



## INSTALLATION GUIDE

 **BOLDUC**

    [WWW.BOLDUC.CA](http://WWW.BOLDUC.CA)



# CONTENT

## Pavers and slabs

Applications	4
Main applications	
Selecting pavers and slabs	4
Paver and slab installation	5
Paver layout patterns	
Avenue Permeable	8
Hexagon 80	8
Prestige 80	9
Citadin 80	9
Linia	10
Citadin M80	11
Richelieu M80	12
Acadia M70	13
Opus	14
Manoir M60	15
Chateau	16
New England Classic and Econo	17
Slab layout patterns	
Prestige 65 Slab	18
Citadin 65 Slab	18
Citadin M60 Slab	19
Richelieu M60 Slab	20
Acadia M50 Slab	21
Lotus stones	22
Sand quantity	23

## Wallstones, columns and steps

Applications	24
Main applications	
Selecting wallstones	
Wallstone installation	25
Specific installation details	
Supra Citadin 180 Block	27
Citadin 90 Wallstones	33, 34, 37, 38, 39, 40, 41
Laurentian 90 Wallstones	35, 36, 37, 38, 39, 40, 41
Appalachian Stones	42
Appalachian Wall Pattern	46
Appalachian Steps	47
Appalachian Columns	48
Sutton Wallstones	50

## Essentials

Sutton Firepit T1	52
Laurentian 90 Wood Firepit	53
Laurentian 90 Gaz Firepit	54
Citadin 90 Wood Firepit	57
Citadin 90 Gaz Firepit	58
Supra Citadin 180 Gaz Firepit	61

## Recommended applications

Deicing Salt Exposure	62
-----------------------	----

## Maintenance

Efflorescence	63
---------------	----

## Warranty

64
----



## PLEASE READ THESE INSTRUCTIONS BEFORE BEGINNING ANY LANDSCAPING WORK

It is essential that you know the municipal bylaws and any claims the city may have on the land. You must also check for the presence of pipes and wires in the areas to be excavated.

To assess how much material is required, make a plan of the area to be covered. Bring your plan to your BOLDUC products supplier who will help you determine how many pavers and curbs and how much granular material you will need to order to complete the job. If you are replacing asphalt with pavers, first remove the asphalt layer to gauge the state of the sub-base. If it is inadequate, you will have to excavate and redo it.

It is also important to pick the products randomly from several cubes to ensure uniform colour throughout the project.

When installing Gray, Granite Gray, Ice Gray, Ivory Beige, Anthracite, or Black pavers and slabs, we recommend covering them with a membrane to protect from dirt and grime. Walk on the protective membrane during installation to prevent staining or spotting.

We also recommend using a Teflon-coated vibrating plate on pavers or slabs during installation, to protect stone surfaces.

Once Citadin or Prestige pavers or slabs have been installed and properly cleaned, we recommend applying a sealer for easier maintenance.

It is important to understand that all installed products, such as pavers, slabs, curbs and wallstones, are deemed to have been accepted.

To help you plan your landscaping project, you can download our document "[The 7 stages of a successful landscaping plan](https://conseils.bolduc.ca/7steps/)" at <https://conseils.bolduc.ca/7steps/>.

## **SAFETY PRECAUTIONS**

### 1. Cutting straps



Be careful as products may have shifted during transportation and could topple.

### 2. Cutting products

Use of personal safety equipment is recommended.



### 3. Do not stack more than 2 pallets high.



## APPLICATIONS

### MAIN APPLICATIONS

Concrete paver applications vary. They are subjected to various conditions as to the ground bearing capacity and the various loads applied. Under these conditions, the fields of applications can be divided into three groupings, namely the low load areas, the light traffic areas and the heavy traffic areas.

Low load areas	Light traffic areas	Heavy traffic areas
Characterized by pedestrian traffic.	Areas under heavy and constant pedestrian, bicycle or other similar traffic and/or light motor vehicle traffic.	Areas under heavy motor vehicle traffic and heavy-machinery traffic.
<ul style="list-style-type: none"> <li>• walkways;</li> <li>• patios;</li> <li>• decks of in-ground swimming pools;</li> <li>• roof-decks;</li> <li>• curbs;</li> <li>• various pedestrian areas;</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• residential streets;</li> <li>• residential parkings;</li> <li>• cycling trails;</li> <li>• parks;</li> <li>• public and commercial terraces;</li> <li>• pedestrian pathways;</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• main roadways and commercial streets;</li> <li>• bus corridors;</li> <li>• street and school crossings;</li> <li>• industrial, harbour and airport areas;</li> <li>• commercial and industrial parking lots;</li> <li>• crossroads and intersections;</li> <li>• shopping centers;</li> <li>• unloading docks;</li> <li>• etc.</li> </ul>

### SELECTING PAVERS AND SLABS

Selecting the shape, thickness, and layout patterns of pavers will be done in accordance with the interlocking performance required for the field of application. The requirements in terms of interlocking capacity are based on the various conditions affecting the pavement during its life cycle, namely the loads to which the pavement will be subjected to, the load-bearing capacity of the ground, drainage, environmental conditions, local availability of materials, and local construction practices.

Summary table\*

Applications	Recommended type of paver or slab	Recommended paver or slab thickness (mm)	Recommended layout pattern
Low load areas	Any type of paver or slab	40, 50, 60, 65	Any layout pattern
Light traffic areas	Any type of paver	60, 70, 80	Any layout pattern
High traffic areas	Self-locking geometric	80, 100, 150	Discontinuous joint layout

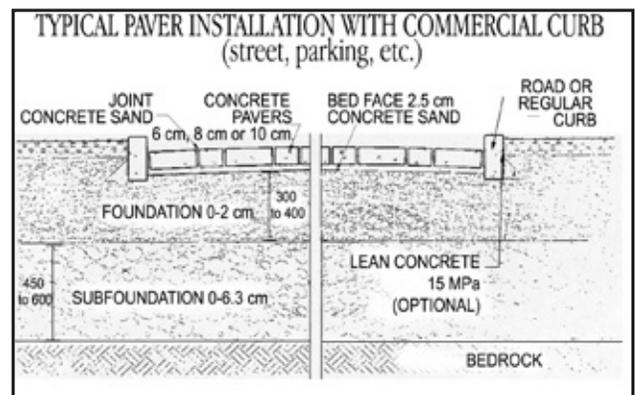
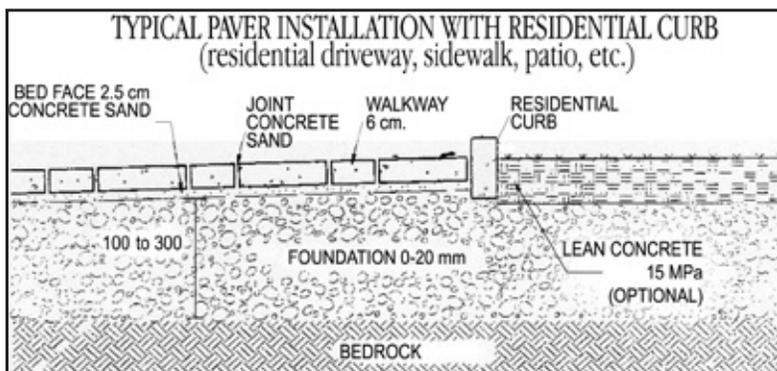
\* Recommendations pour les cas généraux seulement. Ce tableau ne saurait répondre à toutes les questions soulevées par les cas particuliers. À ce sujet, veuillez consulter le service technique de BOLDUC ou un professionnel.

## PAVER AND SLAB INSTALLATION

### TOOLS NEEDED: FOR PAVERS

- Wheelbarrow
- Two 3 m long (10 feet) rigid pipes, 25 mm (1 inch) diameter
- One 25 mm x 150 mm x 2.4 m (1 in. X 6 in. X 8 ft.) plank
- Wooden stake
- Level
- Mason's cord
- Line level
- Chalk line
- Measuring tape
- Broom
- Membrane
- Rake
- Shovel
- Paver knife or concrete saw
- Plate compactor with Teflon plate (highly recommended) to protect pavers and slabs

### STEPS TO FOLLOW



### 1. Excavation

- 1.1 To determine the excavation depth and quantity of granular material required for your project, consult the table at the bottom of the next page.
- 1.2 When excavating, create a 1% slope (1/8 in. per foot or 1 cm per meter) to ensure adequate drainage. The same slope must be used for the base, the bed face and the paver surface (See subsequent steps).
- 1.3 The periphery of the excavated area must extend at least 12 in. (30 cm) beyond the paver surface. This extra space is for installing concrete curbs and compacting the soil behind the curbs to ensure the stability of the surface to be paved.
- 1.4 Use a rake to level the bottom of the excavated area and a vibrating plate to compact the soil if it is sandy or granular. A carefully leveled base will minimize variations in bed face thickness and reduce the risk of final paver surface distortion.

If the soil is mainly clay, it should not be compacted. For clay soil, we also strongly recommend using a geotextile membrane to separate the soil from the granular base material to prevent mixing and provide greater long-term stability.

### 2. Base

Spread 0-3/4 in. granular material in 4 in. (10 cm) layers over the bottom of the excavated area, compacting after each layer. Several passes will be needed to ensure proper compaction. Lightly hose down the granular material to improve compaction.

We recommend using a vibrating plate, a vibrating roller or a jumping jack tamper to compact the granular material.

Check the foundation's final level, using a guide that is the thickness of the bedding and paver layers. The screed pipes used for the bedding layer can serve as guides (section 4.2). Bear in mind that the compacted bedding layer will be about 10 mm thinner than originally. If necessary, correct the foundation level and compact it again. Good control of the foundation level will minimize variations in the bedding layer's thickness, which will in turn reduce the risk of differential deformations of the paved surface.

### 3. Bordures

To install Citadin, Laurentian, Appalachian, Regular or Medium curbs, proceed as follows:

Begin installing the curbs before you finish the base. Install the first row of curbs on the side where you wish to begin installing the pavers. Compact the soil behind the curbs, and make sure they are solidly anchored and perpendicular to the pavers you will be installing.

Next, temporarily install a row of pavers, in accordance with your chosen pattern, in order to determine the final location of the second row of curbs. This will minimize the number of pavers you will have to cut. Finish installing the curbs. Use stretched twine to ensure the curbs are well aligned. Backfill the curbs and compact the soil. You may now complete your base.

## PAVER AND SLAB INSTALLATION

---

### STEPS TO FOLLOW

#### **4. Bed face**

---

- 4.1 Spread a layer of concrete sand or stone dust no more than 5/8 in. to 1 in. thick (1.5 to 2.5 cm). It is important that the bed face be as thin as possible. Do not compact since a 1 in. (2.5 cm) bed face will reduce to 5/8 in. (1.5 cm) following final compaction of the pavers (See step 5.7). The thickness of the bed face must be as consistent as possible.
- 4.2 Level the concrete sand or crushed material of same particle size distribution using a straight plank and two pipes no more than 1 in. (2.5cm) in diameter (See Diagram A).

#### **5. Paver and Slab Installation**

---

- 5.1 Lay the pavers or slabs on the bed face as per the desired pattern. Ask for the BOLDUC paver or slab installation patterns from your distributor or visit our website. Continue the installation row by row, walking on the pavers or slabs, not on the bed face (See Diagram B). Fill the space left by the pipes used to level the bed face with concrete sand or crushed material of same particle size distribution..
- 5.2 Leave approximately 1/8 in. (3 mm) between pavers. Some pavers already have built-in side spacers, while others do not.
- 5.3 For best results in terms of the overall consistency of your design, we recommend installing pavers from several cubes simultaneously, taking them in vertical rather than horizontal rows. Also, during installation, make sure the pavers are installed with the correct side facing up.
- 5.4 Check the alignment of the paver or slab joints every five rows. Realign if necessary using a regular screwdriver.

5.5 Install the pavers up to the second to last row.

5.6 If you must cut pavers, use a concrete saw or paver chisel. For slabs, use a concrete saw. Use a chalk line to mark the pavers that must be cut. If using a concrete saw, keep well away from the paved surface when cutting to avoid damaging the pavers with debris thrown off by the saw.

5.7 This step applies to paver installation only. Once the pavers have been installed and the curbs secured, stabilize the paved surface using a vibrating plate (See Diagram C). Do not use a jumping jack tamper or vibrating roller at this stage. For best results, make two or three passes in both directions (See Diagram D).

#### **6. Filling joints**

---

- 6.1 Spread dry concrete sand over the paved surface (let dry in sun if damp). You can also use bagged polymer sand, which has the advantage of always being dry during application. Fill joints with the sand by sweeping over the entire surface and in all directions (see Diagram E). This step is optional for slabs.
- 6.2 This step only applies to paver joint filling. Remove excess sand. Settle the sand into the joints by making several passes with a vibrating plate. Make sure all the joints are completely filled. Repeat steps 6.1 and 6.2 as necessary. After the sand is completely swept and blown off the surfaces, spray the pavers to moisten the sand joints and be sure to remove any excess water with the blower.
- 6.3 If, over time, the joints do not remain completely filled with sand or if they empty little by little, repeat steps 6.1 and 6.2.
- 6.4 We recommend keeping a number of pavers or slabs as replacements.

## PAVER AND SLAB INSTALLATION

### STEPS TO FOLLOW

#### EXCAVATION DEPTH AND FOUNDATION THICKNESS\*

PROJECT	TYPE OF SOIL	MINIMUM REQUIRED EXCAV. DEPTH	MINIMUM BASE THICKNESS	MINIMUM SUBBASE THICKNESS	BED FACE THICKNESS
COMMERCIAL: Street, parking, etc.  (80 mm et 100 mm pavers or thicker)	Clay	45 in. (115 cm)	18 in. (45** cm)	24 in. (60** cm)	5/8 to 1 in. (1.5 to 2.5 cm)
	Gravel	34 in. (85 cm)	12 in. (30** cm)	18 in. (45** cm)	5/8 to 1 in. (1.5 to 2.5 cm)
Residential Driveway  (60 mm pavers or thicker)	Clay	15 in. (37.5 cm)	7 in. (17.5 cm)	18 in. (45 cm)	5/8 to 1 in. (1.5 to 2.5 cm)
	Gravel	11 in. (27.5 cm)	7 in. (17.5 cm)	12 in. (30 cm)	5/8 to 1 in. (1.5 to 2.5 cm)
Sidewalk or patio  (pavers or slabs)	Clay	13 in. (32.5 cm)	4 in. (10 cm)	18 in. (45 cm)	5/8 to 1 in. (1.5 to 2.5 cm)
	Gravel	9 in. (22.5 cm)	4 in. (10 cm)	12 in. (30 cm)	5/8 to 1 in. (1.5 to 2.5 cm)

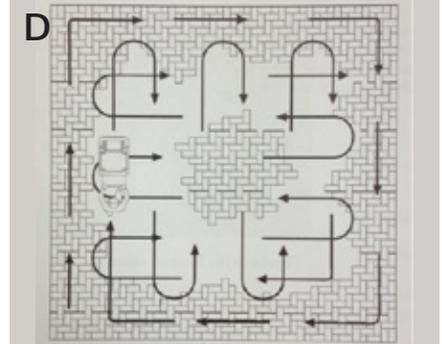
\* These values are intended to serve as a guide, and are valid only for low traffic applications. Certain soil types that are very unstable or especially affected by freeze-thaw cycles may require deeper excavation and thicker foundations. For areas with these soil types, or for large projects, we recommend consulting a geotechnical professional.

\*\* Compacted to 95% of Modified Proctor.

#### NECESSARY MATERIALS

MATERIAL REQUIRED FOR 110 sq.ft. (10m <sup>2</sup> )	TYPE OF SOIL	GRAVEL 0-3/4 in. BASE	GRAVEL 0-2 1/2 in. or class A sand SUBBASE	BED FACE CONCRETE SAND	JOINT FILLER CONCRETE SAND ***
COMMERCIAL: Street, parking, etc.  (80 mm et 100 mm pavers)	Clay	19 800 lb 9 000 kg	26 400 lb 12 000 kg	1 100 lb 500 kg	110 to 220 lb 50 to 100 kg
	Gravel	13 200 lb 6 000 kg	19 800 lb 9 000 kg	1 100 lb 500 kg	110 to 220 lb 50 to 100 kg
Residential Driveway (60 mm pavers or thicker)	Clay	13 200 lb 6 000 kg	—	1 100 lb 500 kg	90 lb 40 kg
	Gravel	8 800 lb 4 000 kg	—	1 100 lb 500 kg	90 lb 40 kg
Sidewalk or patio (pavers or slab)	Clay	11 000 lb 5 000 kg	—	1 100 lb 500 kg	90 lb 40 kg
	Gravel	6 600 lb 3 000 kg	—	1 100 lb 500 kg	90 lb 40 kg

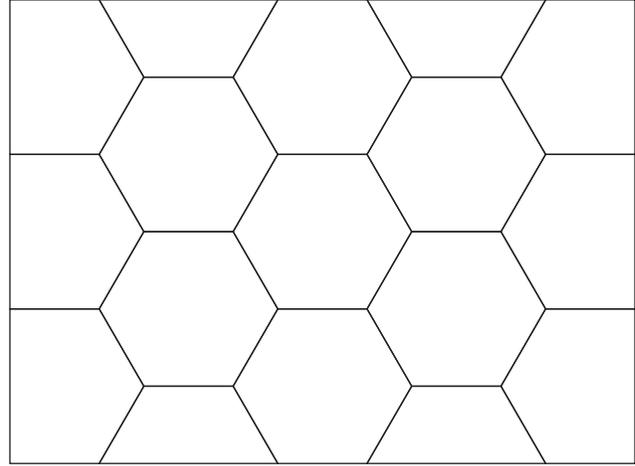
\*\*\* The quantities vary according to the type of pavers or slabs used.



## PAVER LAYOUT PATTERNS

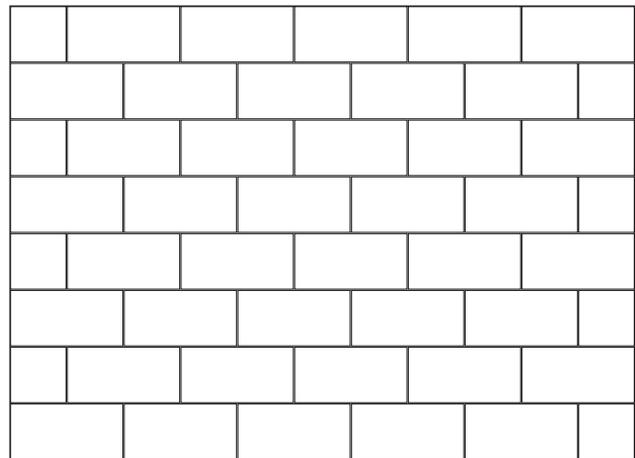
### HEXAGONE 80 PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
3 <sup>1</sup> / <sub>8</sub> x 7 <sup>7</sup> / <sub>8</sub> x 9 <sup>1</sup> / <sub>8</sub>	8 x 20 x 23	2,7	28,57



### AVENUE PERMEABLE PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
3 <sup>1</sup> / <sub>8</sub> x 5 <sup>7</sup> / <sub>8</sub> x 11 <sup>13</sup> / <sub>16</sub>	8 x 15 x 30	0,4	4,2

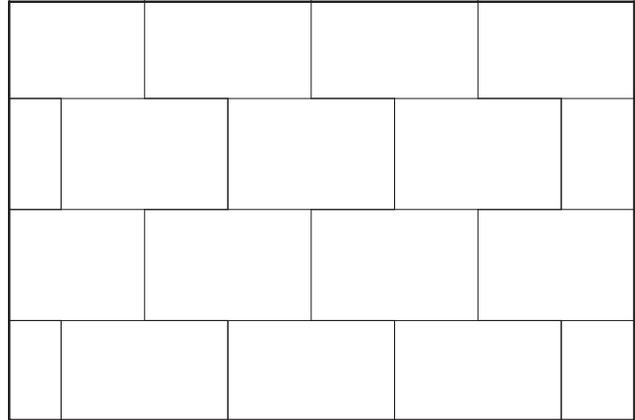


15 x 30 « Runner » Pattern

## PAVER LAYOUT PATTERNS

### PRESTIGE 80 PAVER

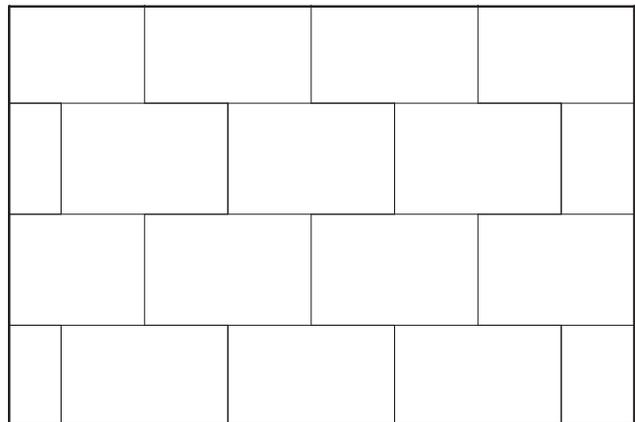
HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
3 <sup>1</sup> / <sub>8</sub> x 15 <sup>3</sup> / <sub>4</sub> x 23 <sup>5</sup> / <sub>8</sub>	8 x 40 x 60	0,4	4,2



40 x 60 «Runner» Pattern

### CITADIN 80 PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
3 <sup>1</sup> / <sub>8</sub> x 15 <sup>3</sup> / <sub>4</sub> x 23 <sup>5</sup> / <sub>8</sub>	8 x 40 x 60	0,4	4,2

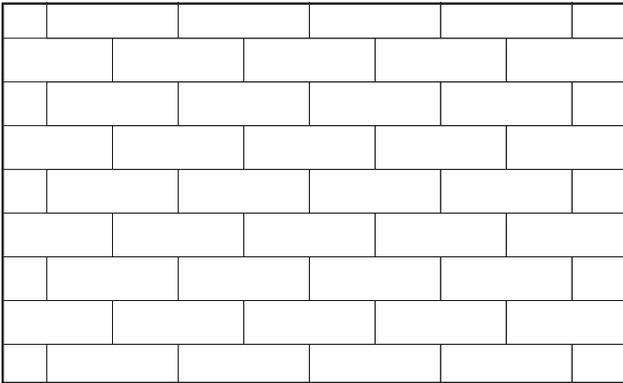
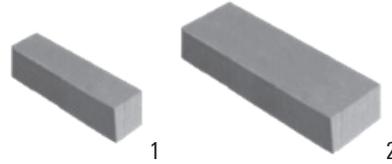


40 x 60 «Runner» Pattern

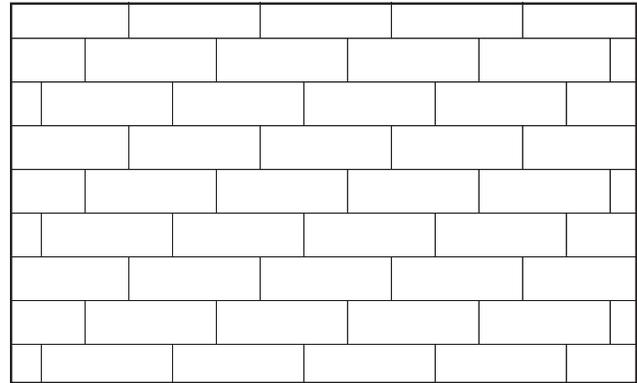
## PAVER LAYOUT PATTERNS

### LINIA PAVER

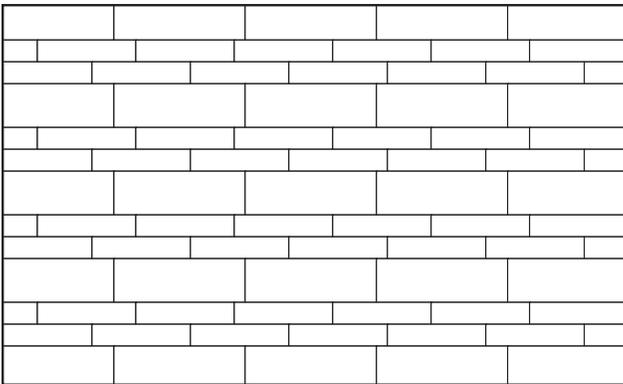
HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 3 <sup>15/16</sup> x 3 <sup>15/16</sup> x 17 <sup>3/4</sup>	10 x 10 x 45	2,06	22,2
1. 3 <sup>15/16</sup> x 7 <sup>7/8</sup> x 23 <sup>5/8</sup>	10 x 20 x 60	0,77	8,3



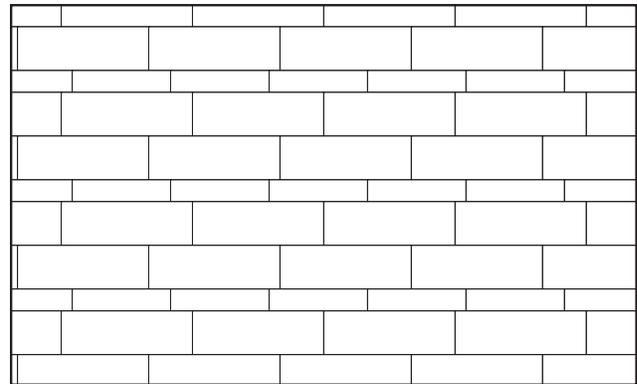
Pattern 1  
1/2 «Runner» Pattern



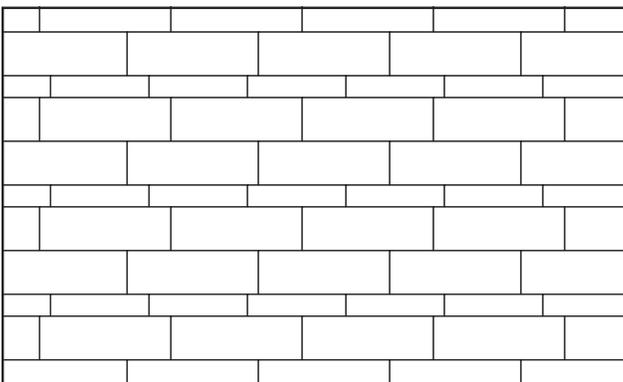
Pattern 2  
1/3 «Runner» Pattern



Pattern 3  
Module 20 and module 10, 1/3 «Runner» Pattern



Pattern 4  
Module 20 and module 10, 1/3 «Runner» Pattern option 2



Pattern 5  
Module 20 and module 10, 1/3 «Runner» Pattern option 3

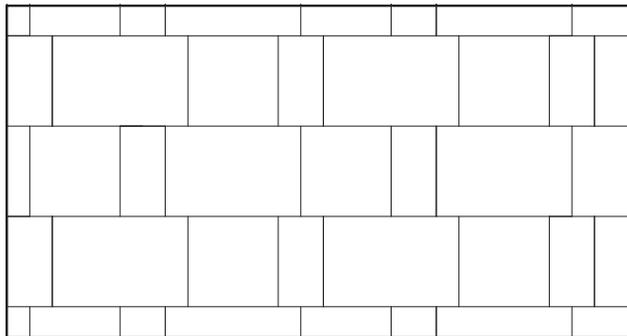
## PAVER LAYOUT PATTERNS

### CITADIN M80 PAVER

We recommend applying a sealer after installation of Citadin M80 pavers for easier maintenance.

