

GlasGrid® Installation Guide

Pavement Reinforcement Mesh | Installation Procedures for GlasGrid® 8501, 8502, 8511, 8512 & 8550

This document is intended to provide guidance on the method for installing the GlasGrid® Pavement Reinforcement System and should be read in conjunction with the project specifications. Please contact your Tensar representative to clarify any conflicts that may arise between any documents or if you wish to verify any of the content within these guidelines.

ROAD PREPARATION

Complete all crack sealing, pothole filling, base repairs, leveling course installations, and any other necessary repairs.

ROAD SURFACE CONDITION

Surface must be:

- Dry
- Clean and dust-free
- Between 5°C (40°F) and 60°C (140°F)

If a tack coat is specified, it may be applied before or after the installation of GlasGrid, depending on site conditions. Tack must be completely cured prior to paving.

PRODUCT STORAGE

In order to preserve adhesive properties GlasGrid products must be stored inside a dust-free environment and kept dry at the job site.

TWO EASY-TO-PLACE METHODS

Fabric Tractor Installation

The first and more common approach involves mechanical placement, typically using a fabric tractor modified to front-mount the GlasGrid material (Figure 1). The tractor is typically used for full-width installations but can also be used for detail repairs that are sufficiently large.

Fabric Tractor Procedure:

1. Load roll onto front of tractor. Always load the red-colored end of the core on the same end each time to allow placement of GlasGrid product with the self-adhesive side down.
2. Roll with rubber tired roller or with specially designed fabric tractor to activate the pressure sensitive adhesive.
3. If a tack coat is specified, apply tack coat and allow to cure.
4. Pave.

Manual Placement Installation

An alternative installation method involves manual placement of the GlasGrid product (Figure 2). Although the product is physically placed by hand, it is highly recommended that the GlasGrid roll be mounted on the back of a truck or other vehicle to help maintain tension during placement. Manual installation is more commonly used for localized areas of road.

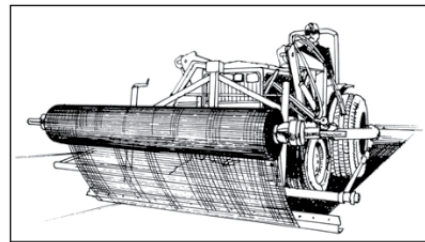


Figure 1: Fabric Tractor

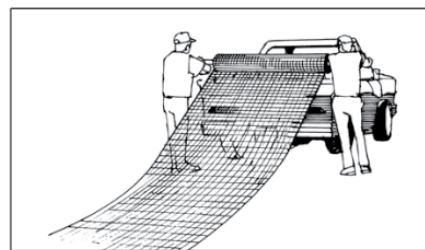


Figure 2: Manual Placement Procedure

Manual Placement Procedure:

1. Load roll on an appropriate dispensing device on the back of a pick-up truck. To ensure that the GlasGrid product will always unroll with the sticky side face down, load so that the red-colored end of the core is on the same side each time.
2. Secure the roll on the dispensing device with locking device.
3. Secure start of roll on pavement as the truck slowly moves away.
4. For shorter pieces pull GlasGrid product off roller to desired length. Cut with utility knife and lay by hand.
5. Roll only with rubber tired roller. Roller must be kept clean.
6. If a tack coat is specified, apply tack coat and allow to cure.
7. Pave.

SPECIAL INSTALLATION CONSIDERATIONS

- A GlasGrid System representative is recommended to be present during the initial days of installation.
- Because fiberglass is considered a skin irritant, workers should wear gloves while handling the GlasGrid product.
- Lay GlasGrid material over ironworks, roll, and then cut using a sharp utility knife.
- Whether the GlasGrid System is placed mechanically or manually, there are several general requirements to consider:
 - » The GlasGrid product must be installed under sufficient tension to reduce or eliminate any ripples. If ripples do occur, they must be removed prior to paving by pulling the GlasGrid product tight.
 - » On curves with tight radii, cut the GlasGrid product in short sections to reduce or eliminate ripples (Figure 3).

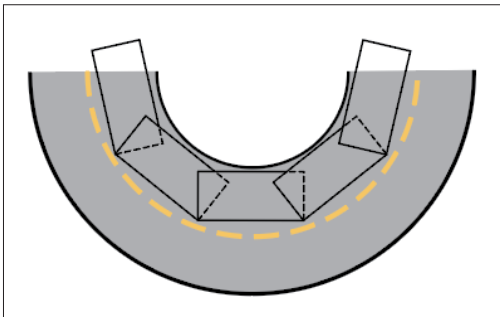


Figure 3: Cutting and overlapping GlasGrid around a curve

- » Transverse joints should be overlapped in the direction of the paver by 3-6 in. (75 to 150 mm); longitudinal joints should be overlapped by 1-2 in. (25-50 mm). The overlapping of two lengths of GlasGrid is shown diagrammatically in Figure 4.

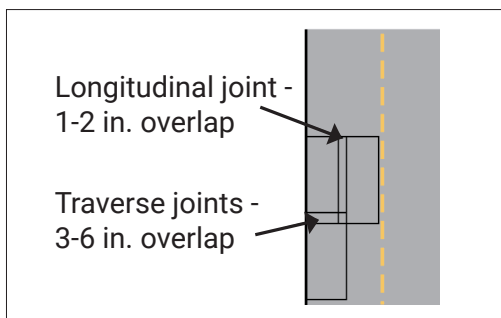


Figure 4: Overlapping GlasGrid across transverse or longitudinal joint

- » The tires of all construction vehicles must be kept clean to avoid picking up the GlasGrid material during installation.
- » Construction and emergency traffic may travel over the GlasGrid material once it has been placed and rolled, but turning and/or braking must be avoided at all times. Any damaged sections caused by construction traffic must be removed and patched prior to paving. It is also important that the GlasGrid System be kept free of mud, dust and other debris during construction.

TEST FOR PROPER ADHESION

The following procedure can be used to determine whether sufficient adhesion exists between the GlasGrid and the underlying asphalt:

- Cut a square-shaped sample of the GlasGrid material approximately 1m² (1 sq yd) in size.
- Place the sample on the road surface to be paved and under the same conditions.
- Apply adequate vertical pressure to fully activate the pressure sensitive adhesive e.g., by use of a rubber tired roller or by other means.
- Insert the hook of a spring balance under the center of the GlasGrid sample (Figure 5).
- Pull the spring balance upward until the sample starts to pull loose, and record the gauge reading.
- In the event that 20 lbs (9 kg) or more force is required to pull the sample up from the road surface, sufficient adhesion has been achieved to support typical paving operations. Therefore the placement of GlasGrid may proceed.

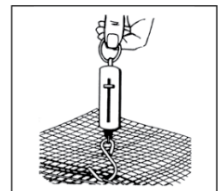


Figure 5

In the event that the sample does not have sufficient adherence, identify the cleanliness or moisture issues present and resolve them before installing the rest of the GlasGrid material.

NEED INSTALLATION ASSISTANCE?

For additional installation assistance on the GlasGrid System, please contact Tensar. Our team can connect you with your local representative.

800-TENSAR-1 | tensarcorp.com | info@tensarcorp.com