

Unilock® provides a transferable lifetime guarantee on the structural integrity of its paving stones to the original purchaser of the product for residential use. Material installed using our installation guidelines that proves defective will be replaced without cost. Color matching cannot be guaranteed and replacement labor is not included. Proof of purchase required. To register your transferable lifetime guarantee visit www.unilock.com.

UNILOCK®
DESIGNED TO CONNECT.

BASIC TECH GUIDE

Walkways, Patios, Raised Patios,
Planters, Steps, Driveways, Pool Decks,
Pillars, Seat Walls, and more!

For over 40 years, Unilock® has been assisting contractors and homeowners with new products, ideas, and installation information. We're glad that you have chosen to install Unilock products. You'll have peace of mind that you've chosen the best. We recommend that you choose Unilock pavers made with EnduraColor™ or EnduraColor™ Plus for everlasting color, a hard-wearing surface, and exclusive surface textures. See www.unilock.com for details.

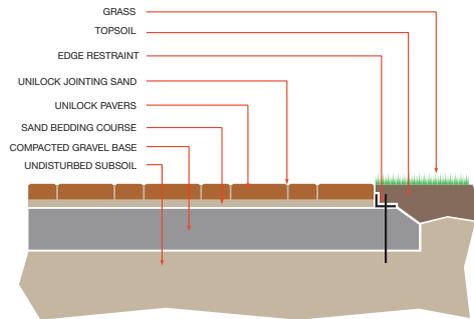
ENDURACOLOR™

This brochure is a basic guide to show you the necessary steps involved in installing Unilock pavers and walls. Whether you are installing a simple walkway, planter, or a large project such as a driveway, we want you to know that Unilock Authorized Dealers are there to help you along the way.

To download a copy of our in-depth Unilock Advanced Tech Guide and/or to view our installation videos, visit www.unilock.com

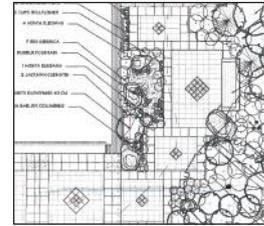


PAVER Installation



PAVER BASE THICKNESS		
Application	Gravel Base	Sand
Patios	6" - 8" (15 - 20 cm) minimum	3/4" - 1" (2 - 2.5 cm)
Walkways	6" - 8" (15 - 20 cm) minimum	3/4" - 1" (2 - 2.5 cm)
Pool Decks	6" - 12" (15 - 30 cm) minimum	3/4" - 1" (2 - 2.5 cm)
Driveways	10" - 14" (25 - 35 cm) minimum	3/4" - 1" (2 - 2.5 cm)

Base Gravel - Use 3/4" (2 cm) crusher run gravel/sand mix
Bedding Sand - Use a coarse concrete sand



1 Planning

Draw a simple plan showing measurements and grade elevations. Locate one of over 500 Unilock® Dealers at www.unilock.com and bring your plan to the dealer. He or she will help you calculate the correct amount of materials and estimate the cost of your project. The dealer will also have displays and product and color samples for you to choose from, as well as basic helpful advice.



2 Preparation

Mark out the location of the patio, walkway, or driveway. Call the utilities, phone company, and cable TV provider to locate any buried cables and/or services.

Tools required: Wheel barrow, rake, level, string, tape measure, shovel, compactor, guillotine and/or masonry saw, gloves, and safety glasses. (For small jobs, you may wish to rent a hand tamper instead of a gas-powered one.)



3 Excavation

Excavate to a minimum of 6" - 12" (15 - 30 cm) deep, depending on your application type (see Base Thickness Chart). Excavate deeper if the soil had previously been disturbed. Remove all loose soil. Always excavate a minimum of 3" (7 cm) wider on each side than the area you are actually paving. For a driveway, excavate 6" (15 cm) wider on each side than the area you are actually paving.



4 Base

Begin placing gravel and compact with a gas-powered plate compactor in layers 2" - 3" (5 - 7.5 cm) thick. Grade the base as close to the final contour of the finished job as possible. Continue until desired height is achieved (see Base Thickness Chart) and base is solid. Slope all installations away from the house/building for drainage purposes. (1" (2.5 cm) slope over every 10' (3 m) is the minimum slope.) The gravel base should end approx. 3" (7 cm) below your desired finished height.



5 Screeding

Pavers are laid on a bed of coarse sand placed directly on the compacted base. (see charts and cross-sections) Use 3/4" - 1" (2 - 2.5 cm) diameter pipes as screeding guides on top of the gravel. Set up the guides so that your pavers will be 3/8" (1 cm) above the finished level (this allows for your final compaction). Level the sand evenly by pulling a board along the pipes (see photo). After screeding, remove the guides and fill in the remaining grooves with sand. (To learn more, view our videos online.)



6 Banding

Banding and accents are easy to install and make your installation unique. If you are installing circles, fans, borders, or accents, place these first before installing the main pattern. Bring the main field to your accent field and cut the pavers to fit the design.



7 Laying the Pavers

Lay the pavers in the desired pattern directly on the screeded bed of sand. Always start along the longest straight side, this will minimize the cutting required. To keep the joint lines straight, use a string line guide. Do not lay the pavers too closely together. If they are laid too tightly, then any attempt to straighten the lines will be difficult and you will not have the proper amount of sand between the joints.