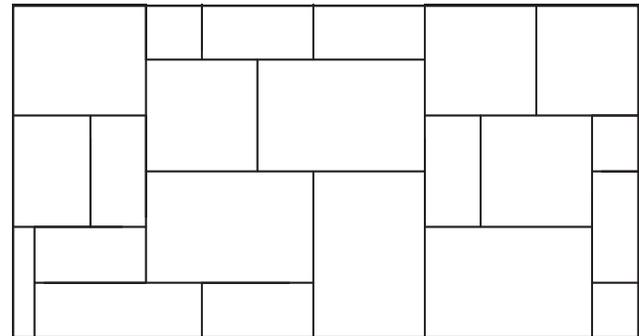
Always follow sealer manufacturer's instructions.

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 3 1/8 x 6 3/8 x 12 13/16	8 x 16,3 x 32,5	0,92	9,92
2. 3 1/8 x 12 13/16 x 12 13/16	8 x 32,5 x 32,5		
3. 3 1/8 x 12 13/16 x 19 3/16	8 x 32,5 x 48,8		
4. 3 1/8 x 19 3/16 x 32	8 x 48,8 x 81,3	0,23	2,52
5. 3 1/8 x 6 3/8 x 12 13/16	8 x 16,3 x 32,5	1,76	18,93

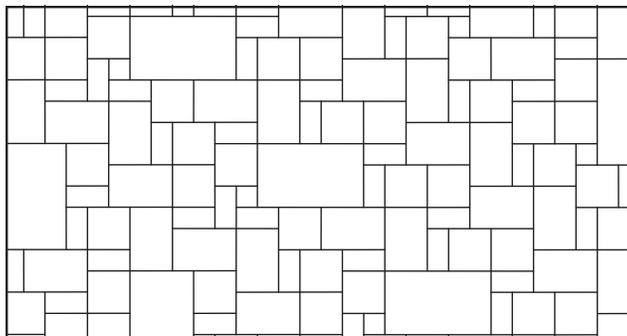


**Pattern 1**  
« Runner » Pattern Pavers 1-2-3

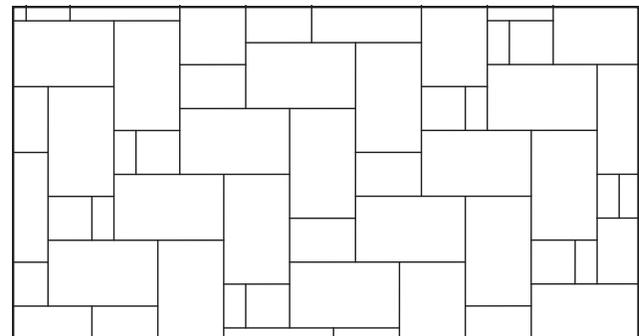
*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*



**Pattern 2**  
« Modular » Pattern Pavers 1-2-3



**Pattern 3**  
Modular Pattern with 15% of Supra Citadin M80 (4)  
16% 16 Citadin M80 paver 1 (80x163x325)  
32% 16 Citadin M80 paver 2 (80x325x325)  
36% 12 Citadin M80 paver 3 (80x325x488)  
15% 2 Supra Citadin M80 paver 4 (80x488x813)



**Pattern 4**  
Modular Pattern with 83% of Supra Citadin M80 (4)  
3% 4 Citadin M80 paver 1 (80x163x325)  
6% 4 Citadin M80 paver 2 (80x325x325)  
7% 3 Citadin M80 paver 3 (80x325x488)  
83% 14 Supra Citadin M80 paver 4 (80x488x813)

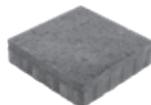
## PAVER LAYOUT PATTERNS

### RICHELIEU M80 PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 3 1/8 x 6 3/8 x 12 13/16	8 x 16,3 x 32,5	0,92	9,92
2. 3 1/8 x 12 13/16 x 12 13/16	8 x 32,5 x 32,5		
3. 3 1/8 x 12 13/16 x 19 3/16	8 x 32,5 x 48,8		
4. 3 1/8 x 19 3/16 x 32	8 x 48,8 x 81,3	0,23	2,52



1



2

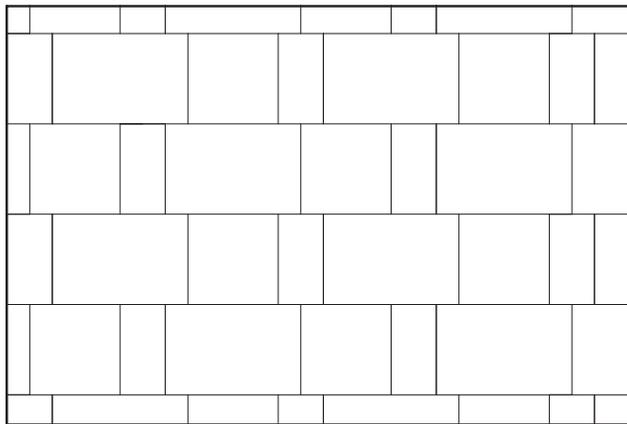


3



4

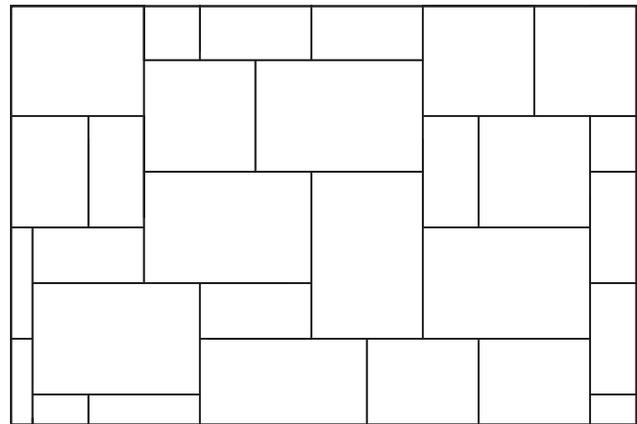
Supra Richelieu M80 Paver



Pattern 1

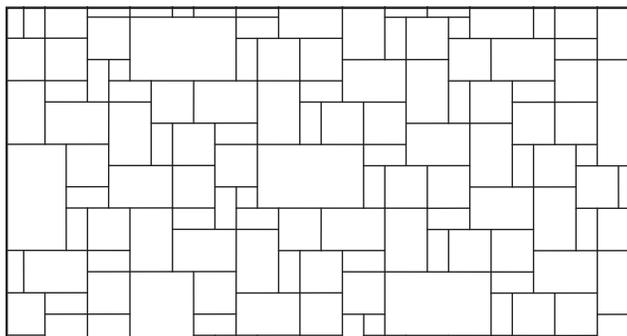
« Runner » Pattern Pavers 1-2-3

*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*



Pattern 2

« Modular » Pattern Pavers 1-2-3



Pattern 3

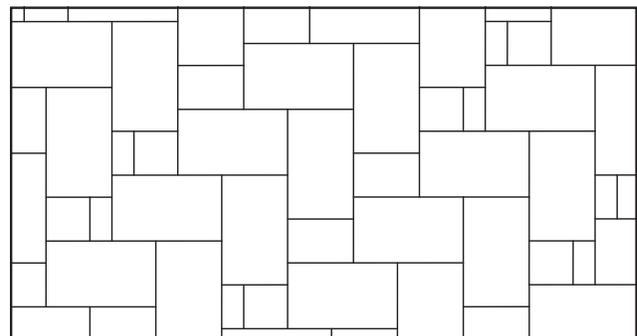
Modular Pattern with 15% of Supra Richelieu M80 (4)

16% 16 Richelieu M80 paver 1 (80x163x325)

32% 16 Richelieu M80 paver 2 (80x325x325)

36% 12 Richelieu M80 paver 3 (80x325x488)

15% 2 Supra Richelieu M80 paver 4 (80x488x813)



Pattern 4

Modular Pattern with 83% of Supra Richelieu M80 (4)

3% 4 Richelieu M80 paver 1 (80x163x325)

6% 4 Richelieu M80 paver 2 (80x325x325)

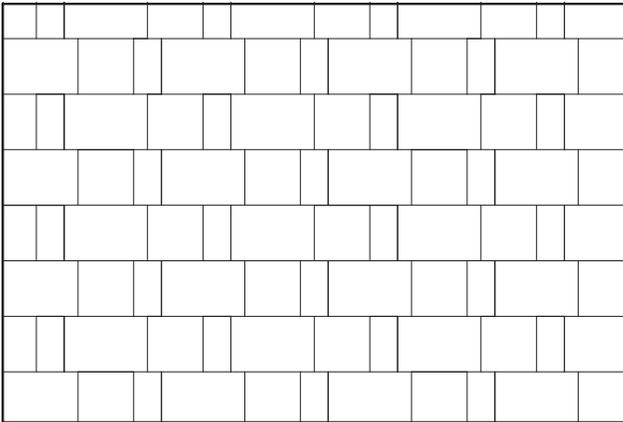
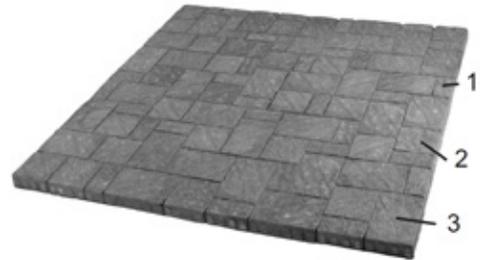
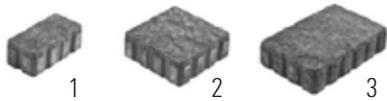
7% 3 Richelieu M80 paver 3 (80x325x488)

83% 14 Supra Richelieu M80 paver 4 (80x488x813)

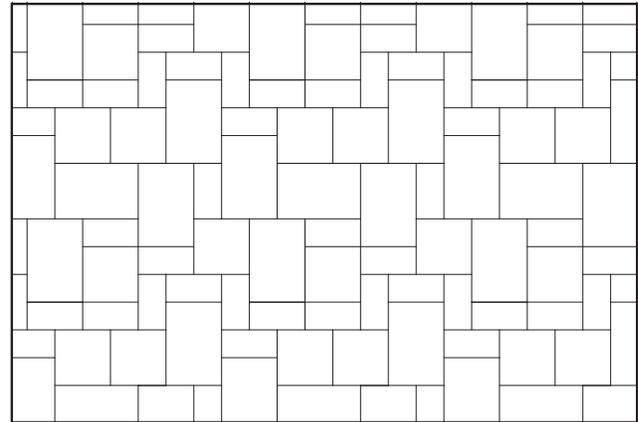
## PAVER LAYOUT PATTERNS

### ACADIA M70 PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
Module 1			
1. 2 <sup>3</sup> / <sub>4</sub> x 3 <sup>15</sup> / <sub>16</sub> x 7 <sup>7</sup> / <sub>8</sub>	7 x 10 x 20	2,32	25
2. 2 <sup>3</sup> / <sub>4</sub> x 7 <sup>7</sup> / <sub>8</sub> x 7 <sup>7</sup> / <sub>8</sub>	7 x 20 x 20		
3. 2 <sup>3</sup> / <sub>4</sub> x 7 <sup>7</sup> / <sub>8</sub> x 11 <sup>13</sup> / <sub>16</sub>	7 x 20 x 30		



Pattern 1 • «Runner» Pattern  
Module 1: (1-2-3)



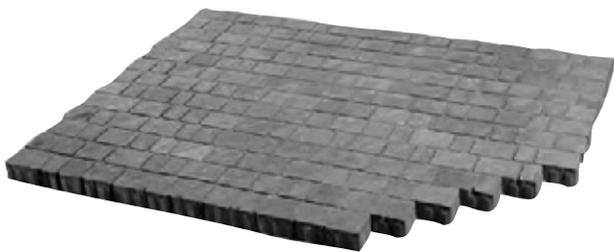
Pattern 1 • «Modular» Pattern  
Module 1: (1-2-3)

The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.

## PAVER LAYOUT PATTERNS

### OPUS PAVER

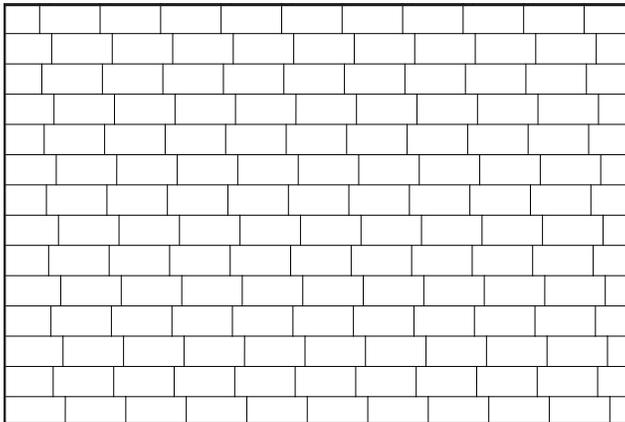
HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
2 <sup>3/8</sup> x 3 <sup>15/16</sup> x 7 <sup>7/8</sup>	6 x 10 x 20	4,13	44,4



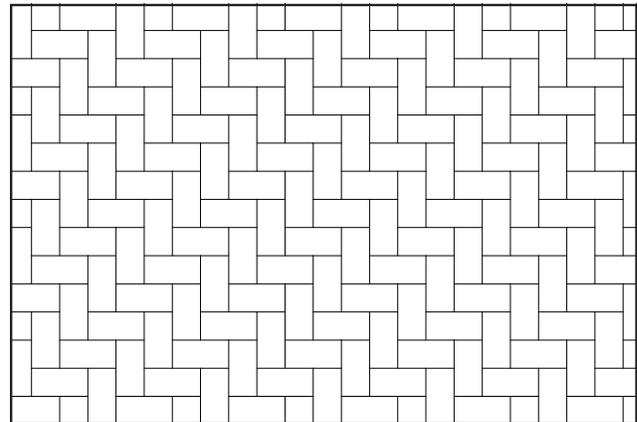
«Runner» Pattern



«Herringbone» Pattern



Pattern 1  
«Runner» Pattern



Pattern 2  
«Herringbone» Pattern

## PAVER LAYOUT PATTERNS

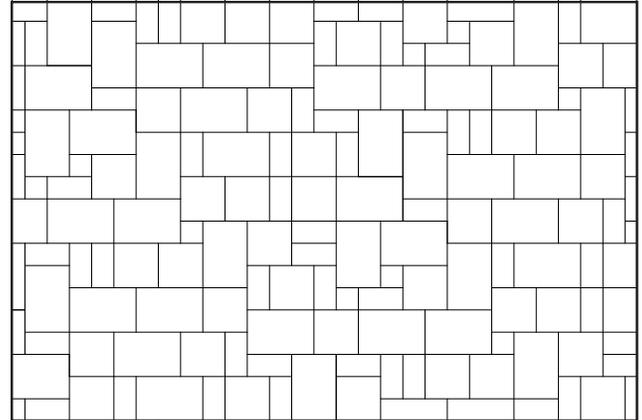
### MANOIR M60 PAVER

Module	HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
	in	cm	/sq. ft	/m <sup>2</sup>
<b>Module 1</b>				
1. Small Rectangle	2 <sup>3</sup> / <sub>8</sub> x 3 <sup>1</sup> / <sub>8</sub> x 6 <sup>1</sup> / <sub>4</sub>	6 x 8 x 16	3,58	38,5
2. Small Square	2 <sup>3</sup> / <sub>8</sub> x 6 <sup>1</sup> / <sub>4</sub> x 6 <sup>1</sup> / <sub>4</sub>	6 x 16 x 16		
3. Large Rectangle	2 <sup>3</sup> / <sub>8</sub> x 6 <sup>1</sup> / <sub>4</sub> x 9 <sup>1</sup> / <sub>2</sub>	6 x 16 x 24		



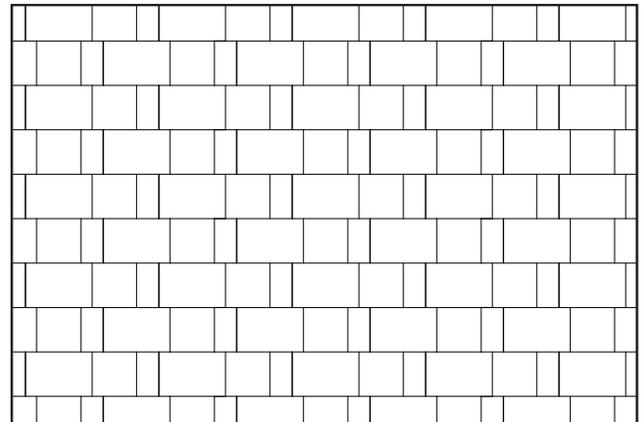
#### Installation Tip:

If the width of the surface to be paved is an exact multiple of 47 inches, you can complete the edges of the paved surface without cutting, by simply interchanging paver sizes.



Pattern 1 • « Modular » Pattern

Module 1 : (1-2-3)



Pattern 2 • « Runner » Pattern

Module 1 : (1-2-3)

*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*

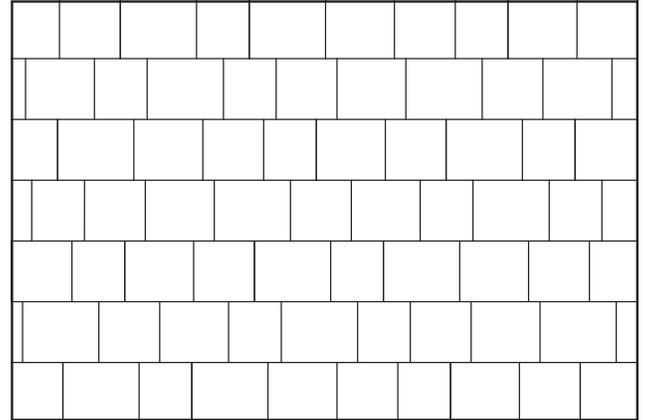
## PAVER LAYOUT PATTERNS

### CHATEAU PAVER

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
cm	po.	/m <sup>2</sup>	/pi <sup>2</sup>
6 x 15 x 13	2 <sup>3</sup> / <sub>8</sub> x 6 x 5 <sup>1</sup> / <sub>8</sub>	41,8	3,89
6 x 15 x 15	2 <sup>3</sup> / <sub>8</sub> x 6 x 6		
6 x 15 x 17	2 <sup>3</sup> / <sub>8</sub> x 6 x 6 <sup>1</sup> / <sub>16</sub>		
6 x 15 x 18,8	2 <sup>3</sup> / <sub>8</sub> x 6 x 7 <sup>3</sup> / <sub>8</sub>		



« Runner » Pattern



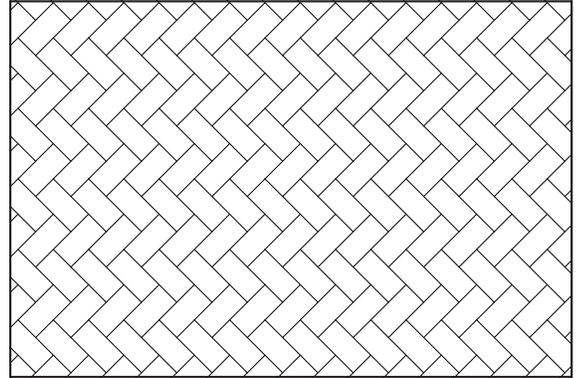
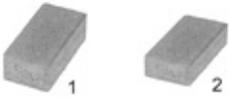
« Runner » Pattern

*The installation drawing above is for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*

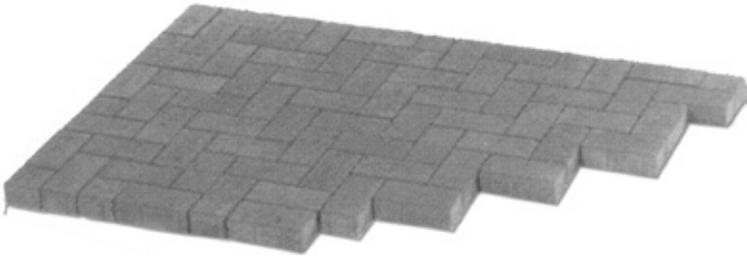
## PAVER LAYOUT PATTERNS

### NEW ENGLAND CLASSIC AND ECONO PAVER

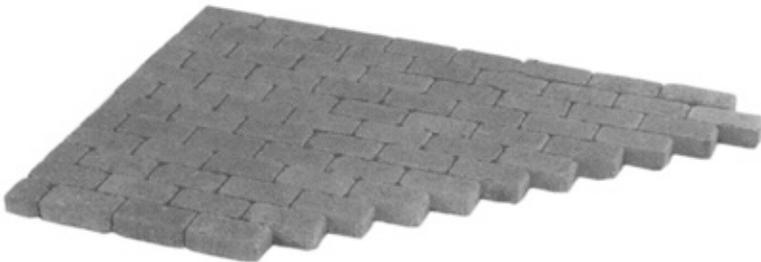
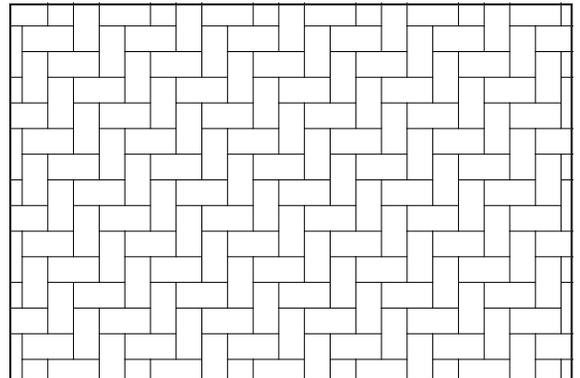
Module	HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
	in	cm	/sq. ft	/m <sup>2</sup>
1. New England Classic	2 <sup>3</sup> / <sub>8</sub> x 3 <sup>15</sup> / <sub>16</sub> x 7 <sup>7</sup> / <sub>8</sub>	6 x 10 x 20	4,65	50,0
2. New England Econo	2 x 3 <sup>15</sup> / <sub>16</sub> x 7 <sup>7</sup> / <sub>8</sub>	5 x 10 x 20	4,65	50,0



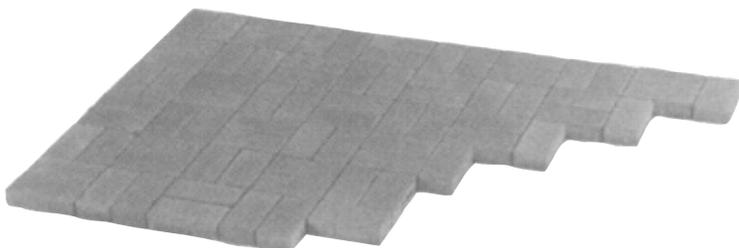
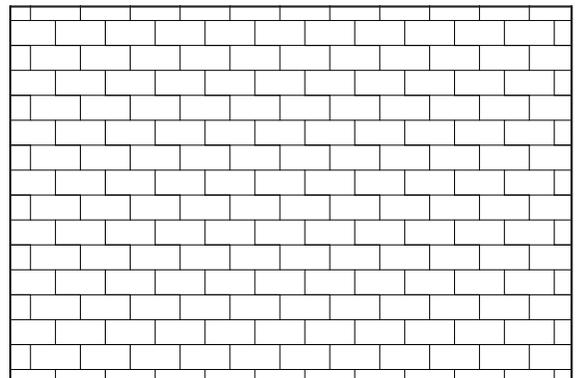
«45° Herringbone» Pattern



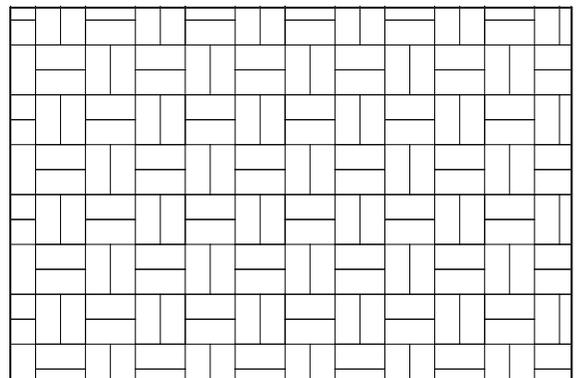
«Herringbone» Pattern



«Runner» Pattern



«Basket Weave» Pattern



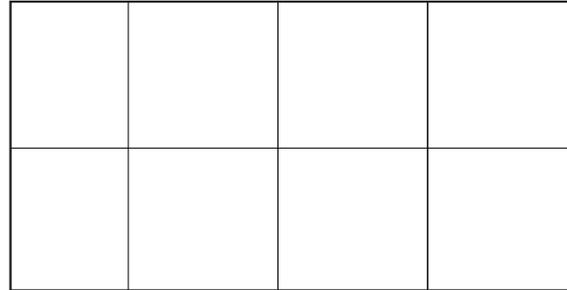
## SLAB LAYOUT PATTERNS

### PRESTIGE 65 SLAB

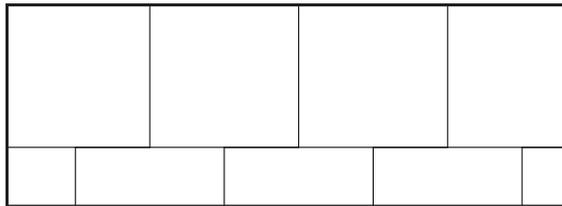
We recommend applying a sealer after installation of Prestige 65 slabs for easier maintenance.

