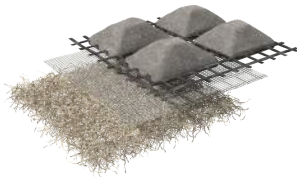


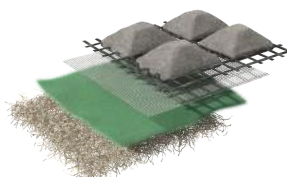
# INSTALLATION AND MAINTENANCE GUIDELINES

**Flexamat® is a Tied Concrete Block Mat with various underlayments.**

**Flexamat® Standard**



**Flexamat® Plus**



**Flexamat® 10NW**



## Flexamat® Widths and Overlaps

Flexamat® is available in widths of 4', 5.5', 8', 10', 12', and 16'. For applications wider than 16', we produce 15.5' wide material with a 12" geogrid extension for mat abutments. Flexamat® rolls can be cut to custom lengths in 1' increments. Typical lengths are 30', 40' and 50'. #3 Rebar U-Anchors or Stainless Steel Zip-Ties are utilized at the seams. The manufacturer or authorized representative will provide technical assistance during installation as needed.

### GENERAL COMPOSITION OF MATERIALS

Blocks	5000 PSI, Wet-cast Portland Cement
Interlocking Biaxial Geogrid	Fornit 30/30 Polypropylene Geogrid with 2,055 lb/ft biaxial strength UV-T Polypropylene Geogrid with 2,055 lb/ft biaxial strength
Underlayment Options	Standard - Curlex® II ECB & Leno Weave Plus - Recyclex® TRM-V, Curlex® II ECB & Leno Weave Fabric - 10 oz Non-Woven Geotextile *More options available upon request, including Net Free underlayment.

### MANUFACTURING VALUES

Flexamat® Properties	Values
Roll Widths	4' 5.5' 8' 10' 12' 16' 15.5' with geogrid and underlayment extensions (for areas wider than 16')
Roll Lengths	30' 40' 50' / Custom
Material Weight	10 lbs./sf
Block Size	6.5" x 6.5" x 2.25"
Percentage Open Area (POA)	30% min.

### PERFORMANCE

Test	Tested Value	Bed Slope	Soil Classification	Limiting Value
ASTM 6460	Shear Stress	30%	Sandy Loam (USDA)	24+PSF
ASTM 6460	Velocity	20%	Loam (USDA)	30+ ft/sec

# SHIPPING, TRANSPORT, STORAGE & HANDLING:

Flexamat® is packaged in rolls for shipment. The material weighs 10 lbs. per square foot. Up to 4,800 square feet can be transported per truck. Rolls are packaged with heavy-duty lifting straps.

## **Note: Heavy-Duty Lifting Straps Included**

No deposit or return required for the lifting straps. A **BASKET LIFT IS THE ONLY METHOD FOR LIFTING ROLLS OF FLEXAMAT.** The lifting system must be appropriately rated for the weight of each roll. This system should include a shackle clevis, two to four eye to eye sling straps (rolls can require 2 to 4 lifting straps), and a three to four leg bridle wire sling with safety latches.



All rolls will be marked with their corresponding width and length. Also, the rolls can be marked with any corresponding section/area per request.

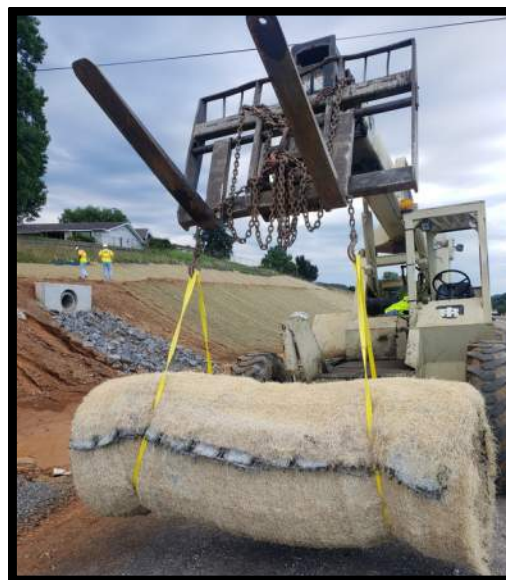
Do not use forks to lift the rolls from underneath. Also, only the lifting straps should be used to lift the rolls.

