REINFORCED WALLS

NOTE: *The following is an example of a typical GeoStone installation. Not all walls require the same techniques. GeoStone recommends consulting with an Authorized GeoStone representative or professional installer before undertaking such a project. Check with your local municipality before starting any construction project for applicable regulations and permits that may be required.*

(1) Begin by digging a two foot wide trench. Excavate all loose soils and native rock until hard original ground is reached. The footing will be supporting the entire weight of the wall.

(2) The footing depth will vary based on the the height of the wall. Rule of thumb is 1 inch of embedded block per vertical foot of wall height is required. Place four to six inches of crushed rock (#78 or #8910) in the footing and level for the wall foundation.

(3) As preparation of the footing continues, remove all large rocks and use a vibrating plate tamp to achieve proper compaction. Get footing as smooth level, and compacted as possible.

(4) Run a string line for straight walls. This willlleip in the align ment of the first course. Use a cement trowel to smooth out base prior to setting the first block.

(5) When laying the first course, level the block front to back and side to side with a two foot carpenter's level. <u>It is very important that the first course be level and placed on a compacted footing.</u>

(6) It is always a good idea to shoot grades from time to time to ensure your wall is maintaining the correct level.

(7) Align and batter each course prior to core filling with rock. Batter means setting each course back 1/4 - 1/2 inch behind the course below as seen in the picture above. On straight walls, use as a string line. In curves, visually align the wall to achieve the desired appearance.

(8) It is recommended that the cores of the block be filled with a #67 or #78 stone no less frequently than every three courses. This same stone is recommended for the backfill as well.

(9) After core filling the block, use a rod to drive down into the cores to assure a thorough core fill. Backfill should be level to top course of block.

(10) Compacting the backfill is very important. This provides additional resistance to pressures exerted on the wall and prevents settlement. Repeat this process after each backfill.

(11) Sweep <u>ALL</u> rock and gravel for the tops of the blocks before laying down next course of geogrids. Any variance in height caused by rocks between courses will cause unsightly gaps. Backfill area should encompass entire proposed grid length area.

(12) Next lay out the georids. Their length will depend on the wall height. Rule of thumb is no less than 75% of wall height (no shorter than 4") and no less frequent than every 2 vertical feet.

(13) After laying out the grids, place another course of block down on top of the grids, align, then core fill and backfill. It is important that the grids be stretched tight prior to placing rock fill.

(14) Finish the wall with the Wall Cap product. Adhere Wall Cap to the last course of block with outdoor construction adhesive.