Always follow sealer manufacturer's instructions.

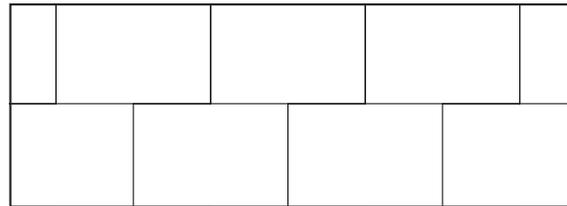
HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 2 <sup>1</sup> / <sub>2</sub> x 15 <sup>3</sup> / <sub>4</sub> x 23 <sup>5</sup> / <sub>8</sub>	6,5 x 40 x 60	0,39	4,17
2. 2 <sup>1</sup> / <sub>2</sub> x 23 <sup>5</sup> / <sub>8</sub> x 23 <sup>5</sup> / <sub>8</sub>	6,5 x 60 x 60	0,26	2,78



« Checker » Pattern 60 x 60



« Runner » Pattern 60 x 60



« Runner » Pattern 40 x 60

The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.

## SLAB LAYOUT PATTERNS

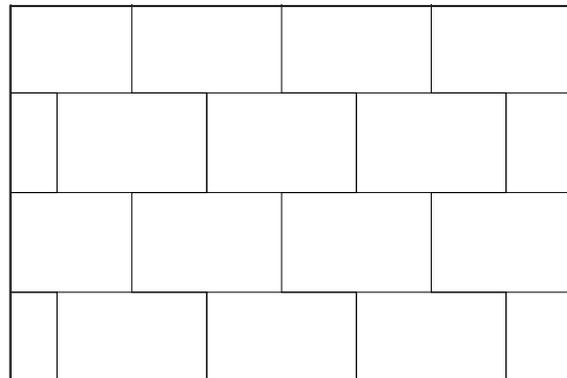
### CITADIN 65 SLAB

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
2 <sup>1</sup> / <sub>2</sub> x 15 <sup>3</sup> / <sub>4</sub> x 23 <sup>5</sup> / <sub>8</sub>	6,5 x 40 x 60	0,39	4,17



We recommend applying a sealer after installation of Citadin 65 slabs for easier maintenance.

Always follow sealer manufacturer's instructions.



« Runner » Pattern 40 x 60

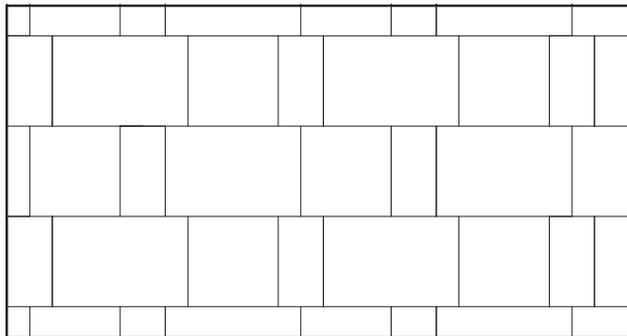
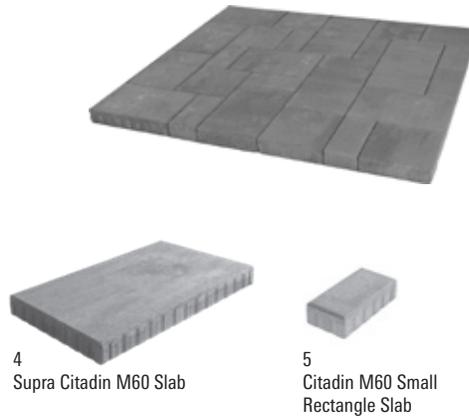
## SLAB LAYOUT PATTERNS

### CITADIN M60 SLAB

We recommend applying a sealer after installation of Citadin M60 slabs for easier maintenance.

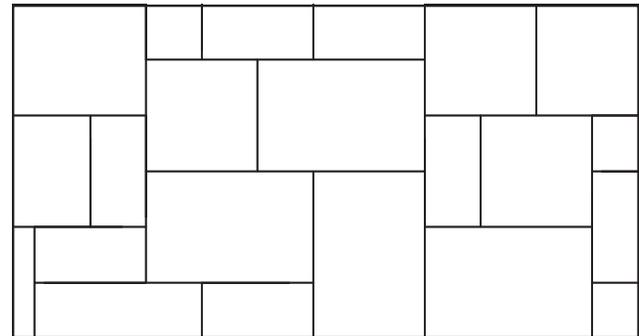
Always follow sealer manufacturer's instructions.

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 2 <sup>3/8</sup> x 6 <sup>3/8</sup> x 12 <sup>13/16</sup>	6 x 16,3 x 32,5	0,92	9,92
2. 2 <sup>3/8</sup> x 12 <sup>13/16</sup> x 12 <sup>13/16</sup>	6 x 32,5 x 32,5		
3. 2 <sup>3/8</sup> x 12 <sup>13/16</sup> x 19 <sup>3/16</sup>	6 x 32,5 x 48,8		
4. 2 <sup>3/8</sup> x 19 <sup>3/16</sup> x 32	6 x 48,8 x 81,3	0,23	2,52
5. 2 <sup>3/8</sup> x 6 <sup>3/8</sup> x 12 <sup>13/16</sup>	6 x 16,3 x 32,5	1,76	18,83

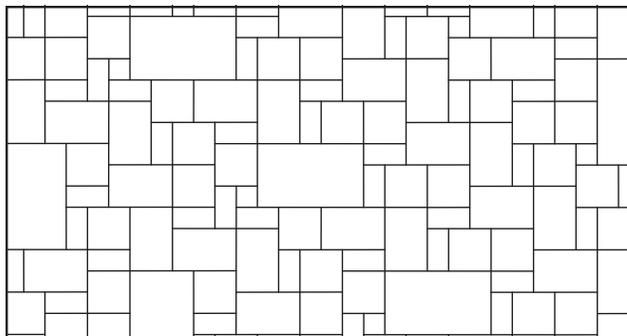


**Pattern 1**  
«Runner» Pattern Pavers 1-2-3

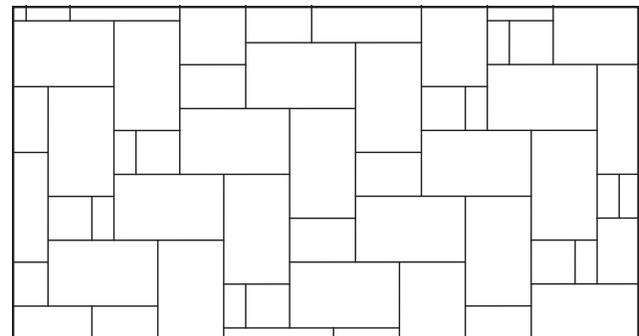
*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*



**Pattern 2**  
«Modular» Pattern Pavers 1-2-3



**Motif 3**  
Modular Pattern with 15% of Supra Citadin M60 (4)  
16% 16 Citadin M60 slab 1 (60x163x325)  
32% 16 Citadin M60 slab 2 (60x325x325)  
36% 12 Citadin M60 slab 3 (60x325x488)  
15% 2 Supra Citadin M60 slab 4 (60x488x813)



**Motif 4**  
Modular Pattern with 83% of Supra Citadin M60 (4)  
3% 4 Citadin M60 slab 1 (60x163x325)  
6% 4 Citadin M60 slab 2 (60x325x325)  
7% 3 Citadin M60 slab 3 (60x325x488)  
83% 14 Supra Citadin M60 slab 4 (60x488x813)

## SLAB LAYOUT PATTERNS

### RICHELIEU M60 SLAB

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
in	cm	/sq. ft	/m <sup>2</sup>
1. 2 3/8 x 6 3/8 x 12 13/16	6 x 16,3 x 32,5	0,92	9,92
2. 2 3/8 x 12 13/16 x 12 13/16	6 x 32,5 x 32,5		
3. 2 3/8 x 12 13/16 x 19 3/16	6 x 32,5 x 48,8		
4. 2 3/8 x 19 3/16 x 32	6 x 48,8 x 81,3	0,23	2,52



1



2

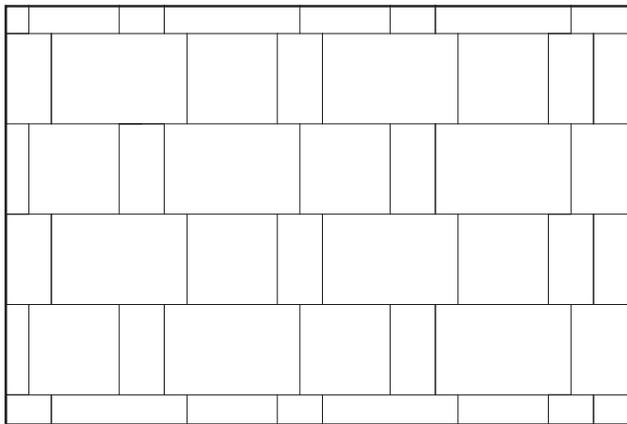


3



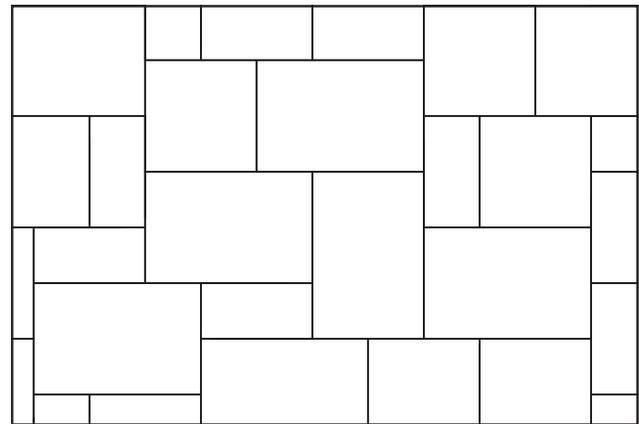
4

Supra Richelieu M60 Slab



Pattern 1

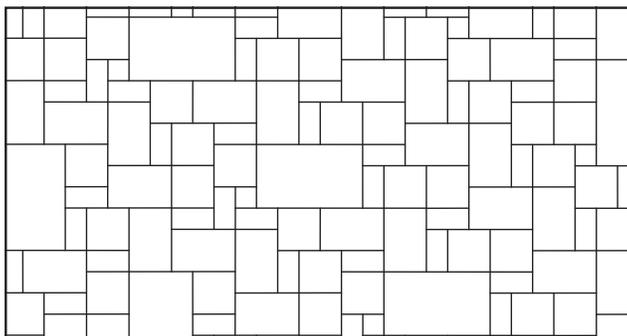
« Runner » Pattern Pavers 1-2-3



Pattern 2

« Modular » Pattern Pavers 1-2-3

The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.



Pattern 3

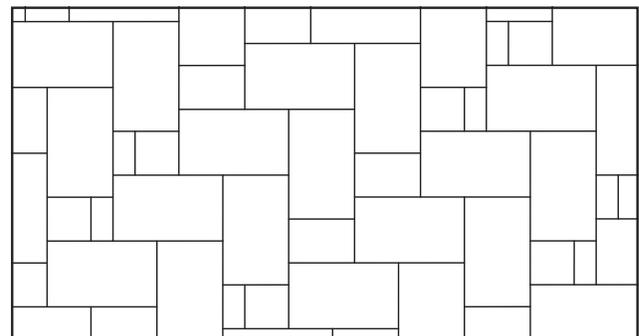
Modular Pattern with 15% of Supra Richelieu M60 (4)

16% 16 Richelieu M60 slab 1 (60x163x325)

32% 16 Richelieu M60 slab 2 (60x325x325)

36% 12 Richelieu M60 slab 3 (60x325x488)

15% 2 Supra Richelieu M60 slab 4 (60x488x813)



Pattern 4

Modular Pattern with 83% of Supra Richelieu M60 (4)

3% 4 Richelieu M60 slab 1 (60x163x325)

6% 4 Richelieu M60 slab 2 (60x325x325)

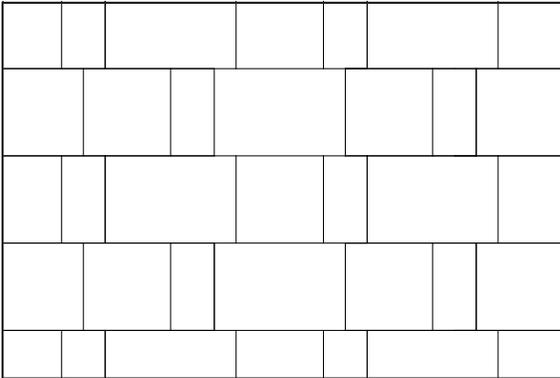
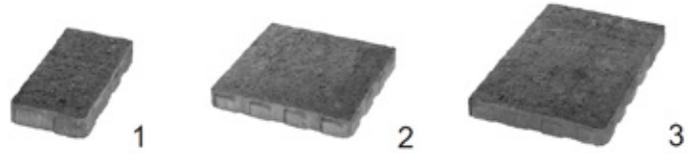
7% 3 Richelieu M60 slab 3 (60x325x488)

83% 14 Supra Richelieu M60 slab 4 (60x488x813)

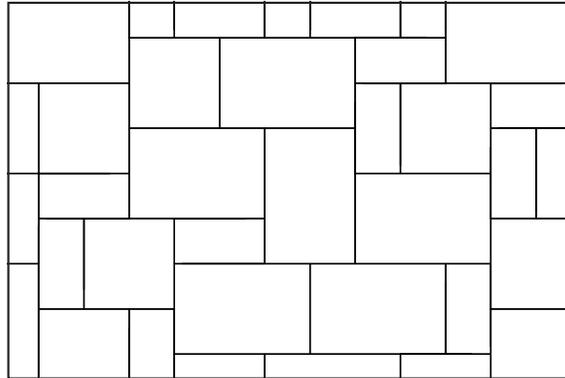
## SLAB LAYOUT PATTERNS

### ACADIA M50 SLAB

HEIGHT X WIDTH X LENGTH		NO. OF UNITS	
cm	po.	/m <sup>2</sup>	/pi <sup>2</sup>
1. 2 x 6 <sup>7/8</sup> x 13 <sup>3/4</sup>	5 x 17,5 x 35	0,81	8,7
2. 2 x 13 <sup>3/4</sup> x 13 <sup>3/4</sup>	5 x 35 x 35		
3. 2 x 13 <sup>3/4</sup> x 20 <sup>5/8</sup>	5 x 35 x 52,5		



Pattern 1 • «Runner» Pattern



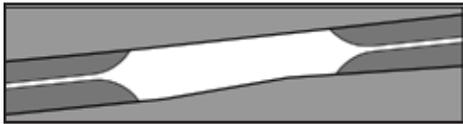
Pattern 2 • «Modular» Pattern

*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*

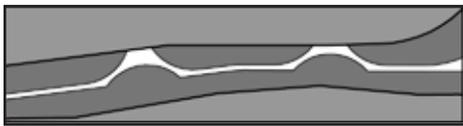
## LOTUS STONE

HEIGHT X WIDTH X LENGTH		PIECES COUNT	
cm	in.	/sq. ft	/m <sup>2</sup>
2 x 12-15 x 17-25	5 x 30-38 x 43-63	0,11	1,15

Lotus stones are palletized in rows of six different model stones. An exact arrangement of the stones relative to one another must be strictly observed during installation. Markers on the sides of the Lotus stones help place them properly. There are two types of markers:



Large markers, which may be single or double, must be aligned one next to each other.



Narrow markers, which may be single, double or triple. These are of a semi-cylindrical male-female type. Male markers must be aligned with female markers having the same number of grooves.

### Preliminary Steps for Installation

Begin by preparing the base and bedding sand according to the recommendations in the Bolduc Products Installation Guide.

#### Step 1

Install an first Lotus stone, preferably along one of the edges of the area to be paved. Identify the type (large or narrow) and the number of markers (1, 2 or 3) on its side. The stone illustrated in Figure 1 has double narrow female markers.

#### Step 2

On the pallet, pick up a stone with markers that will fit with those of the first stone. In the example, you would be seeking for a stone with double narrow male markers (Figures 2, 3 and 4).

#### Step 3

Continue installing following the same principle. Identify the type of markers on the stones in Figure 5. Then select the next stones to be installed according to these markers (Figures 6 and 7). Figure 7 shows a close-up of an assembly of single narrow female-male markers and a triplet of narrow male-female markers.

#### Step 4

Continue the installation (Figure 8). Figure 9 shows a close-up of an assembly of single large markers.

### Final steps

Once the paving area is filled, begin sawing stones along the edges (optional) and install the edges restraint or the curbs . Fill joints according to the recommendations in the Bolduc Products Installation Guide.

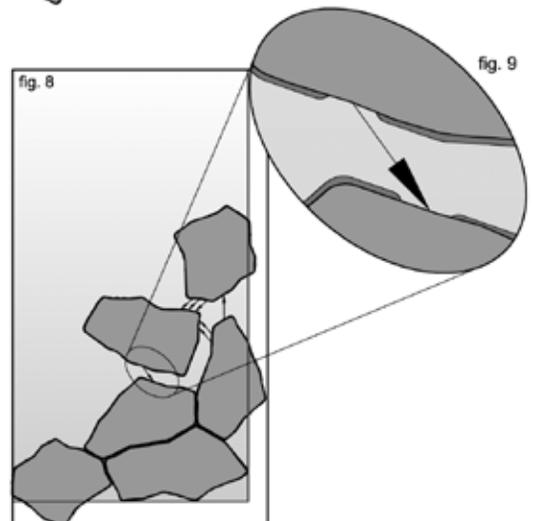
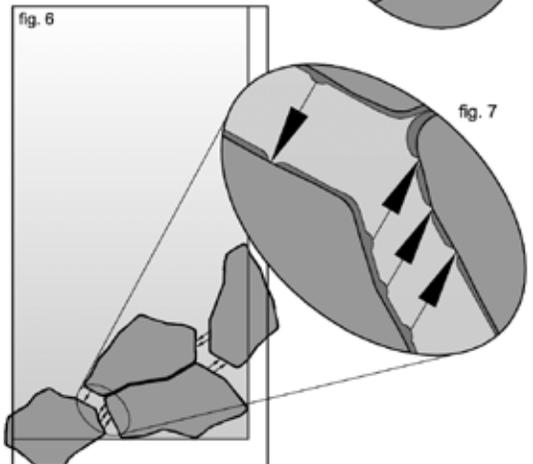
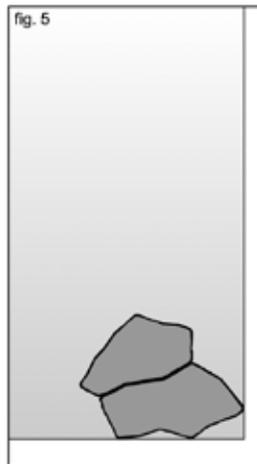
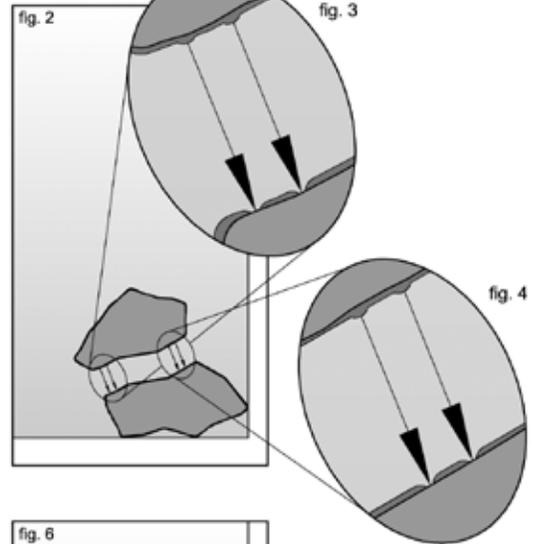


TABLE: APPROXIMATE SURFACE COVERAGE PER 22.7 KG BAG OF POLYMERIC SAND, BY TYPE OF PAVER.