8 Cutting

Pavers that do not fit along edges or around objects may require cutting. Mark pavers and cut them with the guillotine cutter or masonry saw. A guillotine cutter is the easiest method, but to achieve a more exact cut, a "dry-cut" masonry saw or a tub-style "wet saw" works best. (Rented from your local rental outlet.)

ALWAYS WEAR APPROPRIATE SAFETY GEAR WHEN CUTTING.



9 Edging

Edge restraints are a critical element in terms of the durability of a paver installation. They prevent the pavers from moving and shifting laterally. Both plastic and metal edge restraints are effective. Various concrete edging materials also work well with the added benefit of complementing the pavers with color and texture. Edge restraints must always be spiked into the compacted base. Do not place on soil.



10 Compacting

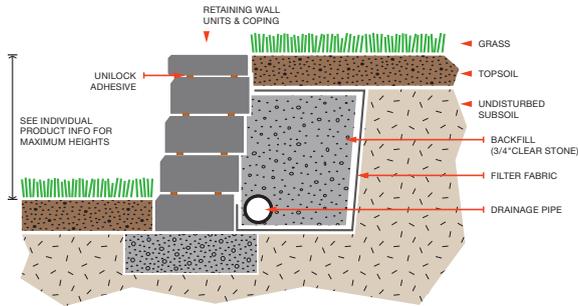
After all the cuts have been made, and the edge restraints are in place, the pavers must be swept clean and then compacted with a plate compactor. This helps settle the pavers into the bedding sand and creates a flat surface. (For patterns such as circles and accents, you may want to put some jointing sand in first to stabilize the smaller pieces.) When compacting Unilock Select™ products ensure that a compactor protector plate is being used. In all cases, we recommend a minimum of three passes with the compactor going in alternating directions each time.



11 Finishing

Sweep specially graded Unilock® Jointing Sand (available from your Unilock Dealer) into the joints between the pavers. This locks the pavers together creating a very durable surface. For optimum protection from the penetration of weeds and insects, use Unilock® Polymeric Sand to create a sealed joint, which will also resist erosion in sloped applications. Contact Unilock, or ask your local dealer, for more information regarding the use of polymeric sand on Unilock Select™ products.

WALL Installation



WALL BASE THICKNESS		
Application	Gravel Base	Backfill
Walls	6" (15 cm)	12" (30 cm)
Planters	4" - 6" (10 - 15 cm)	8" (20 cm) angled
Steps	4" - 6" (10 - 15 cm)	8" (20 cm)
Pillars	12" - 18" (30 - 46 cm)	n/a



1-2 Planning & Preparation

Draw a simple plan as instructed under paver installation.

Tools required: Wheel barrow, rake, level, string, tape measure, 3 lb. mallet, 3" (7.5 cm) masonry chisel, masonry saw, shovel, hand tamper, gloves, safety glasses. (For larger jobs rent a gas-powered compactor.) Call the utilities, phone company, and cable TV provider to locate any buried cables and/or services.



3 Excavation

Excavate a minimum of 7" - 12" (18 - 30 cm) below the finished grade. The width of your base should be 2 times the depth of your wall unit. Excavate more if the soil has been previously disturbed or drains poorly (heavy clay conditions). Remove all loose soil. Remember that you need a minimum of 4" (10 cm) of gravel base using 3/4" (2 cm) crusher run gravel/sand mix (see Wall Base Thickness Chart) and at least 3" (7.5 cm) of wall unit buried below grade level to help "toe in" the wall.



4 Base

Place 4" - 18" (10 - 46 cm) of gravel (see Wall Base Thickness Chart) in the trench and compact in layers of 2" - 3" (5 - 7.5 cm) using a hand tamper or gas-powered vibrating compactor. Compact until very hard. Leave enough room for the first 3" (7.5cm) of the first row of wall units to be buried below grade level. The final height of your installation will determine the exact level at which you must set your base.



5 Leveling

Some wall styles come as "doubles." Split them first. Level the blocks individually using a mallet and a small level. Ensure that all blocks are leveled from side-to-side and front-to-back. After the first row is in, the rest of the units can be stacked. Offset all vertical joints by starting the second row with a block cut in half.

Some blocks styles do not have a lip or groove locking them together. In these cases we recommend that the blocks are individually glued together.



6 Backfilling

Add gravel backfill after every 2 rows of blocks. Use a well draining gravel. See cross-sections and chart for quantities required behind the wall. (You may wish to ask your Unilock® Dealer for assistance.) Always use a filter fabric to separate the existing soils from your gravel. Leave enough filter fabric to wrap the top, as shown in the cross-section details. This will prevent the clear gravel from getting clogged.



7 Finishing

When placing your final row of blocks, (in some cases this might be a special cap called "coping"), you must glue them on with Unilock's Concrete Adhesive. Always dry-fit and cut any pieces required before gluing. After the glue has set (approx. 4 - 8 hours), you may backfill with soil, put in sod, or install plants to complete your installation. (see cross-sections for placement details.)