

Royal Cobble™ by  **BELGARD**

*Royal Cobble™ Brings
All the Best of European
Design to Your Front Yard.*



One look and you're whisked away to a time when horse-drawn carriages clacked through charming European townships and countrysides. It's a time when architectural design was measured by its elegance and fine craftsmanship. Today, your home can reflect this era of history with Royal Cobble pavers. Combining rich, earthtone colors with textured surfaces creates an authentic "old world" appearance. Available in rectangular and square styles for pattern flexibility, Royal Cobble gives you the freedom to make your home...your castle.

Royal Cobble® sets the beauty of pavers in visual motion. The Royal Cobble® system, comprising five different shapes, permits the creation of circles, half circles, fans, sweeping curves, geometric and random patterns that can unify and enhance landscape and architectural elements with beautifully flowing designs. Royal Cobble® frees the imagination to use large-scale patterns to create new interest and even drama in landscape settings, to harmonize paved areas with surrounding buildings and to lend design distinction to any project.

Composition and Manufacture

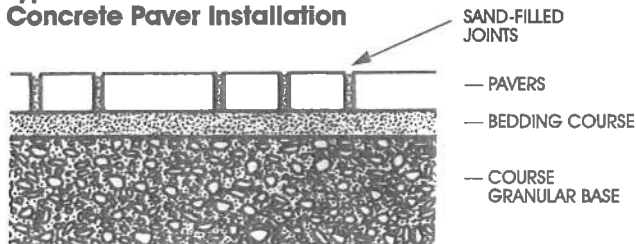
Royal Cobble® is made from a "no slump" concrete mix. Made under extreme pressure and high frequency vibrations, Royal Cobble® has a compressive strength greater than 8000psi, a water absorption maximum of 5% and will meet or exceed ASTM C-936 and freeze-thaw testing per section 8 of ASTM C-67.

Installation

1. Excavate unsuitable, unstable or unconsolidated subgrade material and compact the area which has been cleared. Backfill and level with dense graded aggregate suitable for base material (typically 4-6 in. of compacted base for light vehicular and pedestrian traffic) or as otherwise directed by Site Engineer/Architect/Landscape Architect.
2. Place bedding course of washed concrete sand conforming to the grading requirements of ASTM C33 to a uniform depth of 1-1 1/2 in. (25-38 mm) screeded to the grade and profile required.
3. Install Royal Cobble® with joints approximately 1/8 in. (3mm). (Pavers with spacer ribs automatically provide minimum joint width.)
4. Where required, cut pavers with an approved cutter to fit accurately, neatly and without damaged edges.
5. Tamp pavers with a plate compactor, uniformly level, true to grade and free of movement.
6. Fill joints with sand.


*For complete installation & specification details contact your manufacturer.


Typical Cross Section of Concrete Paver Installation




Dimensions

Height/Thickness $2 \frac{3}{8}'' = 60\text{mm}$

 Large Rectangle Stone
4.52 x 6.77" (115 x 172mm)
approx. 4.7 pieces per sq. ft.

 Square Stone
4.52 x 4.52" (115 x 115mm)
Approx. 7 pieces per sq. ft.

 Small Rectangle Stone
4.52 x 2.24" (113 x 57mm)
Approx. 14 pieces per sq. ft.

Applications

- Driveways • Patios • Entrance areas • Sidewalks
- Terraces • Garden paths • Pool decks • Beach promenades • Pedestrian malls • Roof gardens

Note: Colors are shown as accurately as possible in brochures and samples, but due to the nature of the product, regional color preferences and variables in print reproduction, colors may not match exactly. For best results in maintaining color consistency, pavers must be installed from several cubes at a time.

Miller an Oldcastle® Company

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Kansas City, MO 64132

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fax 816-444-8736

Bonner Springs an Oldcastle® Company

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Bonner Springs, KS 66012

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ASTM C 140-08 Test Report
Sampling and Testing Concrete Masonry Units and Related Units

Job No: 09-487-2
Report Date: 8/10/2009

Client: Miller - Rhino
Address: 4201 Powell Drive, PO Box 8
Bonner Springs, KS 66012

Testing Agency: National Concrete Masonry Association
Research and Development Laboratory
Address: 13750 Sunrise Valley Drive
Hemdon, VA 20171-4662

Unit Specification: ASTM C 936-08

Sampling Party: Miller - Rhino

Unit Description:

Date Samples Received: 7/22/2009

Specified Height (mm): 60

Summary of Test Results

	Required	Actual	
Net Area Compressive Strength.....	8000 min	11900	psi
Absorption	5.0 max	4.5	%
Density (Oven Dry Condition)	****	135.4	pcf
Net Cross Sectional Area	****	30.0	in ²
Variation in Width Dimensions.....	.063 max	0.009	in.
Variation from Specified Height Dimensions.....	.125 max	0.041	in.
Variation in Length Dimensions.....	.063 max	0.006	in.

Individual Unit Test Results

	Avg. Width (in.)	Avg. Height (in.)	Avg. Length (in.)	Sample Weight (lb)	Total Load (lb)	Net * Area (in. ²)	Net Area Compressive Strength (psi)
Unit #1	3.86	2.33	7.79	5.70	411940	30.08	13700
Unit #2	3.85	2.40	7.78	5.69	334480	29.98	11160
Unit #3	3.86	2.40	7.79	5.69	325570	30.04	10840
Average	3.86	2.38	7.78	5.70	357330	30.03	11900

Date Tested:
8/3/2009

* Net area determined as the product of the length and width of the unit.

	Received Weight W _R (lb)	Immersed Weight W _I (lb)	SSD Weight W _S (lb)	Oven-Dry Weight W _D (lb)	Absorption (%)	Density (pcf)	Net Volume (ft ³)
Unit #4	5.86	3.36	5.97	5.73	4.1	137.1	0.0418
Unit #5	5.66	3.24	5.81	5.54	4.8	134.8	0.0411
Unit #6	5.64	3.21	5.77	5.51	4.7	134.2	0.0411
Average	5.72	3.27	5.85	5.60	4.5	135.4	0.0413

Date Tested:
7/23/2009
to
7/30/2009

Comments: These units meet or exceed the compressive strength, absorption, and dimensional requirements of ASTM C936-08.



Nicholas R. Lang
Manager, Research & Development Laboratory