping flanges are exposed.

Depending on whether your roadway is short end to short end or long end to long end, between one and two mats are required to create a suitable passing area x the length of the passing lane required.



To create a large turning area or turn-out, the same methodology would apply, in that mats are most easily installed with the overlapping flange placed over the exposed under-lapping flange. Matting can be built out in both directions of the exposed flanges



### Work Platforms, Bone Yards, and Contiguous Areas

MegaDeck is designed to connect in all directions, allowing for the construction of a work compound, equipment pad, bone yard, or other contiguous surface.

It is generally recommended that MegaDeck slated for use in long term or semi-permanent work compounds be positioned using the staggered methodology described above. While this method provides the greatest strength, it is important to keep in mind that it leaves a staggered edge along the perimeter of the compound.

To begin installation, always begin in one corner of the site (preferably closest to access road) and be sure to lay the first row of mats in as straight a manner as possible, ensuring that the first row of mats is parallel to the site so that further mats don't drift off course. This first row is the most important, as subsequent rows of mats simply follow the same line. To

verify alignment it is suggested that a string line be run for the first row installed.

Remember to always position the first mat such that the under-lapping flanges are open and ready to receive the next MegaDeck.



Compound Build-out Method

### Bridging Situations

It is important to remember that MegaDeck is not designed as a bridging solution and should not be considered for crossing large holes or gaps greater than 2ft. In such situations, it is recommended that you consult with an experienced bridge engineer to determine what bridging options can be placed under MegaDeck.

MegaDeck is designed with some inherent flex, both within each mat and between mats. This allows MegaDeck to handle varying ground contours and to conform somewhat to the ground surface. This prevents see-sawing and a fulcrum point that could build stress and potentially damage mats.

### Water Runoff Considerations

Consideration of water run-off is particularly important when dealing with large compound areas. In this regard, it is important to consider building up the subsurface of an area to prevent low spots within the MegaDeck matrix,

where water may gather. Fill dirt or gravel may be brought in or other site preparation work can be done in advance of MegaDeck installation.

Like a sports field, a slightly crowned MegaDeck installation will be unnoticeable to the naked eye; however, it will allow water to flow and runoff along the perimeter of the MegaDeck pad and away from the work area.

Some thought should be given to the amount of water runoff expected from a large area and the ability of the surrounding area to handle the water that runs off of the work pad.



Crowning exaggerated to show runoff

### Geo-textiles and MegaDeck

While not necessary, Geo-textiles are an inexpensive way to speed installation and removal time, as the presence of a geo-textile provides a clean and uniform installation surface and prevents debris or mud from interfering with the MegaDeck connection system. Geo-textiles can be used to provide a barrier between dirt, mud and the mats above, while minimizing the cleaning required upon removal of MegaDeck

Depending on the type of geo-textile utilized and how porous it is, it will help keep mud and subsurface water from seeping up to the top surface and can keep contaminants from seeping down from the jobsite into the ground below.

To use a geo-textile in combination with MegaDeck, simply unroll the geo-textile on the ground surface and install MegaDeck using the standard installation procedures detailed above.

### Transitions and On/Off Ramps

As MegaDeck mats are over 4” thick, it is advisable to build a transition between the access road and the matting material. Use of our molded rubber transition strip is advised, but it is always possible to simply build up the ground surface (using dirt, gravel, or lumber) to provide a transition onto the MegaDeck surface.

We recommend placing 2” thick wooden beams underneath the projecting overlapping flange that exists on two edges of a MegaDeck installation. This will help protect the flange from damage and provide support for heavy loads transitioning onto the mats. Alternatively, mounding dirt underneath the flange will provide some additional support and extend the life of your system.

#### **Double Stacking MegaDeck**

Though generally not necessary, it is possible to double stack layers of MegaDeck to create an ultra-strong access pad over very soft ground. Standard installation procedures should be applied for both layers, except that seam lines should be staggered between the top layer and the bottom layer, providing additional strength and loading capabilities.

Double stacking is suitable for deep mud applications or for areas where greater clearance from a soft ground surface is required.

## **CLEANING AND MAINTENANCE OF MEGADECK**

### **General Cleaning**

Mats are non-porous and the material used in manufacturing MegaDeck will not absorb water, contaminants, bacteria, and other substances. MegaDeck is designed to be cleaned using a high powered pressure washer. Most commercial cleaning agents will not damage the surface, but consideration should be given to environmental concerns when cleaning mats on a jobsite.

In this regard, contaminants such as grease, oil, and lubricants should be removed directly from the mat surface, in advance of mat removal and only ecologically sound cleaning solutions should be used.

### **Snow and Ice Removal**

MegaDeck may be shoveled or plowed with standard snow removal equipment; however, care should be given to avoiding damaging mats with a vehicle-based plow blade. The area most susceptible to damage is the seam line between mats, especially if mats are not fully connected or are unevenly positioned. Care should be made to avoid catching the seam lip or damaging the surface traction pattern of the MegaDeck.

Salt, sand, and other traction aids are appropriate for use on MegaDeck and should be kept on hand to ensure that surfaces do not become slippery with snow, ice, grease, or other lubricants.

## **REPAIRING DAMAGE TO MEGADECK**

MegaDeck is designed to facilitate repair to mats, thus extending a mat’s useable life. The components of MegaDeck that may be repaired or replaced are the metal locking pin receivers, the main seal of lid, the flange seal off lids, and even the main body.

### **Repairing Cracks and Surface Punctures**

Surface punctures as a result of a heavy impact can generally be patched using a hand held plastic extruder (plastic extrusion welder) that is available for purchase directly from Signature or from a third party supplier. These extruders will extrude hot HDPE through a nozzle and the HDPE will bind to the surrounding material to create a seal. This method of repair is ideal for surface punctures, but is not recommended for repairing long cracks or other structural breaks.

