

Versa-Lok[®] Soil-Reinforcement Fabric Design

Important:

Retaining wall designs vary significantly with different site, soil, and loading conditions. Therefore, the drawings presented here are for estimating purposes only and should not be used for final construction. The user is responsible for obtaining final designs from a qualified, licensed civil engineer and for complying with all local building codes. Use these drawings to help estimate the amount and placement of fabric necessary for your Versa-Lok[®] retaining wall project. Note that some designs require 4.5-foot rolls while others require 6.0-foot rolls. Never substitute 4.5 - foot fabric in place of 6.0-foot fabric.

Versa-Lok[®] Fabric should not be used on any projects that do not exactly meet the assumptions of these drawings - including taller walls, walls with steeper slopes, walls with larger loads, shoreline applications, and tiered walls. If your project varies from the drawings, in any way, contact your local Versa-Lok[®] representative for other soil-reinforcement options or call us toll free at 800.770.4525.

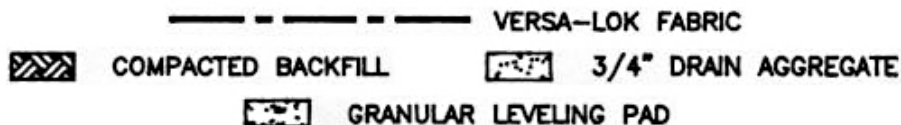
Design Assumptions:

These drawings assume the following conditions:

- Stable foundation soils.
- No groundwater above the wall base.
- Soils with minimum internal friction angle of 28 degrees.
- Soil weight of 120 pcf.
- No additional loading (including that which may be caused by tiered retaining walls).

Slopes must not be steeper than 2.5 : 1 (horizontal : vertical). Where traffic loading is present loads must be back at least two feet from the back of the wall and the loads must not exceed a uniform 100 psf (light car traffic).

The drawings in this guide apply only to Versa-Lok[®] Fabric used in conjunction with Versa-Lok[®] Standard retaining wall units and Versa-Tuff pins. Do not use these drawings as guides for any other soil-reinforcement material or any other retaining wall units. Remember that final designs should be approved by a qualified, licensed civil engineer in accordance with all local building codes.

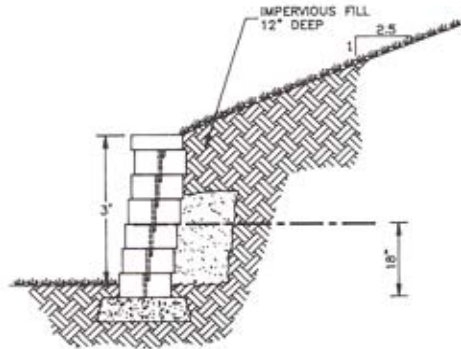


Use 4.5 - foot Versa-Lok® Fabric for these walls...

Height: 3 feet

Loading:
Slope with no additional load.

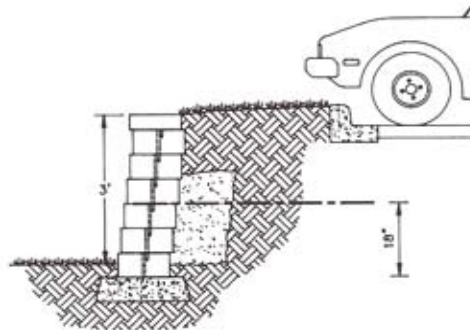
Fabric placement:
One layer of 4.5-foot fabric—at top of third course from bottom.



Height: 3 feet

Loading:
Level backfill with load.

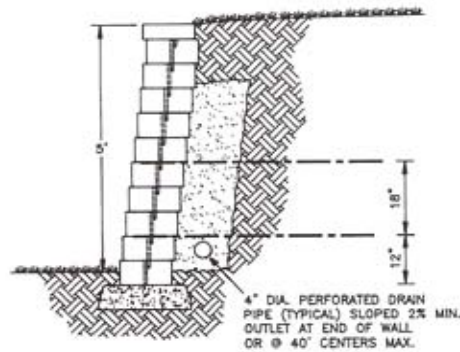
Fabric placement:
One layer of 4.5-foot fabric—at top of third course from bottom.



Height: 5 feet

Loading:
Level backfill with no additional load.

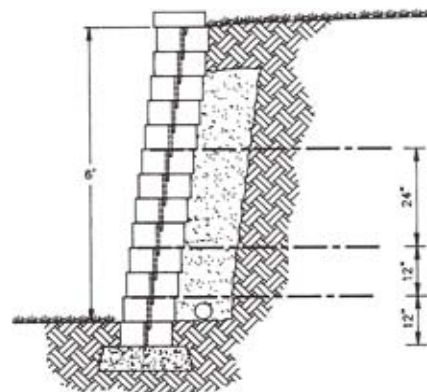
Fabric placement:
Two layers of 4.5-foot fabric—at top of second and fifth courses from bottom.



Height: 6 feet

Loading:
Level backfill with no additional load.

Fabric placement:
Three layers of 4.5-foot fabric—at top of second, fourth, and eighth courses from bottom.

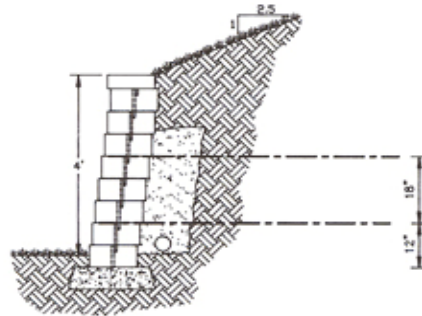


Use 6.0 - foot Versa-Lok[®] Fabric for these walls...

Height: 4 feet

Loading:
Slope with no additional load or level backfill with load.

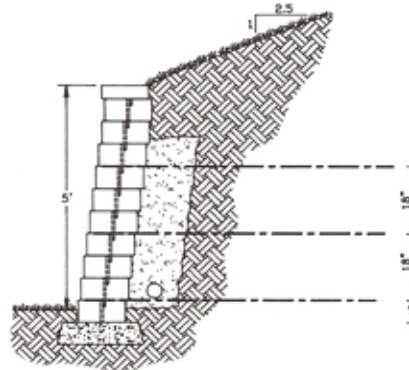
Fabric placement:
Two layers of 6.0-foot fabric—at top of second and fifth courses from bottom.



Height: 5 feet

Loading:
Slope with no additional load or level backfill with load.

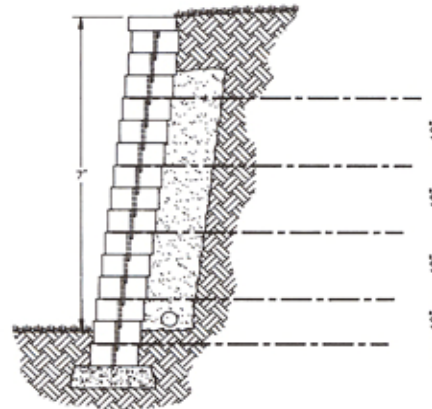
Fabric placement:
Three layers of 6.0-foot fabric—at top of first, fourth, and seventh courses from bottom.



Height: 7 feet

Loading:
Level backfill with no additional load.

Fabric placement:
Five layers of 6.0-foot fabric—at top of first, third, sixth, ninth, and twelfth courses from bottom.



Height: 8 feet

Loading:
Level backfill with no additional load.

Fabric placement:
Six layers of 6.0-foot fabric—at top of first, third, sixth, ninth, twelfth, and fifteenth courses from bottom.

