VARDEN BLOCK: INSTALLATION INSTRUCTIONS
FOR SLOPES AND RETAINING WALLS

Video installation guide available on our YouTube channel. Please read through all instructions before beginning.

DESIGN LAYOUT & SITE PREPARATION

- Once you have determined where your wall needs to be placed, dig a trench for your base course 8-10 inches deep (6 inches for the buried blocks, and an additional 2-4 inches below that for your base rock or sand).

BASE COURSE

- Fill the bottom 2-4 inches of your trench with fine crushed rock or sand that can be easily compacted with a tamper or similar tool.
- Compact the crushed rock or sand, then top with an inch or two of sand to help with leveling as you place the block. (see details for drainpipe placement if desired)

BLOCK PLACEMENT & LEVELLING

- If using the side rails, snap both into receptors slots and secure them before setting block.
- Place Side Rail in marked receptor on blocks, press until the tabs snap into the receptors.
- Place your first row of block 9 inches apart. (each side rail can also serve as a 9" spacing gauge)
- Level each block front to back and side to side.
- If the blocks are not quite level, lift the blocks to push some sand underneath or tap high end into base sand, and adjust to level. See Fig. 4
- Continue levelling along the line from one end of the wall to the other. Pin the blocks in place with a wire sod staple to prevent kicking it out of positions (optional).

Tip: For best results, use longest level possible

PLACING THE UNIT BACKFILL

- Place compost or blended growing media into the trough of each block (behind the face) and into the space between each block on the course.
- Soil movement is prevented by cutting a small piece of filter cloth to lay on the inside bottom of the block prior to placing unit backfill, if its a concern.
- Fill the space up to the top of the side rails and then step on the material to compact it.
- Top off the media and step on it again until it is level with the side rails or above and then strike if off level to allow stacking of the next course of block so that they rest level on the block below.
- Make sure all blocks on each course are filled completely, then backfill and compact the area behind the blocks with fill, clean free of roots, debris, rocks, etc. or use limestone or sand.

STACK SUCCESSIVE ROWS

- Start your next row, evenly staggering blocks on top of the previous row.
- Each upper block rests on the inside rails of two blocks below.
- Place the entire row or course of block, backfill, compact, strike off excess, repeat to the desired height of wall.
- Take care to backfill and compact the backfill behind the filled block courses as the wall facing comes up in height.

REINFORCEMENT GRIDS (for walls over 3-ft tall)

- Walls over 3-ft tall require reinforcement grids. (Mirafi 2XT or Synteen SF20)
- Geogrids may be used, placing layers inside the blocks fill pocket bottom.
- Starting with the 2nd row, place the grid layers in the blocks and roll back flat.
- Backfill the blocks first, then backfill over the grids to the full depth of cut area.

- Backfill and compact the fill over the grids up to the elevation of the top of the blocks side rails, before placing the next course of blocks. Repeat to top of wall.

CORNERS/CURVES – Side Rails

- Straight walls with no curves or corners may be built without the snap-in side rails if desired.
- Curves and corners will require the blocks to radiate to manage the wall configuration and the spacing between them will vary. (**see detail sheets)**

- Inside curves will start with base blocks nearly touching and will get further apart as the wall goes up.
- Outside curves will start with base blocks as far apart as possible and will get closer together as wall goes up.

PLANTING

- VARDEN BLOCK walls and slopes are designed from their inception to be planted and grown over. The system is intended to be the most reliable means available for creating strong, economical structures that quickly disappear into the natural landscape, with a huge variety of locally appropriate plant species.
  - The face of the finished system should be brushed off to dislodge any over-filling of the pockets which would quickly slough off on its own.

- Planting must start from the top course and continue down the face of the wall until every pocket is filled with at least one plant.
- The planting pocket is designed large, and the fill volume is high, so each pocket can accommodate multiple small plugs or single larger plugs.
- Live plants should be centered in the "sun receiving" area of the pocket (not up under the upper module) and any seeding should be focused on the same area.
- Maintenance will be required for the first year to ensure a proper grow-in and low to no maintenance thereafter.