Hexagone 80 Paver 8 x 20 x 23	62,1 sq.ft	5,77 m <sup>2</sup>	Acadia M50 Slab	241,3 sq.ft	22,42 m <sup>2</sup>
Prestige 80 Paver 8 x 40 x 60	142,5 sq.ft	13,24 m <sup>2</sup>	Richelieu M60 Slab	75,8 sq.ft	7,04 m <sup>2</sup>
Citadin 80 paver 8 x 40 x 60	142,5 sq.ft	13,24 m <sup>2</sup>	Supra Richelieu M60 Slab	144,83 sq.ft	13,46 m <sup>2</sup>
Linia Paver 100 x 450	23,7 sq.ft	2,20 m <sup>2</sup>	Citadin M60 Slab	75,8 sq.ft	7,04 m <sup>2</sup>
Linia Paver 200 x 600	43,0 sq.ft	4,00 m <sup>2</sup>	Supra Citadin M60 Slab	144,83 sq.ft	13,46 m <sup>2</sup>
Richelieu M80 Paver	56,8 sq.ft	5,28 m <sup>2</sup>	Citadin M60 Small rectangle Slab	51,86 sq.ft	4,82 m <sup>2</sup>
Supra Richelieu M80 Paver	108,57 sq.ft	10,09 m <sup>2</sup>	Citadin 65 Slab 40 x 60	175,5 sq.ft	16,30 m <sup>2</sup>
Citadin M80 Paver	56,8 sq.ft	5,28 m <sup>2</sup>	Prestige 65 Slab 40 x 60	175,5 sq.ft	16,30 m <sup>2</sup>
Supra Citadin M80 Paver	108,57 sq.ft	10,09 m <sup>2</sup>	Prestige 65 Slab 60 x 60	219,2 sq.ft	20,36 m <sup>2</sup>
Citadin M80 Petit rectangle Paver	38,84 sq.ft	3,61 m <sup>2</sup>	Lotus Slab	113,2 sq.ft	10,52 m <sup>2</sup>
Chateau Paver	57,0 sq.ft	5,30 m <sup>2</sup>	Romance Slab	203,6 sq.ft	18,92 m <sup>2</sup>
Acadia M70 Paver	48,4 sq.ft	4,50 m <sup>2</sup>	Champlain Slab	107,4 sq.ft	9,98 m <sup>2</sup>
Opus Paver	31,0 sq.ft	2,88 m <sup>2</sup>	Patio Slab	211,3 sq.ft	19,63 m <sup>2</sup>
Manoir M60 Paver	79,4 sq.ft	7,38 m <sup>2</sup>	Classic Slab	211,3 sq.ft	19,63 m <sup>2</sup>
New England Paver	69,2 sq.ft	6,43 m <sup>2</sup>			

## APPLICATIONS

### MAIN APPLICATIONS

BOLDUC Slope Blocks can be used in numerous applications including landscape design, multi-level walls, maritime applications, tunnels and overpass access walls, sound screens, parking areas, etc. BOLDUC Slope Blocks can be installed in the most remote locations and can be used to design the tightest curves. The only limit to the possibilities of BOLDUC Slope Blocks is the imagination of the designer. Many forms and textures are available, including tumbled modules, split-faced and smooth-faced blocks. Several colors are offered so that the blocks blend in well with the project.

### SELECTING WALLSTONES

BOLDUC Slope Blocks should not be used for walls above a certain height. Consult the table below for the maximum heights.

If you are planning to build walls higher than the maximum recommended height, you must reinforce the soil behind the wall using geogrids to reduce the pressure. In such case we recommend consulting a geotechnical engineer or professional landscaper, or our technical service for more information on reinforced walls.

Model	Installation	Maximum Height * Gravity Wall	Minumum Curve Radius	Batter Angle	Setback per Row
Slope Block 1 Regular	Closed joints: Open joints 50 mm (2 in.) Open joints 100 mm (4 in.)	1,5 m (5 ft) 1,2 m (4 ft) 1,1 m (3 ft 7 in.)	—	10°	25 mm (1 in.)
Slope Block 1 Classic	Closed joints: Open joints 50 mm (2 in.)	1,47 m (4 ft 10 in.) 1,34 m (4 ft 3 in.)	—	15°	36 mm (1 <sup>7</sup> / <sub>16</sub> in.)
Slope Block 1 Econo	Closed joints: Open joints 50 mm (2 in.)	1,05 m (3 ft 6 in.) 0,9 m (3 ft)	—	10°	25 mm (1 in.)
Slope Bloc II Regular split face	Closed joints: Open joints 50 mm (2 in.)	1,34 m (4 ft 3 in.) 1,21 m (4 ft)	—	10°	25 mm (1 in.)
Slope Bloc II Econo split face	Closed joints:	0,61 m (2 ft)	610 mm (2 ft)	0°	0 mm (0 in.)
Sutton Wallstones		0,63 m (2 ft)	—	0°	0 mm (0 in.)
Mesa Block		1,2 m (4 ft)	Bevelled face: 915 mm (3 ft) Straight face: 1422 mm (4 ft 8 in.)	0,5° or 4,5°	1,8 mm ( <sup>1</sup> / <sub>16</sub> in.) or 15 mm ( <sup>9</sup> / <sub>16</sub> in.)
Appalachian Stones		0,82 m (2 ft 8 in.)	610 mm (2 ft)	0° or 3,2°	0 or 5 mm ( <sup>3</sup> / <sub>16</sub> in.)
Laurentian 90 Wallstones		0,82 m (2 ft 8 in.)	634 mm (2 ft 3/4 in.)	0° or 3,2°	0 or 5 mm ( <sup>3</sup> / <sub>16</sub> in.)
Citadin 90 Wallstones		0,82 m (2 ft 8 in.)	634 mm (2 ft 3/4 in.)	0° or 3,2°	0 or 5 mm ( <sup>3</sup> / <sub>16</sub> in.)
Supra Citadin 180 Block		1,08 m (3 ft 5 in.)	1422 mm (4 ft 8 in.)	0° or 4,5°	0 or 14 mm ( <sup>9</sup> / <sub>16</sub> in.)

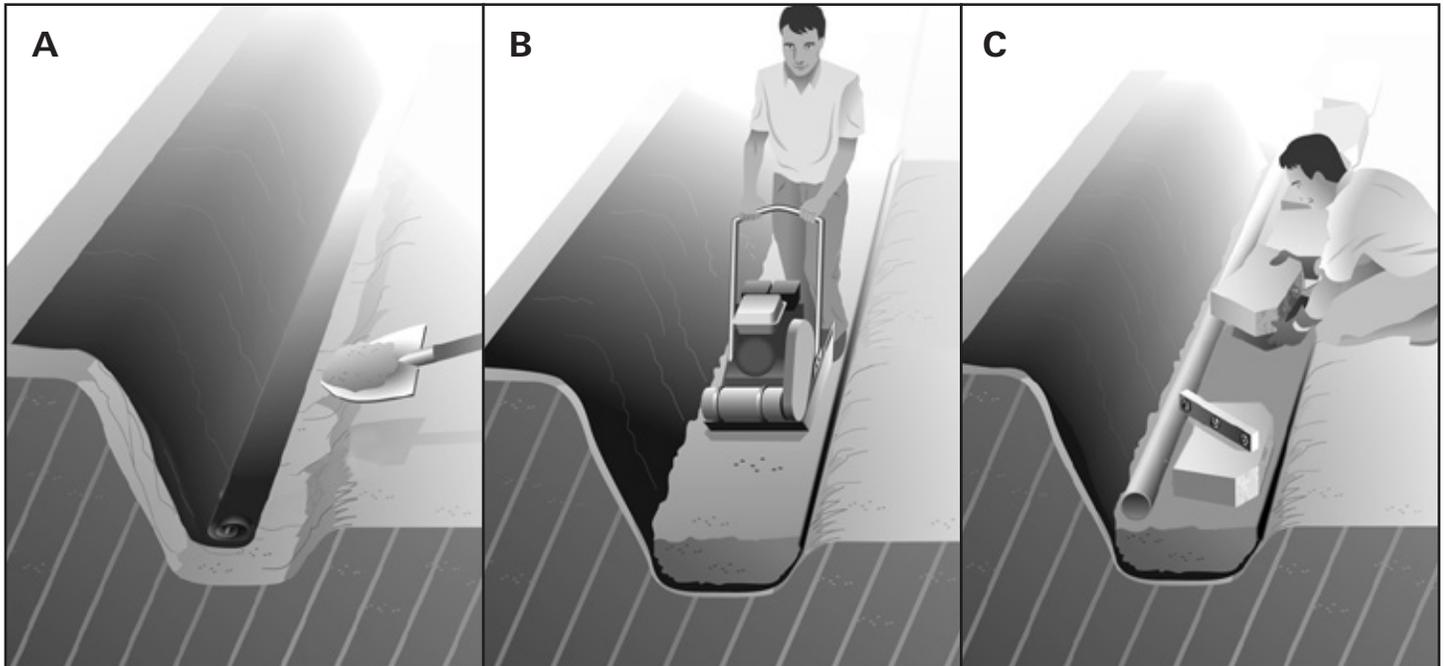
\* The maximum height of the wall includes the section installed beneath ground level.

Note : Four conditions apply to the maximum gravity wall height recommended in the previous table: soil type is considered as gravel or any soil type of equivalent stability (internal friction angle of the retained soil = 36°), there is no extra load on the top of the wall, there is no slope above the retaining wall and the back of the wall is provided with a system of adequate drainage.

For walls subject to different conditions than those above or surpassing maximum heights, consult a geotechnical expert or our Technical Service Department.

## WALLSTONE INSTALLATION

### STEPS TO FOLLOW



#### Tools needed : for walls

- Wheelbarrow
- Wooden stake
- Level
- Mason's cord
- Line level
- Chalk line
- Measuring tape
- Broom
- Rake
- Shovel
- Paver knife or concrete saw
- Plate compactor
- Concrete adhesive

#### 1. Excavating

After deciding on the exact location and dimensions of the retaining wall, dig a trench the same length and width as the retaining wall in order to prepare a compact base.

The depth of the trench will depend on the thickness of the base and the number of rows of blocks, if any, under ground level.

A 6 in (15 cm) thick base must be foreseen. As a general rule, 10% of the total height of the wall must be buried. Burying blocks helps solidify the base of the wall and prevent erosion of the base.

As to the width of the base, a space of approximately 8 to 12 inches wide (20 to 30 cm) must be foreseen behind the wall to lay down a drainage layer of clean gravel.

#### 2. Preparing the Base

Cover the bottom and back of the trench with a geotextile membrane to prevent contamination of the base and drainage layer by soil. The geotextile should protect the drainage layer for the entire height of the wall. Use enough geotextile to leave a 12 in. (30 cm) flap to cover the top of the drainage layer once the retaining wall is fully erected (See Diagram A).

#### 3. Base

Spread a layer of 0-3/4 in. (0-20 mm) gravel, and use a jumping jack tamper or vibrating plate to compact to 95% as per the Proctor compaction test. Use enough granular material to obtain a compacted base approximately 6 in. (15 cm) thick (See Diagram B).

For Slope Block I and II, we recommend using BOLDUC prefabricated concrete foundation slabs as an alternative to a compacted aggregate base.

Place a 4 in. (10 cm) perforated drain pipe behind the base along its entire length. Connect the drain pipe to the existing drainage system to remove any water that may accumulate behind the wall.

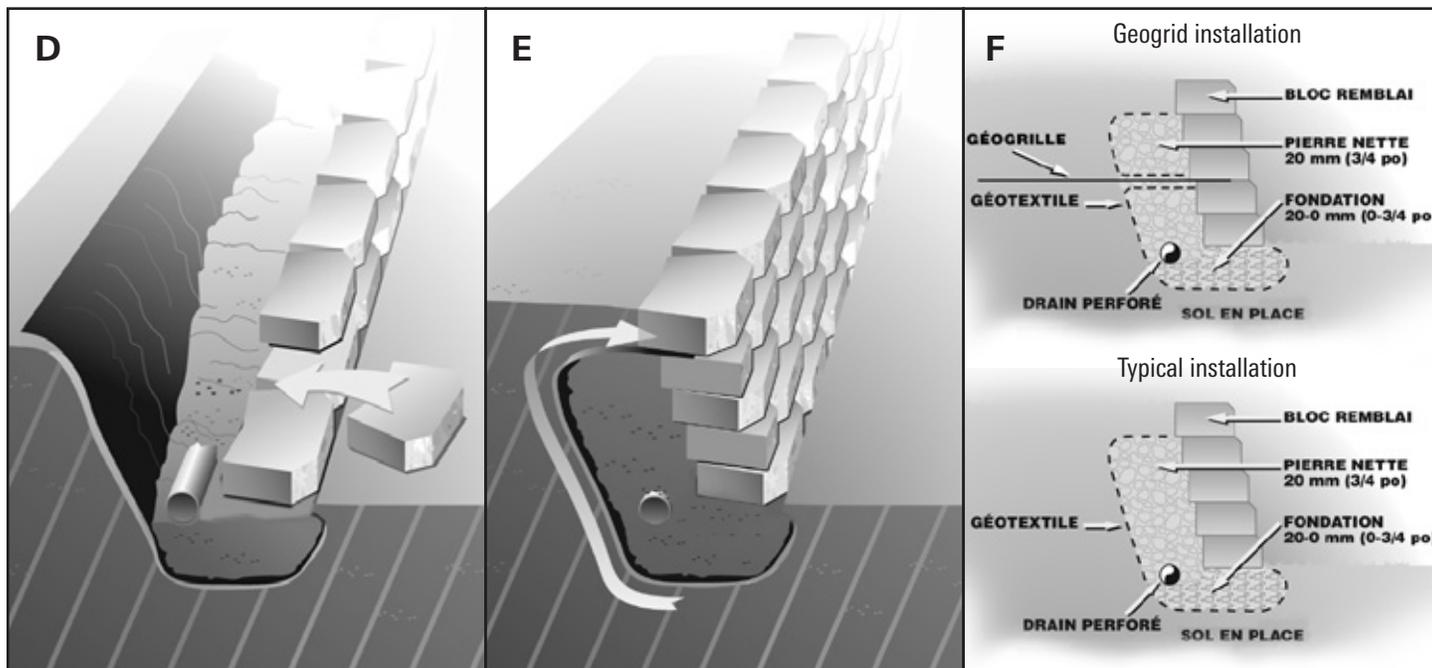
#### 4. First Row

Lay the first row of BOLDUC blocks as per your predetermined design. For Slope Block I and II, all buried rows as well as the first row above ground must be installed with no openings between the blocks. This is optional for subsequent rows except for the very last one, which must be installed with no openings between blocks if you are not using copings.

Make sure the first row is perfectly leveled because a mistake at this point will have an impact on the entire wall, affecting both its solidity and its visual appeal (See Diagram C). If you have selected a model with a tongue and groove system, dig a small trench in the base to ensure the first row is perfectly leveled.

## WALLSTONE INSTALLATION

### STEPS TO FOLLOW



### 5. Backfilling

Backfill the space between the back of the blocks and the back of the trench with 3/4 in. (20 mm) of lightly compacted clean gravel.

### 6. Subsequent Rows

Continue installing the subsequent rows of blocks. Always complete one row before beginning another. Every 8 in. (20 cm) or so, fill in the space behind the wall as per Step 5 (See Diagram D).

Fill in the space behind the drainage layer using soil removed from the trench. Do this every 8 in. (20 cm). Use a jumping jack tamper or vibrating plate to compact the soil to 95% as per the Proctor compaction test. Make sure the geotextile membrane remains between the drainage layer and the backfill. Continue in this manner until you reach the second to last row.

### 6.1 Wall installed with geogrid reinforcements

It is necessary to use geogrids to reinforce the retaining wall if it exceeds the maximum recommended height depending on the type of retaining soil or in the event of an extra load on top of the wall.

Proceed with the filling process of the clean gravel up to the level on which the geogrid will be installed. Completely cover the clean gravel with geotextile to prevent any contamination. Unroll the appropriate length of geogrid and position it perpendicularly to the wall. The geogrid must cover 90% of the preceding block surface. Install the following row of blocks. Tightly stretch the geogrid and brace into place using the fill-in material on its extremities. Cover the bottom of the remaining trench with a new section of geogrid and continue the remaining installation steps (See diagram F).

### 7. Coping stones (last row)

Install the row of copings if available (Citadin 90 Wallstones, Supra Citadin 180 Block, Laurentian Wallstones, Appalachian Stones, Mesa Block) or the last row of blocks (Slope Block I Econo, Slope Block I Regular, Slope Block II Regular Split Face). The copings or last row of blocks must be installed with no spaces between the blocks (closed joints). We also recommend gluing the copings or last row of blocks to the next to last row of blocks using good quality concrete adhesive.

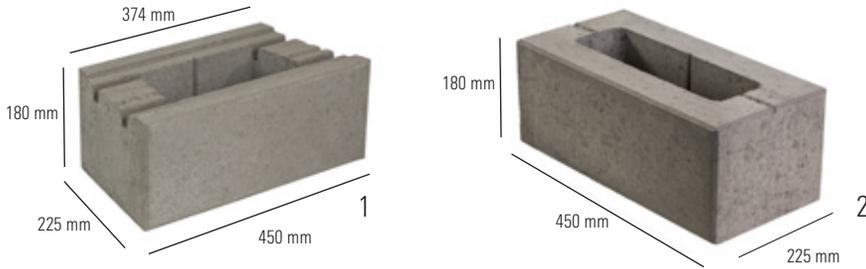
Fold the flap of geotextile over the clean gravel at the next to last row of blocks. Backfill the last row of blocks with soil or other material and level to be able to complete your landscaping up to the wall (See Diagram E).

## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 BLOCK

The Supra Citadin 180 Block system has two different modules:

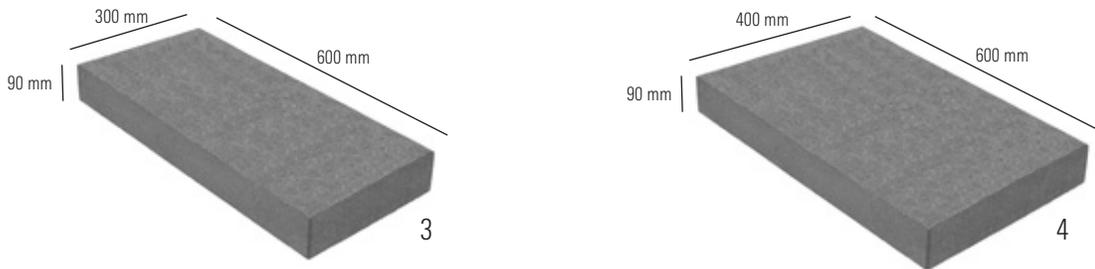
1. A beveled module, finished on two sides.
2. A corner module finished on four sides.



Module 1 can pivot 180 degrees to erect a double-sided wall.

The Supra Citadin 180 Block system contains the main accessories needed to complete your projects.

3. Coping
4. Step

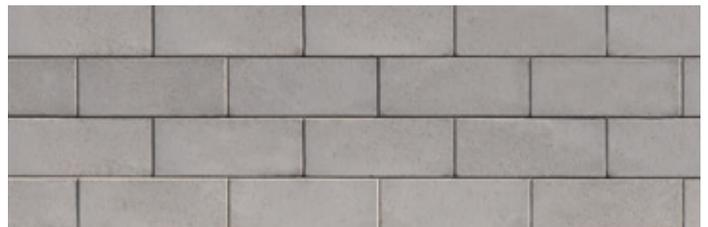


## SUPRA CITADIN 180 BLOCK PATTERNS

The Supra Citadin 180 Block allows for double-sided walls (same appearance on both sides: see Pattern 1).



Pattern 1



Pattern 2

## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 BLOCK (CONTINUED)

#### SUPRA CITADIN 180 BLOCK CONSTRUCTION

Consult steps 1, 2 and 3 on page 25 of the Installation Guide.

#### 4. First row

Place the modules on the compacted base while making sure the horizontal alignment is good so that the first layer of blocks is properly levelled.

#### 5. Installing the top rows

**It is important to select stone products randomly from various pallets to ensure uniform color throughout the project.**

Supra Citadin 180 Block connectors are designed for extra strength and easier construction. The connector system is independent of the block: the same connector serves to build a vertical wall (Figure 1) or one with a 4.5° (14 mm) backward incline (Figure 2), just by changing its orientation during installation. Just decide how you'll build the wall and orient the connectors accordingly. Use 2 connectors per block. For greater stability and a beautiful appearance, lay the blocks so that the joints are offset between consecutive rows.

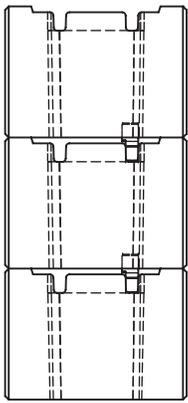


Figure 1

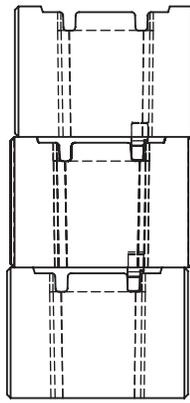


Figure 2



Connector



Connector

#### 6. Building 90° corners

For 90° angles, use the corner block with four finished sides. Crisscross them for greater stability. Fill the cavities in the corner blocks and the blocks of each side with clean gravel.



## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 BLOCK (CONTINUED)

---

#### **7. Backfilling**

After installing the drain behind the wall, fill the space behind every second row of the modules with 3/4 in. (20 mm) clean gravel to a depth of about 8 in (20 cm). Use a membrane to keep the retained soil from contaminating the clean gravel. Repeat these steps up to the desired height.

#### **8. Coping modules**

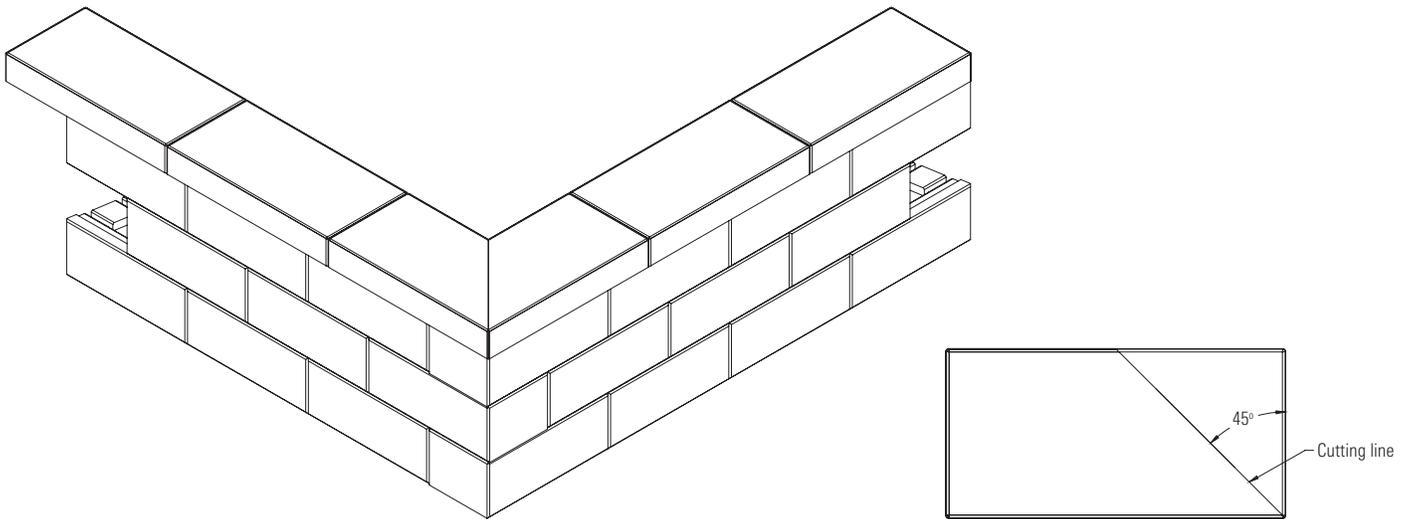
Citadin 90 coping modules comprise the top row of a Supra Citadin 180 wall and hang over its front. As these modules are not installed with connectors; they must be glued to the underlying row with a concrete adhesive.

## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 BLOCK (CONTINUED)

#### 9. Corner

To form a 90° angle for the coping, we recommend using two coping modules cut to a 45° angle and always begin installation with the corner, as illustrated.

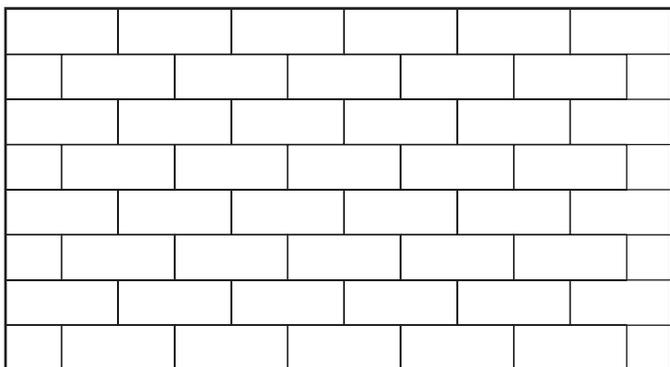


#### 10. Finishing

Once the last row of modules is installed, cover the clear stone behind the wall with a geotextile membrane to avoid contamination from the draining mass. Fill behind the last row of blocks and the coping with nearby soil or other materials (earth, plant matter, mulch, etc.). Level the work in order to complete the layout.

