Imagine... with dozens of Cambridge shapes and colors to choose from, you can create your own personal design for a driveway, walkway, patio, sunroom or any area you’re planning to pave. For your convenience, we are providing you with some popular DesignScaping patterns for your consideration. Remember, using Cambridge Pavingstones with ArmorTec, the design possibilities are endless.

Cambridge Pavingstones With ArmorTec Are Superior! Here’s Why:

**WITH ARMORTEC**

The technologically-advanced ArmorTec surface – exclusively on Cambridge Pavingstones – preserves the paver’s rich color and smooth surface forever.

**WITHOUT ARMORTEC**

In pavers without ArmorTec, beauty is compromised when the surface reveals small stones (aggregate) after only one year of ordinary wear.

**The ArmorTec Advantage**

Insist On It!
DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

**Installation Pattern DSR-001**

From The Cambridge RoundTable Collection. See Instructions For Placement In Chart At Bottom.

**CIRCLE DESIGN KIT**

Consists Of These 6 Numbered Shapes:

- Circle I
  - Center
- Circle II
  - Small w/Angled Top
- Circle III
  - Small w/Curved Top
- Circle IV
  - Three Quarter Rectangular
- Circle V
  - Large Tapered
- Circle VI
  - Half

### Circle Design Kit

<table>
<thead>
<tr>
<th>RING NO. ON PATTERN</th>
<th>CIRCLE DIAMETER</th>
<th>NO. OF PCS. &amp; SHAPE FOR EACH RING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center</td>
<td>6&quot;</td>
<td>2 pieces of Circle I</td>
</tr>
<tr>
<td>1</td>
<td>17 1/2&quot;</td>
<td>8 pieces of Circle I</td>
</tr>
<tr>
<td>2</td>
<td>29&quot;</td>
<td>8 pieces of Circle III</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td>3</td>
<td>41&quot;</td>
<td>26 pieces of Circle V</td>
</tr>
<tr>
<td>4</td>
<td>53&quot;</td>
<td>34 pieces of Circle V</td>
</tr>
<tr>
<td>5</td>
<td>65&quot;</td>
<td>21 pieces of Circle IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td>6</td>
<td>77&quot;</td>
<td>24 pieces of Circle V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 pieces of Circle VI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>place on opposite sides of ring</td>
</tr>
<tr>
<td>7</td>
<td>89&quot;</td>
<td>29 pieces of Circle IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>place on opposite sides of ring</td>
</tr>
<tr>
<td>8</td>
<td>101&quot;</td>
<td>34 pieces of Circle V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 piece of Circle VI</td>
</tr>
</tbody>
</table>

To Expand This 8’ 5” Diameter Circle, A Second Circle Design Kit Is Necessary (See Ring Numbers 9-12). For Ring Numbers 11 & 12, Add One Band Of 4 1/2 x 6 To Your Order.

<table>
<thead>
<tr>
<th>RING NO. ON PATTERN</th>
<th>CIRCLE DIAMETER</th>
<th>NO. OF PCS. &amp; SHAPE FOR EACH RING</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>112&quot;</td>
<td>38 pieces of Circle IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td>10</td>
<td>124&quot;</td>
<td>42 pieces of Circle IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td>11</td>
<td>136&quot;</td>
<td>44 pieces of Circle V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 pieces of Circle VI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pieces of 4 1/2 x 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>place anywhere in ring</td>
</tr>
<tr>
<td>12</td>
<td>148&quot;</td>
<td>48 pieces of Circle V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pieces of 4 1/2 x 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternate shapes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 pieces of Circle VI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>place anywhere in ring</td>
</tr>
</tbody>
</table>

To Achieve Ring Numbers In Excess Of 12, Add The Appropriate Number Of 4 1/2 x 6 Pavingstones

