CALSTONE

Applications & Design Guide

Roman Stone

calstone.com

Roman Stone

Roman Stone

Roman Stone is a modular multi-colored concrete unit that is adhered with concrete adhesive to create commonly used outdoor structures.

Applications

- Barbeques
- Fireplaces
- Steps & Stairs
- Columns
- Fire Pits
- Garden Planters
- Seating Walls
- Water Features

New Fire Pit Package and BBQ Kit!

History of outdoor structures

Not long ago these structures were built using traditional brick and mortar methods. This method of construction is time-consuming and requires a high level of construction expertise. The cost of mortared masonry construction makes outdoor entertainment areas unaffordable for many homeowners.

The Roman Stone advantage

Roman Stone, combined with high-performance concrete adhesive, allows structures to be built using simpler construction methods, which saves time and money. With Roman Stone's modular design, versatility, and broad range of available colors, your backyard dream can go wherever your imagination takes you. Let us help you realize that dream while adding value to your home.

Colors

The aged and weathered appearance of Roman Stone is a smart alternative to expensive natural stone products. Roman Stone is available in eight unique color blends designed to complement our standard paving stone colors. All Calstone blends are created using colors and color combinations found in natural stone. Reproducing the random look and texture of aged and weathered natural stone is accomplished through a tumbling process to purposely create random fractures, chips, scratches, broken edges, and corners.

Note: Due to the variables in the printing process and varying light conditions when photographed and actual production of product, colors may vary slightly from the swatches shown below.

Cream Tan Brown

Gray Charcoal

Tan Red Charcoal

Gray Charcoal Tan

Brown Beige Charcoal

Green Charcoal

Tan Charcoal

Tan Brown Charcoal

To view the latest colors visit **calstone.com**

Roman Stone

Barbeques

When designing a barbeque island, consider the type and size of the grill, your countertop preference, and any other design features. Common features include sinks, refrigerators, storage cabinets, access doors, and more. Measure all components to get exact dimensions for all required openings prior to laying out the first course of stone. Consider clearances required for doors and hood openings. Natural stone is a great countertop option. It can be cut to size, and provides a sophisticated finishing touch to the project. A local natural stone supplier can help with selection and pricing. *It is necessary to install fire brick on the inner walls where wood and charcoal will be burned.*
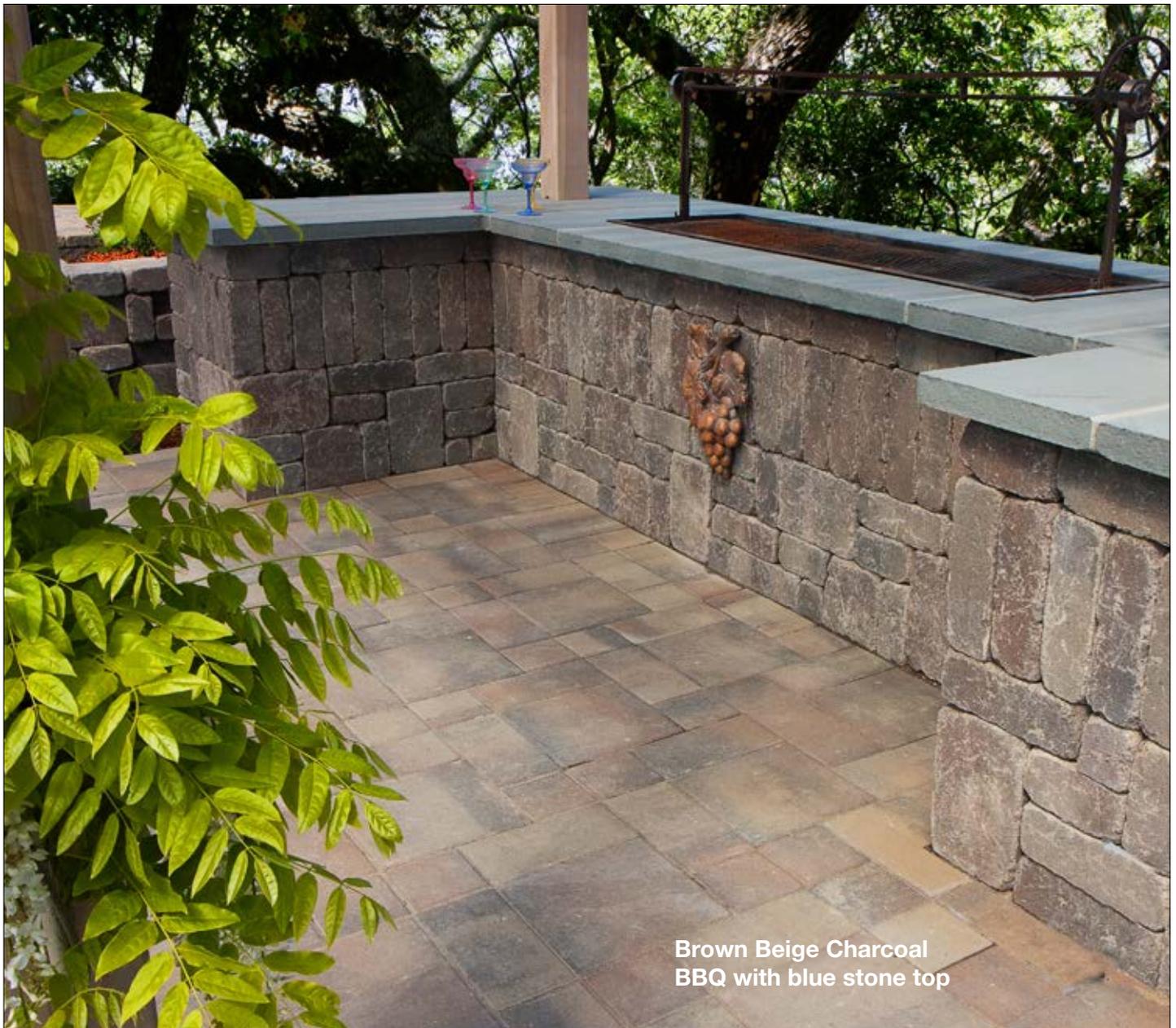
**Brown Beige Charcoal
BBQ with blue stone top**