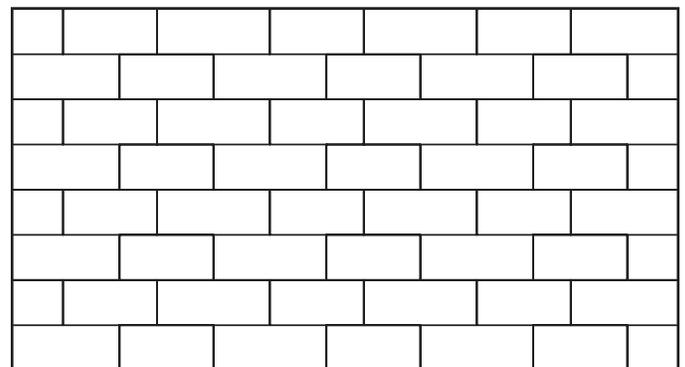
## SUPRA CITADIN 180 BLOCK PATTERNS

(using just one block face)



Layout pattern 2 (for two-sided walls)

(using both block faces alternately)



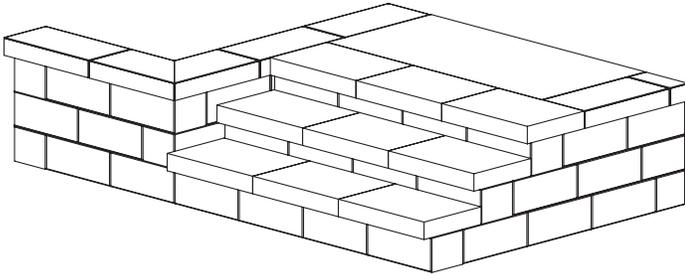
## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 STEPS

#### 1. Installing the first row to support the module

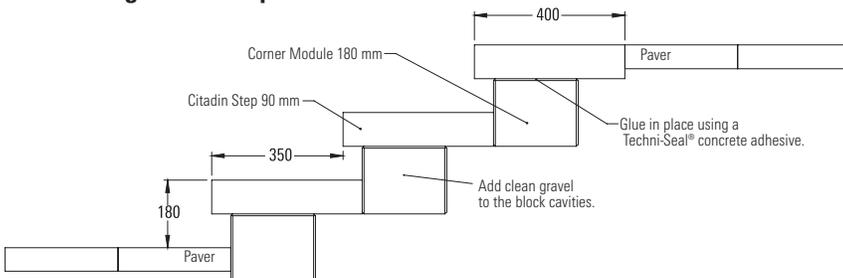
Place the first row of the Supra Citadin 180 Block modules on the compacted base while making sure they are well-aligned horizontally and properly levelled.

#### 2. Installing the step



Harmonize the placement of the step modules to achieve a natural, well-balanced look. We recommend gluing the steps to the riser block for greater stability. The Supra Citadin 180 blocks used to build steps must be filled with clean gravel.

#### 3. Installing the subsequent levels



Repeat instructions 1 and 2.

## SPECIFIC INSTALLATION DETAILS

### SUPRA CITADIN 180 COLUMN

#### Erecting a column

You can build a column with Supra Citadin 180 corner blocks.

#### Step 1

Measure the spot where the column will be built.

Each column has an approximately 26½ in. x 26½ in. (673 mm x 673 mm) cross-section.

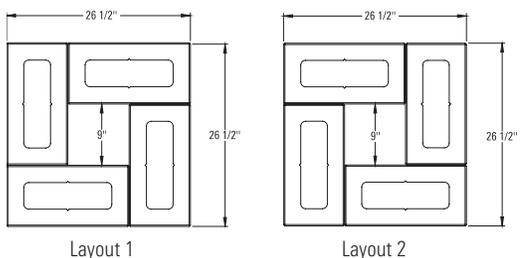
#### Step 2

Fill a 29 in. x 29 in. (737 mm x 737 mm) base that is 6 inches (150 mm) deep with 0-3/4 in. (0-20 mm) granular material. Compact well (use a vibrating plate, a vibrating roller or a jumping jack type of rammer).

#### Step 3

##### Installing the first row

Lay out the first row of blocks as shown in Layout 1. Fit them snugly, check the level and use a right angle to ensure a 90° angle. Use concrete adhesive to set the subsequent rows.



##### Installing the second row

Proceed as for the first row, but according to Layout 2.

##### Installing the subsequent rows

Do as above, going back to Layout 1 and continue alternating layouts with each new row.

#### Step 4

##### Citadin 90 coping

Install the Citadin 90 coping on the top of the column (see Figure 1).

For greater stability, glue the Citadin 90 coping with a concrete adhesive.

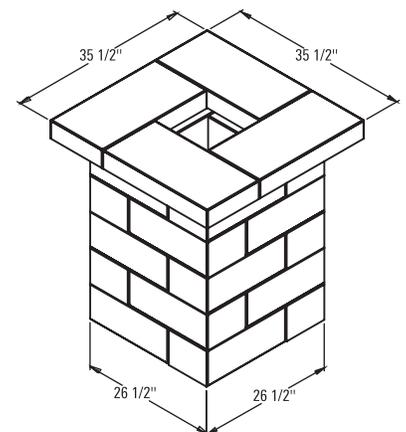


Figure 1

## SPECIFIC INSTALLATION DETAILS

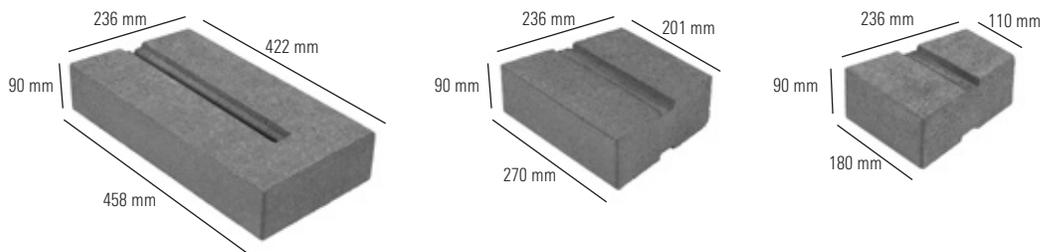
### CITADIN 90 WALLSTONE

---

The Citadin 90 Wallstone series has three different modules:

1. A long module, finished on three sides that is also a corner module.
2. A medium module, finished on two sides
3. A small module, finished on two side

#### Module 90



The three modules have two grooves, aligned one above the other so that the modules can be pivoted 180° in two directions, in vertical and to the horizontal. The three modules each offer four ways of arranging their two distinct imprints, thus giving 12 possible wall layout patterns.

The long module, finished on three surfaces, serves as a corner block.

## SPECIFIC INSTALLATION DETAILS

### CITADIN 90 WALLSTONE (CONTINUED)

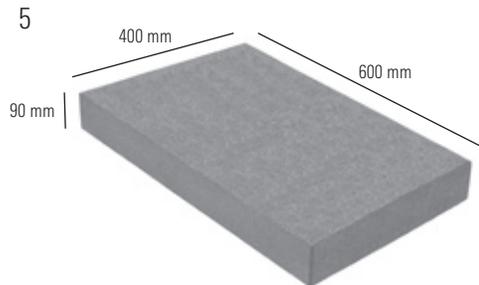
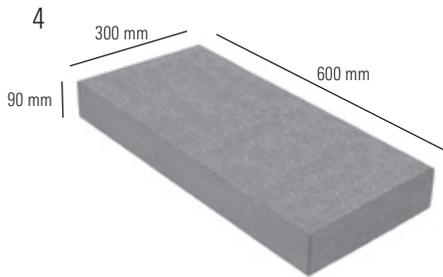
---

With the Citadin 90 wallstone, you can obtain the same appearance of both sides of a double-sided wall.



The Citadin 90 wallstone comprises the main accessories needed for your projects.

- 4. Coping 90
- 5. Step 90



## SPECIFIC INSTALLATION DETAILS

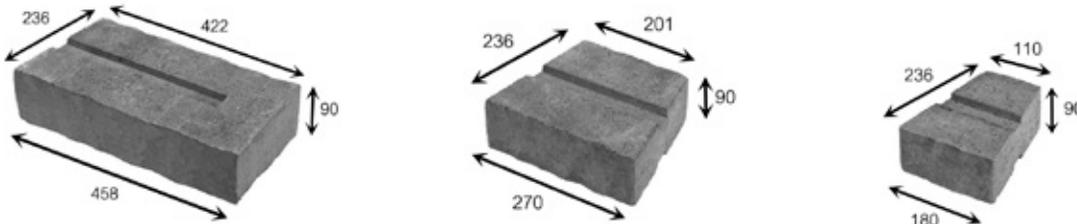
### LAURENTIAN 90 WALLSTONE

---

The Laurentian 90 Wallstone series has three different modules:

1. A long module, bevelled on three sides, that is also a corner module.
2. A medium module, bevelled on two sides
3. A small module, bevelled on two side

#### Module 90



The three modules have two grooves, aligned one above the other so that the modules can be pivoted 180° in two directions, in vertical and to the horizontal. The three modules each offer four ways of arranging their two distinct imprints, thus giving 12 possible wall layout patterns.

The long module, textured on three surfaces, serves as a corner block.

## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN WALLSTONE 90 (CONTINUED)

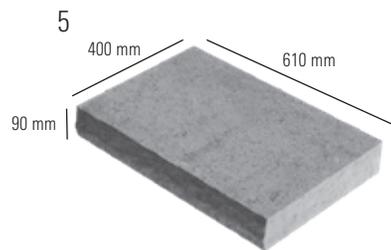
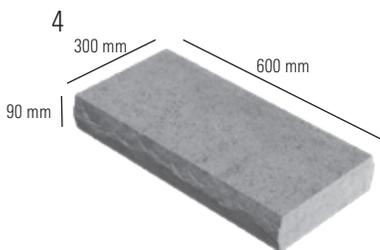
---

With the Laurentian 90 wallstone, you can obtain the same appearance of both sides of a double-sided wall.



The Laurentian 90 wallstone comprises the main accessories needed for your projects.

- 4. Double-Sided Coping 90 Chiselled Finish
- 5. Step 90 Chiselled Finish



## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN 90 AND CITADIN 90 WALLSTONE

#### LAURENTIAN 90 AND CITADIN 90 WALLSTONE CONSTRUCTION

Consult steps 1, 2 and 3 on page 25 of the Installation Guide.

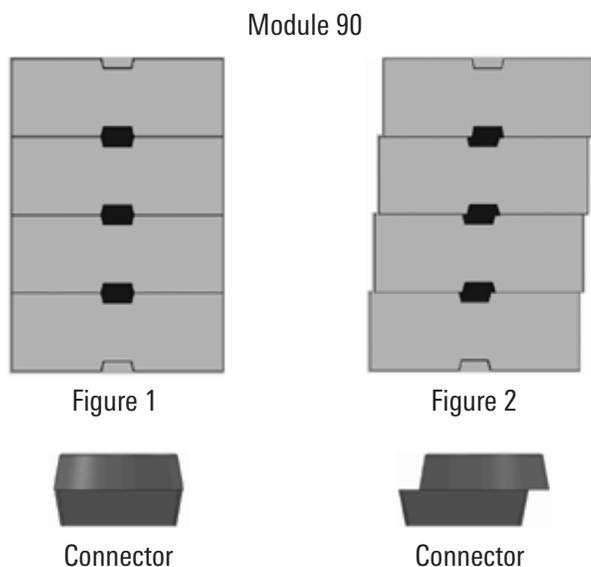
#### 4. First row

Place the modules on the compacted base while making sure the horizontal alignment is good so that the first layer of blocks is properly levelled.

#### 5. Installing the top rows

**It is important to select stone products randomly from various pallets to ensure uniform color throughout the project.**

Laurentian 90 and Citadin 90 wallstone connectors are designed for extra strength and easier construction. The connector system is independent of the block: the same connector serves to build a vertical wall (Figure 1) or one with a 3.2° backward incline (Figure 2), just by changing its orientation during installation. Just decide how you'll build the wall and orient the connectors accordingly. Make sure the connectors are properly set to ensure the stability of all modules in your wall. Randomize the various sizes and combinations allowed by the modules. For greater stability and a beautiful appearance, lay the blocks so that the joints are offset between consecutive rows. To achieve a sturdy construction, use masonry adhesive wherever needed and to glue the smaller cut pieces.



#### 6. Building 90° corners

To achieve 90° angles, use the long modules, which have three textured surfaces. As you build up, overlap and alternate between left and right rows. This will increase stability. We recommend that you glue the outside corners with concrete adhesive.



## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN 90 AND CITADIN 90 WALLSTONE

---

#### 7. Convex curves

For convex curves, arrange the modules to the desired curvature. By using only the small modules, you can achieve a radius as small as 25 in (635 mm) along the wall-face. With the medium modules, the minimum radius will be approximately 37½ in (950 mm). Alternating between the two modules gives a radius of about 31½ in (800 mm) along the wall-face.



#### 8. Backfilling

After every two rows, fill the space behind the modules with ¾ in (20 mm) clear stone. Protect the clear stone with a membrane from possible contamination by the retained soil. Repeat these steps up to the desired height.

#### 9. Coping modules

The top Laurentian and Citadin 90 row is made with straight coping modules that just out over the front of the wall-face. They are not installed with connectors and must be glued onto the row beneath using masonry adhesive.



#### 9.1. Coping

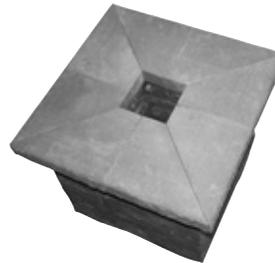
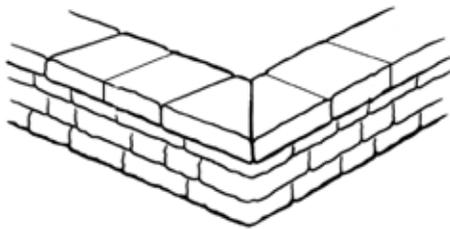
The coping module is ideal for straight line installation, but can also be used for curved installations. This requires some cutting. We recommend gluing the copings to the top row of wall blocks using a masonry adhesive.

## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN 90 AND CITADIN 90 WALLSTONE

#### 9.2 Corner

To form a 90° angle for the coping, we recommend using two coping modules cut to a 45° angle and always begin installation with the corner, as illustrated.

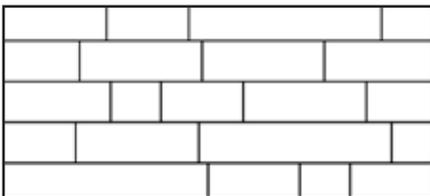


#### 10. Finishing

Once the last row of modules is installed, cover the clear stone behind the wall with a geotextile membrane to avoid contamination from the draining mass. Fill behind the last row of blocks and the coping with nearby soil or other materials (earth, plant matter, mulch, etc.). Level the work in order to complete the layout.

## LAURENTIAN 90 AND CITADIN 90 WALL PATTERNS

### Module 90



## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN 90 AND CITADIN 90 STEPS

---

#### 1. Installing the first row as a support module

Place the first row of Laurentian 90 and Citadin 90 Wallstone modules on a compact base. Make sure it is well-aligned horizontally and level. Be sure to randomize the various sizes and combinations allowed by the modules.

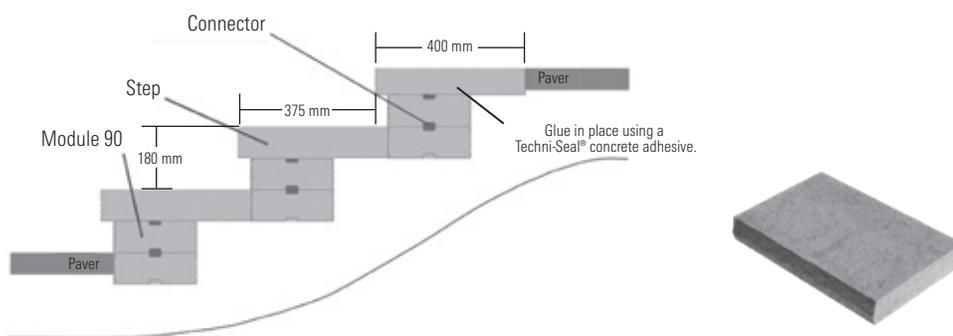


#### 2. Installing the second row as a riser

Place the connectors such that the wall will not lean. Place the following row's modules harmoniously for a natural, balanced look. Make sure the connectors are properly set so that the modules in your second row, which serves as a riser, remain solidly in place. Be sure to randomize the various sizes and combinations allowed by the modules. For greater stability and a beautiful appearance, lay the blocks so that the joints are not aligned between consecutive rows. Use masonry adhesive to glue the smaller cut pieces according to need. We recommend gluing the riser modules for greater stability. Backfill behind the riser and support modules with 0-3/4 in (0-20 mm) stone and compact thoroughly.

#### 3. Installing the step

Place the connectors on the second row such that the wall will not lean. Place the following row's modules harmoniously for a natural, balanced look. Make sure the connectors are properly set so that your modules remain solidly in place. Use concrete adhesive to glue the smaller cut pieces according to need. We recommend gluing the riser modules for greater stability.



#### 4. Installing the following levels

Repeat steps 1, 2 and 3.

## SPECIFIC INSTALLATION DETAILS

### LAURENTIAN 90 AND CITADIN 90 COLUMN

#### ERECTING A COLUMN

You can erect a column with Laurentian 90 and Citadin 90 wallstone corner blocks. **However, since the corner block is not sold separately, you will need to use the other blocks (medium and small) when installing the adjacent wall.**

#### Step 1

Measure the space where the column will be built. Each column has a cross section of about 27½ in x 27½ in (700 mm x 700 mm).

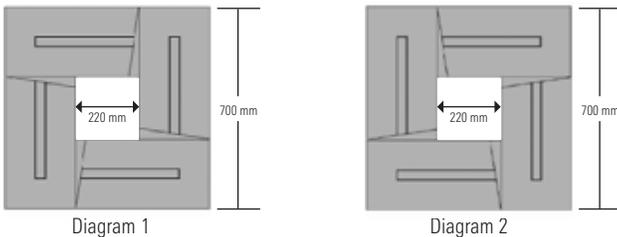
#### Step 2

Prepare a 30 in x 30 in (770 mm x 770 mm) base, 6 in (150 mm) deep with 0-3/4 in (0-20 mm) granular material. Compact well using a vibrating plate, vibrating roller or jumping jack rammer.

#### Step 3

##### **Installing Row 1:**

Place the first row blocks in the order shown in Layout 1. Set them firmly and make sure they are level. Use a carpenter's square to make sure you have a right angle. Use concrete adhesive to set the following rows.



##### **Installing Row 2:**

Proceed as you did with row 1, but using Layout 2 as your guide.

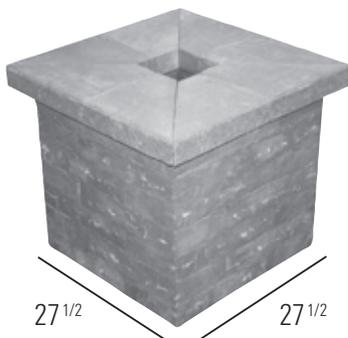
##### **Installing subsequent rows:**

From the third row on, begin with Step 3 and alternate between the two layout patterns until you reach the desired height.

#### Step 4

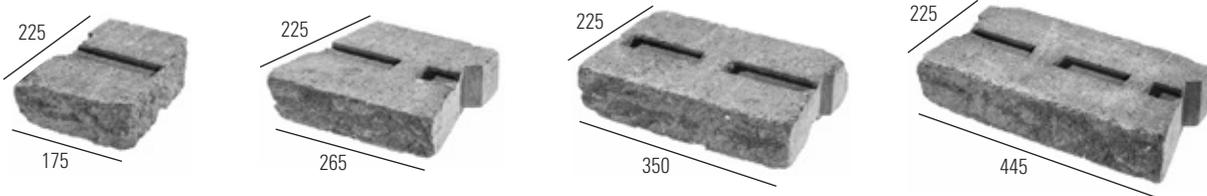
##### **Laurentian 90 and Citadin 90 coping**

Install the Laurentian 90 and Citadin 90 coping on top of the column as shown. Some cutting will be necessary. To achieve a sturdier column, glue the Laurentian 90 and Citadin 90 coping modules with concrete adhesive.



## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN 90 WALLS



It is important to select stone products randomly from various pallets to ensure uniform colour throughout the project.

#### BUILDING LOW WALLS

Follow Steps 1, 2, and 3 of the Wallstone Installation Guide on page 25.

#### 4. Installing the first row

Place the modules on the compacted base while ensuring the horizontal alignment so that the first layer of blocks is level.

#### 5. Installing the top rows

Appalachian wallstone connectors are designed for extra strength and easier construction. The connector system is independent of the block: the same connector can be used to build a vertical wall (Figure 1) or one with a 3.2° backward incline (Figure 2), just by changing its orientation during installation. Just decide how you'll build the wall and orient the connectors accordingly. Install the following rows' modules harmoniously for a natural, balanced look (see pattern I). You can also install some modules vertically for a more original look (see patterns II, p.50). Make sure the connectors are properly set to ensure the stability of all modules in your wall. Randomize the various sizes and combinations allowed by the modules. For greater stability and a beautiful appearance, lay the blocks so that the joints are offset between consecutive rows. For a sturdy construction, use masonry adhesive wherever needed and to glue the smaller cut pieces.

**NOTE:** Use the 6 7/8" (175 mm) module to cover two 3 1/2" (90 mm) rows vertically and the 10 7/16" (265 mm) module to cover two 5 1/4" (135 mm) rows.

Module 90

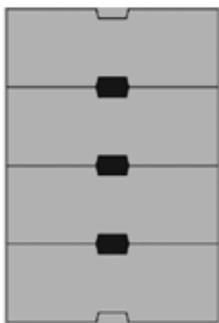


Figure 1

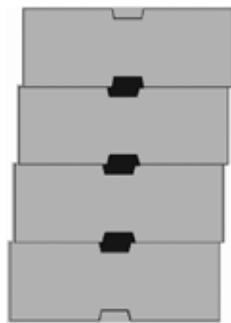


Figure 2



Connector



Connector

## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN WALLSTONES

---

#### 6. Building 90° corners

To achieve 90° angles, use the regular 350-mm (13 3/4-in.) modules and overlap them to set the angles firmly.



Regular 13 3/4 in. (350 mm)  
Appalachian Module



Column Module

#### 7. Making convex curves

To make convex curves with a radius of at least 2' (600 mm), use the complete set of modules from which the back overhanging ends have been removed with a hammer and chisel. For curves with a radius less than 2' (600 mm), use the 6 7/8" (175 mm) and/or 10 7/16" (265 mm) modules if need be, from which the overhanging ends have been removed in advance.



2' (600 mm)  
radius

#### 8. Backfilling

After every two rows, fill the space behind the modules with 3/4 in (20 mm) clear stone. Protect the clear stone with a membrane from possible contamination by the retained soil. Repeat these steps up to the desired height.

## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN WALLSTONES (CONTINUED)

#### 9. Installing the coping modules

The top row of the wall can be achieved with coping modules. These capstones overhang the wall and are not installed with connectors; they must be set atop the previous row with a concrete adhesive.

##### 9.1. Installing coping

The coping module (Figure 1) is ideal for a straight-line installation (Figure 2), though it can also be used for a curved installation in which case cutting will be required. We recommend that coping modules be set against the last row of the wall's blocks with a concrete adhesive.

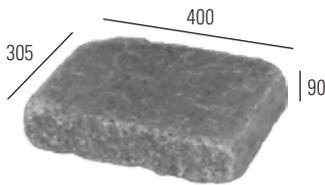


Figure 1

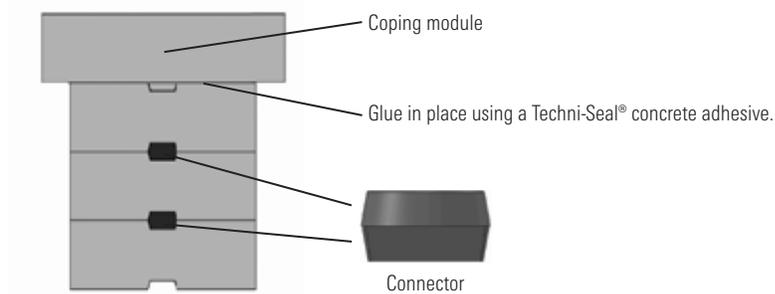


Figure 2

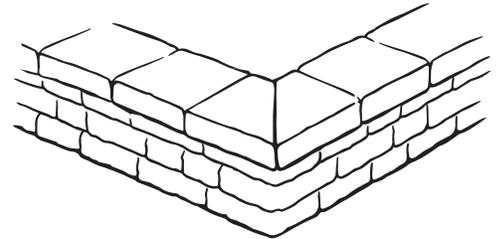
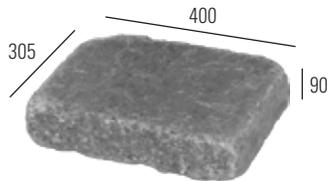
Appalachian copings are sold individually. One cube contains 40 pieces for a total of 52,5 lin.ft. (16 lin.m.).

## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN WALLTONES (CONTINUED)

#### 9.2.4 Corner installation

You can make 90° corner installations by cutting two copings at a 45° angle as shown. Always start your installation with the corner.

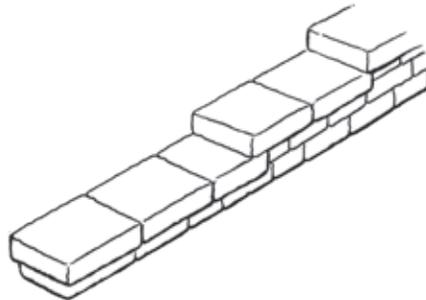


#### 9.2.5 Step wall installations

To create a step wall installation, we recommend the use of coping modules to be split at a 90° angle using a chisel and then pound the newly split face to create the same finish as on the other sides.

#### 10. Finishing

When the last row of modules is complete, cover the clean gravel behind the wall with the remaining geotextile to prevent contamination of the draining mass. Fill in the back side of the last row of blocks and the coping with the existing soil or with any other available soil, vegetation, mulch, etc. and level it to allow you to complete the excavation.



## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN WALL PATTERNS

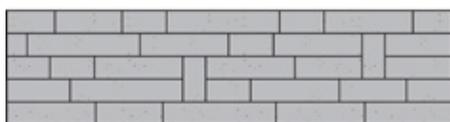
---

Choose your wall pattern and work out which modules you need.

#### Module 90



Modèle I Module 90 (3 1/2 in.)



Modèle II Module 90 (3 1/2 in.)  
with vertical elements

*The installation drawings above are for illustrative purposes only. For the most attractive results, install in a random layout and avoid lining up joints.*

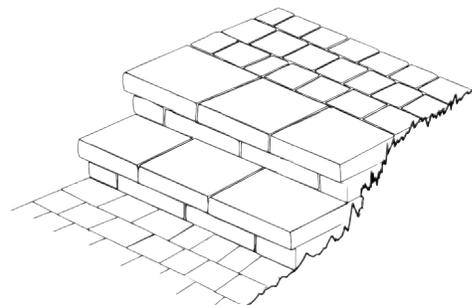
## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN STEPS

#### CONSTRUCTING STAIRS

##### 1. Installation of the support module

Lay, then level, a solid construction unit; this will support the riser. The construction unit used can be either a solid concrete block, an Appalachian Stone unit or any other cement element that results in a firm seating. Note that the surface of the block must be even with the paved surface.



##### 2. Installation of the riser

Glue the 250-mm (10-in.) riser module on top of the support module by aligning their back surfaces. For greater stability, you can offset the step and riser joints. To do so, you can cut the riser modules along the groove under the module, which would give two semi-modules. The riser modules must be affixed to the support modules with a concrete adhesive. Backfill behind the riser and the support module with 0-20 mm (0-3/4-in.) stone and compact it well.

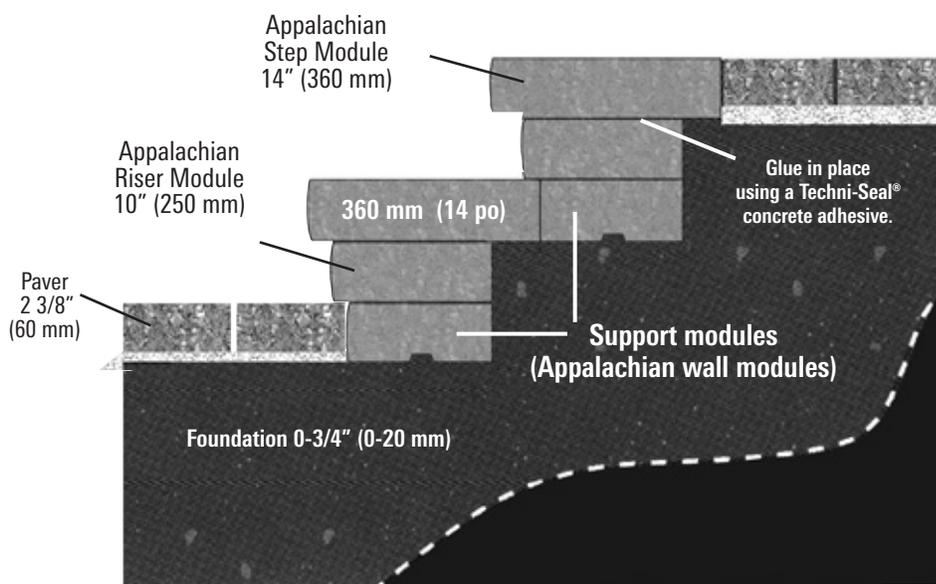
##### 3. Installing the step

Place the step modules harmoniously for a natural and nicely balanced look. Glue the steps onto the riser modules for greater overall stability.

Note that when the side of the step is visible, you can saw the step module through the grooved part under the module using a paver chisel or a cold chisel.

##### 4. Installing the subsequent course

Repeat steps 1, 2 and 3.



## SPECIFIC INSTALLATION DETAILS

### APPALACHIAN COLUMN

---

#### ERECTING A COLUMN

You can erect a column using two Appalachian wallstone cubes. **However, since the corner and small blocks are not sold separately, you will need to use the other blocks (medium and large) when installing the adjacent wall.**

#### Step 1

Measure the area where the column will be built. Each column measures 29 1/2 in. x 29 1/2 in. (750 mm x 750 mm).

#### Step 2

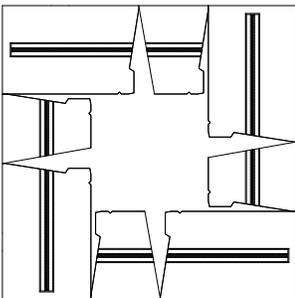
Prepare a 30 in. x 30 in. (770 mm x 770 mm) base filled with 6 in. (50 mm) of 0-3/4 in. (0-20 mm) granular material. Compact well using a vibrating plate or a jumping jack.

#### Step 3

##### **Row 1 installation:**

Place the first row blocks in the order shown in Layout 1. Set them firmly and make sure they are level. Use a carpenter's square to make sure you have a right angle. Use concrete adhesive to set the following rows.

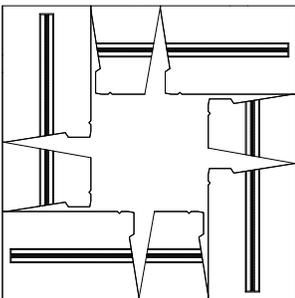
Diagram 1



##### **Row 2:**

Proceed as you did with row 1, but using Layout 2 as your guide.

Diagram 2



##### **Installation of subsequent rows:**

From the third row on, begin with Step 3 and alternate between the two layout patterns until you reach the desired height.

## SPECIFIC INSTALLATION DETAILS

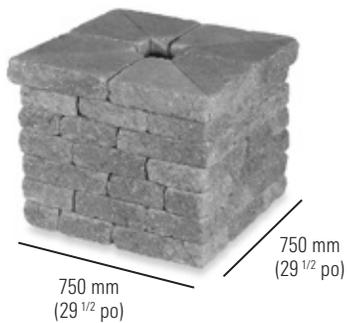
### APPALACHIAN COLUMN (CONTINUED)

---

#### Step 4

#### ***Appalachian Column***

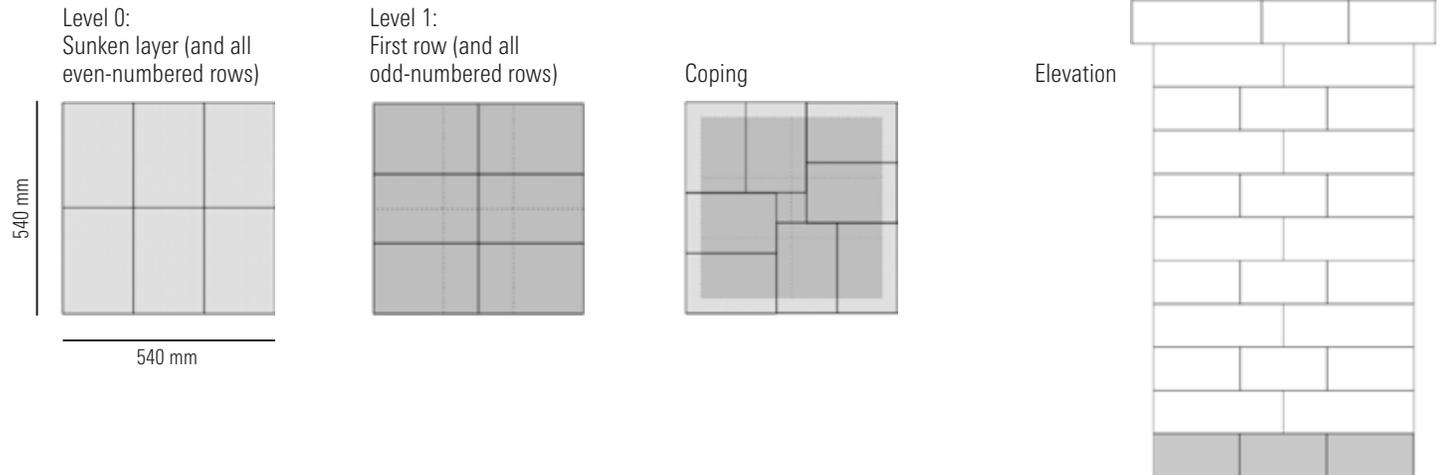
Install the Appalachian coping on top of the column as shown. Some cutting will be necessary. To achieve a sturdier column, glue the Appalachian coping modules with concrete adhesive.



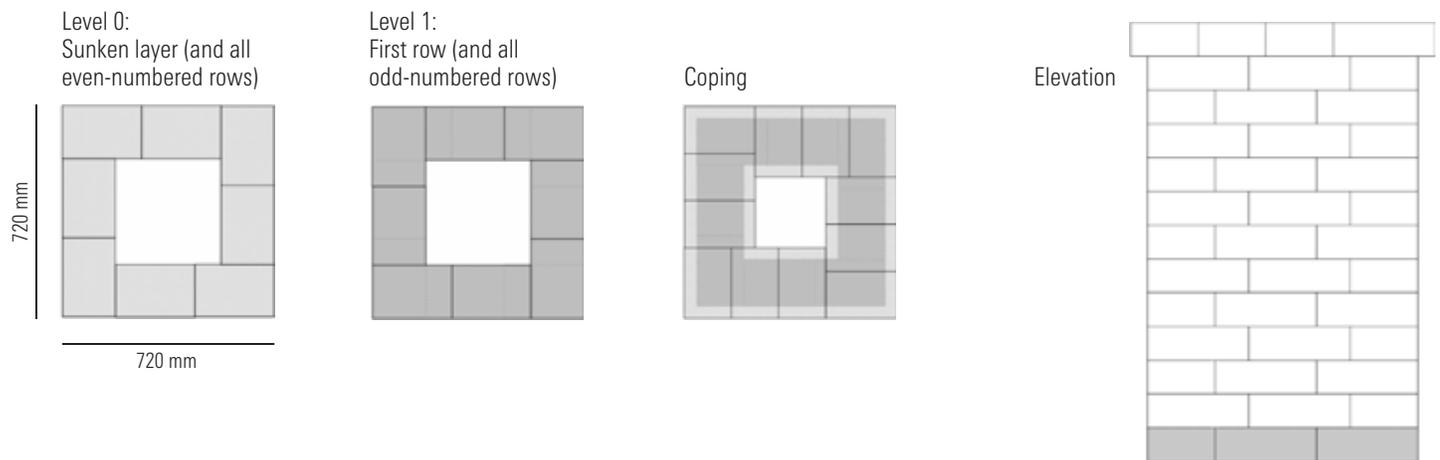
## SPECIFIC INSTALLATION DETAILS

### SUTTON WALLSTONES

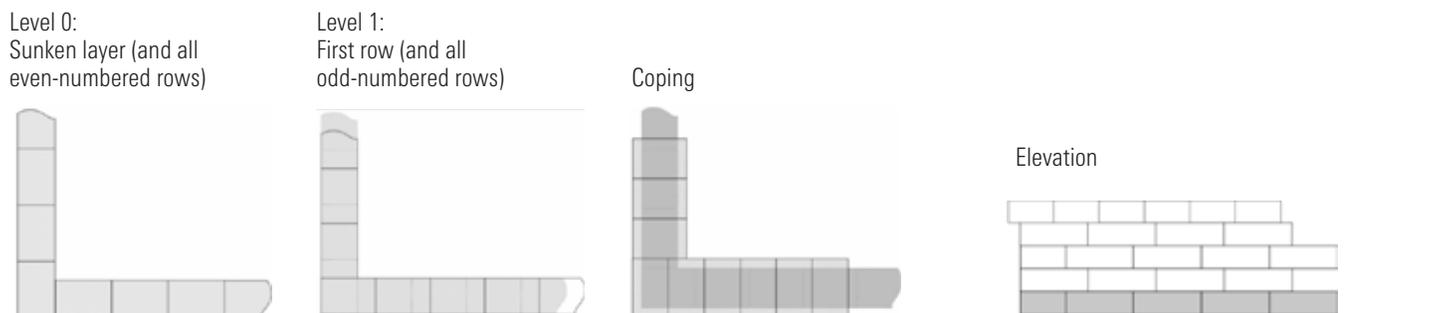
#### Building a 540 mm column



#### Building a 720 mm column



#### Building a 90 degree corner wall

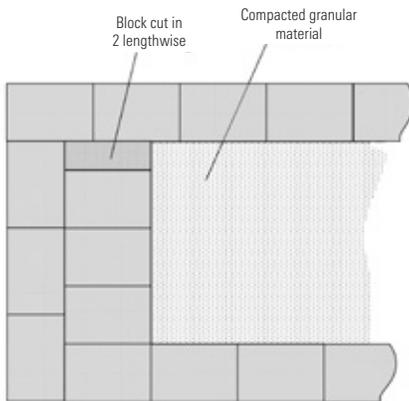


## SPECIFIC INSTALLATION DETAILS

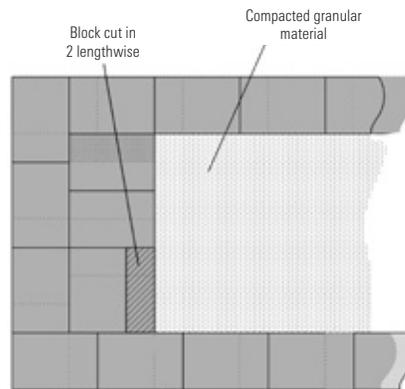
### SUTTON WALLSTONES (CONTINUED)

#### Building a 990 mm wide staircase

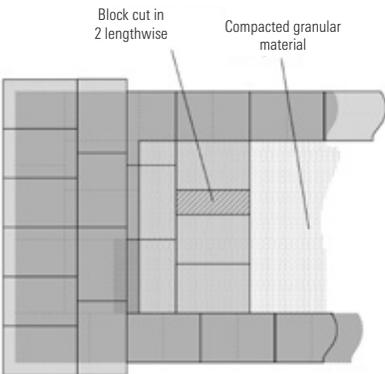
Level 0: sunken layer



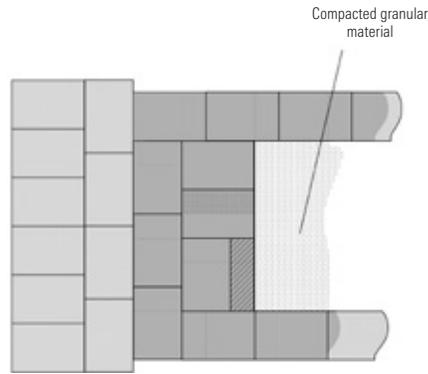
Level 1: first row of risers



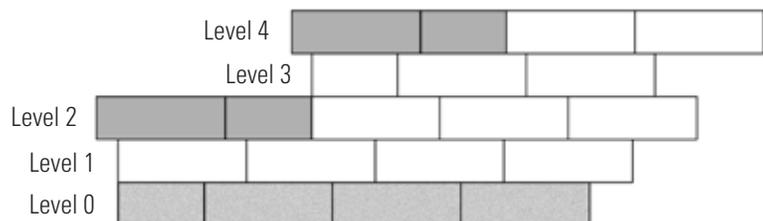
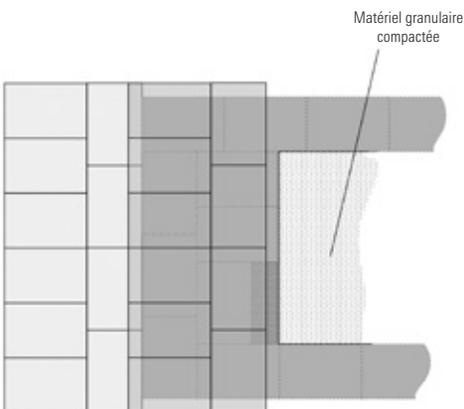
Level 2: first row of steps



Level 3: second row of risers



Level 4: second row of steps



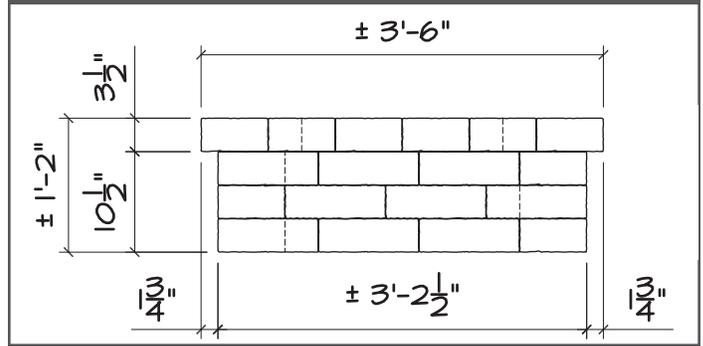
## ESSENTIALS COLLECTION

### T1 SUTTON FIREPIT

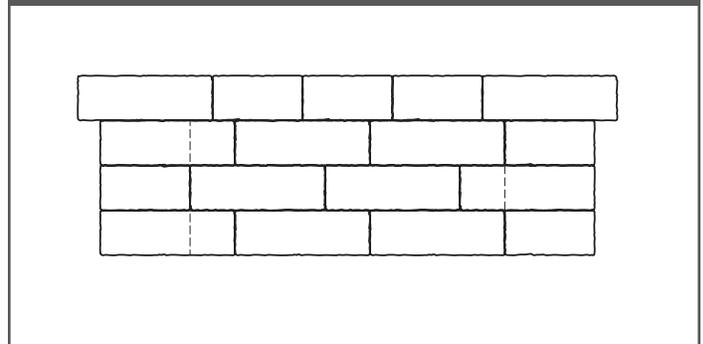


The firepit is designed with Sutton blocks and requires no cutting.

Elevation A



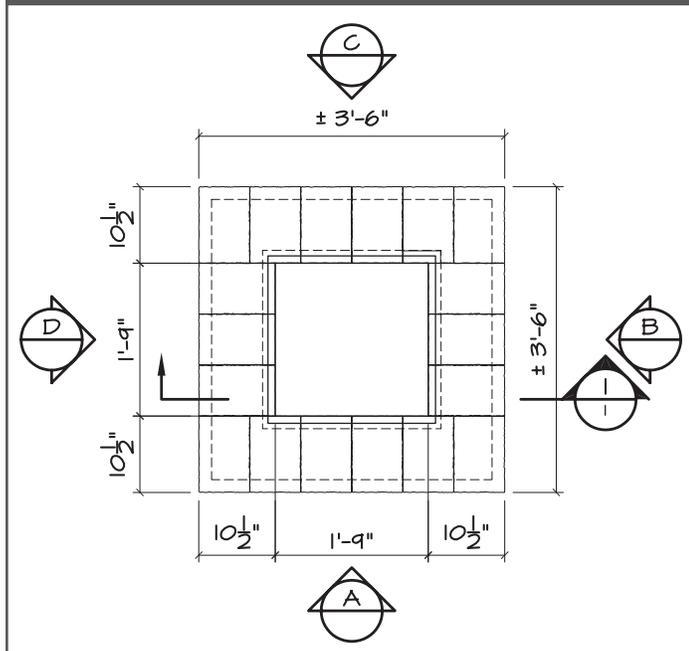
Elevation B



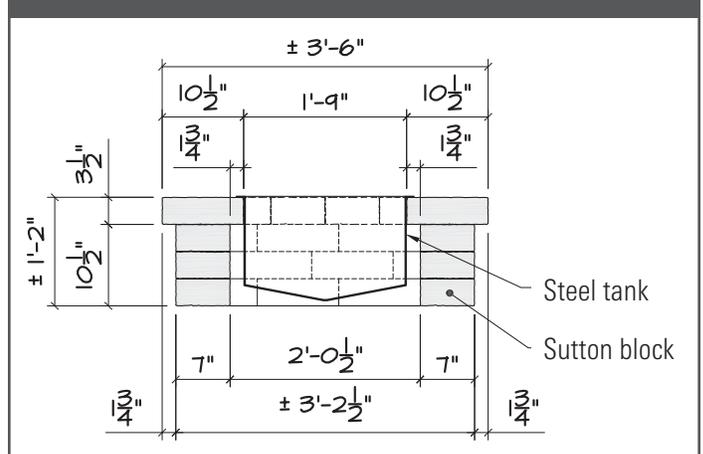
#### Materials required

- Sutton blocks: 56
- Steel tank: 1
- Fire screen: 1

Overhead diagram



Row 1



## ESSENTIALS COLLECTION

### LAURENTIAN 90 T2 WOOD FIREPIT

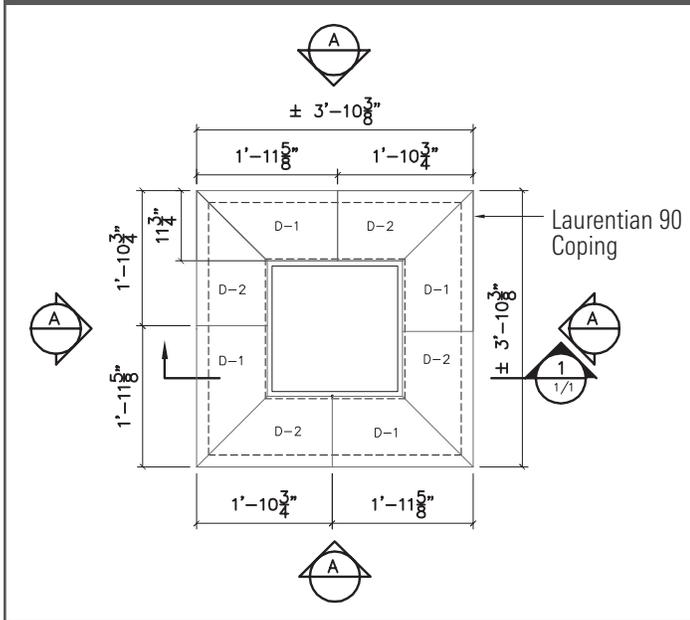


This firepit is designed with Laurentian 90 blocks and copings.

