

PAVERS BY IDEAL



ROSETTA®
WALLS • STEPS • ACCENTS

 Pavers by **Ideal**®
IDEAL CONCRETE BLOCK COMPANY, INC.

WALLS WITH STYLE™

Make a Timeless Discovery. Discover Rosetta®

INTRODUCTION

Several centuries ago a significant archeological find was discovered – the Rosetta Stone. It was the key to unlocking languages and cultures of the past. We are pleased to introduce a significant new stone to our industry – an innovative hardscape product that combines the rugged subtlety of natural rock outcropping with the installation efficiency and security of interlocking block – The Rosetta® Wall & Step Collection.

The Rosetta Wall Collection features a variety of shapes and sculpted faces that capture the beauty and nuance of natural rock. Made of architectural grade, high-strength concrete, each stone is cast to portray a weather-hewn face with the subtle earthtone colors found in nature.

- Rosetta Wall is a unique, 12-piece system ranging in size from 2' to 6' in length and 6" to 24" in height, plus a corner unit
- Each stone has a distinctive face and shape – units are cast in molds that meticulously reproduce the textures, colors and details of natural stone
- As an engineered system, Rosetta Wall offers structural stability – each block steps back from the block below
- Rosetta builds walls up to 6' high as a gravity structure or higher with soil reinforcement
- Rosetta Wall is machine set for fast, efficient installation
- Rosetta Wall offers design flexibility – use one of the preset patterns or create custom designs
- Rosetta Wall creates striking retaining walls, tiers and terrace walls, plantable walls, free-form landscape walls and water features
- Rosetta Wall costs significantly less than natural rock walls and large-scale stone walls

COMPOSITION & PERFORMANCE

Rosetta Wall is an architectural-grade, high-strength precast concrete product. Manufactured under controlled factory conditions, each shape is individually cast in urethane molds, vibrated, formed and cured into dense, durable units.

PHYSICAL CHARACTERISTICS

Rosetta Wall meets or exceeds industry standards including ASTM C94 Ready-Mixed Concrete and ASTM C1372 Segmental Retaining Wall Units.

Air Content: 5% - 7.5% minimum

Compressive Strength: 4000 psi minimum



DESIGN & TECHNICAL SERVICES

Design, engineering, and installation information is available at www.discoverrosetta.com. The easy to use *Rosetta Wall Designer* software utilizes *Microsoft Excel®* to estimate and build a virtual wall that can be easily replicated in the field. Create designs using pre-set patterns or by selecting modules of A, B and C pallets (see page 5). The program is free and may be downloaded from the Rosetta website.

Of course, product information also is available from Ideal. Please contact our office or visit our website www.idealconcreteblock.com for information and literature. Our knowledgeable sales staff is pleased to offer design consultation, specification guidance and assistance in the field.

GENERAL CONSTRUCTION GUIDELINES

The following instructions are typically suitable for walls under 6' high with optimum site conditions. Walls 6' and higher, terraced walls, sites with poor drainage, weak soils, excessive groundwater, slopes behind or in front of the wall, and surcharges, such as parking behind the wall, require special consideration and construction practices, including soil reinforcement techniques. We recommend you contact a qualified soils engineer if any of these conditions exist.

Pre-construction: Before you start construction, secure the necessary permits and, if needed, engineering. Contact Dig Safe or Call Before You Dig and request that they mark underground utilities. Review the plans to make sure they take into account accurate site and soil conditions. Also, develop a plan to control surface water during construction.

Good construction practices start with safety. Wear appropriate protective gear, maintain safe slopes, follow proper rigging and lifting procedures and applicable OSHA standards. Rosetta is shipped on pallets labeled A, B and C. Familiarize yourself with the packaging beforehand to save time when installing.