Cream Tan Brown capped with natural stone top

Our New BBQ Kit

Calstone now offers a BBQ Kit.
(shown left)

The package includes

- 128 Pieces of Roman Stone
- Metal Grilling Unit
- Blue Stone Counter Top
  (2 - 18" x 48" and 2 - 12" x 37")
- 4 Tubes of Concrete Adhesive

Size:
- Base Dimension 3'8" x 5'8"
- Blue Stone Counter Top 4' x 6'1"
- Counter Height 34"
- Grilling Surface 23" x 34 1/2

It's easy to install and can be built with common tools and completed in one day.
visit **calstone.com**

Roman Stone

Fire Pits

A built-in Roman stone fire pit allows you to enjoy the perfect home campfire with an added level of safety and functional beauty. To determine the appropriate dimensions, consider the number of guests you plan to entertain.

Fire pits usually sit low to the ground, with overall heights between 16-20". This is a comfortable height for sitting or for resting your feet.

The fire pit must be lined with steel or a prefabricated fire insert to protect the Roman Stone from direct flames.

Gray Charcoal

Our New Fire Pit Package

Curved seating wall sold separately

Calstone now offers a Fire Pit Kit. *(shown left)*

The package includes

- 66 pieces of Roman Stone (48 for the walls and 18 for the top border around the grill)
- Fire Pit Insert
- Grilling Grates (shown above)
- 2 tubes of Concrete Adhesive

Size: Outside Base Dimension 44"
Outside Cap Dimension 48"
Inside Dimension 24"

