



## RETAINING WALLS





RomanPisa



StackStone



RomanStack



RomanPisa

## **ABOUT EXPOCRETE**

Proud to be 100% Canadian, Expocrete has been serving Western Canada with quality products and outstanding customer service since 1979. With new products, innovative ideas and technical support, Expocrete is a leader in its industry and strives to be ahead of the competition.

### **MISSION STATEMENT**

“Expocrete’s goal is to be the leading manufacturer and marketer of concrete products. We will achieve this by meeting and exceeding our customers expectations with excellence in quality products and service. In doing so, we shall adhere to the highest standards of integrity and commitment to our customers, employees and community.”

If you would like to learn more about our products and services, please do not hesitate to contact one of our Expocrete team members.



SienaStone



Pisa2



Roman Jumbo Pisa



StackStone

## **ADVANTAGES of segmental retaining wall (SRW) systems over cast-in-place concrete or wooden retaining walls.**

Expocrete Concrete Products Ltd. manufactures all products with the utmost care and integrity. Our manufacturing facility has the highest quality control in Western Canada. To prove this, Expocrete guarantees all of its products.

### **Appearance**

- Wide range of different finishes offered
- Many available colours and shapes to compliment the architectural style of your home

### **Moderate Initial Cost and Installation**

- Can be installed by homeowner
- Better performance with easier and faster installation
- Flexibility for site-specific applications
- SRW systems are placed on a compacted aggregate base
- Reduces cost by not requiring an expensive structural footing

### **Low Maintenance**

- SRW systems are manufactured of high strength, low absorption concrete which helps make them resistant to spalling, scour, abrasion, rot and insect damage.

### **High Winter Durability**

- SRW systems can absorb minor movements due to frost or settlement
- Less susceptible to freeze-thaw deterioration

### **ROMAN VS REGULAR**

Every Expocrete SRW system is manufactured to NCMA (National Concrete Masonry Association) standard of 5000 psi (35mpa).

To give old world charm, a specialized tumbling process is used that rounds out the edges and corners. This "Roman" appearance gives the feel of a stone wall that could have been built centuries ago.



Regular



Roman



## STACKSTONE

StackStone is a tapered garden stone that is self-aligning with a structural interlock. Both sides of the stone are rock faced to give freestanding walls an attractive appearance from any angle. This product gives you everything you need to make straight walls, curves and corners. Maximum allowable height is (0.61 m) 2.0 ft.

See our web site for more details.



**Standard Unit:**

**Bundle** 150 Stones  
1160 kg / 2550 lbs

**# of stones per linear** 5.62 m / 1.71 ft

**Dimensions:**  
Front width: 8"  
Back width: 6"  
Depth: 8"  
Height: 4"

**Coping Unit:**

**Bundle** 150 Stones  
1090 kg / 2400 lbs

**# of stones per linear** 5.62 m / 1.71 ft

**Dimensions:**  
Front width: 8"  
Back width: 6"  
Depth: 8"  
Height: 4"

**Starter Unit:**

**Bundle** 50 Stones  
182 kg / 400 lbs

**Dimensions:**  
Front width: 4"  
Back width: 3"  
Depth: 8"  
Height: 4"

\*used to create an offset or stagger joints to increase stability\*

**90° Corner Unit:**

**Bundle** 90 Stones  
1145 kg / 2550 lbs

**Dimensions:**  
Front width: 8"  
Back width: 7"  
Depth: 11"  
Height: 4"

\*used to create a 90° corner or step down\*

\*used to construct an 18" square StackStone pillar.\*

**TR Unit:**

**Bundle** 180 Stones  
1227 kg / 2700 lbs

**Dimensions:**  
Front width: 8"  
Back width: 4"  
Depth: 8"  
Height: 4"

\*used when creating radiuses less than 2.4 ft (29")\*

\*used when assembling a 25" StackStone fire pit kit.\*

All above products available in the following colours:  
Charcoal, Desert Buff, Grey, Rustic and Northern



## ROMANSTACK

RomanStack is manufactured by putting a typical StackStone unit through a specialized process that rounds off the edges and corners, and gouges the face. This gives the wall a worn cobble appearance that looks like real stone, not concrete. Maximum allowable height is (0.61 m) 2.0 ft. See our web site for more details.



