

### STRUCTURAL RETAINING WALL

# VALERA™ - TRI-PLANE

Valera provides a more vertical batter wall. A proven block design with an extensive record of field performance, Valera touts comprehensive engineering and installation support resources. Valera has become a trusted favorite of specifiers, installers and owners.











Tri-plane Unit

#### **Unit Dimensions:**

8"h x 17.9"w x 11"d (203mm x 455mm x 279mm)

### **Unit Weights:**

89 lbs (40 kg)

Units/sq.ft.: .1

#### **FEATURES & BENEFITS**

#### Maximum Versatility and Performance

- A more vertical batter (%/16" per course) maximizes buildable site area.
- Made of durable concrete with iron oxide pigments that resist fading in extended UV exposure. Meets or exceeds applicable requirements of ASTM C1372 for compressive strength, absorption and dimensional tolerance.

#### Ease of Installation

• Integral lug ensures proper alignment, setback and ease of installation.

#### Aesthetics

- Traditional angular face showcases color and adds shadows to heighten visual appeal.
- · Natural stone texture.
- Capping units available.
- Variety of colors complement any landscape.

Note: Unit color, dimensions, weight, and availability varies by manufacturer.



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#### INSTALLATION INSTRUCTIONS

**STEP 1: Layout** - Stake out the wall's placement according to lines and grades on approved plans. Excavate for the leveling pad to the lines and grades shown. Excavate soil to a dimension behind the wall for placement of grid and reinforced soils.

**STEP 2: Leveling Pad** - The leveling pad consists of a crushed aggregate compactible base material. The pad must extend a minimum six (6) inches in front and behind the first course of unit, and be a minimum six (6) inches in depth. Compact the aggregate and check top elevation for level.

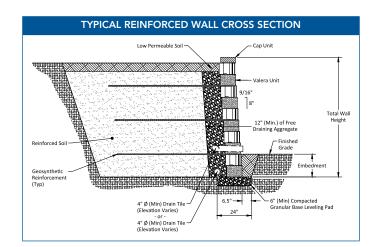
**STEP 3: Base Course** - For gravity walls, one complete course of units must be buried. For taller reinforced walls, additional courses of block may need to be buried; consult the approved wall plans.

Place a string line along the back of the units to align the wall units. Begin laying unit at the lowest elevation of the wall. Place wall units flat on the leveling pad with facings aligned according to plans. Place the units side-by-side, flush against each other, and in full contact with the leveling pad. Level the unit front-to-back and side-to-side. Check the units for proper horizontal alignment.

STEP 4: Wall Construction - Clean any debris off the top of the units. Place the second course of units on the base course maintaining a running bond configuration. Push each unit forward as far as possible to ensure unit-to-unit engagement and the correct setback. Fill all voids between concrete wall units with drainage aggregate. Backfill with drainage aggregate directly behind the unit to a depth of 24" from the face of the wall.

**STEP 5: Drainage** - Place a perforated drain pipe at the base of the drainage aggregate. Daylight or direct the drain to an area lower than the lowest drain elevation in the wall. Additional drainage design may be required.

STEP 6: Install Fill and Compaction - Place the drainage aggregate and unit core fill as directed. Fill behind the aggregate with soil meeting design parameters. Place and compact the backfill material before the next course is laid. Hand-operated equipment should be used within three (3) feet of the wall. Avoid driving heavy equipment within three (3) feet of the wall units. Place reinforced backfill soil behind the drainage aggregate in maximum 6-8" lifts and compact to a minimum of 95% standard Proctor density with the appropriate compaction equipment.



STEP 7: Geogrid Reinforcement Placement - Check approved wall construction plan for grid type, strength, lengths and elevations. Measure and cut the reinforcement grid to the design length in the plans. The design strength direction of the geogrid shall be laid perpendicular to the wall. Place the front edge of the geogrid on the designated course a maximum of one (1) inch from the face of the unit. Apply the next course of units to secure it in place. Pull the reinforcement taut and secure in place. A minimum of six (6) inches of backfill over the grid is required prior to vehicular operation.

STEP 8: Finish Grade and Surface Drainage - Protect your wall from water damage and erosion with a finished grade to provide positive drainage away from the wall at the top and bottom of the wall structure during construction. To minimize infiltration of water into the top of the backfill area of the wall, place a minimum of eight (8) inches of soil with low permeability (clay or similar materials) over the drainage aggregate and backfill soils.

**NOTE:** Colors are shown as accurately as possible in brochures and samples, but due to the nature of the product, regional color differences and variables in print reproduction, colors may not match exactly.