It's easy to install and can be built with common tools and completed in one day.
visit **calstone.com**
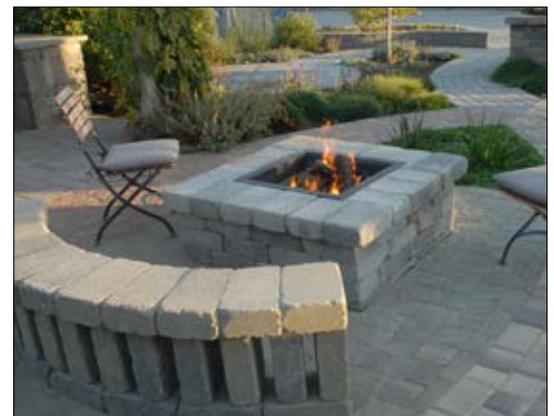
Fireplaces

Adding a fireplace transforms any patio into an outdoor living room. Take advantage of the California climate by entertaining and enjoying life outdoors year round. You can build anything from a simple free-standing unit to an elaborate combination of living room elements.

The fireplace pictured below utilizes a Firerock insert kit with a veneer of Roman Stone. For detailed information on how to build a beautiful and functional fireplace, visit **www.firerock.us.**

Tan Red Charcoal

Roman Stone

Garden Planters

Create beautiful focal points by bringing your favorite flowers to eye level with raised garden planters. Gardening in raised planters is much more enjoyable than gardening at ground level, and it's easier on your body. Raised planters also add a level of protection to your prized plantings and reduce the likelihood of pet, rodent, or bug damage. Roman Stone will not rot or attract insects, and does not contain any hazardous chemicals.

Tan Charcoal

Steps and Stairs

Precise planning is critical to achieve the best results. Starting and ending points, rise heights, run lengths, curved stairs, straight stairs, and landing sizes all need to be determined prior to layout and construction. Form the steps by digging out the earth and then placing base rock to form the rough layout of the steps. Install the Roman Stone units to box in the step, then put more base rock in to level. Repeat for each step. If this is your first time designing and constructing stairs, we recommend that you visit the Internet for more detailed information or ask the advice of an experienced step builder.

Tan Brown

Roman Stone

Seating Walls

Seating walls and division walls can function as stand-alone elements, as element extensions, or as separate components of a design concept. A comfortable seating height is 20-24". Division walls can be built to suit your preferences. Walls can be straight or curved, and can be simple or artistic in design. Walls can be capped with Roman Stone, natural stone, or architectural precast caps. Please visit your nearest Calstone distributor for capping options.

Green Charcoal

Tan Red Charcoal

Brown Beige Charcoal

Columns

There are many ornamental and structural applications for columns, including lampposts, mailboxes, entry columns, wall stabilization, landscape accents, and more. The key is to keep each course level (may require shimming) and all four corners vertically plumb. Interlocking columns and walls together will add stability to both. Spacing of the columns is usually determined by the overall wall height. In general, for walls three feet high or less, spacing the columns 8-10' apart is adequate

Brown Beige Charcoal

Cream Tan Brown

Tan Red Charcoal
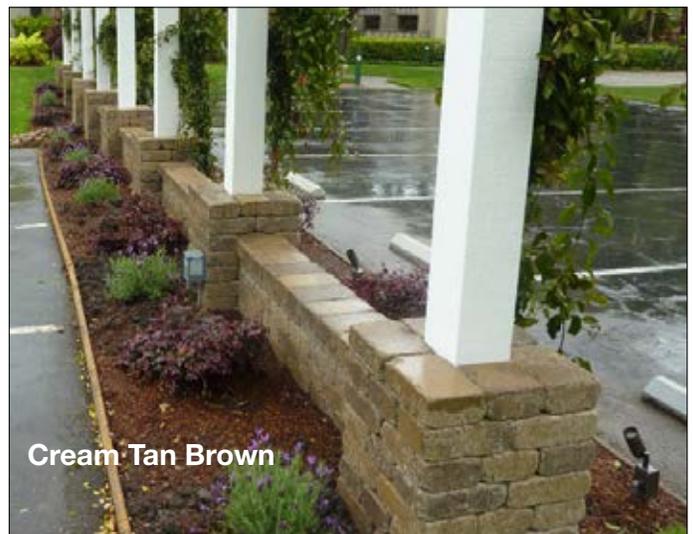
Cream Tan Brown

Roman Stone

Water Features

The sound of running water creates a peaceful and serene mood. That's why water fountains are favorites in outdoor design. Implement a water feature in your design to create a retreat where you can relax and enjoy time alone or with loved ones in an intimate setting. Water features become the focal point of any garden and naturally attract a variety of birds and butterflies. For detailed information on the water feature kit used below, visit **www.atlanticgardens.com.**

