

GeoMat™ Leaching System Installation Instructions

GeoMat must be installed according to applicable regulations. If unsure of the installation requirements for a particular site, contact your designer, engineer, regulatory agent or Geomatrix Systems, LLC.

Note: Do not install the system in wet conditions or in overly moist soil; this can cause smearing and compaction of the infiltrative surface.

1. Mark out location and elevations of the septic or pretreatment tank, pump tank and leaching system. Set stakes to aid in locating the corners and center of the leaching system. For systems designed on sloping sites, mark reference points on grade stakes according to the designed invert elevation for each GeoMat lateral. Ensure trees and shrubs with a drip line over the system are removed or utilize root guard fabric to prevent root intrusion.

2. Excavate to the desired elevations to accept the GeoMat and any associated fill; if utilized. The trench bottom or fill must be level. Rake out fill, if utilized, for bed configurations. With native soil installations and with trench configurations, rake bottom and sides of excavation to ensure no smearing of fines is present. Remove any cobbles, stones and other debris greater than 2". A 2-3" layer of ASTM C-33 sand may be placed directly under GeoMat when soil conditions necessitate. If required, have the prepared excavation and any specified backfill inspected by the system designer or regulatory agent prior to GeoMat placement.

Note: In fine textured soils prone to compaction, avoid walking in the bottom of the excavation to prevent compaction and loss of soil structure



3. Roll out GeoMat. Cut the GeoMat using shears to desired length.



4. Install GeoMat distribution piping into the mat by feeding it in from one end. With gravity pipes, the perforations are oriented at 5 and 7 o'clock. With pressure distribution systems, the flat section of the GeoGuard™ orifice shield must lay on the GeoMat and the flow of effluent must be directed downwardly into the GeoMat core. Be certain to glue distribution pipe together using a two part solvent weld glue (purple primer and glue), and SCH40 pressure rated coupling, according to manufacturers specifications. Do not allow dirt and debris to enter piping components.



5. Close/seal ends of GeoMat using an Arrow P22 stapler (or equivalent). Where distribution piping passes through the end of the GeoMat, it should be centered; staple close to each side of the penetrating pipe.

If assembling the GeoMat components outside of the prepared, level, excavation, trench or bed, carefully slide mat along ground and into place. Care should be taken to prevent damage to the solvent weld joints in the distribution pipe when moving the fully assembled GeoMat. Each GeoMat lateral should be level along its length.

6. With pressure distribution systems, install GeoMat distal port on the distal end of each lateral. Distal port should ideally be 18" past the end of the mat. Distal end of pipe should be raised slightly to allow effluent to drain from distal head port back to orifices and into mat. Install distal port so that the top of the distal port is below grade. Install distal port access box over distal port.

7a. For gravity systems connect the GeoMat distribution laterals to the septic tank, secondary treatment unit and/or distribution box.

7b. For pressure distribution connect laterals to the pump tank or pressure manifold. The pressure manifold can be located in the pump tank or between the leaching system and the pump tank. For systems with laterals at different elevations, flow equalization valves are placed between the pump and laterals to allow balancing of distal head, which results in equal flow to all laterals. The pressure manifold and equalization valves can be located in the pump tank for ease of use and protection from damage. Alternatively it can be located anywhere between the pump tank and laterals.

8. Backfill excavation and/or place specified cover over the GeoMat. Uniform cover depth over the drain field results in consistent oxygen transfer to the entire system.

9. Cover material should be graded to prevent excessive storm/surface water from infiltrating the system. Seed the disturbed area immediately after installation to stabilize soil.

Please contact us with any questions.



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