**Standard Unit:**

**Bundle** 150 Stones  
1160 kg / 2550 lbs

**# of stones per linear** 5.62 m / 1.71 ft

**Dimensions:**  
Front width: 8"  
Back width: 6"  
Depth: 8"  
Height: 4"

**Coping Unit:**

**Bundle** 150 Stones  
1090 kg / 2400 lbs

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**Dimensions:**  
Front width: 8"  
Back width: 7"  
Depth: 11"  
Height: 4"

\*used to create a 90° corner or step down\*

\*used to construct an 18" square RomanStack pillar.\*

**TR Unit:**

**Bundle** 180 Stones  
1227 kg / 2700 lbs

**Dimensions:**  
Front width: 8"  
Back width: 4"  
Depth: 8"  
Height: 4"

\*used when creating radiuses less than 2.4 ft (29")\*

\*used when assembling a 25" RomanStack fire pit kit.\*

All above products available in the following colours:  
Charcoal, Desert Buff, Grey, Rustic and Northern



## QUARRY STONE

Quarry Stone is a unique block used in creating freestanding walls or stone fences under 2.0 ft in height. This stone can also be used to construct pillars, benches and fireplaces.

See our web site for more details.

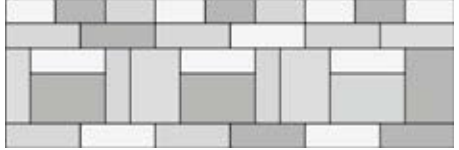


**Quarry Stone:**

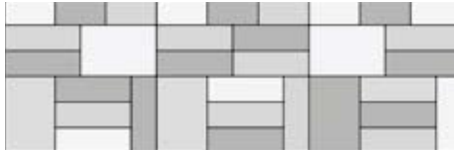


Bundle	100 Stones 1500 kg / 3312 lbs
Dimensions:	Front width: 12" Back width: 12" Depth: 8" Height: 4"
Coverage per unit	32.15 pcs m2 3 pcs ft2

Sample Pattern 1



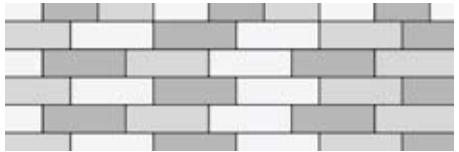
Sample Pattern 2



Sample Pattern 3



Sample Pattern 4



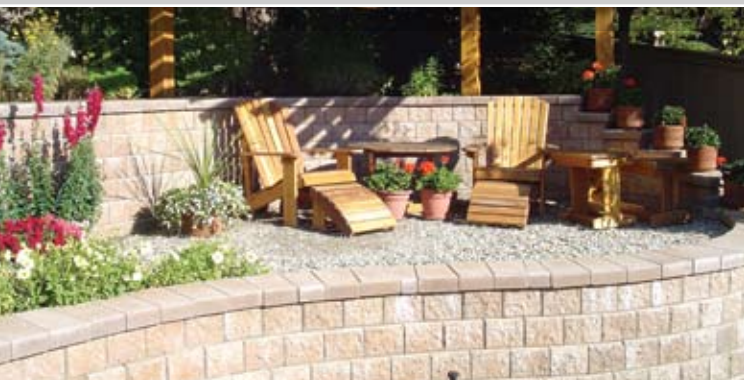
The above product is available in the following colours:  
Charcoal, Desert Buff, Rustic and Northern



## PISA2

Pisa2 retaining walls offer the flexibility of design and the quarried stone appearance that architects, engineers, contractors and homeowners are looking for. Pisa2 is the ideal way to handle grade changes in any landscape or garden project and can be used to increase the amount of usable space for patios, terraces and parking pads.

