

Setting Triangles

A few important numbers worth memorizing:

$$1/8 = .125$$

$$1/4 = .25$$

$$3/8 = .375$$

$$1/2 = .5$$

$$5/8 = .625$$

$$3/4 = .75$$

$$7/8 = .875$$

Figuring side triangles for diagonal set quilts:

Measure the side of the finished block and multiply this number by **1.4142**. This would be the finished measurement for the long side of your side setting triangle.

$$\text{ex. } 12'' \text{ block} \times 1.4142 = 16.97 \text{ or } 17''$$

For your **cut** measurement add $1 \frac{1}{4}''$ and cut according to the Quarter Square triangle cutting instructions. Cut an $18 \frac{1}{4}''$ square and crosscut on both diagonals, corner to corner. This will yield 4 triangles.

$$\text{ex. } 17'' + 1 \frac{1}{4}'' = 18 \frac{1}{4}''$$

Figuring corner triangles for diafonal set quilts:

Take the finished side measurement of your block and divide it by 1.4142. This would be the finished measurement of the short side of your corner setting triangle.

$$\text{ex. } 12'' - 1.4142 = 8.49 \text{ or } 8 \frac{1}{2}''$$

For your **cut** measurement add $\frac{7}{8}''$ and cut according to the Half Square triangle cutting instructions. Cut a $9 \frac{3}{8}''$ square and crosscut on one diagonal, corner to corner. This will yield 2 triangles.

CONVERSIONS

1/8'	=	.125	=	4 1/2"
1/4'	=	.25	=	9"
3/8'	=	.375	=	13 1/2"
1/2'	=	.5	=	18"
5/8'	=	.625	=	22 1/2"
3/4'	=	.75	=	27"
7/8'	=	.875	=	31 1/2"
1'	=	1.	=	36"

Basic Calculation

A = Total inches needed (variable)

B = Average fabric width (38" - 44")

C = Number of strips needed (variable, round up)

D = Finished strip width plus seam allowance (variable)

E = Fabric required in inches (variable)

F = Fabric required in yards (add 4-6 inches for purchase amount)

Figure inches needed (A) from pattern.

$$A \div B = C$$

$$C \times D = E$$

$$E \div 36 = F$$

Binding

(a) Perimeter \div (b) average fabric width = (c) # of strips needed
(round up) \times (d) binding width = (e) inches of fabric required.

$$a \div b = c \qquad c \times d = e$$

Perimeter (quilt length + quilt width) \times 2 : _____ inches

Average fabric width (38 - 44 inches) : _____ inches

of strips : _____ to cut

Binding width : _____ inches

Fabric required : _____ inches

Examples: Quilt Size 46" \times 60"

$$(46 + 60) \times 2 = 212''$$

$$212'' \div 40'' = (5.3) 6 \times 2.5'' = 15''$$

Requires 15 inches of preshrunk fabric.

Purchase 4" to 6" more to allow for shrinkage.

Figure yardage requirements for the following:

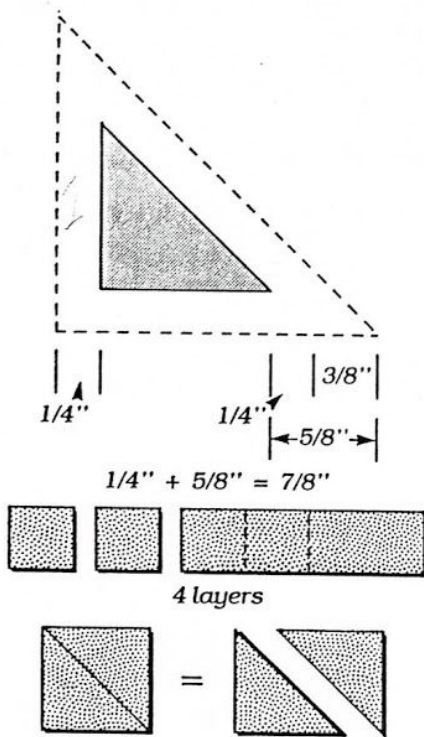
98" \times 108"

24" \times 80"

TRIANGLES

HALF SQUARE TRIANGLES

Most of the triangles used in these quilts are half square triangles. These triangles are half of a square with the short sides on the straight grain of fabric and the long side on the bias. To cut these triangles we will cut a square and then cut it in half diagonally. Cut the square $7/8''$ larger than the finished size of the triangle to allow for all seam allowances.



