

## Landscape Block Circle Algorithm : Overview - Table

This is an algorithm to compute the layout of landscaping blocks of the type shown in figure 1 in a layout like shown in figures 3 to 5.

The dash line of figure 1 denotes a lip on the underside of the block that engages the faces of the blocks in the ring behind it like shown in figure 2.

To start,  $R_s$  the radius to the middle of the blocks in the inner ring is specified as shown in figure 3. The middle of the blocks are the closest points of the blocks to the center.

This algorithm computes an ending radius  $R_f$  and a set of chords to pace the blocks around the circumference of the circle defined by radius  $R_f$ .

Radius  $R_f$  is where the corners of the blocks of the outer ring are set as shown in figure 4.

Figure 5 shows the chords (lines between points on the circumference of a circle) that are calculated to place the blocks of the outer ring.

- Preliminaries
- [Block Description](#)
- [Equation List](#)
  - [Equations 1-4 derived and explained](#) Blocks per circle Ring for a given diameter
  - [Equations 5-11 derived and explained](#) Calculating Successive Rings
  - Calculating Chords to determine block placement around  $R_f$  of outer ring
  - [Calculating the  \$R\_m\$  the minimum  \$R\_s\$ : Inscribing a circle in an equilateral triangle](#)
  - [Variables](#)
  - Other considerations
    - 
    - 
    - 
    -
  - min diameter
  - Gap
  - dimensions not exact

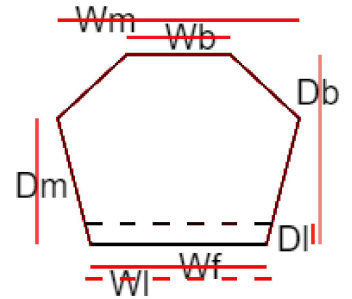


Figure 1

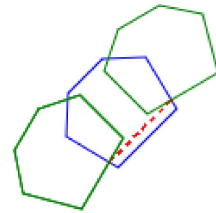


Figure 2

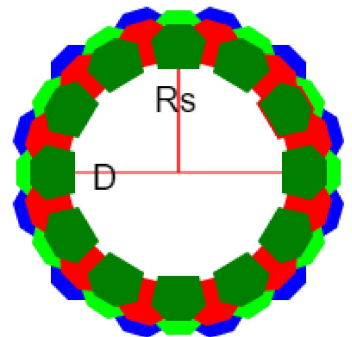


Figure 3

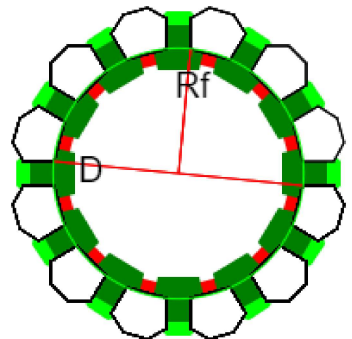


Figure 4

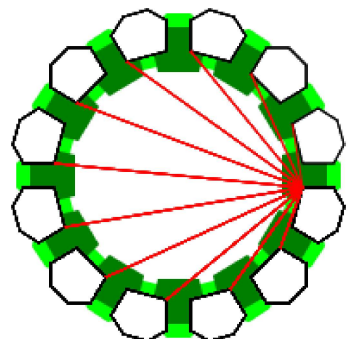


Figure 5