See our web site for more details.



**Standard Unit:**

Bundle	72 Stones 1500 kg / 3312 lbs
# of stones per linear	4.92 m / 1.5 ft
Dimensions:	Front width: 8" Back width: 8" Depth: 12" Height: 6"

\*used when constructing straight walls or when creating an inside radius.

**Tapered Unit:**

Bundle	72 Stones 1339 kg / 2952 lbs
# of stones per linear	4.92 m / 1.5 ft
Dimensions:	Front width: 8" Back width: 6" Depth: 12" Height: 6"

\*used when constructing straight walls or when creating an outside radius.

**Starter Unit:**

Bundle	144 Stones 1500 kg / 3312 lbs
Dimensions:	Front width: 4" Back width: 4" Depth: 12" Height: 6"

\*used to create an offset or stagger joints to increase stability.

**90° Corner Unit:**

Bundle	18 right / 18 left corners 1176 kg / 2592 lbs
Dimensions:	Front width: 20" Back width: 20" Depth: 8" Height: 6"

\*used to create a 90° corner or stepdown.

**45° Corner Unit:**

Bundle	18 right / 18 left corners 1176 kg / 2592 lbs
Dimensions:	Front width: 20" Back width: 20" Depth: 8" Height: 6"

\*used to create a 45° angle during wall construction.

All above products available in the following colours:  
Charcoal, Desert Buff, Grey, Rustic & Northern



## ROMANPISA

RomanPisa is manufactured by putting a typical Pisa2 unit through a specialized process that rounds off the edges and corners, and gouges the face. This gives the wall a worn cobble appearance that looks like real stone, not concrete. RomanPisa can be substituted for any Pisa2 system application.

See our web site for more details.



**Standard Unit:**

Bundle	72 Stones 1500 kg / 3312 lbs
# of stones per linear	4.92 m / 1.5 ft
Dimensions:	Front width: 8" Back width: 8" Depth: 12" Height: 6"

\*used when constructing straight walls or when creating an inside radius.

**Tapered Unit:**

Bundle	72 Stones 1339 kg / 2952 lbs
# of stones per linear	4.92 m / 1.5 ft
Dimensions:	Front width: 8" Back width: 6" Depth: 12" Height: 6"

\*used when constructing straight walls or when creating an outside radius.

**Starter Unit:**

Bundle	144 Stones 1500 kg / 3312 lbs
Dimensions:	Front width: 4" Back width: 4" Depth: 12" Height: 6"

\*used to create an offset or stagger joints to increase stability.

**90° Corner Unit:**

Bundle	18 right / 18 left corners 1176 kg / 2592 lbs
Dimensions:	Front width: 20" Back width: 20" Depth: 8" Height: 6"

\*used to create a 90° corner or stepdown.

**45° Corner Unit:**

Bundle	18 right / 18 left corners 1176 kg / 2592 lbs
Dimensions:	Front width: 20" Back width: 20" Depth: 8" Height: 6"

\*used to create a 45° angle during wall construction.

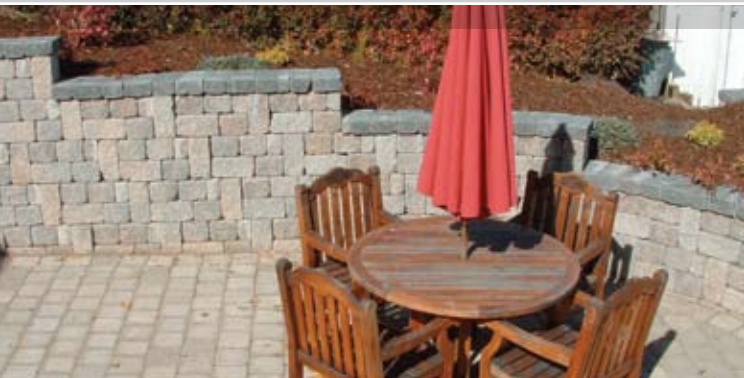
All above products available in the following colours:  
Charcoal, Desert Buff, Rustic & Northern



## ROMAN JUMBO PISA

Roman Jumbo Pisa has a unique style and size. When used in combination with RomanPisa, it offers a variety of patterns within your retaining wall system. Roman Jumbo Pisa can be installed horizontally and vertically. The unique design allows for even the most creative designer to play with the many options that are created from this unique block.

