

SUMMARY OF OUR RECOMMENDATIONS

1. Site Storage And Handling

mastaGRID® geogrid rolls that are more susceptible to UV effects are packaged in heavy duty plastic wrapping that is PTFE UV resistant. Each roll is labelled with an identification code, width, length and unique roll batch number.

To ensure the geogrid properties are not negatively impacted in any way, appropriate site storage and handling procedures should be followed.

- Where applicable, store geogrid under cover and suspended off the ground.
- When installing mastaGRID rolls on slopes or embankments use the assistance of the Geomasta 2-part spreader bar (Please contact us for further details).
- mastaGRID PET rolls should not be left exposed or uncovered for more than 14 days, however mastaGRID PP grids will not be affected if left exposed for up to 45 days
- Damaged mastaGRID rolls, before or during installation should be replaced to ensure the strength of the geotextile isn't affected.
- Proper replacement shall consist of replacing the affected area and adding at least one metre additional geogrids to all sides of the affected area. (Refer to Figure 4.1 - HS Woven Replacement)
- Before construction vehicles/ equipment should drive on the HS Woven it should be covered by a minimum of 200mm uncompact fill. For site specific requirements please seek the advice of a geotechnical engineer.

2. Subgrade Preparation And Installation

Subgrade shall be prepared prior to placement, providing a level and uniform ground surface, with appropriate clearing and grubbing performed to accomplish this. Also refer to the project documents as additional preparation could be outlined in them and may be required.

Where applicable in a subgrade improvement application, mastaTEX geotextile are to be installed as a separation layer below the geogrid to segregate subgrade and fill layers.

mastaGRID shall be installed in accordance with the lines and grades shown on the plans and specifications. All wrinkles and folds must be removed. When required, the mastaGRID PET may be pretensioned to eliminate slack, this is particularly applicable to uniaxial products.

3. Overlapping

Sufficient overlap width is required between mastaGRID rolls to ensure a constant tensile strength is maintained across all joins. The amount of overlap depends primarily on the subgrade conditions and the potential for equipment to cause ruts.

Subgrade strength and the CBR value can be used as a guideline for the minimum overlap required – see table below.

Recommended Minimum Overlap Requirements As Per MRTS58 8.2

CBR	MINIMUM OVERLAP
>2	300 - 450mm
1-2	600 - 900mm
0.5 - 1	900mm
<0.5	Advice from Engineering and Technology Branch to be obtained
All roll ends	900mm
All woven geotextiles	1000mm

4. Mastagrid Replacement

- Damaged mastaGRID rolls, before or during installation should be replaced to ensure the strength of the geotextile isn't affected.
- Proper replacement shall consist of replacing the affected area and adding at least one metre additional geogrids to all sides of the affected area. (Refer to Figure 4.1 - Grid Replacement)

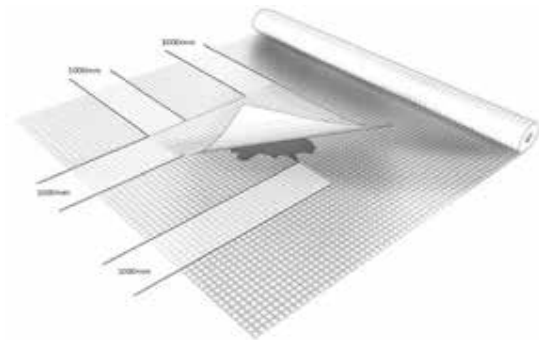


Figure 4.1 - Grid Replacement

5. Fill Placement

Care shall be taken to ensure that mastaGRID geogrids don't separate at the overlaps during construction. Road base material shall be placed in lift thickness as shown on the plans. Before construction vehicles/equipment should drive on the geogrid it should be covered by a minimum of 200mm uncompact fill. For site specific requirements please seek the advice of a geotechnical engineer.



Figure 5.1 - Minimum fill thickness

Reference:

- RMS R63 - Geotextiles
- RMS R67 - High Strength Geosynthetic Reinforcement

- MRTS58 - Subgrade Reinforcement Using Pavement Geosynthetics
- MRTS100 - High Strength Geosynthetic Reinforcement In Road Embankments