No chains or cables should be wrapped around the material.

Upon delivery, rolls may be left exposed for up to **30 days**. If exposure will exceed 30 days, the rolls **must be tarped or otherwise covered.**

## **International Shipping:**

Flexamat® is able to be transported via shipping containers for projects overseas. See the demonstration to the right to see how our team loads these containers.



## Tools for Install

### Personal Protective Equipment (PPE)

As a minimum, we recommend having the proper head-protection, eye-protection, gloves and foot protection. This will help minimize the risk of injury on the jobsite.



### Staging Area

Preparing an area to stage the rolls in accordance to the install can help minimize install time.



### Tools Checklist

#### T-Handle Pulling Tool

- Used for adjusting the mat during install



#### Concrete Saw with Diamond Blade

- Used if cutting is required



### OSHA Guidelines

As a valued contractor installing our product, we strongly emphasize the importance of adhering to OSHA (Occupational Safety and Health Administration) guidelines at all times. Ensuring compliance with OSHA standards is not only a legal requirement but also a critical step in maintaining a safe and efficient work environment. By following these guidelines, you contribute to the safety of your team and the overall success of our projects. Thank you for your commitment to safety and excellence.



## SUBGRADE PREPARATION

The prepared subgrade shall provide a firm, unyielding foundation for the mats. The subgrade shall be prepared as detailed on the plans.

Subgrade surface shall be free of any debris, protrusions, rocks, sticks, and roots that would prevent intimate contact with subgrade.

The Flexamat® block has a height of 2.25". When grading next to hard surfaces like a road, sidewalk, or outlet pad, account for the block height when grading to allow for a smooth transition for water to flow from the hard surface onto the top of the Flexamat® blocks.

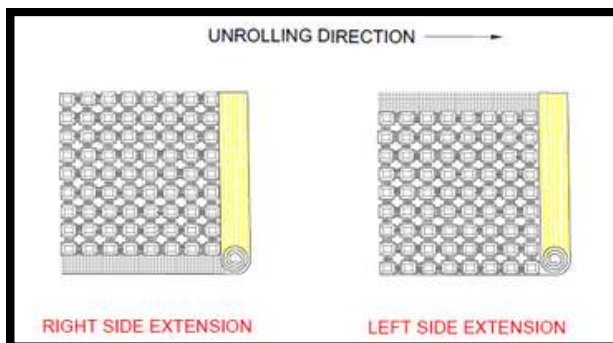
### NOTE:

Before unrolling the Flexamat, apply seed and soil amendments directly to the prepared soil prior to installation of mats. Use seed and soil amendments or topsoil per project specifications.

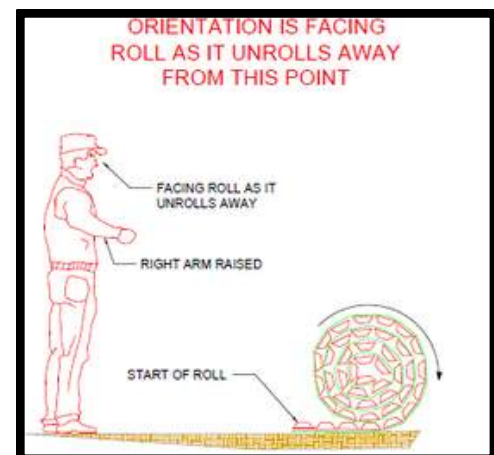
## UNDERSTANDING EXTENSION ORIENTATION

**\*FOR VIDEOS CLICK HERE\***  
or visit [www.youtube.com/Flexamat](http://www.youtube.com/Flexamat)

Stage the Flexamat® for unrolling, positioning the leading edge at the bottom, aligned with the grade on the plans or at the end of the previous roll, following the manufacturer's guidelines. Flexamat can be unrolled down or across slopes.