See our web site for more details.



**Roman Jumbo  
Pisa:**



Bundle

64 Stones

1512 kg / 3328 lbs

Dimensions:

Front width: 12"

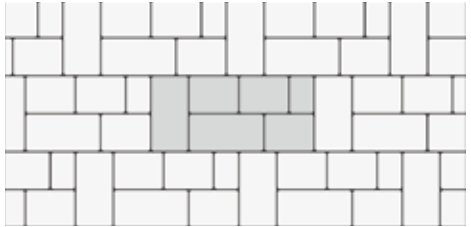
Back width: 12"

Depth: 9"

Height: 6"

\*used with RomanPisa to create random or patterned designs.

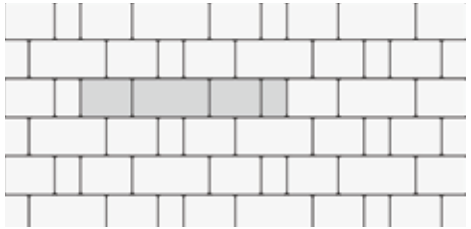
Sample Pattern 1



Per 100 sq.ft.

139 Standard, 47 Half, 93 Jumbo

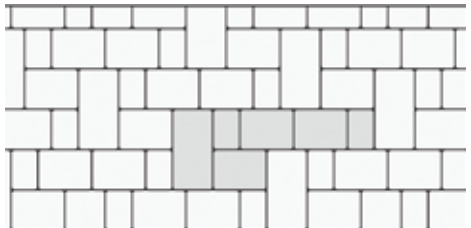
Sample Pattern 2



Per 100 sq.ft.

150 Standard, 75 Half, 75 Jumbo

Sample Pattern 3



Per 100 sq.ft.

164 Standard, 110 Half, 56 Jumbo

The above product is available in the following colours:  
Charcoal, Desert Buff, Rustic & Northern



## CORNERSTONE

CornerStone is a hollow core unit that has unique interlocking lugs and tapered sides that allow maximum flexibility during construction. When stacked and filled with gravel, CornerStone units interlock, providing high shear resistance and excellent connection strength to geosynthetic reinforcement (where required).

See our web site for more details.



**Flat Face:**

Bundle

40 Stones

1455 kg / 3200 lbs

# of stones per linear

2.18 m / 0.67 ft

Dimensions:

Front width: 18"

Depth: 12"

Height: 8"

**Radial Face:**

Bundle

40 Stones

1455 kg / 3200 lbs

# of stones per linear

2.18 m / 0.67 ft

Dimensions:

Front width: 18"

Depth: 12"

Height: 8"

**Offset Face:**

Bundle

40 Stones

1455 kg / 3200 lbs

# of stones per linear

2.18 m / 0.67 ft

Dimensions:

Front width: 18"

Depth: 12"

Height: 8"

**90° Corner Unit:**

Bundle

32 Stones

871 kg / 1920 lbs

Dimensions:

Front width: 18"

Depth: 9"

Height: 8"

\*used to create a 90° corner or stepdown.\*

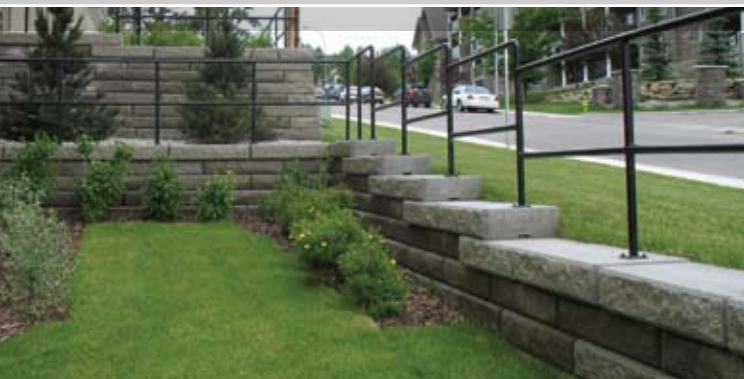
Stones may need to be cut in half to create an offset or stagger joints to increase stability.