<table>
<thead>
<tr>
<th>RING NO. ON PATTERN</th>
<th>CIRCLE DIAMETER</th>
<th>NO. OF PCS. &amp; SHAPE FOR EACH RING</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>160&quot;</td>
<td>107 pieces of 4 1/2 x 6</td>
</tr>
<tr>
<td>14</td>
<td>172&quot;</td>
<td>115 pieces of 4 1/2 x 6</td>
</tr>
<tr>
<td>15</td>
<td>184&quot;</td>
<td>124 pieces of 4 1/2 x 6</td>
</tr>
</tbody>
</table>

Upon Completion, There Will Remain Four Of I, II & III; Sixteen Of IV; Twenty-Three Of V And One Of VI.
DETERMINING SQUARE FOOTAGE FOR A CIRCLE AREA AND OTHER GEOMETRY
Formulas To Help In Calculating The “Not So Standard” Projects.

AREA OF CIRCLE FORMULA – AREA = \( \pi r^2 \)

\[(3.14) (\text{radius})^2\]

2 Examples For A Circle Installation

1. 15’ Diameter Circle – Area = \( \pi r^2 \)

Area = \( \pi (7.5)^2 = 177 \text{ sq. ft.} \)

\[(3.14)(7.5 \times 7.5) = 177 \text{ sq. ft.} \]

2 circle cubes = 100 sq. ft.
(sq. ft. based on what pieces are applicable)
4 1/2 x 6 = 77 sq. ft.

2. A 15’ Diameter Circle With An 8’ Planter In The Center

15’ diameter = 177 sq. ft.
8’ diameter = \( (\pi)(4)^2 = 50.25 \text{ sq. ft.} = 177 \text{ sq. ft.} – 50.25 \text{ sq. ft.} = 126.75 \)
(Subtract outer circle from inner circle)
1 circle cube - 50 sq. ft.
4 1/2 x 6 - 77 sq. ft.
**Table One: Formulas**

<table>
<thead>
<tr>
<th>Shape</th>
<th>Formula</th>
<th>Shape</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td>[ A = \pi r^2, \ C = 2\pi r ]</td>
<td>Cube</td>
<td>[ V = s^3 ]</td>
</tr>
<tr>
<td>Parallelogram</td>
<td>[ A = bh ]</td>
<td>Rectangle box</td>
<td>[ V = lwh ]</td>
</tr>
<tr>
<td>Right Triangle</td>
<td>[ A = 1/2bh, \ c^2 = a^2 + b^2 ]</td>
<td>Right Circular Cylinder</td>
<td>[ V = \pi r^2 h ]</td>
</tr>
<tr>
<td>Square</td>
<td>[ A = s^2 ]</td>
<td>Pyramid</td>
<td>[ V = 1/3 Bh ]</td>
</tr>
<tr>
<td>Trapezoid</td>
<td>[ A = 1/2h (b+b1) ]</td>
<td>Right Circular Cone</td>
<td>[ V = 1/3\pi r^2 h ]</td>
</tr>
<tr>
<td>Triangle</td>
<td>[ A = 1/2bh ]</td>
<td>Sphere</td>
<td>[ V = 4/3\pi r^3 ]</td>
</tr>
<tr>
<td>Sphere</td>
<td>[ A = 4\pi r^2 ]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Two: American System Of Weights And Measures**

**LENGTH**

- 12 inches = 1 foot
- 3 feet = 1 yard
- 5 1/2 yards = 1 rod
- 5280 feet = 1 land mile
- 6076 feet = 1 nautical mile

**AREA**

- 144 square inches = 1 square foot
- 9 square feet = 1 square yard
- 160 square rods = 1 acre
- 640 square acres = 1 square mile

**WEIGHT**

- 16 ounces = 1 pound
- 2000 pounds = 1 ton
- 2240 pounds = 1 long ton

**CAPACITY DRY MEASURE**

- 2 pints = 1 quart
- 8 quarts = 1 peck
- 4 pecks = bushel

**LIQUID MEASURE**

- 16 fluid ounces = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon
- 231 cubic inches = 1 gallon

