

Geomatrix GeoU™ Leaching System Installation Instructions

These instructions serve as a general overview for the Geomatrix GeoU™ Leaching System. These installation instructions, associated drawings and all applicable standards and regulations of the Connecticut Department of Public Health should be strictly adhered to.

Contact Geomatrix for non-residential applications and for systems over 2,000 gpd.

Geomatrix Systems, LLC (Geomatrix) advises the Designer, Installer and Owner of the Geomatrix Leaching System that oxygen transfer rates should be evaluated to ensure sufficient oxygen is available for the leaching system to operate properly for the actual wastewater flow and strength. Geomatrix advises that when oxygen is limiting, proper treatment and long term hydraulic function are jeopardized. GEOMATRIX SPECIALLY DISCLAIMS ALL RESPONSIBILITY FOR ANY AND ALL FAILURES, DAMAGES, CLAIMS OR LOSSES THAT RESULT FROM INSUFFICIENT OXYGEN.

Note: Do not install the system when soil conditions are unsuitable.

1. Layout system.
2. Prepare site and remove any trees with a drip line falling within 10 feet of the leaching system to help prevent root intrusion.
3. Locate and mark out location of trenches, piping and other components. Set stakes for location and elevation reference points.
4. The GeoU system should be utilized with an appropriate sized two compartment septic tank.
5. Excavate trenches to design elevation plus a minimum of 2". Trenches should be level end to end. Trenches should be excavated a minimum of 8" wider than the Product width.
6. Rake bottom and sides of trench if smearing of fines is present. Remove any large stones (3"+) and other debris. *Note: When soil conditions necessitate, avoid walking in the trench bottom to prevent compaction and loss of soils structure.*
7. Spread a minimum of 2" of ASTM C-33 sand or approved equivalent (sand), in bottom of trench to bring back up to design elevation. Use a transit or laser level to confirm that the sand is level and smooth. Walk the sand in to compact it. *Note: Use of a mechanical compactor should be avoided when soil conditions could be negatively impacted.*
8. Set the first GeoU unit into the trench. Units with internal frames (GeoU 636, GeoU1236, GeoU672 & GeoU1272) should be placed in the trench with strapping, cardboard corner protectors and blue spacers in place.
9. Install additional GeoU units into the trench to allow for the required design length.
10. Fold the long flap on the terminal end of the unit so as to push against the inlet end of the adjacent unit. This direct contact helps to maintain hydraulic communication between adjacent units. When backfilling the sand around the units, be careful to prevent sand from migrating between the flap and the adjacent unit.
11. Tall units can be secured together using tie wraps if necessary.
12. Glue distribution pipe together using two-part primer and solvent weld glue.
13. Pull/push units together to fully engage distribution pipe into the coupling on the adjacent unit.
14. Cap or connect if units have 2 pipes (per engineers plan) the distal end of GeoU distribution pipe.
15. At this point if installing internal frame units, cut strapping and remove the strapping and the

- cardboard corner protectors – Leave blue spacers in place until after sand has been placed.
16. Carefully place sand over and around GeoU units, uniformly filling in 6” lifts.
 17. Between each lift, using standard 2x4 wood stud, compact sand in and around the GeoU units.
 18. If installing internal frame units, remove the blue spacers – holes are provided in spacer for easy removal.
 19. Fill any remaining voids with sand, to a level a minimum of two inches above the GeoU fabric material. Be careful to fill and compact the area below distribution pipe.
 20. Connect GeoU distribution pipe to septic tank, pump tank and/or D-Box using appropriate fittings.
 21. Install SoilAir™ system. Air supply lines for typical residential homes up to 5 bedrooms should be a minimum of 2” sch. 40 PVC.
 22. After all inspections by regulatory agency and Engineer (if required) cover the system with clean fill (no rocks or debris) as uniformly as possible with a minimum cover depth of 6”.
 23. Grade area over and around the system to shed storm water and sheet flow
 24. Seed and hay as soon as possible to prevent erosion.

NOTE: If multiple rows are utilized, it is recommended to equally feed the rows, parallel distribution, to evenly distribute the effluent over the whole system.

NOTE: If installing leach field in a fill section, top soil and other impermeable layers must be removed from under the entire fill section or tested to assure suitability.

NOTE: When system is being dosed by a pump station, float chamber, or siphon chamber the dose volume should not exceed the internal void space of the Product. A dose should ideally be between 25 and 75 percent of the interior void space.

Model	ELA	Storage Volume per Module Maximum	Storage Volume per Module at 25% Capacity	Storage Volume per Module at 50% Capacity
GeoU 636	8.0	6.8 Gallons	1.7 Gallons	3.4 Gallons
GeoU 1236	14.8	13.0 Gallons	3.3 Gallons	6.5 Gallons
GeoU 1836	21.7	19.2 Gallons	4.8 Gallons	9.6 Gallons
GeoU 672	15.5	12.8 Gallons	3.2 Gallons	6.4 Gallons
GeoU 1272	28.8	24.7 Gallons	6.2 Gallons	12.3 Gallons
GeoU 1846	27.4	24.0 Gallons	6.0 Gallons	12.0 Gallons
GeoU1851	29.9	26.4 Gallons	6.6 Gallons	13.2 Gallons
GeoU 3921	27.4	25.3 Gallons	6.3 Gallons	12.7 Gallons
GeoU 3926	29.9	30.4 Gallons	7.6 Gallons	15.3 Gallons

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Please call Geomatrix Systems with any questions – 860-510-0730
or visit our website at www.geomatrixsystems.com