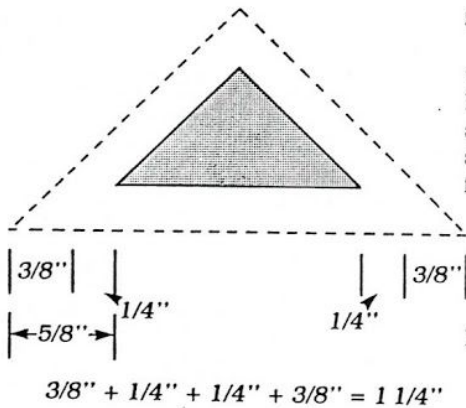
1. Cut a strip the desired finished measurement plus $7/8''$.

2. Then cut into squares using the same measurement.

3. Take a stack of squares and cut diagonally corner to corner.

QUARTER SQUARE TRIANGLES

Triangles used along the outside edges of a quilt are quarter square triangles. These triangles have their short sides on the bias and the long side on the straight of grain. This makes them easier to handle and keeps the outside edges of your quilt from stretching. These triangles are cut from squares. The square is cut $1\ 1/4''$ larger than the finished long side of the triangle.



1. Cut a strip the desired finished measurement plus $1\ 1/4''$.

2. Then cut into squares using the same measurement.

3. Take a stack of these squares (at least four) and cut an X by lining up the ruler from corner to opposite corner. Without moving these pieces, cut in the other direction. Each square will yield four triangles with the long side on grain.

CUTTING RULES

Squares and Rectangles
($1/4" + 1/4"$)

Add $1/2"$

or

.5

Half Square Triangles
($1/4" + 5/8"$)

Add $7/8"$

or

.875

Quarter Square Triangles
($5/8" + 5/8"$)

Add $1\ 1/4"$

or

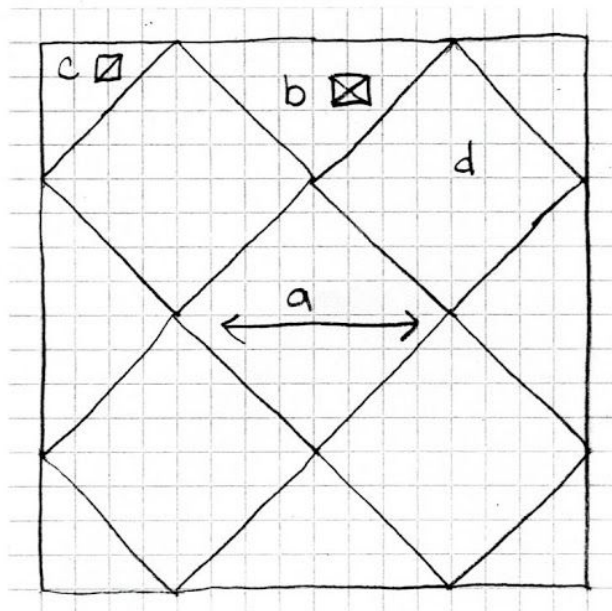
1.25

Setting Blocks

(a) Finished side measurement of block $\times 1.414 =$ (a) diagonal measurement in inches.

(b) Cut as quarter square triangle using (a) and you will get 4 side triangles.

(c) Cut as half square triangle using ($a \times .5$) and you will get 2 corner triangles.



Borders

Straight Borders

- (a) $(\text{Length of long side} + 1/2") \times 2 = \underline{\quad a \quad}$
(b) $(\text{Length of short side} + (\text{border width} \times 2) + 1/2") \times 2 = \underline{\quad b \quad}$
(c) $a + b = \underline{\quad c \quad}$ total # inches needed for border length
(d) $c \div \text{average fabric width} = \underline{\quad d \quad}$ # of strips (round up)
(e) $d \times (\text{finished width of border} + 1/2") = \underline{\quad e \quad}$
(f) $e \div 36" = \underline{\quad f \quad}$ yardage required for **STS cutting**

Lengthwise cutting for borders under 10" wide; purchase # of inches of the longest side. If border is greater than 10" you will double that yardage. There is **no** stretch to lengthwise cut borders and **no** seams, but it generally requires considerably more yardage.

Examples: Quilt body size 82" x 102" (8" border)

- a. $(102 + .5) \times 2 = 205"$
b. $(82 + (8 \times 2) + .5) \times 2 = 197"$
c. $205 + 197 = 402"$
d. $402 \div 40 = (10.05)$ 11 strips
e. $11 \times 8.5 = 93.5"$
f. $93.5 \div 36 = (2.597)$ 2 5/8' exactly
Purchase 2 3/4 yd.

Mitered borders

- (a) Length of short side + (border width x 2) = a
(b) Length of long side + (border width x 2) = b
(c) $a + b = \underline{\quad c \quad}$ perimeter with border

Figure exactly like binding but in place of the binding width use the border width + 1/2".