**VOLUME**

- 1728 cubic inches = 1 cubic foot
- 27 cubic feet = 1 cubic yard

**Table Three: Metric System Of Weights And Measures**

**LENGTH**

- 10 millimeters (mm) = 1 centimeter (cm) = 0.3937 inch
- 100 centimeters = 1 meter (m) = 39.37 inches
- 1000 meters = 1 kilometer (km) = 0.6214 mile
- 1 square meter = 10.75 square feet

**CAPACITY**

- 1000 milliliters (ml) = 1 liter (l) = 1.057 quart
- 1000 liters (l) = 1 kiloliter (kl) = 264.2 gallons

**WEIGHT**

- 1000 milligrams (mg) = 1 gram (g) = 0.0353 ounce
- 1000 grams (g) = 1 kilogram (kg) = 2.205 pounds
Cambridge Cutting Templates

With only thirteen cuts per fan, four fans consisting of a center paver and six rings can be created from each Circle Design Kit. Each fan will measure 65”w x 37”d. One kit will also accommodate two half radius patterns that are necessary to complete the design. See C on Drawing No. 1: Fan Pattern Installation Detail below.

A fan design can be created from the six paver shapes included in the Cambridge Circle Design Kit. However, to place fans into a field of Cambridge Pavingstones, five of the shapes in the kit will require precision cuts. Five convenient cutting templates can be found on a separate sheet included in this instruction package. Cut out each template along the outer edge.

To achieve a proper fit where one fan meets another, mark the prescribed cuts by placing specific templates on top of the shapes that require cutting. See reverse side for instructions on using the templates.

Proper Installation Procedures

1. Make sure that a properly compacted quarry process base and layer of screeded C-33 sand has been installed.

2. Run first string line down the center of the laying surface. See Center Line No. 1 on Drawing No. 1: Fan Pattern Installation Detail.

3. Run a perpendicular line across the front of the laying face. See Line No. 2 on Drawing No. 1: Fan Pattern Installation Detail. To square up string lines, start the 3-4-5 triangle at B on Drawing No. 1: Fan Pattern Installation Detail. Leave sufficient room for the border course between Line No. 2 and the edge restraint.

4. Start the first fan. See A on Drawing No. 1: Fan Pattern Installation Detail. Follow instructions carefully, making sure that the appropriate pavers for each row are laid over Center Line No. 1. Note that this is the ONLY method that will maintain symmetry of bond lines throughout the pattern. Straying from lines could tighten one side of the pattern and open the other.

5. Run two additional string lines parallel with Center Line No. 1. Refer to Center Line No. 3 on left and Center Line No. 4 on right on Drawing No. 1: Fan Pattern Installation Detail. Repeat this step as many times as needed to fill the width of the laying face.

6. Repeat Step 4 on Lines No. 3 and 4. Make sure that the radii of the outer fans meet. See Drawing No. 1: Fan Pattern Installation Detail.

7. Fill in with a half radius against the lower concave radius of each fan starting with Ring No. 6. Work back to Ring No. 3 as needed. See C on Drawing No. 1: Fan Pattern Installation Detail.
**RING SHAPES TEMPLATE INSTRUCTIONS**

Center  1 of Circle I No.1 Using Template No. 1, cut a Center paver shape and place it.

No. 1  3 of Circle II No. 2 Center first Circle II paver on center line. Using Template No. 2 and Circle II paver shapes, cut a right and left hand piece and place them at ends.

No. 2  3 of Circle III No. 3 Center one Circle III paver shape on center line. 2 of Circle IV Add two Circle IV paver shapes. Using Template No. 3 and Circle III paver shapes, cut a right and left hand piece and place them at ends.

No. 3  7 of Circle V No. 4 Place one paver on center line. Add remaining pavers. Using Template No. 4 and Circle V paver shapes, cut a right and left hand piece and place them at ends.

No. 4  2 of Circle IV 8 of Circle V No. 4 Place one Circle V paver shape to the left and one to the right of center line. Add remaining pavers. Alternate shapes. Using Template No. 4 and Circle V paver shapes, cut a right and left hand piece and place them at ends.