Tan Charcoal

Modular Construction Basics

Roman Stone can be easily arranged in symmetrical square or rectangular modules. The smallest module is created using four stones to make a 1' 8" x 1' 8" square (diagram 1). By adding additional stones, the size of the module can be increased in one-foot increments in either direction (diagram 2). Using this concept you can create structures sized appropriately for your specific project. Pre-planning and trial layouts will enhance your construction experience and results.

diagram 1

← 1' 8" →

← 2' 8" →

diagram 2

Foundations

Roman Stone structures can be built on pavement or on a compacted aggregate base. It is critical to understand that your project is only as good as the foundation it is built on. Suitable pavements include interlocking concrete pavers, asphalt, and concrete. Concrete and asphalt should be flat and free of cracks or degradation, with a minimum thickness of 4".

Interlocking pavers should be on a compacted base at least 4" thick. The width of any pavement should allow full contact for the first course of the Roman Stone. This will ensure good stability for your project.
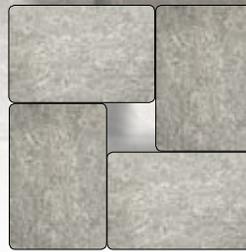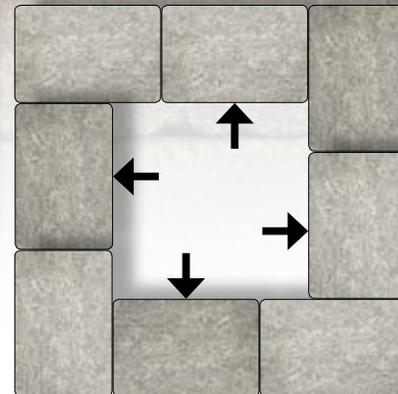
In the absence of pavement, ¾" class II or IV baserock should be used for the base. It's important that the baserock be compacted and free of organic soils. The thickness should be 6" minimum and extend at least 2" past the structure's footprint. To ensure proper compaction, base material should be placed and compacted in 2" intervals.

The soil beneath the base material must be firm and stable. If soil is soft, replace it with additional compact baserock.

Roman Stone

First course on base rock

Preparation and layout are the most time consuming, as well as the most important, step in achieving a good installation. Ensure that the baserock is flat, level, and compacted.

layout of first course

Lay out the entire first course and level each stone front to back, side to side, and stone to stone. Use a plastic dead-blow hammer as necessary to make small adjustments.

First course on pavement

Determine if the pavement is sloped. Many pavements appear flat and level, but in fact have a slight slope for water runoff. It is critical that the first course of Roman Stone is flat and level.

leveling with shims

Leveling adjustments can be made by shimming with thin pieces of wood, ceramic tile wedges, or other devices to hold the first course level until the adhesive sets up.

