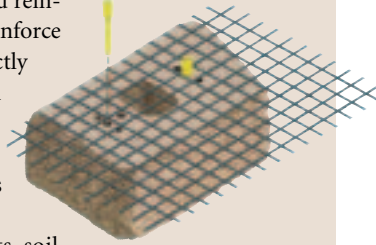


GEOGRID SOIL REINFORCEMENT

Taller walls or walls supporting surcharge loads require the use of geogrid reinforcement material to reinforce a cohesive soil mass directly behind the retaining wall and provide connection to the concrete facing units. Geogrid properties and wall design require knowledge of wall heights, soil properties (Phi angle and moist unit weight), surcharge loads and manufacturer's requirements for specific geogrid types and strength capabilities. For general design of limited height walls, refer to the "Design Charts" in the back of this brochure. For conditions beyond these basic charts, consult a qualified engineer. To install geogrid into your wall, continue the installation process with the following steps.



Excavate Reinforced Soil Area: Remove existing soil in the reinforced soil zone to the maximum embedment length of the geogrid design. Level and compact soil behind the wall prior to placement of each geogrid layer.

Cut Geogrid: Cut sections from the geogrid roll to the specified length (embedment length) by design charts or engineers design analysis. Check manufacturer's criteria for biaxial or uniaxial geogrids. In most cases, the correct orientation is to roll the geogrid perpendicular to the wall face.

Install Geogrid: Place geogrid over the Country Manor shouldered pins already in place. NOTE: Allow approximately 3" (75mm) of geogrid material to rest on the unit top surface ahead of the pin (from pin to face of wall). This will ensure that the next course above will be fully supported on geogrid. Place all sections of geogrid, abutting each other side-to-side as per manufacturers instructions.

Secure Geogrid: Pull the pinned geogrid taut to eliminate loose folds. Stake or secure the back edge of geogrid before backfill and compaction. As possible, compact from back of wall area towards embankment to avoid loosening geogrid or putting compaction pressure on wall. Remove stakes, as required, once backfill is placed.

Install next course of Country Manor units. Follow steps 3-5 (on page 5) until next geogrid layer or completion of wall.

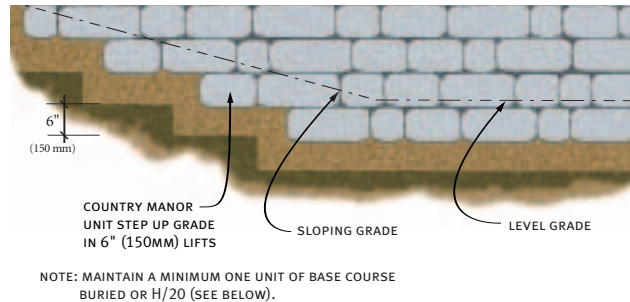
STEPPED FOOTING (Leveling Pad)

Leveling pad options:

- Compacted free draining granular fill (inorganic)
- Crushed stone road base
- 3/8" - 3/4" crushed stone
- Non-reinforced concrete (2000 psi)

Leveling pad thickness: 6" (150mm) ± granular materials
3" (75mm) ± concrete option

Always start wall at lowest elevation of site location where wall is to be constructed. Build step-ups in leveling pad to match 6" Country Manor unit thickness. When using non-reinforced concrete for the leveling pad option, it is critical that the step-ups exactly match the Country Manor unit thickness! With a concrete leveling pad, there are few options for correction if the step-up is built higher than the unit height.



GENERAL NOTES:

- Units may vary due to texturing processes and unit sizes by region. Verify unit type, size, weight availability by region. Units may vary up to 1" ± (25mm) due to texture variations.
- Clean out pin holes and receiving channel as required to assemble wall. During manufacturing, some concrete crumbs may deposit in these areas and should be removed to permit pins to be placed in the appropriate holes and receiving channel.
- Cut or split units as required (with a mason saw, hydraulic break or chisel and hammer) for corners, caps or wherever units need to be altered to allow construction to be finalized. (Cuts produce smooth finish; splits produce textured finish.)
- When cutting concrete units, always wear safety goggles, gloves and filter mask per manufacturer's recommendations.
- Use Keystone Kapseal construction adhesive for all units in parapet walls, columns, etc. where wall is built freestanding (not retaining soil). Use vertical bead of adhesive between units in freestanding wall to avoid daylight view through wall units. Use adhesive as required at 90° corners or where pins do not interconnect units.

