

# Box Corner Cushions

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Page |

1 The calculator is the best way to determine exactly how much yardage will be required for any box corner cushion. It also creates a scale rendering of the single panel of fabric needed to complete a project. The renditions are very accurate, including pattern matching requirements — both vertically and horizontally. This increased functionality introduces some complexity which justifies the instructions that follow. In addition, some necessary assumptions for seams and should be made explicit — more about all of this in the following paragraphs.

Note the question marks in parentheses on the screen. A short description of the role of each input control can be displayed by touching the accompanying question mark.

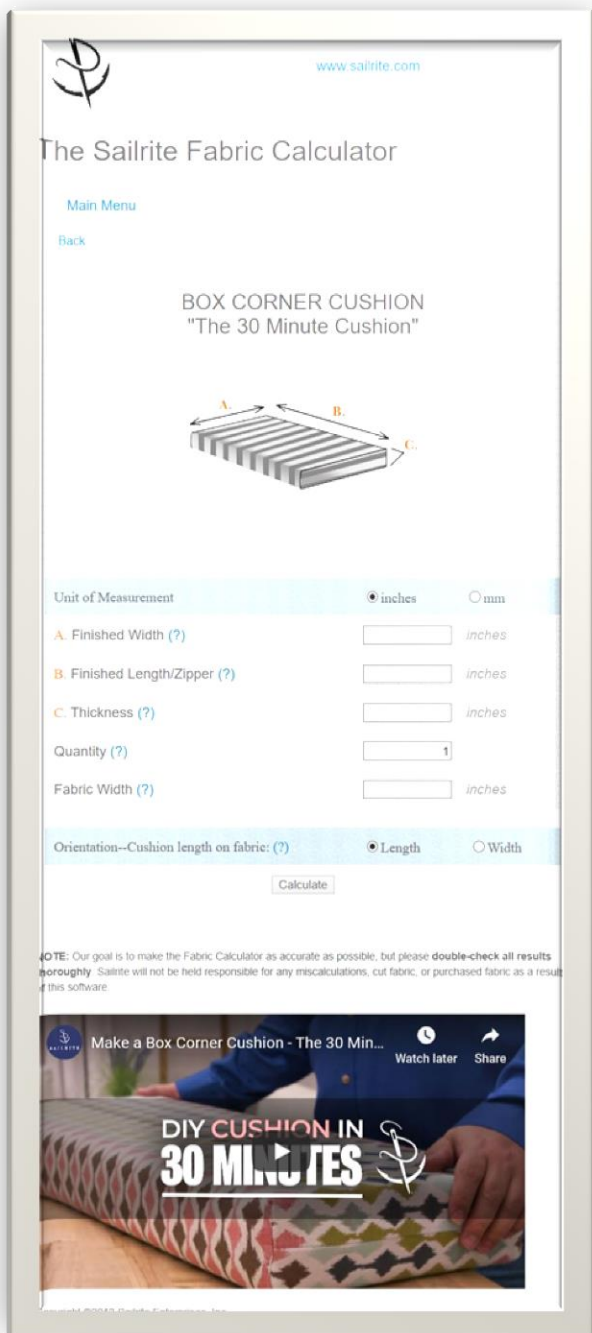


Figure 1: The Home Screen

The resulting text box can be retired by hitting the “exit” button. Enter the following measurements:

Page | 22.5, 72.75, 3.5, 1, 54 — leave  
3 “orientation” at the default “Width” and hit “Calculate”.

Decimal numbers must be used to dimension cushions with fractional measurements when entering length and width and thickness into the calculator. Fractions are not required when the millimeters are used, but inches must often be subdivided and that can make initial data entry a little tedious. To convert  $\frac{3}{8}$  inch, for example, to a decimal divide the numerator by the denominator (which, in the case of  $\frac{3}{8}$ , yields 0.375).



Fraction	Decimal
1/8"	0.13
1/4"	0.25
3/8"	0.38
1/2"	0.50
5/8"	0.63
3/4"	0.75
7/8"	0.88
1"	1.00

Figure 2: Decimals

FABRIC WIDTH (ft)
04
11/17/15

Orientation--Cushion length on fabric: (?)
 Length
 Width

**Key Dimensions:**

2 fabric panels will be sewn together side by side (each panel will be 54.54 inches x 54 inches).  
 Cut size of fabric = 54.54 inches x 76.65 inches (76.65 side runs along the width of the fabric, it will be the zipper opening, the backside of the cushion).  
 Cut corner notches 1.58 inches wide by 1.69 inches deep.  
 Cut center notches 1.58 inches wide by 2.15 inches deep.  
 Cut size of foam = 23 inches wide x 73.23 inches length.  
 Zipper allowances = 0.62 inches.  
 Seam allowances = 0.5 inches.  
 Centering margin = 15.67 inches.

**List of Materials:**

Decor & Upholstery Fabric = 3.03 yards.  
 Foam = 23 inches x 73.23 inches -- 1 each  
 Seamstick 1/4" Basting Tape for Canvas and Upholstery = 1 roll.  
 Thread from Sailrite.  
 Continuous Zipper Chain #5 White or Black = 6.72 Feet  
 Zipper Slider (non-locking) #5 Coil White or Black = 1 each  
 Cushion Wrap Silk Film 54" = 1 roll.

