## Circles and Fans

## Circles

Our Circle Pak is comprised of five shapes that can be used to create both half and full circles. Sold by the pallet, each Circle Pak can form circles as small as $6^{1 / 2} 2^{\prime \prime}$ in diameter to as large as $108 \frac{1}{2} 2^{\prime \prime}$. A second Circle Pak will expand the diameter to $159{ }^{\prime \prime}$. Medium Rectangles are used to extend the diameter to $184^{1 / 2} 2^{\prime \prime}$. For circles exceeding these dimensions, continue with Medium Rectangles or incorporate Squares. Each additional row increases the diameter approximately $12^{3 / 4} 4^{\prime}$.

Start circles in the center and work your way out. Refer to the chart for the sequence in which the shapes are placed. Expand the circle one row at a time placing the stones hand-


Use Medium Rectangle and/or Square stones to expand the circle beyond the 14 rows shown in chart. Additional rows will increase the diameter in increments of approximately $12^{3 / 4} 4^{\prime \prime}$.
tight and joints offset from the previous row. Please note that all the joints may not be staggered from row to row.

When including circles in a pavement, you will want to deduct the area of the circle from the overall square footage of the pavement. There's no need to dig out that old geometry book as we have included the formulas here to help with determining the area of a circle and layout.

- Area of a circle $=\operatorname{dia}^{2} \times .7854\left(\right.$ Ex. $8^{\prime}$ dia. $\left.=64 \times .7854\right)$
- Area of a circle $=\operatorname{rad}^{2} \times 3.14$ (Ex. 4' rad. $\left.=16 \times 3.14\right)$
- Circumference of a circle $=$ diameter $\times 3.1416$
- Diameter of a circle $=$ circumference $\times .3183$

| Row | Diameter | CS | LW | SW | MR | SR | \#Packages |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Center | $6^{1 / 4}{ }^{\prime \prime}$ | 2 |  |  |  |  | $\begin{gathered} \text { 1st Circle } \\ \text { Pak } \end{gathered}$ |
| 1 | $19^{1 / 4}{ }^{\prime \prime}$ |  | 8 |  |  |  |  |
| 2 | $31^{3 / 4}{ }^{\prime \prime}$ |  | 8 |  | 8 |  |  |
| 3 | $44^{1} / 2{ }^{\prime \prime}$ |  |  | 26 |  |  |  |
| 4 | $57^{1 / 2}{ }^{\prime \prime}$ |  |  | 34 |  |  |  |
| 5 | 70" |  |  | 21 | 21 |  |  |
| 6 | 83" |  |  | 26 | 24 | 2 |  |
| 7 | 96" |  |  | 30 | 30 |  |  |
| 8 | $108^{1 / 2} 2^{\prime \prime}$ |  |  | 34 | 33 | 1 |  |
| 9 | $120{ }^{3} / 4^{\prime \prime}$ |  |  | 38 | 38 |  | $\begin{aligned} & \text { 2nd Circle } \\ & \text { Pak } \end{aligned}$ |
| 10 | $133^{1 / 2}{ }^{\prime \prime}$ |  |  | 42 | 42 |  |  |
| 11 | $1461 / 4^{\prime \prime}$ |  |  | 45 | 45 |  |  |
| 12 | 159" |  |  | 49 | 49 |  | Medium <br> Rectangle <br> Package |
| 13 | $171^{3 / 4}{ }^{\prime \prime}$ |  |  |  | 106 |  |  |
| 14 | $1841 / 2^{\prime \prime}$ |  |  |  | 115 |  |  |


| LEGEND |  |  |  |
| :--- | :--- | :--- | :--- |
| CS | Center Stone | MR | - Medium Rectangle |
| LW | Large Wedge | SR | Small Rectangle |
| SW | Small Wedge |  |  |

## Fans

Circle Paks can also be used to create fans, which impart an "old world" look and require a similar expertise when setting. We have shown a popular size that can be set within the arm's reach of the installer. Shaded areas are stones that require cutting. One Circle Pak will do five fans of this size.

Start laying fans at a $90^{\circ}$ angle by snapping a line where the center of the first fan will go. Using a paver square or the 3-4-5 triangle method, strike a perpendicular line to establish a square corner where the two lines intersect.