#### Materials required

- Laurentian 90 blocks: 36
- Laurentian 90 coping: 8
- Steel tank: 1
- Fire screen: 1

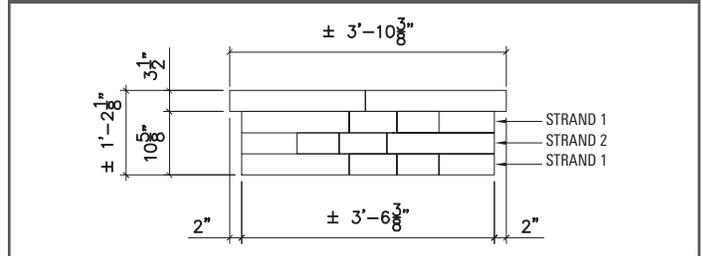
#### Overhead diagram



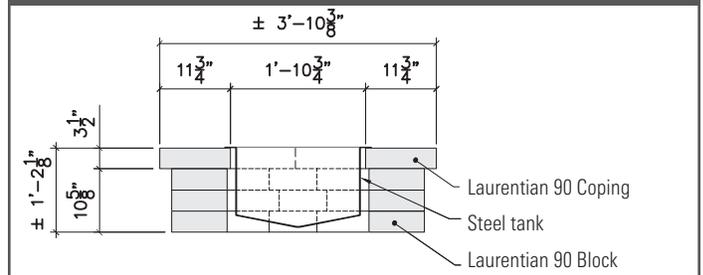
#### Cutting chart

Total number of <b>LAURENTIAN 90 BLOCKS</b> required for firepit base. (12) of each model for a total of (36)		
Model: A 	Model: B 	Model: C 
Total number of <b>LAURENTIAN 90 or CITADIN COPINGS</b> required for firepit top. (8) cut copings		
Id	Qty	Description
D-1	4	
D-2	4	

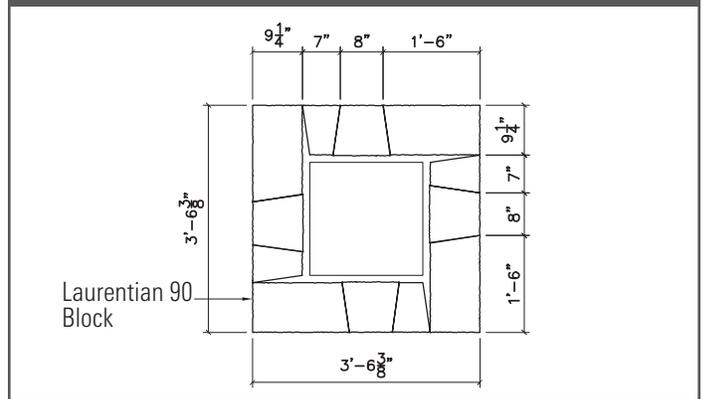
#### Elevation A



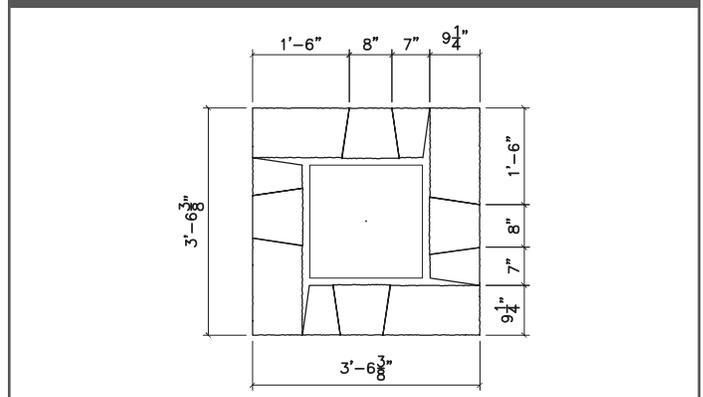
#### Cutting Diagram 1



#### Strand 1



#### Strand 2



## ESSENTIALS COLLECTION

### LAURENTIAN 90 GAS FIREPIT

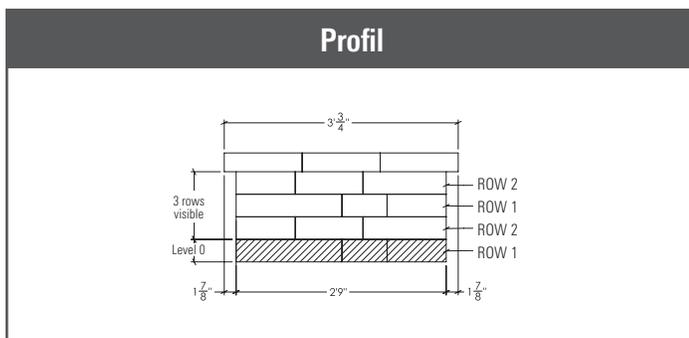
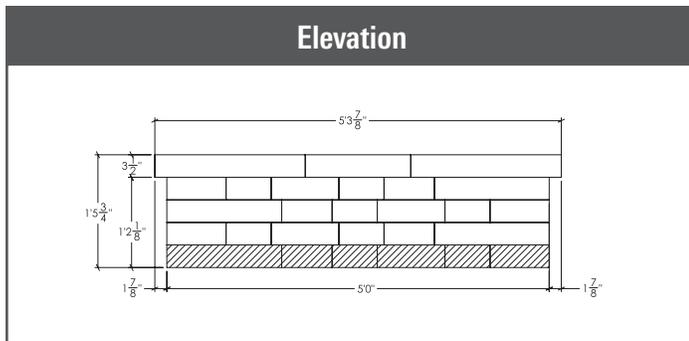
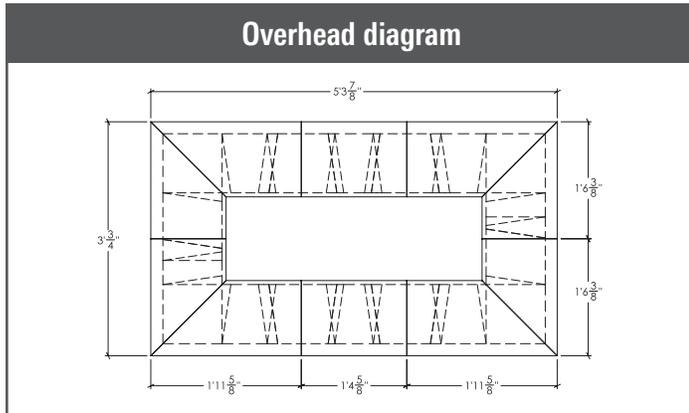


Control panel



This fireplace is designed with Laurentian 90 wallstones and coping.

\*Before permanently installing a Laurentian gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-1242 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Laurentian 90 blocks: 56 ((5) rows, (4) C blocks remaining)
- Laurentian 90 coping: 10
- Rectangular burner CF-1242 : 1

### Cutting chart

Total number of **LAURENTIAN 90 BLOCKS** required for firepit base: 56

MODEL A: 20



MODEL B: 20

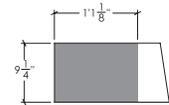


MODEL C: 16



**BLOCK MODEL C** (12) full blocks (4) cut

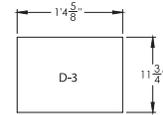
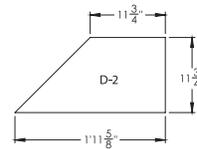
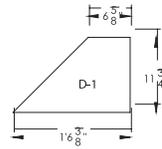
Blocks C cut: **C-1**



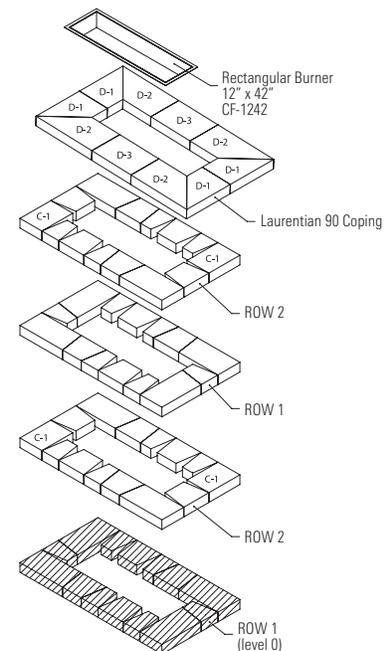
Total number of **LAURENTIAN 90 COPINGS** required for firepit top (10)

**LAURENTIAN 90 COPING**

(4) D1 coping (4) D2 coping (2) D3 coping



### Exploded view



## ESSENTIALS COLLECTION

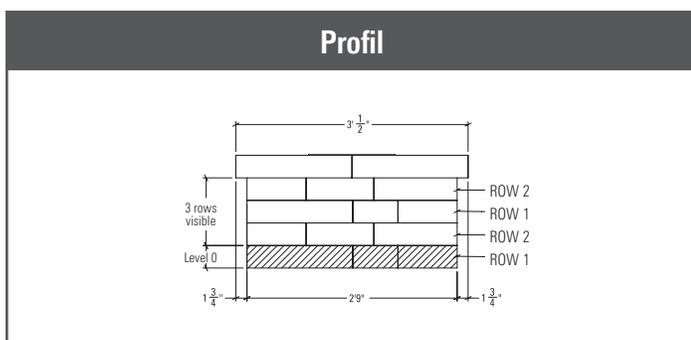
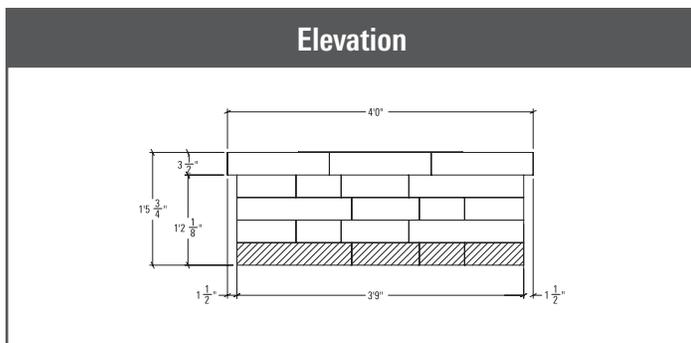
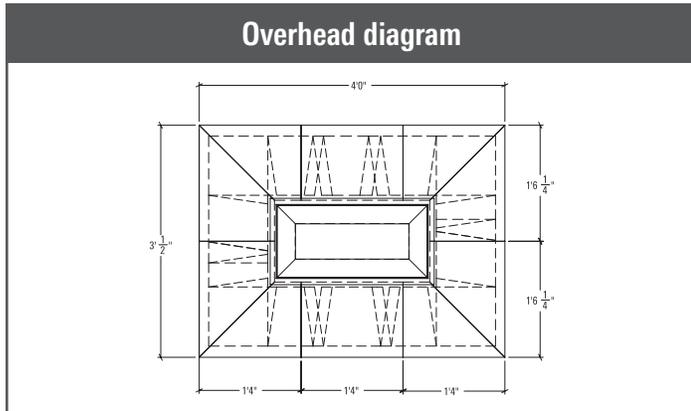
### LAURENTIAN 90 GAS FIREPIT

Control panel



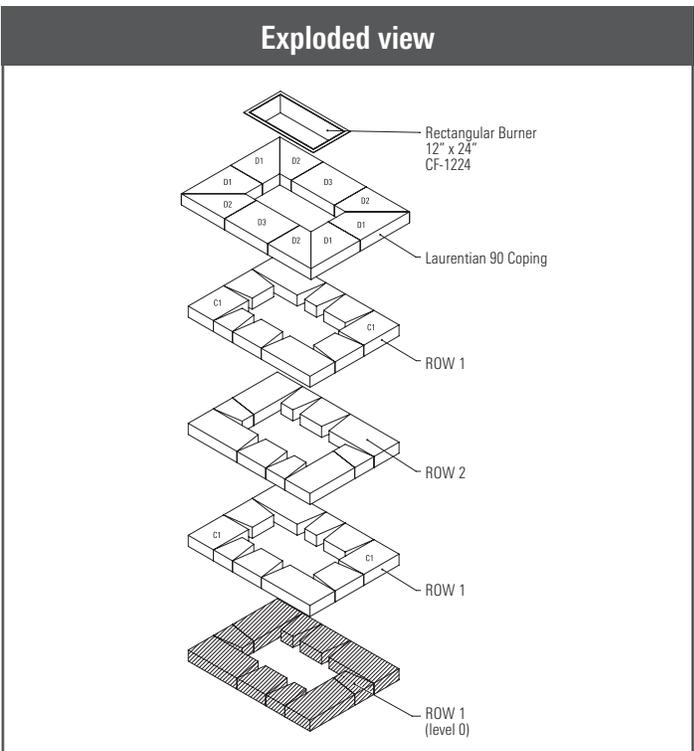
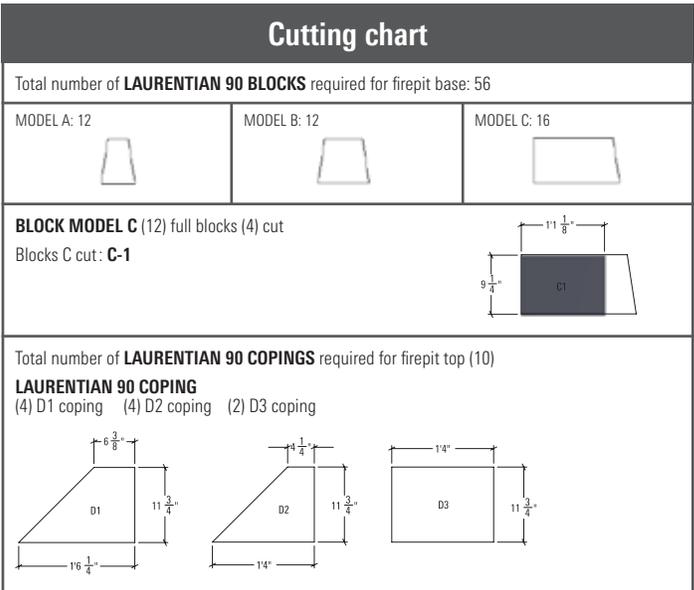
This fireplace is designed with Laurentian 90 wallstones and coping.

\*Before permanently installing a Laurentian gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-1224 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Laurentian 90 blocks: 40
- Laurentian 90 coping: 10
- Rectangular burner CF-1224 : 1



## ESSENTIALS COLLECTION

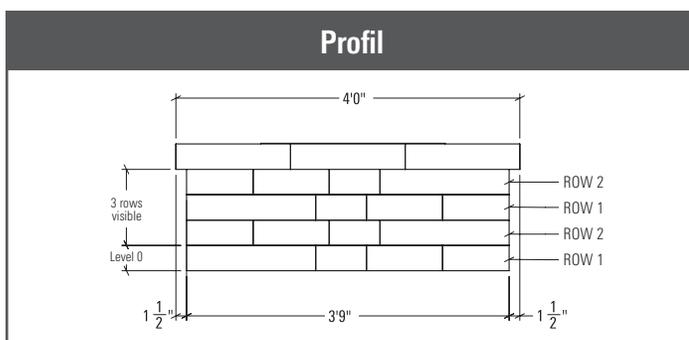
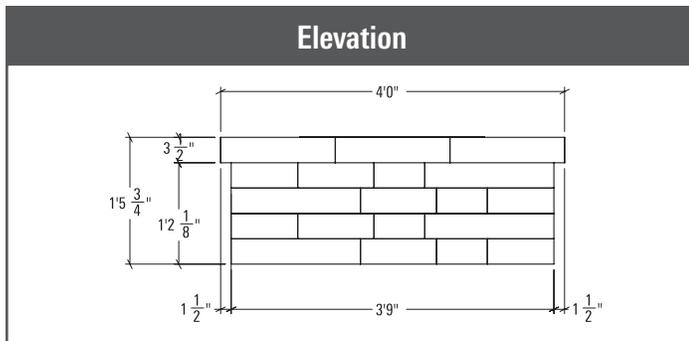
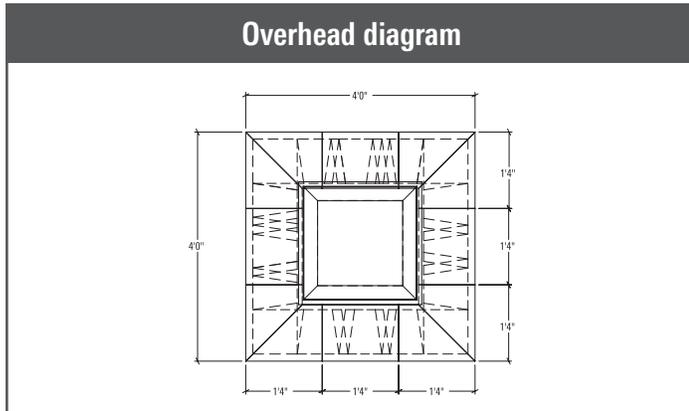
### LAURENTIAN 90 GAS FIREPIT

Control panel



This fireplace is designed with Laurentian 90 wallstones and coping.

\*Before permanently installing a Laurentian gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-2424 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Laurentian 90 blocks: 48
- Laurentian 90 coping: 12
- Rectangular burner CF-2424 : 1

### Cutting chart

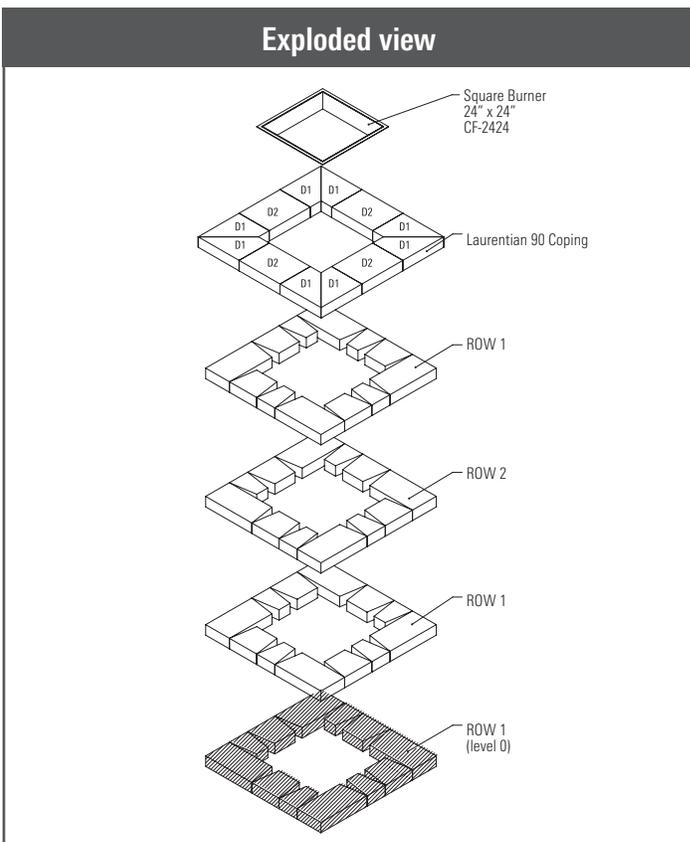
Total number of **LAURENTIAN 90 BLOCKS** required for firepit base: 48

MODEL A: 16	MODEL B: 16	MODEL C: 16
-------------	-------------	-------------

Total number of **LAURENTIAN 90 COPINGS** required for firepit top (12)

**LAURENTIAN 90 COPING**  
(8) D1 coping (4) D2 coping

D1 dimensions: top width 4 1/4", bottom width 14", height 11 3/4".  
D2 dimensions: width 14", height 11 3/4".



## ESSENTIALS COLLECTION

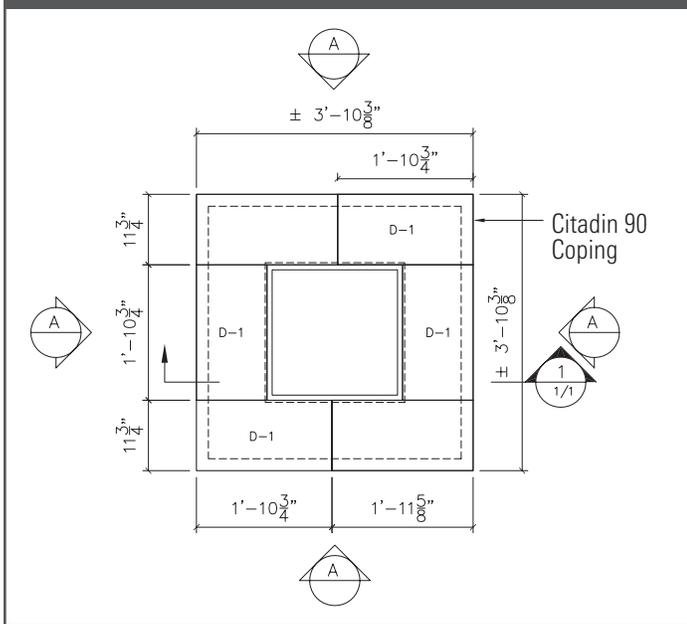
### CITADIN 90 T2 WOOD FIREPIT

This firepit is designed with Citadin 90 blocks and copings.

#### Materials required

- Citadin 90 blocks: 36
- Citadin 90 coping: 6
- Steel tank: 1
- Fire screen: 1

#### Overhead diagram



#### Cutting chart

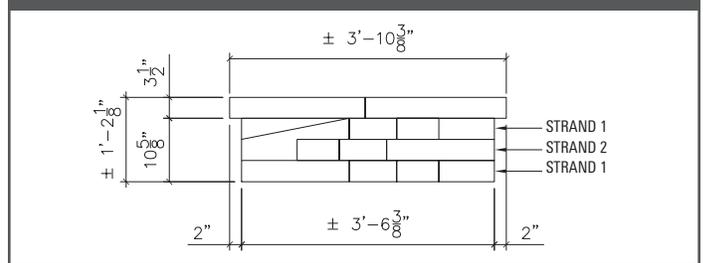
Total number of **CITADIN 90 BLOCKS** required for firepit base.  
(12) of each model for a total of (36)

Model: A	Model: B	Model: C

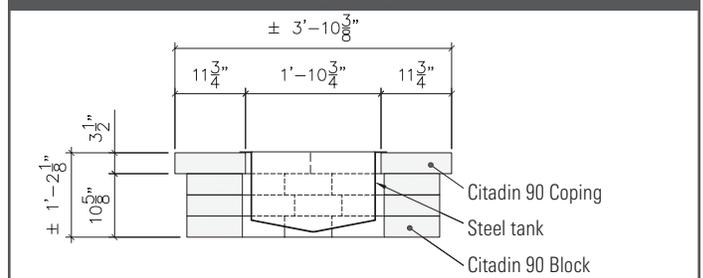
Total number of **CITADIN 90 COPINGS** required for firepit top.  
(2) full copings (4) cut copings

Id	Qty	Description
D-1	4	

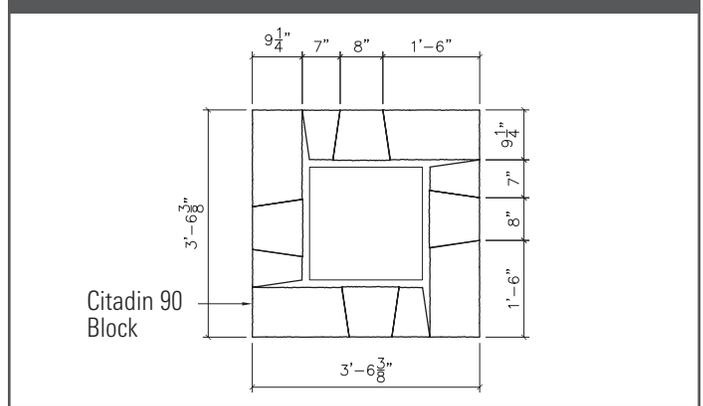
#### Elevation A



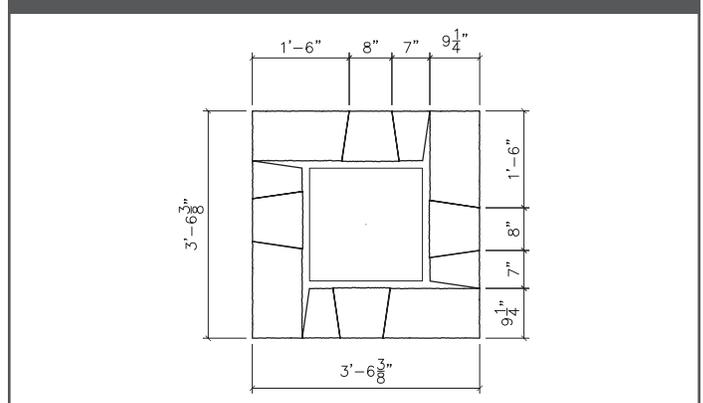
#### Cutting Diagram 1



#### Strand 1



#### Strand 2

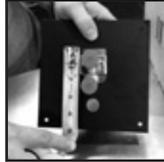


## ESSENTIALS COLLECTION

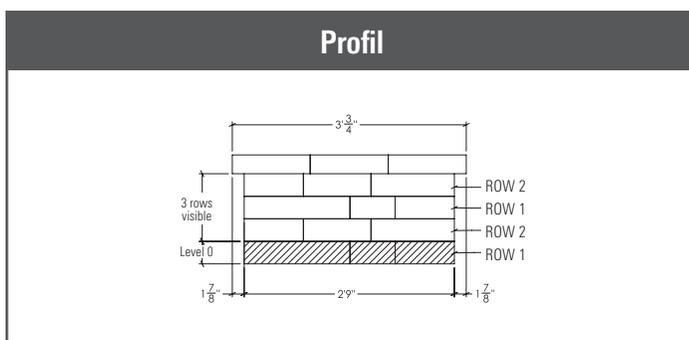
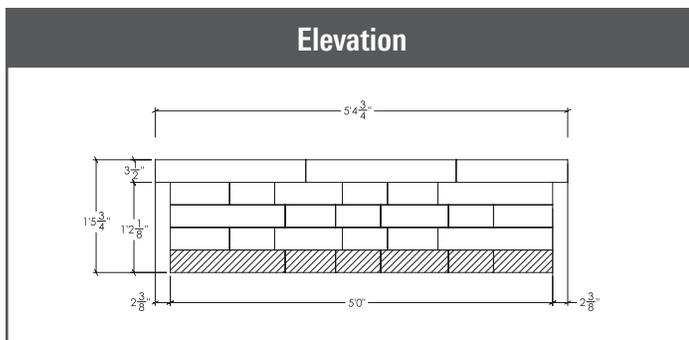
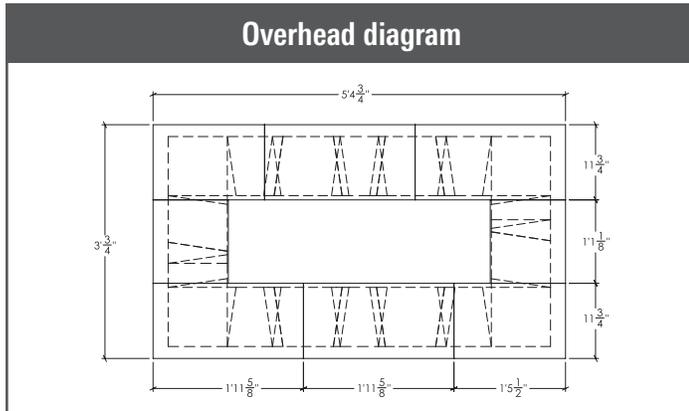
### CITADIN 90 GAS FIREPIT



