



Standard Installation over Sand Bed and Compacted Base

1. **Establish a grade that slopes gently away from structures or other areas of concern.** Ensure that the grade is sufficient to direct water away from buildings and allows the stones to shed water. A good rule of thumb is to slope the surface approximately one inch for every ten running feet of patio or walkway.

2. **Install a solid base of compactable fill.** To provide a stable base and to allow proper drainage, road base or other like material should be installed and properly compacted to eliminate settling concerns. Cover area with weed barrier if necessary.

3. **Spread a layer of washed sand.** Spread sand one inch in depth over the entire area to be covered with EarthStone patio stones. The use of clean sand allows for the proper drainage of water that makes its way through the joints in the patio or walkway surface. Be sure that the surface of the sand bed is consistent with the grade of the compacted base so as to allow proper drainage. An easy way to ensure sand bed uniformity and save time during this step is to screed the sand as though pouring a concrete slab. Place material of either one inch thickness or diameter (i.e.: one inch diameter metal conduit) of adequate length along the outside edges of the area in which sand is to be applied to serve as depth gauges and to maintain the established grade. Begin at one end by placing sufficient sand in the area to be covered and using a sufficiently sturdy straight edge (i.e.: 2"x6" board) of sufficient length to span from one depth gauge to the other. Drag the board from one end of the depth gauges to the other leveling the existing sand and adding additional sand as necessary until the entire surface has a smooth even bed of sand.

4. **Lay patio stones with approximately one-half inch spacing between stones.** Note that the edges of EarthStone patio stones are naturally irregular, not sawn, meaning that joints are approximate and the use of uniform spacers is not permissible. Take some care during this step to verify joint uniformity and stone alignment, and adjust stone positioning as necessary. Also verify that individual stones are suitably level.

5. **Fill joints by sweeping in any of a number of products commonly used for joint filling.** While a number of alternatives exist ranging from pea gravel to sand or crushed fines (breeze), the use of polymeric sand to fill joints presents a number of benefits. The benefits include the eliminating of the need for a weed barrier, providing assistance in locking individual stones in place, and eliminating concerns with joint fill material washing out during periods of heavy rain or during washing of patio or hardscape surfaces. Consult with your local landscape center for recommendations and available products in your area. Please note: **do not use vibratory compactors** or other mechanical means in an attempt to settle stones or to complete joint filling as this may cause damage to the stone. When using polymeric sand as joint filler, sweep in sand to a level slightly below the top surfaces of the stones to prevent the sand from washing onto the surface of the stone during the wetting process. As an additional step prior to wetting the sand, using a yard/leaf blower, position the end of the blower exhaust a few feet from the patio surface and blow off the surface of the finished area to rid the stones of any residual sand or powder while leaving the joints undisturbed. As a final step, mist the surface lightly with water. Avoid flooding or disturbing the joints.

6. **Seal the completed patio or landscape project with a breathable concrete sealer.** Your local landscape or masonry supplier will have a variety of suitable sealers with finishes ranging from clear/natural penetrating sealers to topical, film-forming sealers with varying levels of sheen and color enhancement. **Always test sealers first for effectiveness and desired finish qualities.**

Please visit www.earthstoneonline.com (Installation Guides Section) to view guides for other installation methods or for installation instructions for other EarthStone Products.