Hydroseeding The Day of Install (Top)  
vs. 9 Months After Install (Bottom)

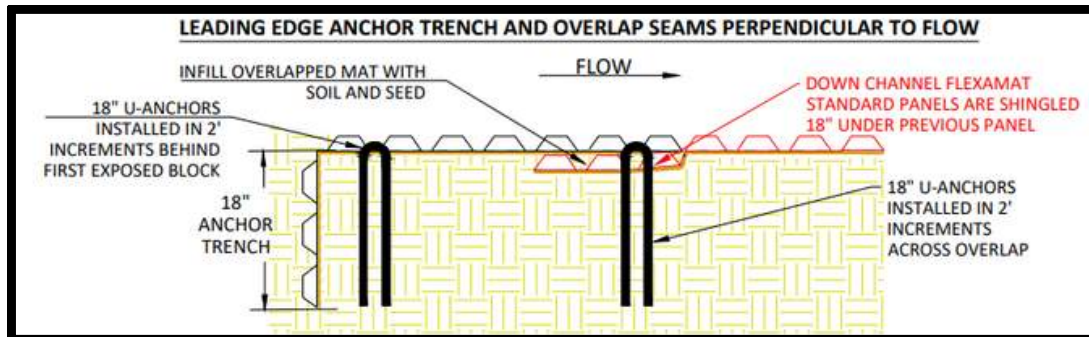


CONTACT US FOR  
INSTALLATION DETAILS FOR  
YOUR APPLICATION

## Overlap Methods

### Parallel to Flow

If the width of Flexamat protection is 16' wide or less, install mats parallel to flow. Use the mat width that matches channel width. For the initial leading edge of the first mat, use an 18" vertical anchor trench. For the next roll, excavate 5" of soil for the overlap in material. Contact us for the specific installation detail for the application on your project.



NOTE: The anchoring details provided above are intended as a general guide. Each project may have different parameters due to varying soil conditions and water flow rates.

### General Overlapping Steps

(Laying mats out parallel to flow)

①



Excavate 5" of soil below at least 3 blocks of the mat already placed.

②



Properly line up the next roll with 3 blocks from the previous roll folded back.

[Pro Tip:  
Overlaps  
YouTube  
Tutorial](#)

③



Fill in the overlap with soil and seed

④



Flip the tail of the mat over the initial leading edge of the new mat

⑤



Secure the overlap with rebar U-Anchors every 2' (Zip Ties every 1')

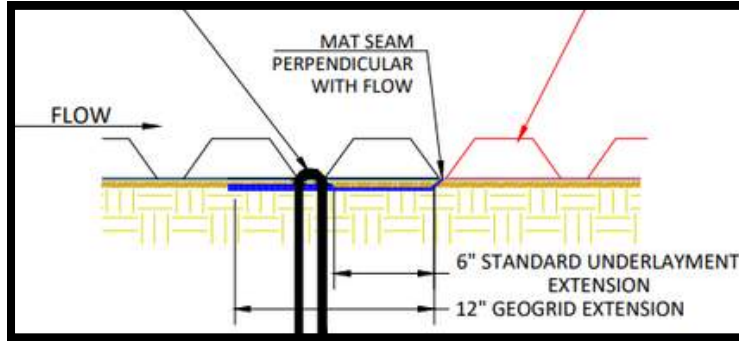


## Perpendicular to Flow

If the width of Flexamat protection is over 16', install the mats perpendicular to flow.  
Contact us for the specific installation detail for the application on your project.

CONTACT US FOR  
INSTALLATION  
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APPLICATION

Overlapping  
with  
Extensions  
Video



NOTE: The anchoring details provided above are intended as a general guide. Each project may have different parameters due to varying soil conditions and water flow rates.



*12\"/>*

### General Overlapping Steps

(Laying mats perpendicular to flow)

①



Once the leading mat is placed, pull back 3 blocks for the overlap area.

②



Position the next mat so that the geogrid and underlayment extension will lay neatly underneath the 3 blocks pulled up from the overlapping mat.