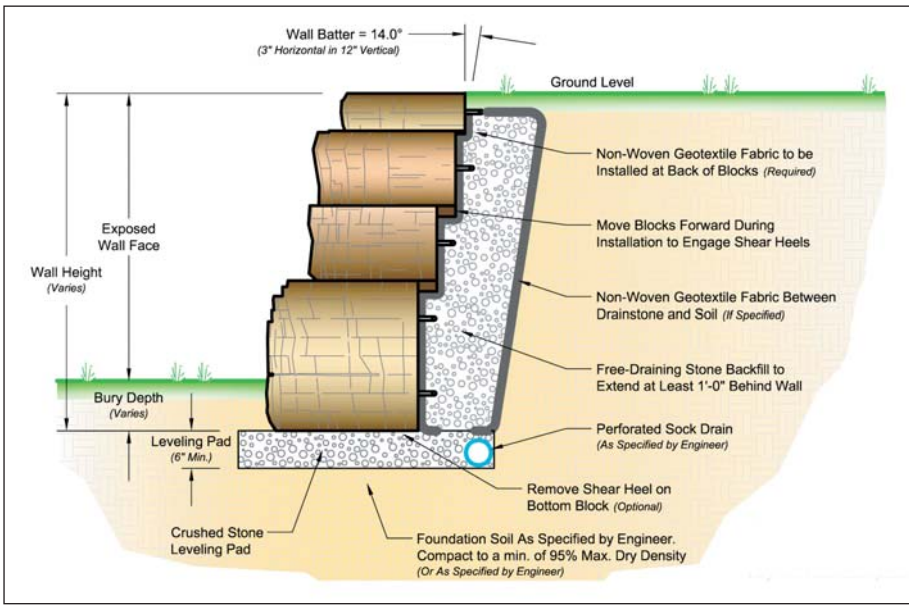


Figure 1 - Cross-Section of Rosetta Wall Installation

For a 12" high block, the shear heels are 3" deep and for a 24" high block, the shear heels are 6" deep. To ensure proper wall alignment and to account for the multiple height blocks and varying set-backs, you must adjust the bottom row of blocks based on their height. Use a stringline for the back of the wall, then offset the blocks as shown in Figure 2. The largest unit is placed against the "back of wall" stringline, with smaller size units set further forward according to shear heel size. When you follow this step, the bottom blocks will be properly placed and allow the rest of the wall to stack up straight and true.

Tip: Once the alignment has been determined, you may find it useful to knock the shear heels off of the blocks in the first course to facilitate placement onto the base.

Step 1 - Base Preparation: Good base preparation is one of the most important elements of retaining wall construction. Excavate a trench 12" deep by 40" wide. If the subgrade soils are unstable, contact a qualified geotechnical engineer for guidance. Otherwise, thoroughly compact the subgrade to at least 95% Standard Proctor density. Use 1 1/2" processed gravel or 3/4" road base type material for the base. Place, level and compact in 3" lifts to grade.

Step 2 - First Course: Proper placement of the bottom course is essential in determining the overall appearance and integrity of the finished project. If you have a fixed point, such as a building or a 90° corner, start from that point and work your way out. Otherwise, start the wall at the lowest elevation, as it is easier to step the block up than it is to step it down.

Nearly all segmental retaining wall systems have a built in batter to provide greater wall stability. With Rosetta, the batter is 14°, which equals 3" of setback for every vertical foot. One of the unique features of the Rosetta system is multiple block heights. To provide a uniform wall batter with multiple height units, the setback of the block varies proportionally with the block height. The setback is achieved with shear heels that are cast into the Rosetta units. For a 6" high block, the shear heels are 1.5" deep.

Using an appropriately rated skid steer or excavator, lift and place each block along the string or paint line using the *Rosetta Lifting Device*. Be sure that the safety latch on the lifting device is engaged before lifting each block. Use a pry bar to make small adjustments to bring the blocks into line. Level each block front to back and side to side.

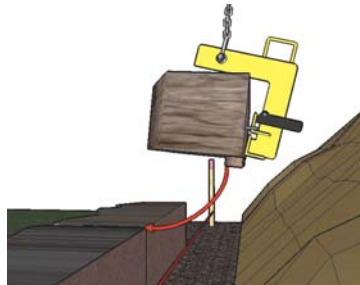


Figure 3 - Rosetta Lifting Device

Continue following the above procedures until the entire first course has been set. Place a 4" perforated pipe behind the wall to collect water and drain it away. It should run the length of the wall and slope to daylight or a catch basin. Cover the exposed pipe with crushed stone and fabric to protect it over time.

