Square Foot™

Retaining Walls

Building a reputation.
One square foot at a time.

Providence Academy used Square Foot Retaining Walls to create usable space for a playground.
– Plymouth, Minn.

Square Foot Retaining Walls are ideal for D.O.T. projects.
– St. Peter, Minn.

BUILD TOP-NOTCH WALLS. SAVE BOTTOM-LINE DOLLARS.

Square Foot™ Retaining Walls have earned approval worldwide from architects, engineers and contractors. Each 87-pound unit covers one square foot of wall face, making this system an economical choice for large commercial and agency projects including: schools, universities, large highway projects, restaurants, shopping centers, waterways and retention ponds. In addition, Square Foot walls can be built with traditional one inch setback or near-vertical construction. So no matter what kind of wall you're building or specifying, there's a Square Foot wall to accommodate your needs.

HEAD OF ITS CLASS.

Square Foot units are engineered with a unique trapezoidal shape that allows you to design straight walls as well as a wealth of inside and outside curves. In fact, Square Foot units boast one of the tightest radiuses among all segmental retaining wall systems (4'6").

PINNING MADE EASY.

Square Foot Retaining Walls employ an easy top-down pinning system that not only ensures accurate alignment, variable bond construction and tighter vertical joints, but also speeds installation.

Square Foot Facts:

- *Square Foot Retaining Walls do not require mortar or concrete footings.*
- *Square Foot Retaining Walls accommodate many kinds of geosynthetic reinforcement.*
- *Square Foot units are engineered with low-absorption, high-strength concrete.*

Build both inside and outside curves, as well as straight walls, with Square Foot Retaining Walls.
– Woodstock, Ga.

With the help of geosynthetic reinforcement, Square Foot Retaining Walls can be built more than 40 feet tall.
– Gainesville, Ga.

FINISHING OFF YOUR SQUARE FOOT WALL.

Square Foot™ Retaining Walls are not complete without matching Square Foot cap units. Install caps with a slight overhang (recommended), set back or flush with the wall face. Secure cap units to the wall using VERSA-LOK® Concrete Adhesive.

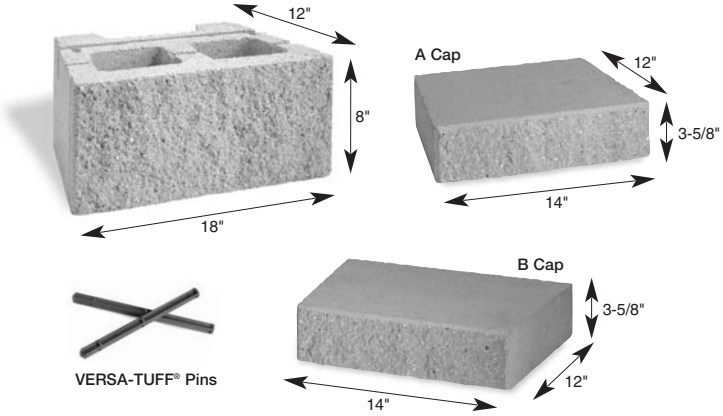
IDEAL FOR D.O.T.

What kinds of projects are well-suited for Square Foot units? Typical applications include:

- Municipal or governmental applications
- Department of Transportation projects
- Expansive commercial projects

SQUARE FOOT SPECIFICATIONS

Height:	8"
Width (face):	18"
Depth:	12"
Face area:	1 sq. ft.
Weight (without aggregate fill):	87 lbs.
Minimum outside radius:	4'6"
Setback:	1" (7 degrees) or 1/4" (1.8 degrees)



Square Foot Facts:

- *Square Foot Retaining Walls are well-suited to climates that experience freeze/thaw cycles.*
- *Square Foot Retaining Walls utilize non-corrosive nylon/fiberglass VERSA-TUFF® Pins.*
- *Unique top-down pinning system allows for variable bond construction.*

Square Foot Installation

The following information should provide a general understanding of Square Foot™ Retaining Wall construction. But remember, retaining wall designs vary with each project depending on site, soil and loading conditions. For more detailed instructions, call 1.800.770.4525 for a free copy of the *Square Foot Design & Installation Guide*.

1. Prepare a leveling pad

Prepare a six inches thick by 24 inches wide leveling pad of well-compacted crushed stone or gravel. Remember, the first course of units should be embedded below grade at least 1/10 the exposed wall height. Place and compact leveling pad material. Finally, add a thin layer of sand to create a uniform, level pad.

2. Install base course

Place Square Foot units on prepared leveling pad. As you proceed, level each unit—front to back, side to side—with adjacent units. Leveling is critical at this stage, so take your time! Align straight wall sections using a string line or by sighting down the grooves on the top of each unit.

3. Fill cores

After positioning the base course, fill the cores of the units with free-draining, angular gravel. Use gravel that is one to 1.5 inches in diameter. As installation progresses, fill the cores of each course before stacking the next course.

4. Backfill

Place and compact soil backfill behind units. Also replace and compact any over-excavated soil in front of base units.

5. Install successive courses

Stack one course at a time. The unique hole-to-slot pinning system allows Square Foot installation with one-inch setback or near-vertical construction. Use the front pin holes (outside holes) if you're using one-inch setback. Use the pin holes within the slots (inside holes) if you're building a near vertical wall. Insert two VERSA-TUFF® Pins through the appropriate holes of the upper course units and tap down into the receiving slots in the lower course units. For units above the final grade in front of the wall, place and compact drainage aggregate behind each course as it is completed. Behind drainage aggregate, place and compact soil backfill.

6. Install geosynthetic soil reinforcement

Lay soil reinforcement horizontally on top of compacted backfill and Square Foot units. Place the next course of Square Foot units on top of the soil reinforcement. Insert pins through Square Foot units and into lower course units. Place drainage aggregate against the back of units and on top of soil reinforcement.

7. Install caps

Complete your wall by placing cap units on the top course. Install caps with a slight overhang (recommended), set back or flush with the wall face. Use VERSA-LOK® Concrete Adhesive to secure cap units to wall.

NOTICE: *Many Square Foot retaining walls require soil reinforcement and engineering assistance. Please consult your local VERSA-LOK representative if you're unsure about any site, soil, height or local construction requirements.*

VERSA-LOK®
Retaining Wall Systems
Solid Solutions.™

6348 Highway 36, Suite 1
Oakdale, MN 55128
800.770.4525
www.versa-lok.com