checking level and plumb
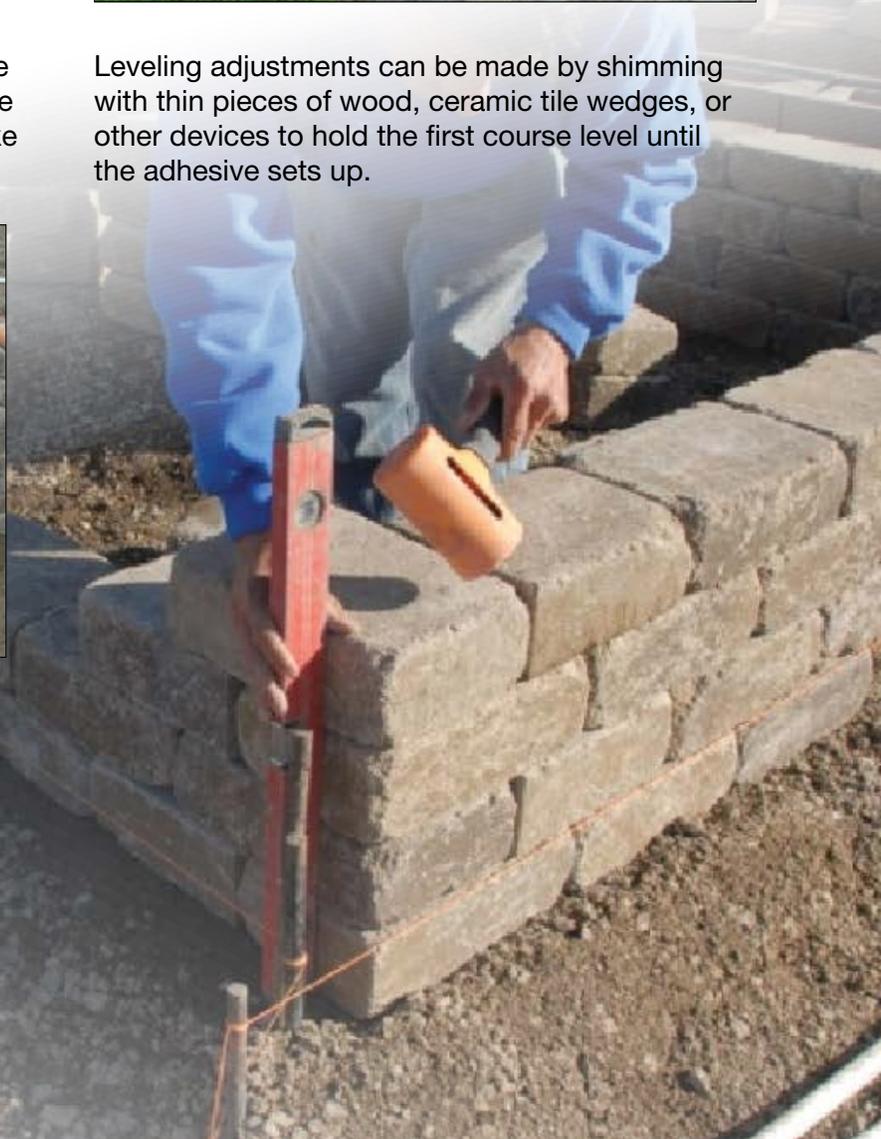
Adhesives

A quality concrete adhesive is all that is needed to bond Roman Stone units together. Adhesive should be applied to each stone on every course. Calstone recommends Alliance Gator Block Bond concrete adhesive. Before applying any adhesive or starting the second course, do the following:

- Lay out the entire first course.
- Confirm that it's square and level.
- Check all dimensions giving consideration to all structure components.
- Remove loose debris and dust from bonding surfaces.

Building curves

The easiest way to build a curved wall is to lay out the stones, leaving a gap on the outside of the curve. If you prefer to build the wall without gaps, you will need to cut some or all of the stones.

applying the adhesive

saw cutting the unit

Second and successive course installation

Once you've established the base course, the second and successive courses are created by gluing the corners in the opposite direction of the first course. Repeat this process for each successive course, continually checking for square and level as you build.

Cutting can be done with a masonry saw or by using a guillotine-type block and stone splitter. Saw cuts are more precise, will guillotine splits are faster.

CALSTONE

Because Quality Matters

Your Authorized Distributor:

Calstone Manufacturing Locations:

San Martin
13775 Llagas Ave.
San Martin, CA 95046
phone (408) 686-9627
fax (408) 686-9127

Galt
421 Crystal Way
Galt, CA 95632
phone (209) 745-2981
fax (209) 745-2983

Sunnyvale
1155 Aster Ave.
Sunnyvale, CA 94086
phone (408) 984-8800
fax (408) 984-2648

Tracy
426 East Grant Line Road
Tracy, CA 95376
phone (209) 833-7366
fax (209) 833-7467

calstone.com