All above products available in the following colours:  
Charcoal, Desert Buff, Grey & Rustic.



## SIENASTONE

SienaStone combines the stability of large modular units with a popular natural rock-like appearance. Its proportions are well suited for both residential and commercial applications. Because of its size, SienaStone is a great choice for constructing steps. SienaStone's split face makes it an attractive alternative for most heavy load bearing applications. See our web site for more details.



**Standard 500 Unit:**

Bundle

# of stones per linear  
Dimensions:6 Stones  
1290 kg / 2868 lbs  
1.0 m / 0.31 ft  
Front width: 39"  
Back width: 39"  
Depth: 20"  
Height: 7.25"**925 Unit:**

Bundle

# of stones per linear  
Dimensions:3 Stones  
1191 kg / 2655 lbs  
1.0 m / 0.31 ft  
Front width: 39"  
Back width: 39"  
Depth: 36"  
Height: 7.25"**Coping Unit:**

Bundle

# of stones per linear  
Dimensions:6 Stones  
1290 kg / 2868 lbs  
1.0 m / 0.31 ft  
Front width: 39"  
Back width: 39"  
Depth: 20"  
Height: 7.25"**90° Corner Unit:**

Bundle

Dimensions:

3 left / 3 right corners  
1290 kg / 2844 lbs  
Front width: 35"  
Back width: 35"  
Depth: 20"  
Height: 7.25"

\*used to create a 90° corner or stepdown.\*

**45° Corner Unit:**

Bundle

Dimensions:

3 left / 3 right corners  
1254 kg / 2766 lbs  
Front width: 34"  
Back width: 34"  
Depth: 20"  
Height: 7.25"

\*used to create a 45° angle during wall construction.\*

**Curve Wall Unit:**

Bundle

# of stones per linear  
Dimensions:12 Stones  
1161 kg / 2559 lbs  
1.95 m / 0.60 ft  
Front width: 20"  
Back width: 17"  
Depth: 20"  
Height: 7.25"

\*used when constructing walls with a minimum radius of 3.6 m / 12 ft\*

All above products available in the following colours:

Charcoal, Desert Buff and Grey



## COPING UNITS

All of the following styles of coping units can be used with Pisa2, RomanPisa, Roman Jumbo Pisa and CornerStone retaining wall systems.

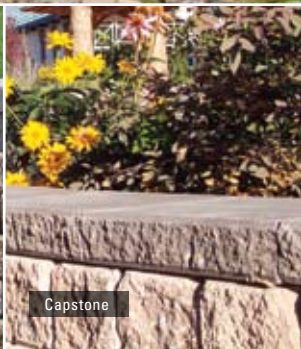
See our web site for more details.



Revers-a-cap



Roman Revers-a-cap



Capstone

### Revers-a-cap:



Bundle	120 Stones
	1472 kg / 3240 lbs
# of stones per linear	5.25 m / 1.6 ft
Dimensions:	Front width: 8"
	Back width: 7"
	Depth: 14"
	Height: 3"

Colours: Charcoal, Desert Buff & Grey.

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### Capstone:



Bundle	64 Stones
	1455 kg / 3200 lbs
# of stones per linear	2.19 m / 0.67 ft
Dimensions:	Front width: 18"
	Back width: 18"
	Depth: 12"
	Height: 3"

Colours: Charcoal, Desert Buff & Grey.

