



■ Installation Guidelines for Segmental Retaining Walls

□ **Storage and Handling**

Exercise care to prevent damage to the GX Geogrid, the wrapping, core and the label during unloading or transferring of the product. If the GX Geogrid is to be stored for extended periods of time, the geogrid should be located and placed such that the integrity of the geogrid, wrapping, core and label are maintained. Store the material off of the ground while laying flat or standing on end. Keep the GX Geogrid rolls covered and protected from ultraviolet light, chemicals (strong bases and strong acids), extreme heat or flame and avoid damage by animals or humans.

□ **Site Preparation**

Before placing GX Geogrids, excavate to the lines and grades shown on the project grading plans and clear the ground surface of all debris or as directed by the design engineer.

□ **Geogrid Installation**

1. Install all materials at the proper elevations and orientations as shown on the construction plans or as directed by the project engineer. The segmental concrete retaining wall units and geogrid should be installed in strict accordance with the block manufacturer's recommendations.
2. Overlap of the geogrid in the design strength direction (perpendicular to the wall face) is not permitted. Each length of geogrid must be one continuous piece of material.
3. All geogrid should be installed under tension in the design strength direction. A nominal tension should be applied to the geogrid and maintained by staples, stakes, or hand tensioning until the geogrid has been covered by at least 6 inches of structural fill. Adjacent geogrid panels should be butted on one another to achieve 100% plan view coverage.
4. Place the reinforced backfill in a maximum compacted lift thickness of 8 inches. Reinforced backfill should be compacted to a minimum of 95% of the standard Proctor density (ASTM D698) and at a moisture content within 2% of optimum or as required in the construction specifications or as

directed by the project engineer. Only place the quantity of geogrid that can be backfilled on that day to limit damage to the installed geogrid.

5. Backfill should be placed, spread and compacted in a manner that limits the development of wrinkles or movement of the geogrid and the segmental retaining wall facing units.
6. Only walk-behind compaction equipment should be allowed within 5 feet of the back of the segmental retaining wall facing units.
7. Tracked construction equipment should not be operated directly on the geogrid. A minimum backfill thickness of 8 inches is recommended prior to operation of tracked vehicles over the geogrid. Turning of tracked vehicles within the reinforced zone should be kept to a minimum to prevent displacing or damaging the geogrid.
8. Rubber tire equipment may pass directly over the geogrid at slow speeds (less than 5 miles per hour). Sudden braking and sharp turning while passing directly over the geogrid should be avoided.
9. All drainage fill and drainage medium materials should be placed in strict accordance with the construction plans or as directed by the project engineer.
10. Drainage collection pipes should be installed to maintain gravity flow of water outside of and away from the reinforced zone as designed by the project engineer.

□ **Disclaimer**

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