Step 3 - Successive Courses: Successive courses are placed in a similar manner. The primary difference is that the shear heels of blocks in upper courses must be engaged with the backs of the blocks in the row below. Position each block behind and approximately 1/2" above the block in the course below (see Figure 3).

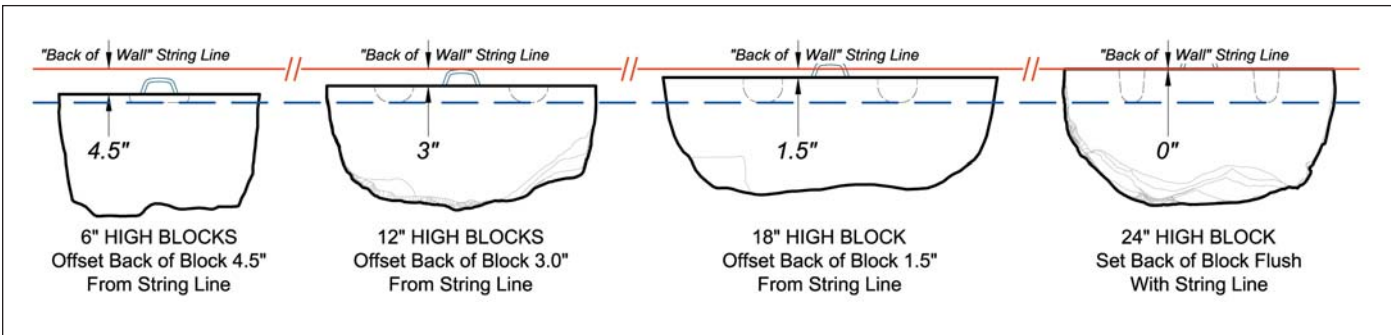


Figure 2 - Aligning set-back for first row of blocks

Shift the block toward the face until both shear heels engage the back of the units in the lower course. Set the block down and make final adjustments with a large pry bar. Do not leave any gaps between the blocks unless you are constructing small planter pockets within the wall. If you include planter pockets, be sure the openings occur over the mid-point of the blocks in the course below and that they are completely spanned by block placed in the row above. Corners or stair returns also may be built into your wall by using the *Four-Sided Corner Block*.

Backfill: The appropriate selection and placement of drainage and backfill material is necessary for the structural integrity of the wall. For safety reasons, do not stack wall units more than two feet high before backfilling with drainage stone and in-fill soil. Place a layer of non-woven geotextile fabric behind the blocks prior to placing the stone to keep it from eroding through the small voids between the blocks. Use a clean $\frac{3}{4}$ " crushed stone to backfill at least 12" of space directly behind the wall. This creates a continuous drainage zone for water to drain down to the perforated drain pipe. Hydrostatic pressure is the number one cause of retaining wall failure, so this step is important to structural integrity.

Beginning at the back of the clean stone and working away from the wall, place and spread backfill soils. To prevent soil from washing into the drainage zone, place a layer of fabric between the $\frac{3}{4}$ " stone and in-fill soil. Overlap sections of the fabric by at least 12". Compact soils in lifts of a depth appropriate to the compaction equipment being used (typically 4" for hand-operated equipment and up to 12" for drum-roller compactors). Backfill materials must be compacted to 95% Standard Proctor. Generally, you should operate compaction equipment parallel to the face of the wall. Start at the back of the blocks and work your way away from the wall until you reach undisturbed soils. Use care to avoid surcharging the wall forward during the compaction process. Continue placing and compacting backfill materials until you are within 6"-12" of the wall's finished elevation.

Step 4 - Laying the Wall: Repeat the steps described above until you have reached the desired height of the wall, backfilling with $\frac{3}{4}$ " crushed stone and in-fill soil and compacting as you go.