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### Roman Revers-a-cap:



Bundle	72 Stones
	1078 kg / 2376 lbs
# of stones per linear	5.6 m / 1.71 ft
Dimensions:	Front width: 8"
	Back width: 6"
	Depth: 14"
	Height: 4"

Colours: Charcoal & Desert Buff.



## PILLARS, CORNERS & CURVES

Expocrete has the most versatile retaining wall systems to assist you with your landscape design. Incorporating pillars to accent a driveway or creating curves to enhance the design of a planter, are easily achieved with our wide range of retaining wall systems.

See our web site for more details and patterns.

### StackStone/RomanStack Pillar

Step 1:



2:



3:



4:



5:



6:



### StackStone/RomanStack Inside Curve



### StackStone/RomanStack Outside Curve



### Pisa2/RomanPisa Inside 90° Corner



### Pisa2/RomanPisa Outside 90° Corner





## FIRE PITs

### STACKSTONE & ROMANSTACK FIRE PIT KITS

Prepackaged fire pit kits include 25" grill and installation instructions. Inside diameter 25" / outside diameter 42"

Colours: Charcoal, Desert Buff, Rustic & Northern

Bundle: 1 Fire pit kit  
458 kg / 1008 lbs

Stackstone



Romanstack



StackStone and RomanStack fire pits can also be constructed to accommodate a 42" diameter hinged grill. These larger fire pits are ideal for larger back yards and acreages.



# INSTALLATION GUIDE

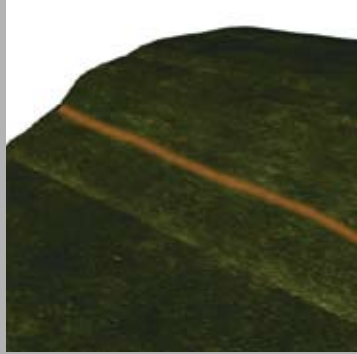
## What you will need:

Retaining Wall Units  
Base Materials  
Level  
Stakes  
String Line  
Compactor  
Hand Tamper  
Broom  
Adhesive

Calculation for base materials:  
 $\text{Length} \times \text{Width} \div 80 =$   
cubic yards needed for 4 inch  
compacted depth.

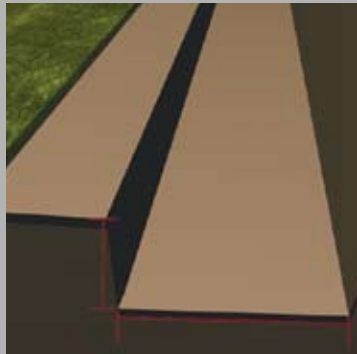
## STEP 1: PLANNING

Locate all utilities and contact local utility companies before digging. Mark a line where the front of the wall will be placed, keeping in mind that some wall systems stack vertically and some will have a setback when stacked. This setback may affect the position of the first row of block. It is important to choose the right wall system for your project. Some retaining wall projects may require engineering. Consult a professional.



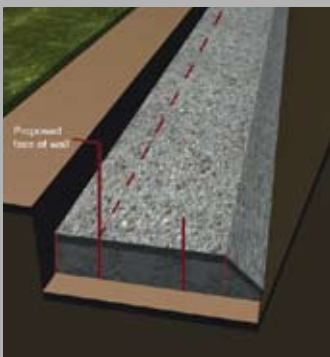
## STEP 2: EXCAVATE

Remove soil and excavate a trench to accommodate the granular base and first course of block. The trench width (front to back) should be no less than twice the width of the block being used. This is to account for the drainage layer behind the wall. The trench depth assumes one unit is buried in addition to the depth of the granular base. However as the wall height increases, depth of embedment also increases. The native foundation soil should be checked to make sure it is firm and capable of supporting the finished wall.



### STEP 3: GRANULAR BASE

The base should be started at the lowest elevation of the wall. The base should be composed of well-graded, free-draining (less than 8% fines), angular gravel material, and compacted thoroughly. The granular base should be the same depth as the block being used and twice the width (front to back). This is to account for the drainage layer behind the wall. In some situations it may be necessary to step the base. This is when the grade in front of the wall slopes up or down, the base must be stepped to compensate.



