

What size do I need to cut Square-in-a-Square units?

There is a 'formula' for virtually every shape we need to cut for patchwork. Hopefully the following will help you to work out how to rotary cut your squares, rectangles and triangles (various) and to set your blocks on point.

Finished size – this is the size of the unit/piece once it is stitched into the block/quilt.

Rounding up to the nearest $\frac{1}{8}$ inch. If you have had to use a calculator then you need decimals not fractions.

$$\begin{array}{llll} \frac{1}{8} = 0.125 & \frac{1}{4} = 0.25 & \frac{3}{8} = 0.375 & \frac{1}{2} = 0.5 \\ \frac{5}{8} = 0.625 & \frac{3}{4} = 0.75 & \frac{7}{8} = 0.875 & \end{array}$$

Square-in-a-Square (Diamond in a Square)



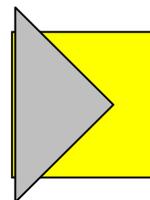
If you want to stitch these using a centre square and four triangles (no waste) the magic number is 1.414.

The centre square ('diamond') is the finished unit size divided by 1.414 plus $\frac{1}{2}$ inch seam allowance. Round up to the nearest $\frac{1}{8}$ inch.

The corner triangles are half the size of the finished unit plus $\frac{7}{8}$ inch squares, cut in half diagonally.

Finished size of unit (inches)	Size to cut centre square (inches)	Size to cut corner triangle squares (inches)
2	2	$1\frac{3}{8}$
$2\frac{1}{2}$	$2\frac{3}{8}$	$2\frac{1}{8}$
3	$2\frac{5}{8}$	$2\frac{3}{8}$
$3\frac{1}{2}$	3	$2\frac{5}{8}$
4	$3\frac{3}{8}$	$2\frac{7}{8}$
$4\frac{1}{2}$	$3\frac{3}{4}$	$3\frac{1}{8}$
5	$4\frac{1}{8}$	$3\frac{3}{8}$
$5\frac{1}{2}$	$4\frac{1}{2}$	$3\frac{5}{8}$
6	$4\frac{3}{4}$	$3\frac{7}{8}$
$6\frac{1}{2}$	$5\frac{1}{4}$	$4\frac{1}{8}$
7	$5\frac{1}{2}$	$4\frac{3}{8}$
$7\frac{1}{2}$	$5\frac{7}{8}$	$4\frac{5}{8}$
8	$6\frac{1}{4}$	$4\frac{7}{8}$
$8\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{8}$
9	$6\frac{7}{8}$	$5\frac{3}{8}$
$9\frac{1}{2}$	$7\frac{1}{4}$	$5\frac{5}{8}$
10	$7\frac{5}{8}$	$5\frac{7}{8}$
$10\frac{1}{2}$	8	$6\frac{1}{8}$
11	$8\frac{3}{8}$	$6\frac{3}{8}$
$11\frac{1}{2}$	$8\frac{3}{4}$	$6\frac{5}{8}$
12	9	$6\frac{7}{8}$

A quick tip for lining up the triangles – fold the square in half and pinch the centre of each side to make a small crease. Fold the triangles and pinch (don't rub) a small crease in the centre of the long side. Match the creases – there should be roughly a ¼ inch overlap at each end of the square.



If, however, you wish to use the quick-piecing method which starts with five squares then you need to cut a centre square the same size as your finished unit plus ½ inch and four corner squares that are half the size of your finished unit plus ½ inch.

Finished size of unit (inches)	Size to cut centre square (inches)	Size to cut corner triangle squares (inches)
2	2½	1½
2½	3	1¾
3	3½	2
3½	4	2¼
4	4½	2½
4½	5	2¾
5	5½	3
5½	6	3¼
6	6½	3½
6½	7	3¾
7	7½	4
7½	8	4¼
8	8½	4½
8½	9	4¾
9	9½	5
9½	10	5¼
10	10½	5½
10½	11	5¾
11	11½	6
11½	12	6¼
12	12½	6½

You can download a step-by-step photo tutorial for both these methods at <https://meadowsidedesign.files.wordpress.com/2015/06/square-in-a-square-tutorial.pdf>)