Control panel

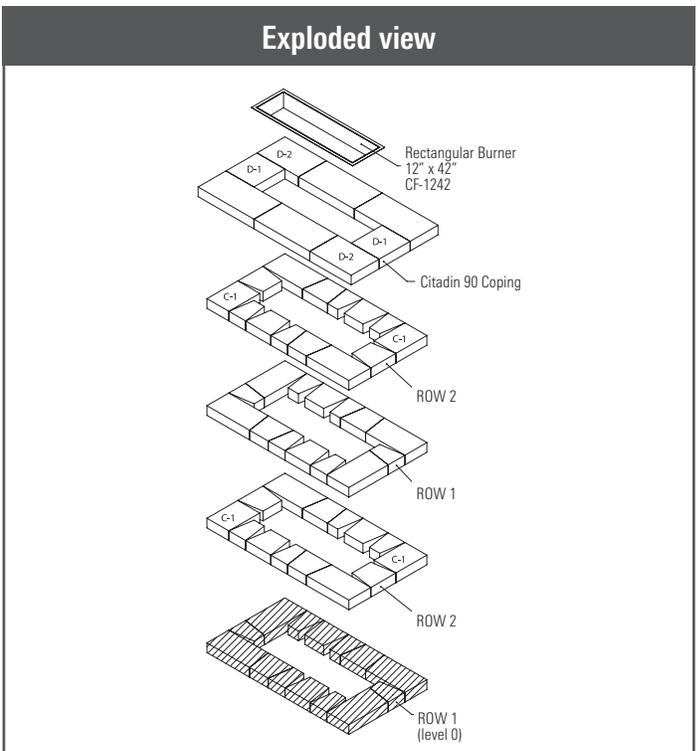
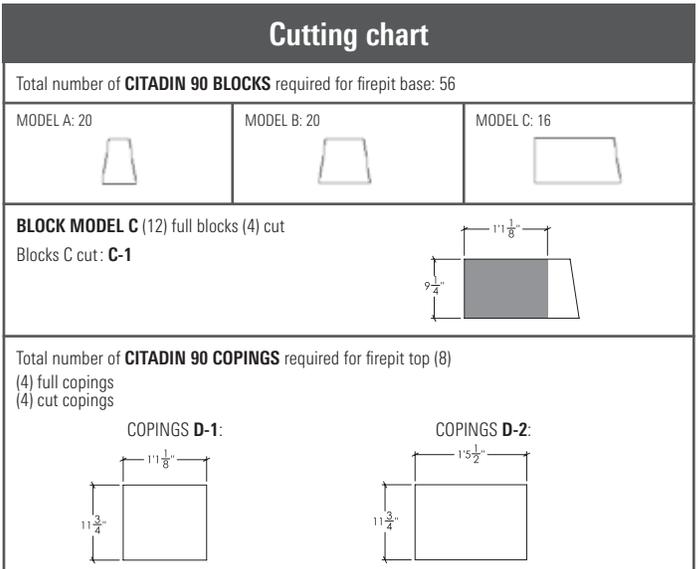


This fireplace is designed with Citadin 90 wallstones and coping. \*Before permanently installing a Citadin 90 gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-1242 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

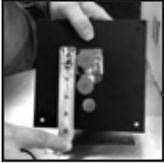
- Citadin 90 blocks: 56 ((5) rows, (4) C blocks remaining)
- Citadin 90 coping: 8
- Rectangular burner CF-1242 : 1



## ESSENTIALS COLLECTION

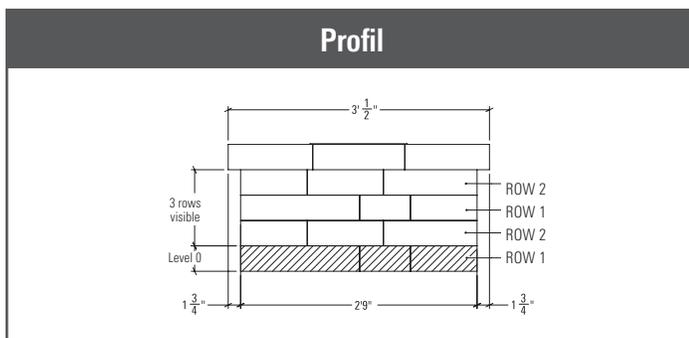
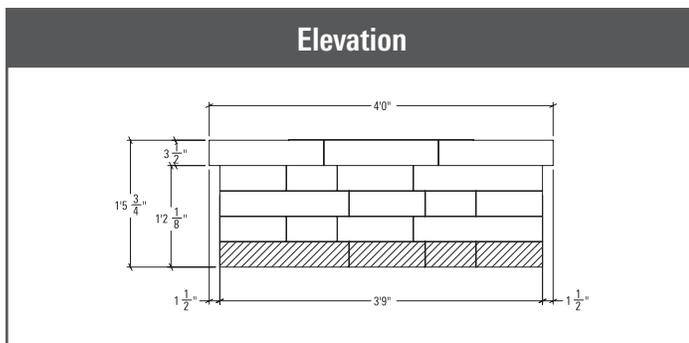
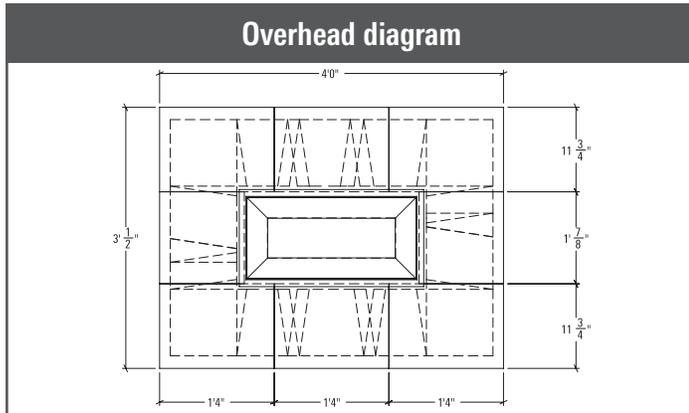
### CITADIN 90 GAS FIREPIT

Control panel



This fireplace is designed with Citadin 90 wallstones and coping.

\*Before permanently installing a Citadin 90 gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-1224 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Citadin 90 blocks: 40
- Citadin 90 coping: 8
- Rectangular burner CF-1224: 1

### Cutting chart

Total number of **CITADIN 90 BLOCKS** required for firepit base: 40

MODEL A: 12



MODEL B: 12

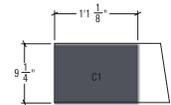


MODEL C: 16



**BLOCK MODEL C** (12) full blocks (4) cut

Blocks C cut: **C-1**



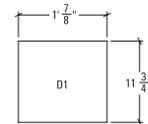
Total number of **CITADIN 90 COPINGS** required for firepit top (16)

**CITADIN 90 COPING**

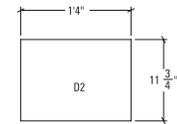
(8) full copings

(8) cut copings

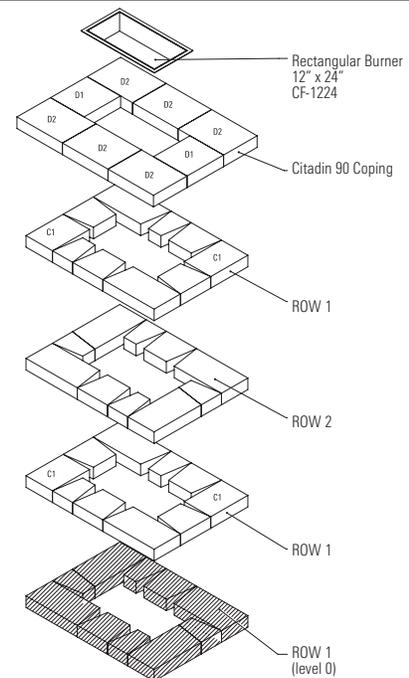
COPINGS D-1:



COPINGS D-2:



### Exploded view



## ESSENTIALS COLLECTION

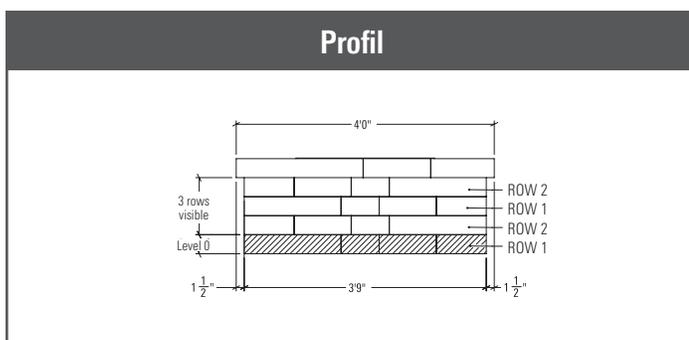
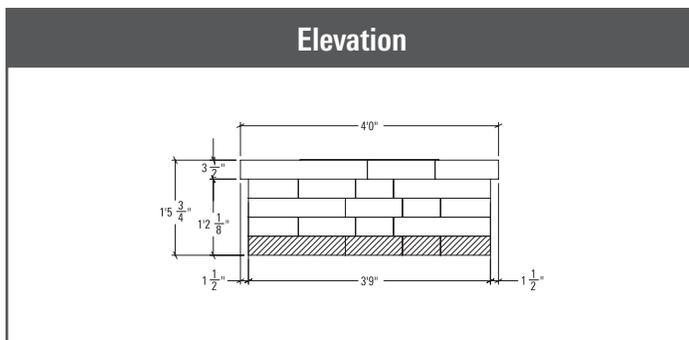
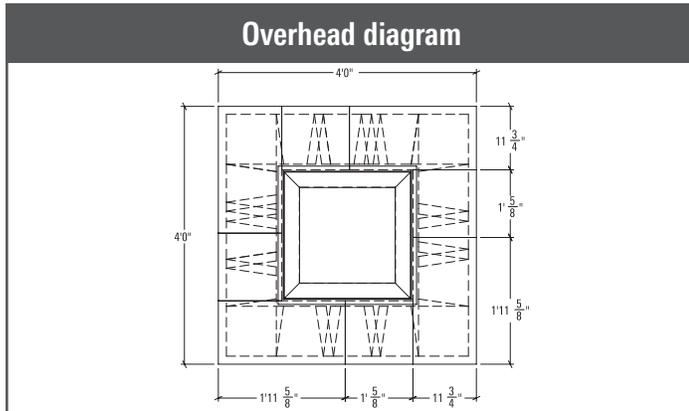
### CITADIN 90 GAS FIREPIT

Control panel



This fireplace is designed with Citadin 90 wallstones and coping.

\*Before permanently installing a Citadin 90 gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-2424 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Citadin 90 blocks: 56 ((5) rows, (4) C blocks remaining)
- Citadin 90 coping: 8
- Rectangular burner CF-2424 : 1

### Cutting chart

Total number of **CITADIN 90 BLOCKS** required for firepit base: 48

MODEL A: 16



MODEL B: 16



MODEL C: 16

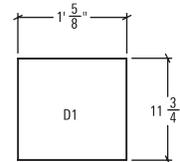


Total number of **CITADIN 90 COPINGS** required for firepit top (8)

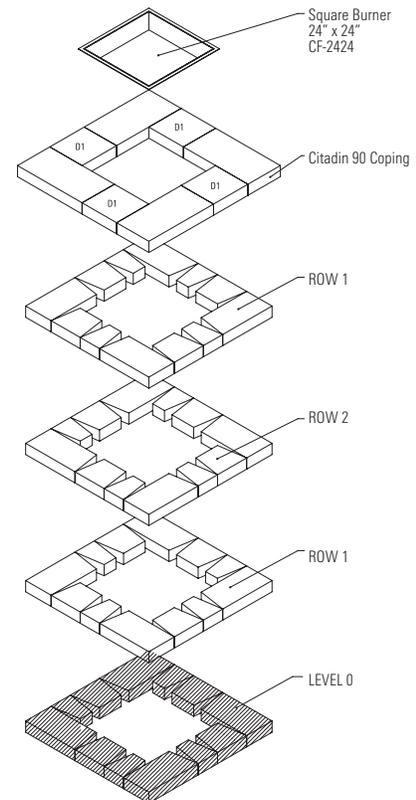
#### CITADIN 90 COPING

- (4) full copings
- (4) cut copings

COPINGS D-1:



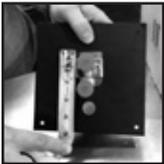
### Exploded view



## ESSENTIALS COLLECTION

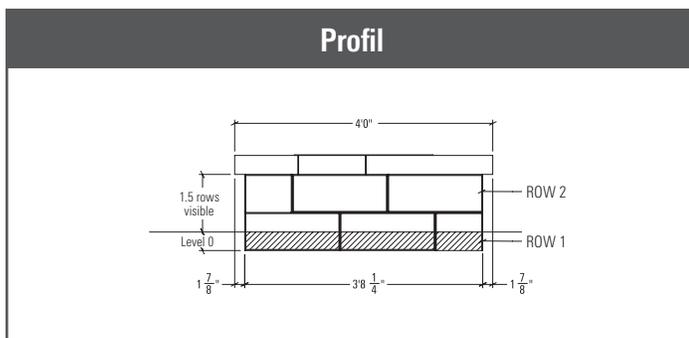
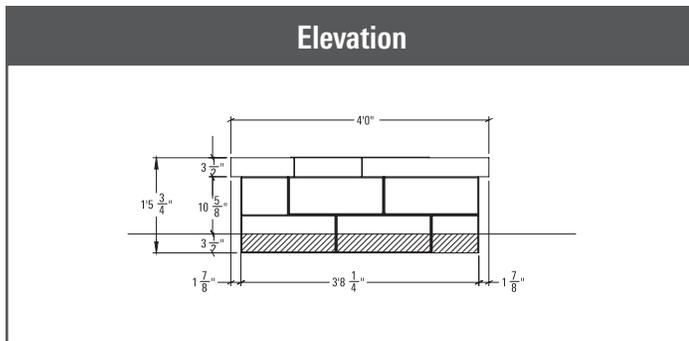
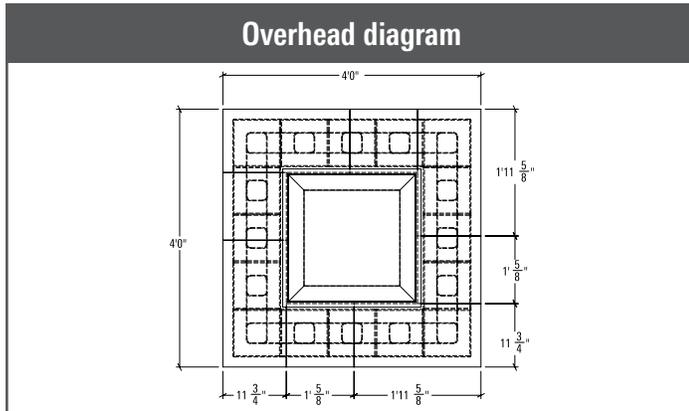
### SUPRA CITADIN 180 GAS FIREPIT

Control panel



This fireplace is designed with Supra Citadin 180 wallstones and coping.

\*Before permanently installing a Supra Citadin 180 gas fireplace, it is important to plan the positioning of the CONTROL PANEL provided with the CF-2424 burner manufactured by The Outdoor Great Room company. Plan all cuts needed for control panel installation, respecting the minimum distance recommended for your gas burner. Also remember to provide hose access for the propane tank.



### Materials required

- Supra Citadin 180 Block: 16 complete corner block
- Supra Citadin 180 coping: 8
- Rectangular burner CF-2424 : 1

### Cutting chart

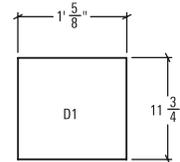
Total number of **SUPRA CITADIN 180 BLOCKS** required for firepit base: 16

Total number of **SUPRA CITADIN 180 COPINGS** required for firepit top (8)

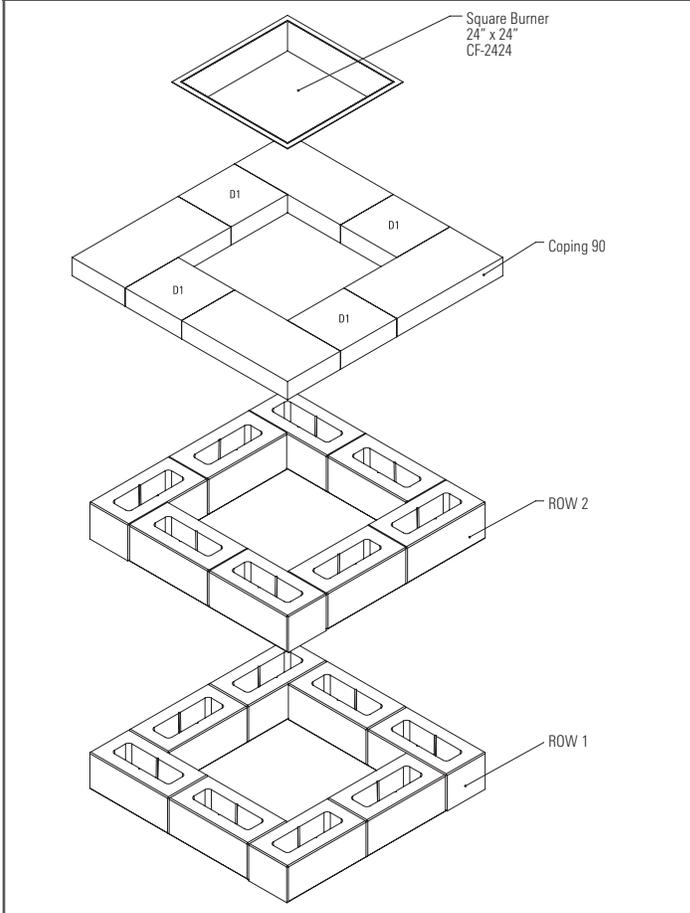
#### SUPRA CITADIN 180 COPING

- (4) full copings
- (4) cut copings

COPINGS D-1:



### Exploded view



## RECOMMENDED PRODUCT APPLICATIONS

### DEICING SALT EXPOSURE

TABLE

Applications Category	Pavers/Slabs	Wallstones	Curbs	Miscellaneous
<b>RESIDENTIAL</b> Unexposed to deicing salts	Slabs			White tiles Appalachian step Laurentian 90 step Citadin 90 step Richelieu 180 step Acadia 150 step
<b>RESIDENTIAL</b> Moderate exposure to deicing salts	Pavers 50 mm Pavers 60 mm Pavers 70 mm Pavers 80 mm	Mesa Appalachian Laurentian 90 Citadin 90 Supra Citadin 180 Slope Block I, II Sutton	Citadin Appalachian Laurentian Regular Medium	Prestige 180 step Citadin 180 step
<b>COMMERCIAL/ INDUSTRIAL/ INSTITUTIONAL</b> High exposure to deicing salts	Appialock pavers Tri Appia pavers Avenue M150 SL pavers Avenue pavers Avenue Autoblocking pavers Avenue Permeable pavers Via Appia 80 pavers Classic 80 pavers Citadin 80 pavers Prestige 80 pavers Hexagon 80 pavers Pavers 70 mm Pavers 60 mm Pavers 100 mm	Mesa	Road curb	Transition curb Car stopper Signal base

## EFFLORESCENCE

### PAVERS, WALLSTONES AND STEPS, SLABS AND CURBS

---

Efflorescence is a natural phenomenon caused by the formation of an off-white calcite on the surface of concrete products made with cement. One in the inherent components of cement is construction lime. During the concrete manufacturing process that consists of mixing cement, water, sand, coarse aggregate and chemical auxiliaries, a series of chemical reactions occur and result in the formation of a solid material: concrete. Construction lime is released during these reactions and migrates through a micro porous network towards the surface of the concrete when it is wet. This lime, once in contact with the carbonic gas present in the air, is transformed into calcite. This phenomenon is efflorescence.

The efflorescence will disappear on its own after two or three years of exposure to weather stress but it is possible to eliminate it more rapidly by cleaning the concrete product with the appropriate detergents.

However, the proper detergents must be used by properly following the manufacturers' instructions. It is not recommended to use detergents containing hydrochloric acid. These acids would not only dissolve the efflorescence but also attack the cement paste and irreversibly modify the appearance of the concrete products by discoloring or changing the surface finish.

We recommend the use of gluconic or phosphoric acids that will allow proper dissolution of the efflorescence while minimizing the risk of alteration within the concrete appearance. Again, it is imperative to follow all recommendations stipulated by the manufacturers as to the use of these products.

Do not hesitate to contact our technical service department for any further information.

## WARRANTY

---

### Warranty description

Béton Bolduc (hereinafter “Bolduc”) provides a transferable lifetime warranty on the structural integrity of its pavers, slabs and retaining walls for residential use. The warranty covers normal use of the materials. It covers abnormal deterioration resulting from the use of sodium chloride (NaCl) as well as cracks or breakage related to defective construction of the items during production.



Bolduc warrants that the conformity of its concrete pavers, slabs, and wallstones meets the latest industry standards in force in Canada and the U.S. All landscaping products produced by the company comply with the appropriate standards established by the Canadian Standards Association (CSA), ASTM (American Society for Testing and Materials), and BNQ (Bureau de normalisation du Québec). These standards are considered to be the most stringent in the world.

### Warranty exclusions

The warranty does not apply to spalling or other disintegration resulting from abnormal overloading, stress, or abrasion, or to deterioration caused by installation that does not conform to standards in force or trade practices.

The warranty also does not apply to impacts caused by compaction or snow removal equipment. Bolduc recommends the insertion of a Teflon plate between compaction equipment and the paver surface to prevent any scraping. In addition, all snow removal equipment must be equipped with proper blade guards and must not scrape the paver surface. This warranty does not apply to damage resulting from natural disasters or negligence of the buyer, building owner, installer, or any third party.

The warranty does not cover efflorescence, white crystals that may accumulate on concrete surfaces, which do not compromise the structural integrity of the product in any way. Efflorescence may disappear over time because of weather, or an efflorescence cleaner may accelerate the process. We cannot be held responsible for this normal phenomenon, which affects all types of concrete (c.f. CBD-2 of the National Research Council Canada or technical specification no. 5 of the Interlocking Concrete Pavement Institute [ICPI]).

Bolduc assumes no responsibility for incorrect application of polymeric sand or any claims of that type. Please contact the polymeric sand manufacturer.

### Warranty application

Bolduc, through its distributor, will provide new pavers, slabs and retaining walls free of charge to replace those covered by the terms of the warranty, after it has conducted an inspection of the product.

### Warranty validity

The warranty enters into force once the enclosed form has been completed and returned to your Bolduc product representative at the store where you made your purchase. All claims must be accompanied by proof of purchase (an invoice, delivery receipt, and pallet identification sticker used at delivery).

### Warranty transferability

The warranty is transferable provided that valid proof of purchase and the Bolduc warranty form are presented.

### Note:

A warranty certificate is available on our website, [www.bolduc.ca](http://www.bolduc.ca), under the “company” menu.

Please follow all instructions and complete the form to enjoy full warranty protection.









1358-2nd Street, Industrial Park  
Sainte-Marie, Beauce, Québec, Canada G6E 1G8

Sainte-Marie: (418) 387-2634  
Toll free Canada: 1-800-463-8966  
Toll free USA: 1-800-603-5567  
Fax: (418) 387-6438  
[www.bolduc.ca](http://www.bolduc.ca)  
[www.bolduc.us](http://www.bolduc.us) [info@bolduc.ca](mailto:info@bolduc.ca)

