











Adding a second Circle Kit takes the diameter to 9.75 feet



The addition of one Expansion Kit takes your circle to 12 feet





STANDARD SPECIFICATIONS

Old Dominion pavers are manufactured to industry standard specifications ASTM: C 936, and CSA: A 231.2.

CIRCLE EXPANSION KIT

Product Data	Circle
Coverage per Layer	11.43 ft ² (1.06 m ²)
Layers per Pallet	4
Coverage Per Pallet	45.72 ft ² 4.25 m ²)
Wieght Per Layer	320 lb (145 kg)
Weight Per Pallet	1,330 lb (603.3 kg)

All Weight per Pallet noted above includes a 50 lb palletweight.

*All metric dimensions are soft converted to Imperial. Dimensions and coverage include 1.5 mm (1/16") joint

COLORS





Cascade Blend

Summit Blend



THE CIRCLE KIT

With their pillow top surface and tapered corners, Mutual Materials® Old Dominion pavers offer a rustic appearance. Old Dominion Squares & Rectangles include three sizes and can be installed in unique, random patterns. Old Dominion Circles make it easy to add a circular patio, fountain, or other feature to your outdoor living space.

Use the three styles alone, or combine them for truly unique, interesting pavements using full circles, half circles, sweeping curves, fans, and traditional cobblestone patterns. Old Dominion pavers are ideal for residential, municipal, and commercial applications.



CIRCLE PRODUCT DATA

Product Data	Depth	Radius	Diameter	Circle Area	Wt/ Pallet	Circumference
1 Pallet	2 %" (6 cm)	41 ³ ⁄4" (106 cm)	83 ½" (212 cm)	39.27 ft ² (3.65 m ²)	1,150 lb (522 kg)	262 ³ / ₄ " (615.8 cm)
2 Pallets	2 ³ ⁄ ₈ " (6 cm)	58 ⁷ /16" (148.4 cm)	116	78.54 ft² (7.29 m2)	1,150 lb (522 kg)	367 ³ /16" (932.7 cm)

^{*}All metric dimensions are soft converted to Imperial. Dimensions and coverage include 1/8" (3 mm) joint. Dimensions refer to completed circle.

CIRCLE PURCHASE REQUIREMENT

Old Dominion Circle must be purchased by the full pallet (38.05 ft²).

CIRCLE INSTALLATION

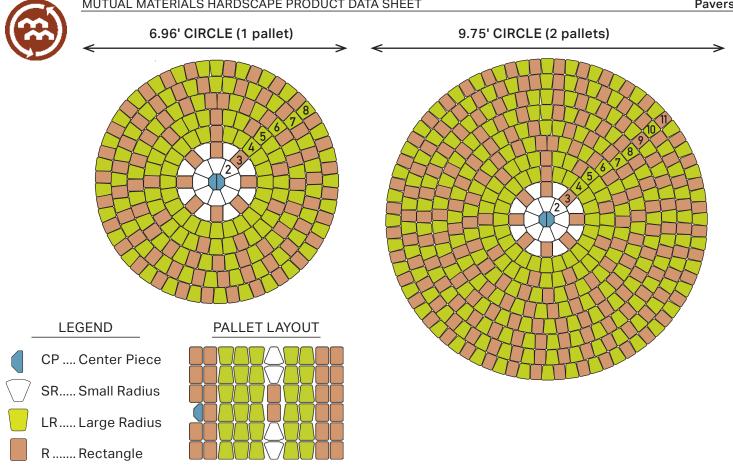
One pallet of Old Dominion Circle will create a ⁶.961 diameter circle, two pallets will create a ⁹.751 diameter circle. If you would like to make an even bigger circle, use Old Dominion Squares & Rectangles for additional bands of the circle—be sure to mix the shapes together to keep joint spacing even. The pallet layout and installation patterns for Old Dominion Circle are below.

IMPORTANT CONSIDERATIONS:

- The center is actually two-pieces which must be cut with a masonry blade along the score lines.
- You must include an 1/8" (3 mm) joint between all pavers.
- Begin screeding sand and laying pavers from the center of the circle.

ROW PATTERNS

1. 2 cut CP	(2 CP)
2. 8 SR	(8 SR)
3. Alternate 1 R with 1 SR all the way around	(8 R, 8 SR)
4. Start with 1 R and then install all LR	(1 R, 23 LR)
5. 3 LR, 1 R, 2 LR, 1 R, repeat all the way around	(23 LR, 9 R)
6. Start with 1 R, then alternate 1 LR with 1 R	(20 LR, 21 R)
7. Start with 1 LR, then alternate 1 LR with 1 R	(25 LR, 24 R)
8. Start with 1 LR, then alternate 1 LR with 1 R	(29 LR, 28 R)
9. Start with 1 LR, then alternate 1 LR with 1 R	(33 LR, 32 R)
10. Start with 1 R, then alternate 1 LR with 1 R	(36 LR, 37 R)
11. Alternate 1 LR with 1 R	(40 LR, 40 R)



Technical Source: Interlocking Concrete Pavement Institute (ICPI): Tech Spec No. 2, 1999

SQUARES & RECTANGLES PRODUCT DATA

Coverage/Layer	Layers/Pallet	Coverage/Pallet	Weight/Layer	Circle Area	Weight/Pallet
11.43 ft²	9	102.74 ft²	302 lbs	39.27 ft ²	2,930 lb
(1.06 cm²)		(9.54 m²)	(145 kg)	(3.65 m ²)	(1,329 kg)

STANDARD SPECIFICATION

Old Dominion pavers are manufactured to industry standard specifications ASTM: C 936, and CSA: A 231.2.

SQUARES & RECTANGLES PURCHASE REQUIREMENT

All three (3) shapes are mixed on each layer and must be purchased by the full layer or full pallet.

