MINIMAL SQUARE ENCLOSURE OF A CENTERED HEXAGON

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The centered hexagons are well-known and can be generated as shown by Wolfram's mathworld and other locations (insert references). I look at the minimal square required to enclose a centered hexagon.

If we number the points in the hexagon starting with 0 and iterating in an *Ond* manner (reference!), the end point will be the sequence

$$c_i = \{6, 18, 36, 60, 90, 126, \ldots\}_{i=1}$$

conjecture Let $\alpha_0 = 2$ and $\alpha_{i+1} = \alpha_i - 3$. Then the length of the sides of the minimal enclosing square lattice is

$$\frac{c_i}{6} + \alpha_i$$