Installation

Indiana Limestone pavers can be set in mortar or over compacted aggregate. The following installation methodologies have been tested for use in residential, pedestrian applications only. Installation details may need to be modified for commercial applications, to conform to local building regulations or use alternative and locally available aggregate materials. Consult with a landscape architect, installation professional, or engineer regarding your commercial projects or if specified installation materials are not available in your area.

General Guidelines

Prior to Excavation Always be sure to call any local utilities to ensure your work area is clear of any underground cables or wires before you dig. Consult with local utilities about options for moving services, if necessary.

Dampproofing the Stone

A cementitious based dampproofing should be applied to the backs and all unexposed sides of the stones to protect the stones from moisture sources and prevent staining.

Protection of Unfinished Work

To avoid possible unsightly stains caused by mud or other splashing, unfinished work can be covered with protective material during construction. If utilized, this should be left intact until landscaping is complete.

Delivery, Storage, and Handling

Product will be supplied adequately packaged on pallets or timbers to keep finished stone clear of the ground. Storage area should be a well-drained space, graveled or chipped for protection against mud splatters. When using pry bars to move stone into place, use padding to protect the edges of the stone.

Notes on Indiana Limestone Material: *Indiana Limestone is a natural stone with color variations within the deposit. If you are installing multiple pallets of material on the job (same or different sizes) it is important to pull material from multiple pallets to ensure the optimal color mix. Polymeric sands should NEVER be used with Indiana Limestone paving materials. Indiana Limestone, by nature, is a more porous natural stone. Binding polymers from polymeric sands (even those noted as non-staining and safe for natural stones) have been shown to leech into the stone and cause discoloration that cannot be repaired or removed and will not weather out over time.*

Setting over Mortar

Setting Bed

Use of Type N Masonry Cement is highly recommended for the setting bed cement mix. White Cement does not contain the chemicals that can cause unsightly staining when activated by water. Typical fine sand will be adequate for the cement mix. A setting bed depth of 1" to 1-1/2" is recommended.

Concrete Slab

The concrete slab should be cured; 30 days of curing would be ideal.

Grouting of Joints

Grouting or pointing of the joints can be done with the same Type N White Masonry Cement (mixed with White Sand to allow for accurate coloring). Cleaning After mortar has set, the pavers should be brushed down with a stiff fiber brush, and then carefully rinsed with clear water to remove any accumulation of stain or matter foreign to the limestone.

Setting over a Compacted Base

Drainage, Grade, and Base Preparation

When excavating it is important to achieve a slope in increments of 1.5% (3/16" per ft./5mm per 300mm). Excavation should mirror the final grade of the pavement. Grading or soil for drainage should be away from a home's foundation. If the soil is granular or sandy, it should be compacted with a vibrating plate. Modify clay-like soil with a blend of lime and crushed stone prior to compaction. Cover compacted soil base with a geotextile fabric to prevent the contamination of the base with the crushed stone base.

Standard "Sand Set"Foundation

Install a 0-3/4" (0-20mm or No. 78 stone) base in 4" lifts with a minimum of 5,000 lbf (22 kN) vibrating plate compactor to a height adequate for your base soil type.

*For Clayey or Silty soil make the foundation 6" to 8" of material.

*For Sandy or Gravelly solid, make the foundation 4" to 6" of material.

*The base should extend beyond the finished edge of the design by an extra width equal to the foundation thickness.

For compacting, wet the base material thoroughly and compact with a vibrating plate in all directions. Continue this until you have achieved the desired height. Use a paver as reference. The base tolerance should be +/- 3/8" for every 10' increment.

Setting Bed

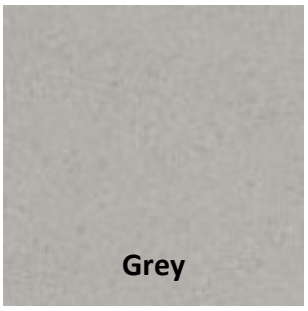
Use a 1" layer of concrete sand as your setting base. Be sure to grade the concrete sand with a straight-edge or by other means. A non-graded subsurface will be evident after installation. Do not compact the bedding sand before pavers are set.

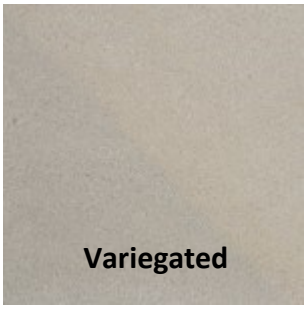
Installation of Pavers

Install pavers on to the setting bed in the shape dictated by the design or pattern required with 3/8" spacing between paver edges. Walk on paving stones while installing them to ensure they stay level when foot pressure is applied. If pavers wobble or are out-of-plane with the surface, remove the paving unit and add additional sand to level. Paving stones on the edge of a design can be cut using an angle grinder fitted with a masonry blade or a concrete saw. Ensure that the blade used on an angle grinder has sufficient depth-of-cut for your application. Utilizing a polymer landscape edging is optional but will aid in retaining shape of paved walkways and patio areas. A variety of edging is available. Spikes for the edge restraints must be installed into the compacted foundation and not the soil.

Filling in Joints

Select your material for fill between stones. Concrete sand is sufficient, decomposed granite is also an option. If using decomposed granite – do not use decomposed granites with resins or stabilizers. Reminder: Indiana Cut Stone does not recommend the use of polymeric sand with our paving products based on understanding of current products. New products are brought to market consistently - refer to manufacturers recommendations and test compatibility before completing a project installation. Spread out your selected fill material and sweep in between joints in all directions. Sweep once more and remove excess sand or decomposed granite.





Indiana Cut Stone

www.indystone.com

812.275.0264