**Panel Rendition 2 lengths**

<-- Fabric Width -->  
 Seam Allowance (0.5 inch) in Yellow  
 Zipper Allowance (0.62 inch) in Red

Cut to 76.65 x 54.54

Corner Notches =  
1.58 on Fabric Width x 1.69 on Fabric Length

Center Notches =  
1.58 on Fabric Width x 2.15 on Fabric Length

centering margin = 15.67

The diagram shows a green rectangular fabric panel. A vertical red line runs down the center, representing the zipper allowance. Yellow lines are positioned on either side of the red line, representing seam allowances. Small white squares at the corners represent corner notches. A vertical double-headed arrow on the right side of the panel is labeled 'Depth/Length'.

↑  
Depth/Length  
↓

**NOTE:** Our goal is to make the Fabric Calculator as accurate as possible, but please **double-check all results thoroughly**. Sailrite will not be held responsible for any miscalculations, cut fabric, or purchased fabric as a result of this software.

Figure 3: Hit Calculate

## *Key Dimensions*

Page | 5  
The box labeled “Key Dimensions” displays all the measurements needed to build the cushion cover. These dimensions are applied visually in the rendition that follows. The cutouts at the corners and along the seam allowance edge will be used to create accurate corner folds insuring a snug cushion fit.

Published fabric width figures are often “nominal”. That is, the actual fabric will sometimes be wider than the published figure. Usually the edges of these fabrics will be rather ragged. It is intended that this extra material will be trimmed away or utilized as seam allowance. So the published width (not the “actual”) is always what should be entered in the fabric width input field. And trim your fabric roll to this published width before locating panels using offsets from the edge (margins) provided by the calculator.



*Trimming Excess Width beyond the  
Nominal*

The calculator automatically builds in a 0.5 inch (12.7 mm) seam allowance when it is necessary to join two panel segments together. Thus 0.5 inch (12.7 mm) is added to each of seam segment. If two segments were used to create a given length, they would total 1 inch more than the finished length. The rendition in the example that we have considered thus far is made up of a two lengths of fabric sewn together side by side so their combined width is reduced one inch by the single seam. Seam allowance is always assumed to be

0.5 inch for each segment. It cannot be changed.

Page | 7  
The cutout dimensions are also calculated by the calculator to provide for .5 inch seam allowance. In addition there is a reduction in the dimensions to insure a snug fit for the cover. The finished sewn “diagonals” at the cushion corners (this measurement defines the cushion cover thickness – the matter will become clear later) will generally be .5 inch less than the thickness of the foam. But the calculator will vary this more or less depending on the thickness of the foam. Thicker foam requires a bigger reduction to keep the fit snug.

### *Cut the Fabric Blank*

Mark the indicated rectangle on the backside of the fabric. Cut it with a hot knife if possible. Then mark (again on the backside) the cutouts. And cut them away with a hot knife.



*Figure 4: A Clear Plastic Ruler can be of help marking the cutouts*

### *Sew the Zipper*

With the fabric face down, fold a .62 inch hem onto the back side of the cover on the two edges marked in red on the rendition. This can be done accurately by marking a line on the fabric twice that depth and folding to it.

Then with the fabric still face down, baste the “zipped together” zipper tape in place on one hem (this will be the back side of the cover) with the bulge in the zipper coil facing away and down or to the face surface of the cover cloth. Let the



zipper overlap the length of the cover by one inch or so on both ends.

Page | The folded outer edge of the  
9 fabric should be lined up under the center of the intact zipper teeth.

Now fold the fabric back on both sides so the face surface is up. Baste the second hem in place over the exposed portion of the zipper tape so that the zipper teeth are covered.



*Figure 5: Cover is right side out – zipper is under the two hems – ends should match*



Break the zipper apart (just peel it apart from one end or the other).

And sew it in place with a row of straight stitches.

### *Close the Cover*

Place basting tape on the back side along one edge marked in yellow on the rendition with the cover face down.

Also place short strips of basting tape along the cutout edges that parallel this yellow edge.

Bring the other yellow edge over and smooth it in place all along the edge. This will close the cover. Run straight stitches .5 inches inside these two matched edges. Reverse to lock the stitches at the beginning and end.

Close the zipper by forcing the slider in place and running it all the way down the length of the zipper. Then force the slider on again and run it half way down the length of the zipper. The zipper will be closed with the slider in its center.

## *Sew the Corners*

Now remove the backing paper from the short strips of basting tape that were secured along the inner sides of the cutouts. Then fold the corners together on these tapes.

Page |  
11



*Figure 6: Folding the Corners*

*Figure 7: The Fold at Zipper's End*



These are the diagonal folds mentioned earlier. They will be sewn in place with a row of straight stitches

just .5 inches inside the edge with the seam allowance folded the same way at both ends of the cover along each seam on the “yellow” edge.

Cut away excess zipper and reinforce the closure at each end of the zipper by sewing a piece of scrap fabric an inch or so square right over the closed zipper end.

### *Insert Foam*

Open the zipper by sliding the zipper pull all the way back and separating the teeth that remain engaged. Turn the cover right side out by passing it through the zipper opening.

Push out the corners.

Wrap the foam in silk film if it is likely to be exposed to water. If so you will be able to use a vacuum to compress the foam and easily slide it in place.

If not some effort will be required to insert the foam, but be assured that it will fit!