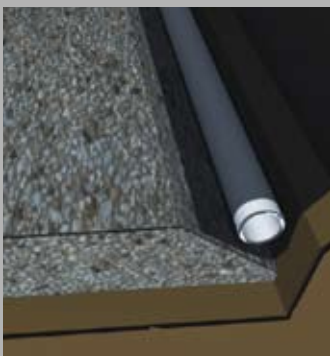
### STEP 4: FILTER

Lay the approved filter fabric (geotextile) along the bottom of the rear of the trench and extend up the exposed excavation to the proposed wall height. Leave adequate material at the top to fold back towards the wall (completely containing the drainage material). Stake the filter cloth against the slope during construction.



### STEP 5: DRAINAGE

Various options for the drain placement exist, depending on how the pipe is to be out let. The drain may be outlet through the wall face or connected to a positive outlet. The drainage system is extremely important and outlets must be planned prior to construction. At the rear of the base, allow the granular material to slope down on the sides towards the drain trench. In the area behind the base, place the approved drain tile (perforated drain with filter sock) on top of the filter cloth. Drain tile must be sloped at a minimum of 2%.

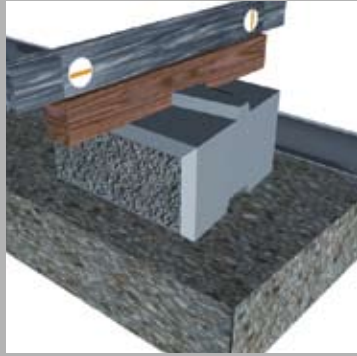


# INSTALLATION GUIDE



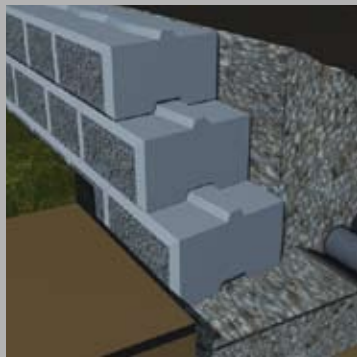
## STEP 6: PLACE THE FIRST COURSE

Position a level string line to mark the location of the first course. This can be determined by placing a block in the middle of the compacted granular base. Extra care should be taken at this stage as it is critical for accurate alignment. Ensure units are level front to back and left to right.



## STEP 7: STACK UNITS & BACKFILL MATERIAL

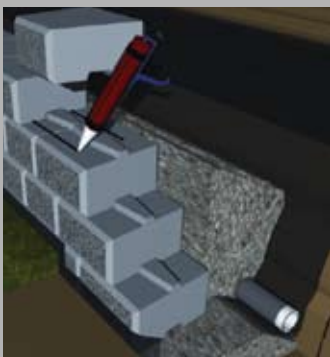
Sweep tops of the placed units to remove any debris and stack next course in a running bond pattern so that the middle of the unit is above the joint between adjacent blocks below. Continue stacking courses to a maximum of four courses before backfilling. A free-draining, 19 mm (3/4in.) clear stone drainage material is placed immediately behind the wall and compacted with a light manual tamper. The drainage layer must be a minimum of 300 mm (12 in.) thick and protected from the native material by the filter cloth. Continue stacking and backfilling as described.



**NOTE:** The illustrations shown are for the StackStone SRW conventional vertical retaining wall system. For a more detailed Pisa2, RomanPisa, Cornerstone, or SienaStone conventional and reinforced SRW installation, please consult a qualified SRW retaining wall contractor or an Expconcrete representative.

### **STEP 8: PLACE THE COPING UNITS**


Various coping units are available depending on the desired look. A layer of concrete adhesive must be applied to the top course in order to fix the coping units in place. Place the coping unit firmly on top of the adhesive, ensuring both surfaces are free of debris, and apply pressure to secure. Follow adhesive installation guidelines.



