

Quilt Backs

So you have your top completed. Now you need a back for your quilt. You could purchase extra wide fabric in widths of 60", 90", 108" or up to 120". This will save you the trouble of having to piece your backing fabric. Simply find a complimentary wide fabric that is at least 8" wider than your top and purchase an amount 8-12" longer than your top. It is that easy. I suggest having the fabric store rip the fabric to the correct length rather than cut it. Ripping fabric ensures that the raw edge is parallel to the grain. This should only be done on the raw edges of the fabric, the selvage edges can be left intact.

Seems like this is the way to go, but rarely do you find a large selection of wide backing fabrics, except in the very largest of fabric stores. Even then, the print styles may not be appropriate for your quilt. If you want the best selection of color, style and fabric quality. You should plan on purchasing standard width fabric and piecing it to produce a quilt back the appropriate size. How do you decide what is the best way to piece your back, and how do you know how much fabric you will need? This is how I figure it out.

Decide on the piecing layout

Backs can be pieced horizontally or vertically. Deciding which way is most fabric efficient depends on the desired dimensions and whether you are using a directional fabric. Directional fabrics are ones that have the printed or woven design following a distinct direction, either vertically or horizontally, across the fabric. These can be as simple as a stripe, or an overall design with directional printed scenes like bear, moose and trees on woody flannel, or flower baskets that all need to be upright, etc. The basic yardage calculations are the same whether your fabric is directional or not, just be aware that having a directional print may determine which way you will want your seams to run relative to the quilt top.

Most quilting cottons are woven to finish at a width of 42-44" wide. This varies considerably by manufacturer and I have seen fabrics ranging from 37" up to 46" wide. Measure the width of your fabric and know how much the fabric will shrink when washed. Some looser woven fabrics, such as homespuns will shrink a little more than prints. Flannel also tends to shrink a little more. If in doubt, test the shrinkage on a small piece before you purchase your yardage, or, purchase 10% extra, as this covers the shrinkage on just about any cotton fabric. I strongly recommend pre-washing your backing fabric before piecing and quilting.

Small backs - Once you've determined the pre-shrunk width of the fabric you have chosen for your back, which I will refer to as WOF, you can figure out how wide a backing you can create with that fabric. On smaller quilts (crib quilts, wall hangings, etc) the fabric may be wide enough without piecing. You should always have at least 2-3" of extra backing and batting around all sides of any top before quilting, even on small quilts, so the rule of thumb is, take the WOF and subtract 4-6". As long as at least one of the dimensions of your top, either length or width, is less than this amount, the backing does not need to be pieced. If both dimensions of your top are less, cut the backing fabric to 6" longer than the smaller dimension. If only one dimension is less, cut the back 6" longer than the larger top dimension. On single piece backs, selvages do not need to be removed.

If both dimensions of your top are larger than this figure, you will need to piece the back with at least one seam. (Keep in mind that you may choose to piece some directional prints in order to coordinate with your top even if they otherwise would not require it).

One seam backs - First, let me start by saying that when you need to piece backing, selvage edges of fabric should always be removed from the edges that will be seamed. This is because selvages are typically a tighter weave that behave differently than the rest of the fabric. They shrink less when washed, have less stretch to them, feel stiff and rough and frequently are odd colors that, in many cases, show right through the backing of your finished quilt.

Quilts in the size range that require pieced backs generally should have both backing and batting that are a good, solid 8" longer and wider than the top (4" extra on all sides). Take the WOF you determined earlier, multiply by 2 and subtract 9½" (8" for the overhang, 1½" for removing selvages along the pieced edge, and seam allowance). Let's call this figure the one seam back width, or 1W. If at least one of your top dimensions is less than 1W, you can piece your top very simply with just one seam. The direction of this seam can go vertically or horizontally. To determine which is more fabric efficient, follow these guidelines.

In the following examples we will assume that the *length* of the quilt top is the larger dimension. If the length of the top is less than 1W, it is most fabric efficient to have a horizontal back seam as shown in figure A. To piece this back, first pre-wash your fabric for shrinkage control. Take the width of your top, add 8", cut 2 pieces of fabric to this length. Remove selvages from edges to be seamed. Seam pieces, right sides together with a ½" seam allowance and press seam open. The ½" seam

