

# Installation

## Overview

The VAST™ Composite Paver System is designed to make installations quick, safe and trouble free. Overall, site preparations will be very similar to that of conventional concrete paver systems.

## Equipment Needed

- Safety glasses
- Gloves
- Ear plugs
- Shovel
- Wheelbarrow
- Straight edge
- (2) ¾" sections of conduit (generally purchased in 8' lengths)
- Rubber mallet
- 10" power mitre saw (sliding recommended) with standard carbide tip wood blade
- Vibrating plate compactor (4Hp walk-behind or similar)
- Broom

## Subgrade

Remove any unsuitable materials from the subgrade and compact. Compaction should be per ASTM D 698, at least 95% Proctor density. The subgrade should be 10-12 inches below desired finished grade. Note: the VAST Composite Paver System is 3" tall.

## Base

Add a layer of aggregate base that conforms to the local standards, if none available refer to ASTM D 2940 (Note: many people refer to this material as Class 5 or Class 7). The base to be a thickness of 6-8 inches compacted per ASTM D 698, at least 95% Proctor density.

## Sand Bed

Add a 1 inch layer of coarse, clean, loose screeded sand. Sand should be coarse and washed and conform to ASTM C33. Do not use mason sand, screedings (e.g., pearock) or stone dust. Do not use sand to level depressions in the base layer; add aggregate to level the area. Recommended method of leveling sand is to pull a straight edge over two ¾" pieces of conduit.

## Edge Restraints

All VAST Composite Paver System applications require the use of an edge restraint around the perimeter. An edge restraint will allow for proper final sanding of the product and as well as provide a clean finished edge for easy alignment. Edge restraints are generally installed prior to placing the bedding sand on a corner of the installation site. Plastic edge restraints designed for conventional paver installations are recommended and can be installed next to the VAST grids or on top of the VAST grids – depending on bordering material and application. For example, installations sites that will eventually be bordered by sod may prefer to install edging over the top of the grid system, thus providing additional lateral support for the paver and allowing the bordering sod a place to lock into the grid system.

It should also be noted that there are other means to 'edge' your application. These include concrete sidewalks, driveways, curbing, etc. See your Certified VAST Reseller for other approved methods of edge restraint.

**IMPORTANT NOTE:** The quality of your application will be highly dependent on the quality and care taken during the site preparation. Improper subgrade compaction, sand leveling, and / or edge restraints can result in several aesthetically displeasing results (e.g., uneven pavers, 'sinks', poor water runoff control, etc.). Issues related to improper site preparation are not covered by the VAST Composite Paver System warranty.

## Method 1. Laying Pavers and Grids Individually

When laying grids and pavers individually it is recommended to layout several square feet of the grid, ensuring they are aligned with one another. See Figures 1 and 2.

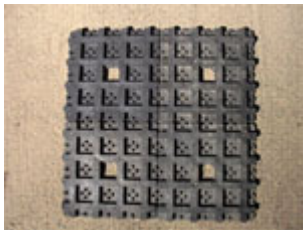


Figure 1



Figure 2



Figure 3

After the grids are in location simply lay the pavers in the desired pattern, aligning the bottom grooves of the pavers with the corresponding protrusion on the grid. See Figure 3.

When the grids are in location and a repeating pattern is defined, it is relatively easy to start laying pavers at multiple locations simultaneously. Simply review how the pattern is repeated and start laying at any desired location. Filling in the outline of two corresponding sections of the site also allows multiple install start points.

Note: Throughout the process of laying the pavers it is recommended that the alignment of the pavers be checked. It is very common that the alignment across long distances will remain intact, but if minor adjustments are required use a rubber mallet to realign.

#### **Method 2. Laying Pavers and Grids as a Unit**

When installing the VAST Composite Paver System as a unit, an entire square foot of pavers can be installed directly as packaged on the sand bed. See Figure 4.



Figure 4

It is recommended that when choosing to install the pavers and grids as an assembly that you 'build' from one corner of the application rather than working from multiple starting points.

#### **Trimming of Pavers and Grids**

Cutting of the VAST Composite Paver System can be done in a variety of methods. To cut a single paver, a standard sliding 10" power mitre saw with a carbide tip wood cutting blade is recommended. The same saw is also recommended for cutting grids. Do not 'force cut', but rather allow the blade to do the work. 'Force cutting' results in unwanted melting of the product, excessive smoke, and gumming / binding of the saw blade. It is recommended that pavers NOT be cut while installed on grids as this can pose a safety risk. ALWAYS WEAR SAFETY GLASSES, GLOVES, AND EAR PLUGS WHEN TRIMMING PAVERS OR GRIDS. Obey all safety and operational instructions that came with your mitre saw.

#### **Tamping (Plate Compacting)**

Tamping of the VAST Composite Paver System prior to sanding will set the system into the sand bed and also take out any minor imperfections in the top surface. It is recommended that a gas powered vibratory plate compactor (roughly 4Hp with 2000lbs centrifugal force) be used. Do not allow the tamper to remain stationary for an extended period of time, as it may scuff the top surface of the pavers. NOTE: ALL TAMPING SHOULD BE DONE PRIOR TO SANDING OF THE VAST PAVER SYSTEM.

#### **Sanding (Joint Sand)**

Sanding of the VAST Composite Paver System is recommended as it locks the location of the pavers. The sand used to fill the joints in the installation should be clean, sharp and well graded. Generally, the same sand used for the sand bed is recommended for the final sanding process (ASTM C33). Finer joint sand may be used but it may take longer to fill the joints.

Spread the sand across the installation site, allow to completely dry, and sweep into the joints. Most installations require this step to be repeated two (2) or three (3) times over a period of a couple weeks following the initial

installation.

NOTE: DO NOT USE POLYMERIC FILLED JOINT SAND AS IT WILL LEAVE A HAZE ON THE PAVERS. ALSO, DO NOT USE A VIBRATORY PLATE COMPACTOR TO AID IN THE INSTALLATION OF THE JOINT SAND AS IT WILL GET BETWEEN THE GRID AND PAVER AND RESULT IN AN UNEVEN GRADE.

**Sealing**

Sealing of the VAST Composite Paver System is not required, and in many cases may leave an unwanted film or haze on the System's surface. Unauthorized application of a sealer is not covered under the VAST Limited Warranty. Please contact VAST Enterprises for questions pertaining to your particular application.