Step 5 - Finishing the Wall: Keep the $\frac{3}{4}$ " crushed stone about 6"-12" below the top of the wall. Place non-woven geotextile fabric over the clean stone. Add topsoil and grade so that water runs off or away from the wall. Never leave the top of a wall graded in such a way that surface water will pond behind the wall. Complete the landscaping by adding sod, flowers, and plants.

ROSETTA STEP COLLECTION

The Rosetta Step Collection features the same weather-hewn look of natural stone found in Rosetta Walls. Available in 6 sizes and shapes, each step offers consistent size and height saving time when selecting and installing. Choose either a $5\frac{1}{2}$ " rise or a 7" rise. Whether used as free-form steppers on slopes, as pathway stones, or in combination with Rosetta Walls or one of Ideal's other segmental retaining wall designs, they impart lasting beauty and elegance to your landscape.



Step Installation: Excavate and grade the area for the first step. Steps should be placed on a base at least 6" thick of well-draining $1\frac{1}{2}$ " processed gravel. Compact to a minimum of 95% Standard Proctor.

Place a step with either forks or straps using a small excavator or skid-steer to lift the piece into place. Fill behind each step with free-draining soil and compact to 95% Standard Proctor. Include a slight pitch to allow water to run off. Continue placing steps in this manner until the finished grade is reached.

For more information, please see our Rosetta Step Collection architectural product sheet.

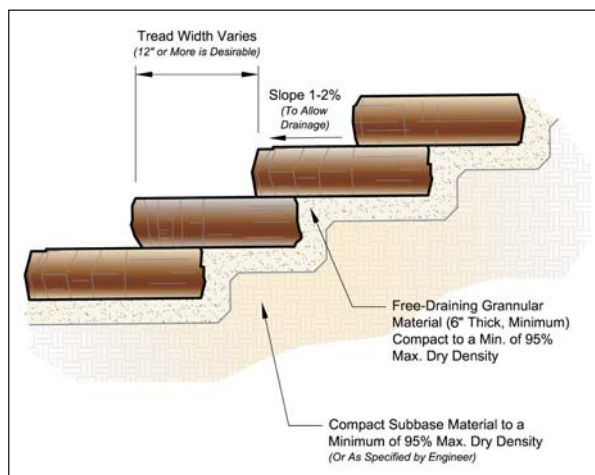


Figure 4 - Rosetta Step Cross-Section

ROSETTA POND KIT

Building a pond with the look of natural stone has never been so easy. Rosetta offers a pond kit with all the information you need to know to build a native waterfall and pond.



The pond is constructed using Rosetta Wall units from Pallets B and C and step units from the Rosetta Step Collection.

For detailed installation instructions, ask your Ideal representative or visit the Rosetta website for the Pond Kit Installation Manual.

DESIGN & WALL PATTERNS

Rosetta Wall's 12-piece collection offers plenty of versatility in laying out a wall design. Some may choose to be creative in the field by building a custom wall as they go, while others may prefer to select one of the preset patterns or use *Rosetta Wall Designer* software to create a custom design. The program is free and may be downloaded by visiting www.discoverrosetta.com.

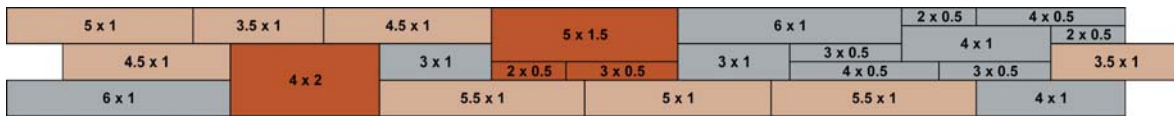
Preset Patterns

We have 3 preset patterns based on full 90 sf modules to choose from:

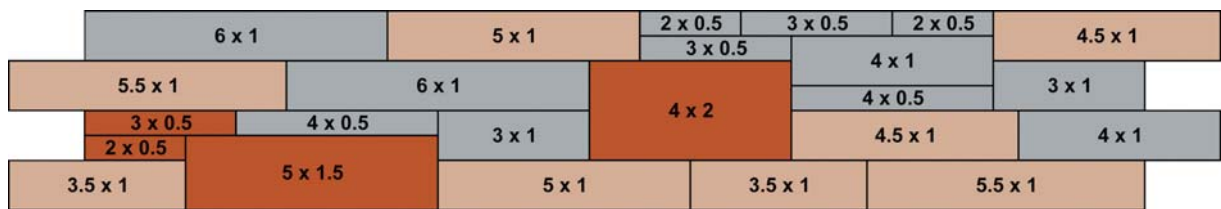
- 3' high x 30' long
- 4' high x 22.5' long
- 5' high x 18' long

For longer walls simply continue the pattern to the desired length.

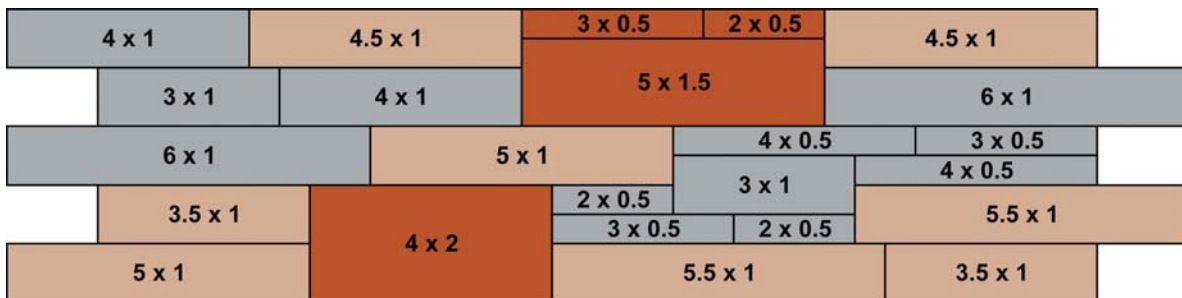
ROSETTA SAMPLE PATTERNS



Preset Pattern 3' high x 30' long



Preset Pattern 4' high x 22.5' long



Preset Pattern 5' high x 18' long

A white deposit known as efflorescence may appear naturally on any concrete or masonry product. It does not affect the structural integrity and will dissipate over time. Efflorescence is not indicative of a flawed product. For more information, ask for our Efflorescence Advisory.

Rosetta Wall Packaging					
Pallet A	Length & Height	Set Back	Pcs/Pallet	Face Feet	Weight/pc
	3.5' x 12"	3"	1	3.5	792
	4' x 12"	3"	1	4	880
	5' x 12"	3"	1	5	1100
	5.5' x 12"	3"	1	5.5	1232
Total A				18	4004
Pallet B	Length & Height	Set Back	Pcs/Pallet	Face Feet	Weight/pc
	2' x 6"	1.5"	1	1	220
	3' x 6"	1.5"	1	1.5	330
	4' x 6"	1.5"	1	2	440
	3' x 12"	3"	1	3	660
	4.5' x 12"	3"	1	4.5	1012
	6' x 12"	3"	1	6	1320
Total B				18	3982
Pallet C	Length & Height	Set Back	Pcs/Pallet	Face Feet	Weight/pc
	2' x 6"	1.5"	1	1	220
	3' x 6"	1.5"	1	1.5	330
	5' x 18"	4.5"	1	7.5	1650
	4' x 24"	6"	1	8	1760
Total C				18	3960
Corner Unit	4'l x 2.5'w x 12"h	--	3	10	1400

Note: All wall units are 24" in depth. Weights shown are approximate.

ROSETTA WALL UNITS



2' l x 6" h



3' l x 6" h



4' l x 6" h



3' l x 12" h



3.5' l x 12" h



4' l x 12" h



4.5' l x 12" h



5' l x 12" h



5.5' l x 12" h



6' l x 12" h



5' l x 18" h



4' l x 24" h

Rosetta® is a registered trademark of Rosetta Hardscapes, LLC, Charlevoix, MI and is manufactured in New England by Carroll Concrete, Newport, NH

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