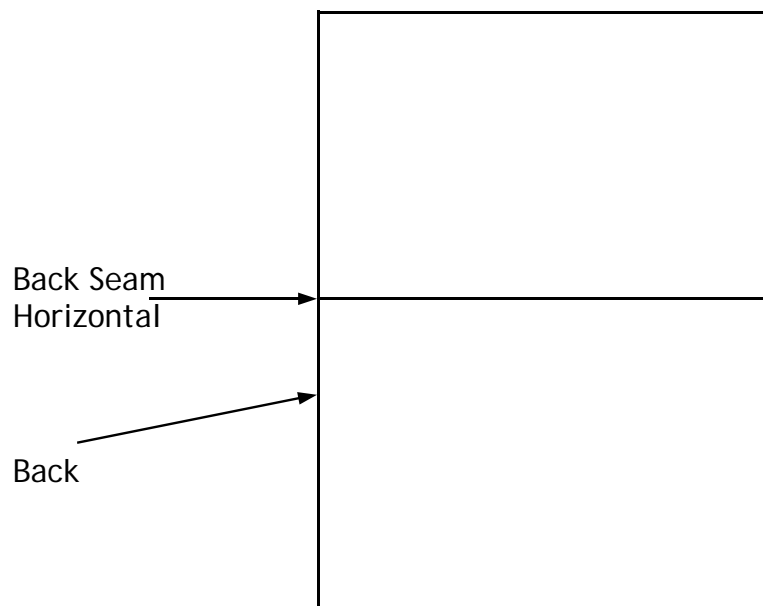


Figure A

allowance is recommended due to added stress on backing seams, and pressing the seam open distributes fabric bulk and produces a more invisible seam, both to the eye and to the touch.

If the length of the quilt top is larger than $1W$, you will need to have a vertical back seam as shown in Figure B. To piece this back, first pre-wash your fabric for shrinkage control, Take the length of your top, add 8", cut 2 pieces of fabric to this length. Remove selvages from edges to be seamed. Seam pieces, right sides together with a $\frac{1}{2}$ " seam allowance and press seam open.

If both of the dimensions of your top are greater than $1W$, then your back will require 2 seams.

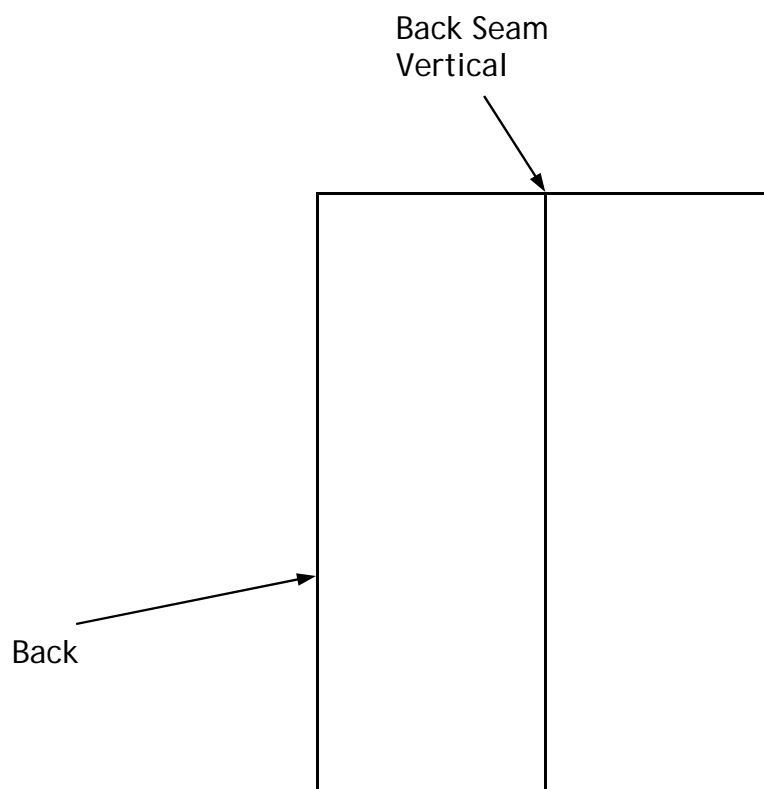


Figure B

Two seam backs - Take the WOF you determined earlier, multiply by 3 and subtract 11" (8" for the overhang plus 2 times $1\frac{1}{2}$ " for removing selvages along the pieced edges, and seam allowances). Let's call this figure the two seam back width, or $2W$. If at least one of your top dimensions is less than $2W$, you can piece your top with two simple, parallel seams. The direction of these seams can go vertically or horizontally. To determine which is more fabric efficient, follow these guidelines.

If the length of the top is less than $2W$, it is most fabric efficient to have horizontal back seams as shown in figure C.