### **STEP 9: ENCAPSULATE DRAINAGE LAYER AND FINISH GRADING**

Fold the excess filter cloth over the top of the drainage layer and extend up the back face of the coping unit. An impervious layer of soil can be placed on top of the filter cloth and compacted manually. Slope the surface above and below the wall to ensure water will flow away from and not accumulate near the wall units.





## RETAINING WALL LIGHTING SYSTEMS

Retaining wall lights are an effective way to create a safe environment and accent your landscape design. These low voltage lighting systems are economical, durable, easy to install and resemble the texture, colour and shape of the retaining wall blocks being used in your landscape design.

Illuminate walkways, patios and driveways with fixtures that virtually disappear during the day.

See our web site for more details.

### **STACKSTONE / ROMANSTACK:**

- Sold individually or in a two-light kit that includes an 88 watt low voltage transformer, 25 feet of wire, 7 watt bulbs and installation instructions.



Colours: Clear, Charcoal, Desert Buff, Grey, Rustic & Northern

### **PISA2 / ROMANPISA:**

- Sold individually or in a two-light kit that includes an 88 watt low voltage transformer, 25 feet of wire, 18 watt bulbs and installation instructions.



Colours: Clear, Charcoal, Desert Buff, Grey, Rustic & Northern

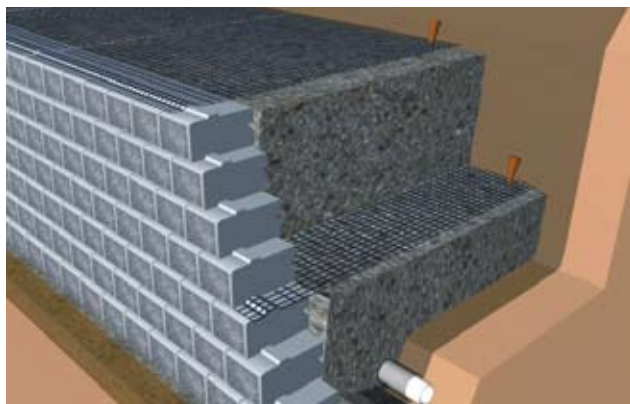
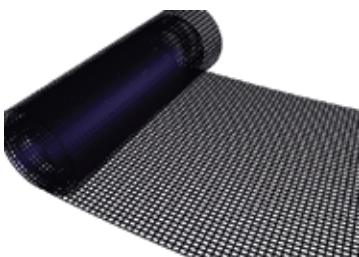
## ACCESSORIES

- ADHESIVES:**
- Available in 300 ml and 825 ml tubes
  - Sold separately or in cases.
  - Used to bond the retaining wall coping units to the standard units.



### **GEOGRID-REINFORCEMENT:**

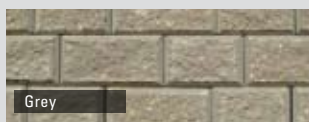
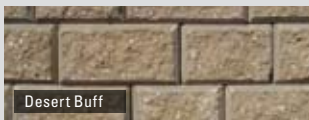
Geogrid is a synthetic material that has an open, thin sheet, grid-like structure that is used to reinforce soil. Geogrids are used in retaining walls that exceed a predetermined height and/or are affected by other forces that may have an impact on how the retaining wall performs. Consult your Expocrete representative for more information on reinforced segmental retaining walls.



Example of segmental retaining wall reinforcement.

# COLOURS

## REGULAR



## ROMAN



Colours may vary.

### Acheson Location

#38 - 53016 Hwy 60 Acheson, AB T7X 5A7

Tel: 780 962 4010 Fax: 780 962 3230

Toll free: 1 800 232 9443

### Balzac Location

P.O. Box 40, 260032 Range RD. 291 Balzac, AB T0M 0E0

Tel: 403 279 0404 Fax: 403 279 4191

Toll free: 1 800 279 3728

### Saskatoon Location

1800 - 11 Street West Saskatoon, SK S7M 1H9

Tel: 306 652 7232 Fax: 306 665 3211