SO	= Square				
	(5 ½" x 5 ½")				
	l				

LR = Large Rectangle (5 ½" x 4 ½")

SR = Small Rectangle (5 ½" x 2 ¾")

SQ	SQ	SQ	SQ	SQ	SQ	SQ	SQ
SR	SR	SR	SR	SR	SR	SR	SR
SQ	SQ	SQ	LR I	R LF	R	SQ	SQ
LR	LR	LR	LR	LR	LR	LR	LR
LR	LR	LR	LR	LR	LR	LR	LR
LR	LR	LR	LR	LR	LR	LR	LR
SQ	SQ	SQ	SQ	SQ	SQ	SQ	SQ
SQ	SQ	SQ	SQ	SQ	SQ	SQ	SQ

SQUARES & RECTANGLES PALLET LAYOUT

Old Dominion Squares & Rectangles can be installed in a number of random or linear patterns. Experiment until you achieve the look that you desire. The diagram to the right shows the layout of each layer on the pallet.



SQUARE 2 %" x 5 ½" x 5 ½" (6 cm x 14 cm x 14 cm)



LARGE RECTANGLE 2 %" x 5 ½" x 4 1/8" (6 cm x 14 cm x 10.5 cm)



SMALL RECTANGLE 2 %" x 5 ½" x 2 ¾" (6 cm x 14 cm x 7 cm)



INSTALLATION INSTRUCTIONS

1. Excavation

Mark area to be paved with stakes and string lines at the desired finished elevation. Locate stakes outside the project area by a minimum of 4". This will allow room for the edge restraint system. Excavate a minimum of 7" below final patio slab elevation. Allow 1/8" to 1/4" per foot slope for correct water runoff. Slope can be in more than one direction depending on job site circumstances. Water will not penetrate joints unless it is allowed to puddle or remain in an area. Remove any loose soils after excavation is complete.

2. Base Preparation

Add a dusting of 3/4" minus rock to the excavated area. This will allow the plate compactor to glide across area without sticking to the sub grade. Compact the entire subgrade with plate compactor. After compacting subgrade, add 1"–2" of 3/4" minus rock, rake smooth and compact. Base rock should have a certain amount of moisture content. Repeat steps until final base elevation is achieved. The final sub-base should be 3" below the Columbia Slate patio slab. Remember, the final product will mirror the base elevation. Any deviation in base should be corrected at this time with base rock (not sand).

3. Bedding Sand

Bedding sand should be screeded at a depth between 1"-1 $\frac{1}{4}$ ". Place 1" rigid pipe below elevation lines and measure down 2" to top of pipes. Place pipes parallel to each other and almost as wide as the strike board (2 x 4). Place sand in between pipes and pull strike board across both pipes. This will allow approximately 1" of sand screeded between the two pipes. Pull pipes out of sand; fill pipe voids with sand and trowel smooth. Do not compact sand bed.

4. Install Patio Slabs

Depending on the pattern, starting points and direction of installation will vary. More times then not, opt for the easiest access with the longest run where no cutting will be made. Also consider more visual areas (i.e. in line with windows, doors, water features, etc). Patio slabs should be placed gently onto the sand bed and not pushed into it. Use a rubber mallet to set patio slabs. Setting a string line 3" above setting bed will allow the installer to maintain straight pattern lines. After installing a larger area, place plywood on top of slabs to walk around on. This will distribute weight so individual patio slabs will not get embedded into sand before adjustments and final compaction is done. Slight adjusting can be accomplished by moving patio slabs to desired spot by inserting a flat head screwdriver in between slabs and pushing them. Cut patio slabs can be used to fill any voids in the pattern along the edges. Mix patio slabs from multiple pallets to achieve a consistent color blend.

5. Edge Restraint

Any edge not retained by a solid, rigid structure (i.e. concrete, asphalt, etc) should be contained with a plastic edge restraint system. These are easier to install after the patio slabs are laid. Using a hose with a spray nozzle, carefully moisten sand bed around perimeter of patio slab area. This will allow a trowel to remove sand from patio slab edge without the sand migrating or sloughing away. Place edge restraint system against patio slab/ bedding sand and on top of compacted base rock. Install 10" spikes every 8"–12". Make sure that all edges are contained before compaction of patio slabs.

6. Compaction

Because of the size of these patio slabs, we do not recommend using a plate compactor directly on top of the patio slabs. We would recommend simply leveling your patio slabs with a rubber mallet. If you want to compact these patio slabs, place sheets of plywood over the patio slab surface before compacting. Use a trowel to remove sand from the edge without causing it to migrate.

MATERIALS NEEDED

Necessary Tools

Shovel (flat and pointed)
Rake
Wheelbarrow
Stakes (for setting grade)
String lines & line level
Hammer
Push broom
8' 2 x 4 (strike board)
(2) Screed pipes (metal)
Tape measure
Trowel
Garden hose w/spray
nozzle
Flat Head screwdriver

Base Rock

34" minus crushed rock Residential (pedestrian) 4" thick Residential (vehicular) 6"– 8" thick 1 cubic yard = 300 sf @ 1" depth

Rental Items

Plate compactor Masonry saw w/ diamond blade

Safety Gear

Safety glasses Ear protection Dust mask (respirator)

Bedding Sand

Clean, washed (concrete) sand 1"-1 $\frac{1}{2}$ " in depth 1 cubic yard = 300 sf @ 1" depth

Joint Sand

DesignMix Paver Joint Sand (80 lb bag) 1 bag will cover approx 100 ft*

MUTUAL MATERIALS LOCATIONS

WASHINGTON

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OREGON

Bend Clackamas Durham Portland Salem

IDAHO

Boise Hayden

MONTANA

Missoula

For product information and customer service, call 1-888-MUTUAL (688-8250)