Should an entire lid (either the main body lid or the flange lid) need to be removed due to cracking or a puncture beyond repair, simply unbolt the main lid or flange lid from the main body using standard tools. A replacement lid may be ordered as well as replacement mounting hardware (barrel nuts/Chicago bolts) and gaskets if needed. Be sure to replace the seal off gasket around the perimeter of the lid to ensure that liquids are unable to penetrate the mat, and that all bolts are appropriately tightened. Lock Tight should be used when re-screwing bolts together to prevent loosening of bolts over time.

If a puncture exists on the main body of the mat, this may be repaired using the extruder patching method above. Should this method prove inadequate, an entire main body part is available for purchase and existing lids and hardware can be used, thus minimizing the cost to get the such a mat back into service.

#### Repairing Locking Pin Receiver Damage

MegaDeck mats are designed such that the metal receivers placed into each mat can be easily replaced if damaged, thus prolonging the life of a MegaDeck mat. In order to replace the receivers, it is necessary to remove the appropriate lid by unscrewing the through bolts holding the lid to the main body. Once removed, the receiver bolts will become visible and the damaged receiver can be unscrewed using a 9/64" hex key. Once removed, simply replace the receiver with a new receiver, bolt back into place, and replace the corresponding lid, bolting it back in place to the main body. Be sure to replace the gasket material around the perimeter of the lid, to ensure that liquids and other substances do not penetrate the main body.

#### SERIAL NUMBERS & IC (INVENTORY CONTROL) CHIP USAGE

Each MegaDeck Mat is stamped with a unique serial number for easy inventory control and tracking.

Inventory control chips do not come standard with MegaDeck mats and may be ordered at the time of an initial order or retrofitted into an existing MegaDeck mat at a later time. Retrofitting is achieved by removing a single flange lid and inserting the IC chip in the outmost corner of the mat. The space created by the ribbed support structure is ideal for holding a variety of inventory control chip types.

As there are many types of IC/RFID chips available in the marketplace today, it is important to specify the type and brand of inventory control chip to be used at the time of an order. For additional assistance on inventory control chips, don't hesitate to contact our technical team.

#### Limited Warranty

##### MegaDeck™ LIMITED WARRANTY

1. What is covered by this warranty. Signature Systems Group, LLC warrants to the original purchaser only or to those customers or an Authorized MegaDeck Dealer, that the product that is the subject of this sale (a) conforms to Signature Systems Group, LLC published specifications, and (b) is free from defects in material and workmanship. The duration of this warranty is six (6) months from date of sale. If the buyer discovers within this time a failure of the product to conform to specifications or a defect in material or workmanship, it must promptly notify Signature Systems Group, LLC in writing, [but not later than 30 days after expiration of the warranty] of the exact manner in which the product was so defective, the conditions of usage which gave rise to such claims, and deliver to Signature Systems Group, LLC therewith a representative sample exemplifying the claimed defects, for examination by Signature Systems Group, LLC engineers. Should the product prove to be defective as set forth above, then Signature Systems Group, LLC at its own cost and expense shall repair the defective item or replace with new and ship to purchaser, replacement product for all those items demonstrating such defects that are shipped back prepaid to its manufacturing plant in Sanford, FL.
2. What is not covered by this warranty. Signature Systems Group, LLC does not warrant, (a) any product not manufactured by Signature Systems Group, LLC or, (b) defects caused by failure to provide a

- suitable installation environment, (c) damage caused by use of the product for purposes other than those for which it was designed, (d) damage caused by disasters such as fire, flood, loading beyond its design specifications, (e) damage caused by unauthorized attachments or modifications, (f) damage during shipment, storage, mishandling or any abuse by the purchaser. Goods have been manufactured & inspected at our plant with the greatest care. However, damages caused by mishandling during a customer installation can be avoided by due care and attention to installation and shipping instructions.
3. Warranty of title. In addition to the warranties set forth in the previous paragraphs Signature Systems Group, LLC warrants that it has good title to the product free of any encumbrance, and that the product shall be delivered directly from Signature System's factory.
  4. Disclaimer of warranty. The foregoing warranties are in lieu of all other warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.
  5. Limitations of remedies. In no case shall Signature Systems Group, LLC be liable for any special, incidental or consequential damages ("Damages") based upon breach of contract, negligence, strict tort, or any other legal theory. Such Damages include, but are not limited to loss of profits, loss of savings or revenue, loss of use of the product or any associated equipment, cost of capital, cost of any substitute equipment, facilities or services, down-time, the claims of third parties, including customers, and injury to property. This limitation does not apply to damages caused by breach of the warranty of title, nor to claims for personal injury. Some states do not allow limits on warranties, or on remedies for breach in certain transactions. In such states, the limits in this paragraph and in paragraph 4 may not apply.
  6. Time limit for bringing suit. Any action for breach of warranty must be commenced within 12 months following delivery of the goods.
  7. No other warranties. Unless modified in writing signed by both parties, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No representative or employee of Signature Systems Group, LLC, or any other party, is authorized to make any warranty in addition to those made in this agreement.
  8. Allocation of risk. This agreement allocates the risks of product failure between Signature Systems Group, LLC and the purchaser. This allocation is recognized by both parties and is reflected in the price of the goods. The purchaser acknowledges that it has read this agreement, understands it, and is bound by its terms.



Signature Systems Group, LLC  
50 East 42nd Street • 14th Floor  
New York, NY 10017

Toll Free In US 800-709-8181 • +1 212-953-1116 • Fax +1 212-953-1117  
[www.megadeckmats.com](http://www.megadeckmats.com)