③



Utilizing the T-Handle Pulling tools, adjust the mat to create a flush overlap with the adjoining mat.

④



Secure the overlap with U-Anchors in 2' increments along the seam.  
(Zip Ties every 1')

# Anchoring Information

## Flat Top U-Anchors

**NOTE:**

#3 Rebar U-Anchors are utilized when installing Flexamat® Standard or Flexamat® Plus. Install 18' U-Anchors in 2' increments behind the anchor trench and across mat abutment seams. It is important to utilize **flat top** u-anchors when installing Flexamat®.



↳ *U-Anchors laid out in 2' increments along the abutment seam*

Material	#3 Rebar
Leg length	18"
Leg spacing	4"

## Stainless Steel Zip Ties



**Color:**  
Silver/Stainless

**Tensile Strength:**  
300 lbs.

**Max Bundle Diameter:**  
5.91" / 150mm

**Thickness:**  
.009" / 0.2286mm

**Width:**  
.31" / 7.87mm

**Nominal Length:**  
19.89" / 505mm

**Package Quantity:**  
100

**Material:**  
316 Stainless Steel

**Product Type:**  
Stainless Steel Cable Ties

**Style:**  
Roller Ball

**Product Description**

- 316 Stainless Steel
- Non-Flammable
- Snag proof, corrosion resistant, UL Listed E227552.
- Roller ball stainless steel cable ties.
- Self locking design for fast and secure installation.
- Fully enclosed head prevents dirt or grit from interfering with locking mechanism.
- Smooth rounded edges for safe handling.
- Suitable for all types of indoor and outdoor applications.



↳ *Stainless Steel Zip Ties installed with 1' increments along abutment seam*

**NOTE:**

The stainless steel zip ties are primarily utilized in applications where Flexamat® 10NW is installed. The zipties shall be placed in 1' increments along the abutment seam while encompassing 3 cords of geogrid.

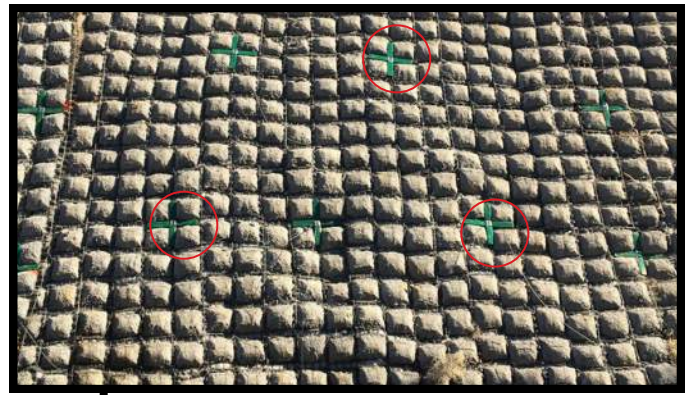


## Terra-Lock™ Earth Percussion Anchors

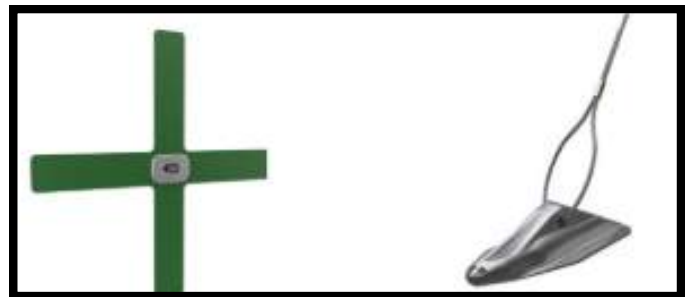
Terra-Lock™ Earth Percussion Anchors are designed to provide drive efficiency and maximize load capacity across a wide range of applications. The Terra-Lock™

3CRS load bearing plate is designed specifically for Flexamat Concrete Block Mats and is made of corrosion resistant plastisol coated Steel Zinc Terra-Lock™

anchor assemblies are all preassembled with specific anchor heads, cable tendon, and bearing plates.

