Guide to Paving Stone Installation

Preliminary Planning

Initial planning and preparation are key factors that will ensure a successful and lasting paving stone installation. Proper planning guarantees fine quality work and makes everyone’s task easier.

Sketch a detailed diagram of the area to be paved, including all measurements required to calculate the amount of materials needed. The area being paved must contain some form of edge restraint.

- **Joint Sand between pavers**

- **Pavers**

- **Edge restraint or curb**

- **1" Bedding sand**

- **Pedestrian traffic, 3"-5" compacted gravel.**

- **Vehicular traffic, 6"-10" compacted gravel.**

 Certain equipment is required to complete this work adequately. You will need a pair of safety glasses, a rake, shovel, tape measure, coarse bristle broom, masonry string line, line level, mechanical plate tamper, and some form of stone cutting equipment. Your Abbotsford Concrete dealer can assist you in obtaining the necessary materials and equipment needed to complete your paving stone installation.

Before you dig, call the following companies to ensure your safety: **Power, Telephone, Gas and Cable TV.** These organizations will provide you with the location of underground services.

When choosing an installer for your project, it is advised that you choose an ICPI (Interlocking Concrete Pavement Institute) Accredited Installer.

See our list of Accredited Installers at [www.pavingstones.com](http://www.pavingstones.com)
1. Remove old pavement and/or existing soil, then excavate to the proper depth depending on the type of traffic.

2. Spread gravel (also referred to as 3/4” minus crushed rock or equivalent), uniformly throughout the excavated area. Using the mechanical tamper, compact the entire area evenly. A sprinkling of water, prior to compaction, will increase the density of the base material and control dust. Do not compact the base material in layers of more than 2 inches.

**NOTE:** Prior to base preparation, water run-off and grade detail should be considered.

3. The compacted base must be uniform and conform to the contour of the finished job. The elevation of the compacted base should be uniform 3-1/4” to 3-3/4” below the finished paving stone surface.

**NOTE:** The base should extend 12” beyond the finished edge of the pavers in order to provide a proper base to support and anchor your edge restraint.

4. Following the completed base preparation, edge restraints are installed to prevent lateral movement of interlocking paving stones and to enhance the aesthetic appearance of your installation.

Edge restraints may be set in a manner to sit flush with, or slightly below your completed paving stone surface. Granular material is used as backfill on the outer edge of the restraint which meets sod or softer material.

**NOTE:** Care should be taken in determining the width of the area being paved in order to minimize the cutting of pavers, and optimize the use of edge pieces.

5. Spread 1” of coarse sand evenly over the compacted base to establish a bedding for placement of concrete pavers.

6. Screeding must be done to ensure that an even bedding surface is established. A screed board (i.e. 2’ x 4”) is used to smooth the bedding layer to the shape of the completed surface. For distances greater than 12 feet, use a screed guide to level the bedding layer. Avoid walking on the screeded surface.

7. Commence placing pavers on the screed bed in the pattern you wish to use. It is important that the pavers being installed are taken from several pallets to ensure a proper color dispersion. Start installation of pavers at the edge and in a corner if possible. This will maximize the use of edge stones and minimize the amount of cutting.

8. Hand place the stones close together. Spaces between individual units should be consistent with an allowable maximum of 1/8”. With the installer standing on the laid paving stones, the next row is placed. The occasional use of masonry string will ensure that your installation pattern will continue to run true throughout the project. To verify accuracy, the string should run along the front row of pavers. A screwdriver is used to move the pavers into proper alignment.

9. Any paving stone cutting should be done upon completion of laying your paving stone pattern. Using a stone cutter or masonry saw, stone should be cut to fill the spaces. If cut pavers leave small gaps, these can be filled with jointing sand. When cutting pavers with a wet saw, please take care not to cut on top of other pavers as you will generate a slurry mix. This slurry mix, if allowed to dry, will leave a permanent cement residue on your pavers.