No. 5  4 of Circle IV 8 of Circle V 2 of Circle VI No. 5 Place two Circle V paver shapes in the same starting position as Ring No. 4. Add remaining pavers. Alternate shapes. Using Template No. 5 and Circle V paver shapes, cut a right and left hand piece and place them at ends.

No. 6  8 of Circle IV 9 of Circle V No. 5 Place one Circle V paver shape on center line. Alternate Circle IV and Circle V paver shapes. Using Template No. 5 and Circle V paver shapes, cut a right and left hand piece and place them at ends.

---

**Note:** It will be necessary to cut six additional Circle VI paver shapes (two for the fourth fan and two for each half radius).
DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

Installation Pattern No. DSR-002
From The Cambridge RoundTable Collection.

6 x 9 (40%)
6 x 6 (27%)
3 x 6 (33%)

Installation Pattern No. DSR-005
From The Cambridge RoundTable Collection.

6 x 6 (20%)
4 1/2 x 6 (30%)
3 x 6 (50%)

Installation Pattern No. DSR-003
From The Cambridge RoundTable Collection.

6 x 9 (25%)
6 x 6 (25%)
4 1/2 x 6 (25%)
3 x 6 (25%)

Installation Pattern No. DSR-006
From The Cambridge RoundTable Collection.

6 x 9 (33.5%)
4 1/2 x 6 (33.5%)
3 x 6 (33%)

Installation Pattern No. DSR-004
From The Cambridge RoundTable Collection.

6 x 9 (16.8%)
6 x 6 (5.5%)
4 1/2 x 6 (41.9%)
3 x 6 (35.8%)

Installation Pattern No. DSR-007
From The Cambridge RoundTable Collection.

6 x 9 (35.5%)
6 x 6 (23.4%)
4 1/2 x 6 (17.7%)
3 x 6 (23.4%)

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DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

Installation Pattern No. DSR-008
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-009
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-010
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-011
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-012
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-013
From The Cambridge RoundTable Collection.

6 x 9 (40%)
6 x 6 (26%)
4 1/2 x 6 (20%)
3 x 6 (13%)

6 x 6 (24.9%)
4 1/2 x 6 (37.8%)
3 x 6 (37.3%)

6 x 6 (38%)
6 x 6 (12%)
4 1/2 x 6 (38%)
3 x 6 (12%)

6 x 6 (50%)
3 x 6 (50%)

6 x 9
6 x 6
4 1/2 x 6
3 x 6

6 x 9 (67%)
6 x 6 (22%)
3 x 6 (11%)

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DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

Installation Pattern No. DSR-014
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-017
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-015
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-018
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-016
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-019
From The Cambridge RoundTable Collection.

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DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

Installation Pattern No. DSR-020
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-021
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-022
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-023
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-024
From The Cambridge RoundTable Collection.

Installation Pattern No. DSR-025
From The Cambridge RoundTable Collection.

PHONE 201.933.5000    FAX 201.933.5532    ONLINE www.cambridgepavers.com
You can choose one of 5 standard Cambridge Blends for each 113 Sq. Ft. Random Design Kit. If you opt to use a standard solid color in one or more of the shapes in your random pattern, these shapes must be ordered individually from your authorized Cambridge Pavingstones distributor.

Note: Order an additional 5% of material to allow for cuts and field changes.
DESIGNSCAPING USING CAMBRIDGE PAVINGSTONES™ WITH ARMORTEC™

Installation Pattern No. DSR-027

RANDOM LAYING PATTERNS USING 12 X 12 FROM THE CAMBRIDGE RENAISSANCE COLLECTION

EXAMPLE 1: RANDOM LAYING PATTERN

EXAMPLE 2: RATIOS TO CONSIDER

EXAMPLE 3: RATIOS TO CONSIDER

Note: Order an additional 5% of material to allow for cuts and field changes.