HELPFUL TIPS

- **Get as much soil into the blocks during wall building as possible but do not over-compact the soil backfill in the blocks and between the blocks. We need roots to move freely.**
- **Compaction of the backfill rearward of the block column should be more compact and the use of hand tampers and vibratory plates will ensure a wall that does not settle backward.**
- **Do not use jumping jacks for compaction behind the wall, as they will shove the installed blocks and create stresses and alignment issues with the wall facing.**
- **Review the detail drawing and wall cross sections available on www.verdtech.com/downloads**
- **Visit our website at www.verdtech.com for more helpful information and contact us directly with project questions at info@verdtech.com and 314-279-8905.**

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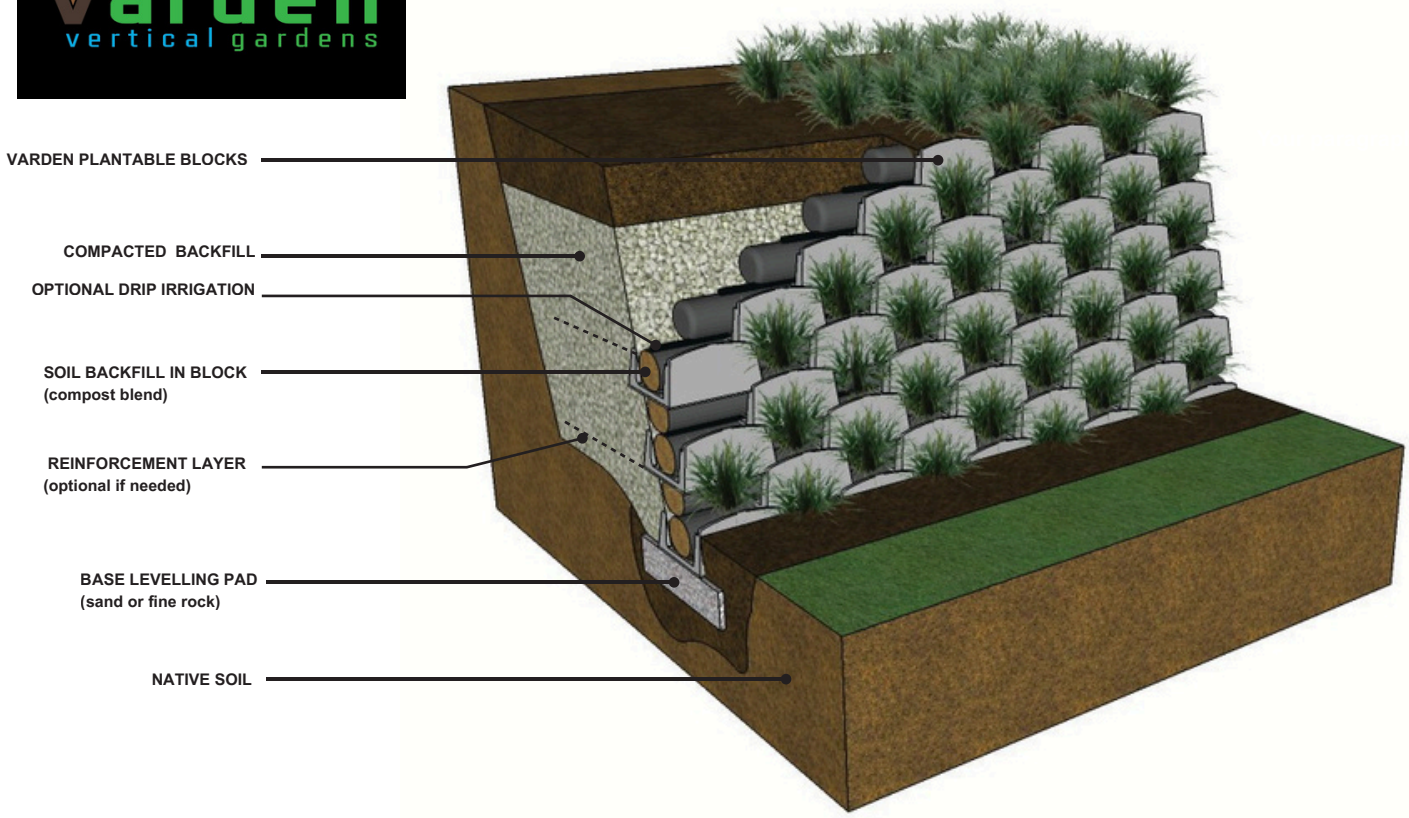
LIVING RETAINING WALL (LRW) EXAMPLE



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