10. Once all pavers have been placed, sweep the entire paving stone surface clean in preparation for tamping. Sweeping also aids in the removal of any foreign deposits that are on the pavers.

11. Using a mechanical plate tamper, begin tamping from the outside edge, moving inward. Tamp the entire paving surface in both directions until the surface is bedded down uniformly.

12. Broadcast jointing sand over entire paving stone surface, sweeping the sand to ensure that all joints are completely filled.

13. Leave excess jointing sand on the paving stone surface, sweeping the finished area a second time and continue sweeping jointing sand and compacting until all joints are completely filled.

14. A paving stone sealer is recommended to enhance, protect and maintain the natural beauty of the paving stones. Sealing can take place immediately after installation or any time in the future, provided that certain guidelines are followed.

*For best results, use Abbotsford Concrete’s Interlocking Paver Joint Sand or High Performance Polymeric Joint Sand, available from your local dealer.*
Full page pattern drawings are available on our website at www.pavingstones.com
Piazza Series

Type 1 & 2 - 90° Herringbone
Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Type 1 & 2 - Offset Runner
Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Type 1 & 2 - Pinwheel Pattern
Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Universal

Type 1 & 2 - 45° Herringbone
Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Type 1 & 2 - 90° Herringbone
Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Type 1 comprises 60% of total area
Type 2 comprises 40% of total area

Villa Stone

Type 1 - 90° Basket Weave

Type 3 - 90° Basket Weave

Type 1,2 & 3 - Runner Bond
Type 1 comprises 46% of total area.
Type 2 comprises 31% of total area.
Type 3 comprises 23% of total area.

Type 1,2 & 3 - Random Cobble

The Villa Stone Offset Runner Bond and Random Cobble patterns use an equal number of Type 1, Type 2 and Type 3 pieces.

Villa Stone Circle Kit

Legend

Legend Edge Detail

Circle Row
Circle Diam. cm
Circle Diam. Inch
Center Stone
Small Circle Stone
Large Circle Stone
Half Stone
Three Quarter Stone

| 7 | 242 | 95 | 30 | 30 |
| 6 | 210 | 82 | 26 | 23 |
| 5 | 178 | 70 | 21 | 21 |
| 4 | 145 | 57 | 34 |   |
| 3 | 113 | 45 | 26 |   |
| 2 | 81  | 32 | 8  | 7  |
| 1 | 49  | 19 | 8  | 2  |
| 0 | 16  | 6  | 2  |   |
A paver edge restraint system is a critical component for a successful installation. Use EdgePro Max® to secure wall system installation.

**Paver Edge Restraints:** EdgePro One®, EdgePro Max® and B.E.A.S.T.™ are specifically designed to meet the requirements for both straight and radius installations.

**Interlocking Joint Sand:**

Joint sand is essential to the success of your paver installation, as joint sand precipitates the interlock component of a segmental paving system.

**Abbotsford Concrete’s Interlocking Paver Joint Sand**

This dry joint sand is manufactured to the Interlocking Concrete Paver Institute’s (ICPI) technical standards to ensure a successful paver or slab installation.  
Size: 36 kg - 80 lbs  coverage approx 100 ft²

**High Performance Polymeric Joint Sands – G2 Intelligent**

Polymeric Sand is the Cleanest, Fastest and Easiest polymeric sand installed in the industry.

Intelligent polymeric sand is made with a state of the art manufacturing process. Specifically calibrated sand is mixed with sophisticated intelligent polymers. This new generation of Intelligent Polymers neutralizes haze and dust. The intelligent polymeric sand application is now dust free and haze free. No blower is needed and the intelligent polymeric sand requires only one watering.

A high-performance Polymeric Joint Sand is designed for high-traffic, steeply sloped and continuously wet areas, ie fountain surrounds.  
Size: 23 kg - 50 lbs  coverage 40 - 90 ft² (depending on joint width)

Special care is required when applying Polymeric Joint Sand; please be sure to read the detailed instructions on the bag carefully.