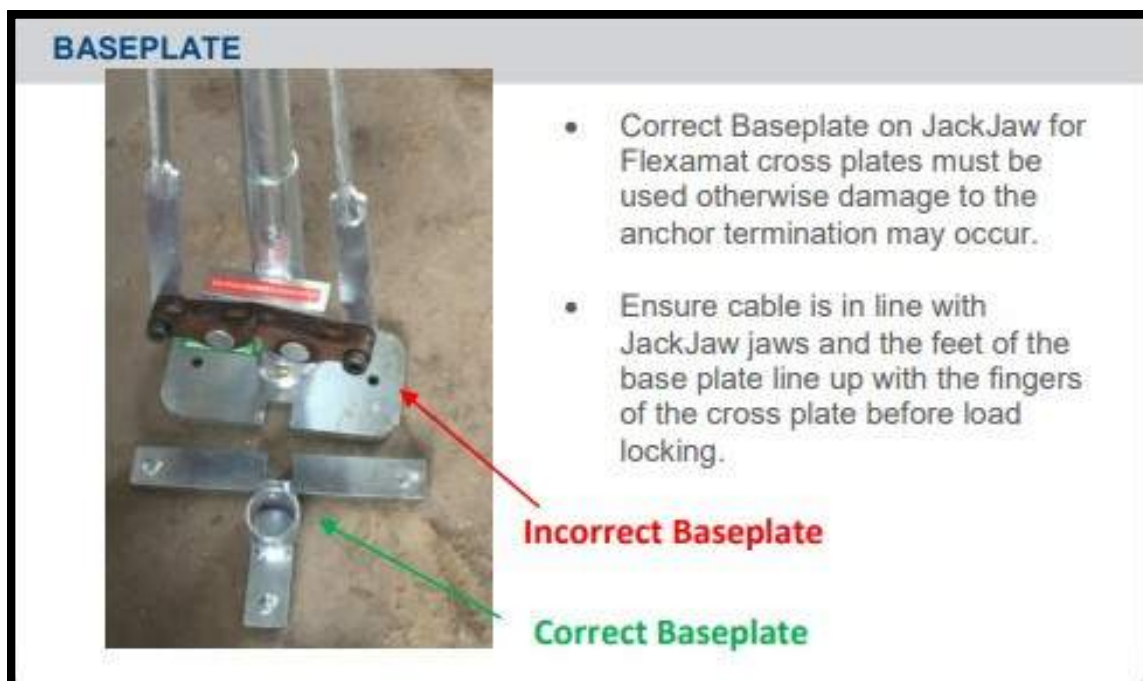


→ *Earth Percussion Anchor Pattern*



## Jack Jaws

Note: Percussion Anchor installation requires Jack Jaw with “T” Baseplate to properly load anchor.





## MAINTENANCE

### Key Points for Inspections and Maintenance:

- Do not spray with weed or grass killers. Use a selective herbicide to control invasive plants if necessary.
- Maintain stabilization of adjacent areas. Repair any rills or gullies that can affect upstream/downstream or top of slope terminations.
- Maintain adjacent vegetation. Exposed soil above and along the sides of the Flexamat should be seeded or covered.
  - Routine maintenance can include mowing on stabilized areas



Before Mowing



After Mowing

### If mats need to be removed:

- Sections of the mat may be removed with a knife, hatchet, or concrete saw.
- If mat removal is temporary, the cut section can be folded or rolled to the side to access the subgrade. If the section needs to be completely removed, roll up the section of mat for removal. Lay lifting straps on the ground behind the cut section to roll the section of mat onto to then lift and remove.

### Removed section can be reinstalled:

- Seed the prepared subgrade where mat was removed.
  - Replace the underlayment
- Reinstall Flexamat section. Once section is installed back into place, secure the mat seams by installing 18" U-Anchors in 1' increments or 20" stainless steel zip ties in 6" increments. Anchors and zip ties shall encompass 3 cords of geogrid from each mat.

## GET IN CONTACT WITH US TODAY



Need more information?



Contact us at [info@flexamat.com](mailto:info@flexamat.com)