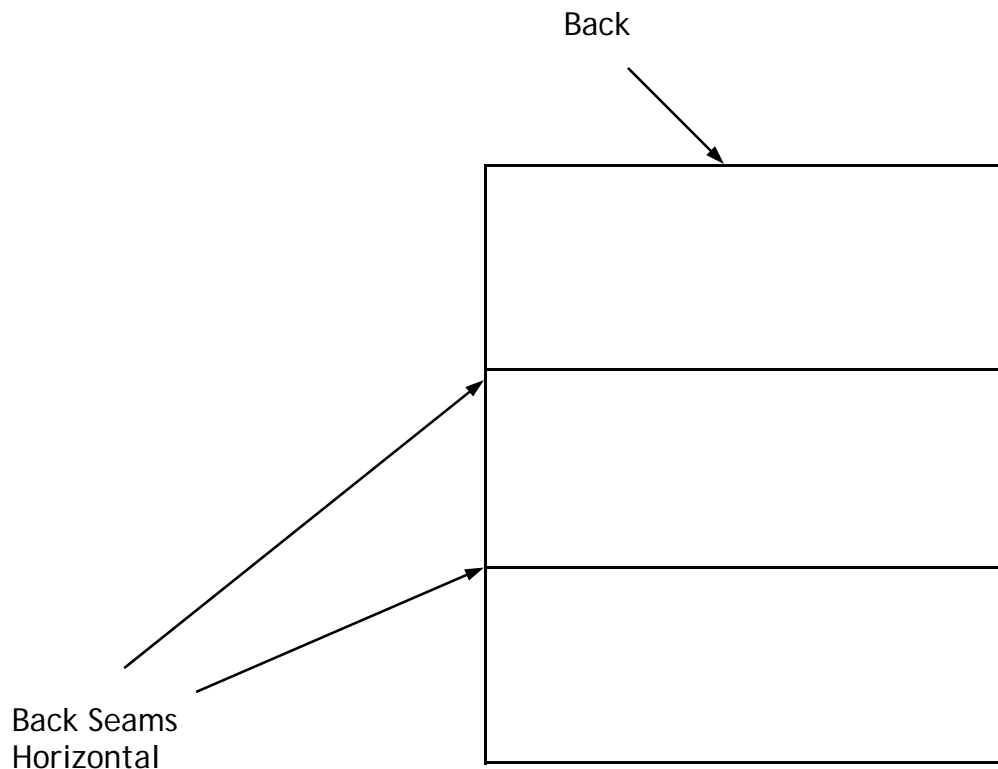


Figure C

To piece this back, first pre-wash your fabric for shrinkage control, Take the width of your top, add 8", cut 3 pieces of fabric to this length. Remove selvages from edges to be seamed. This would be one of the selvages from each of the two end pieces, and both selvages from the center piece. Seam pieces, right sides together with a ½" seam allowance and press seam open.

If the length of the quilt top is larger than 2W, you will need to have vertical back seams as shown in Figure D. To piece this back, first pre-wash your fabric for shrinkage control. Take the length of your top, add 8", cut 3 pieces of fabric to this length. Remove selvages from edges to be seamed. Seam pieces, right sides together with a ½" seam allowance and press seam open.

Calculating fabric yardage - Determining how much fabric you will need is easy. If you have gone through the steps above, and know the most efficient piecing method for your required size back, simply add up the length in inches of all the pieces you will need for your backing and divide by 36. This will give you the exact yardage necessary. To this amount my recommendation is to add 1/4 yard if you are making a one piece back, add 1/3 yard if you are making a 2 piece back, and add 1/2 yard if you are making a 3 piece back. This is simply a "fudge factor" and allows for the length shrinkage on most fabrics off the bolt. You will never regret having a little extra fabric.

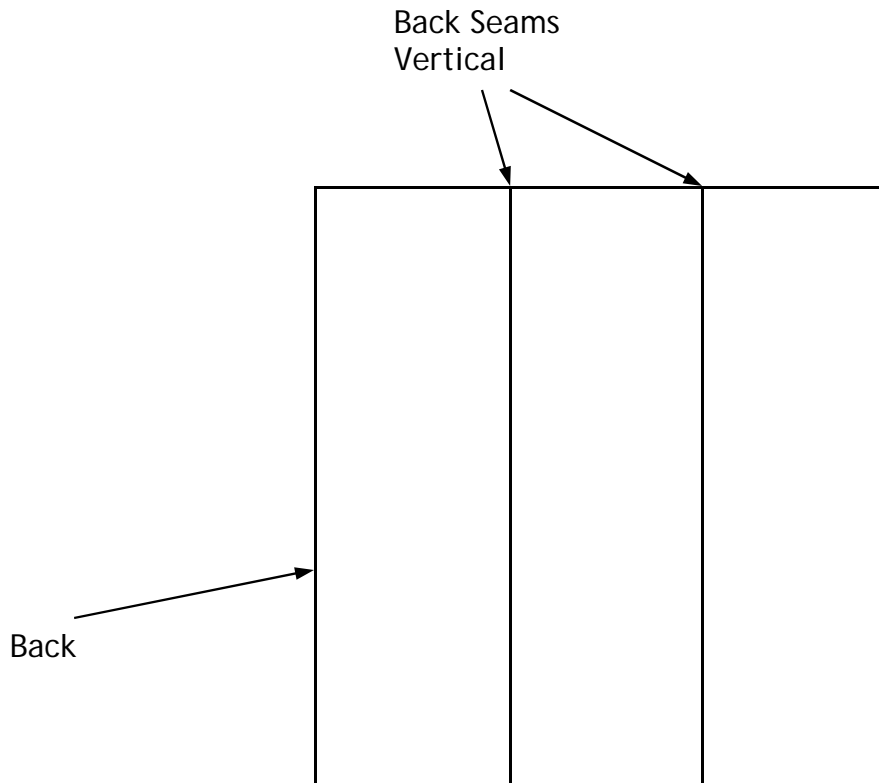


Figure D

Example calculation - Say I have selected a backing fabric that measures $43\frac{1}{2}$ " wide on the bolt. I determine that after removing selvages and allowing a pre-wash shrinkage factor that I will have a useable width of fabric of 41". My quilt top is 75 x 90. What is the most efficient way to piece a back and how much yardage should I buy?

I know I need to piece my back because both of my top dimensions are larger than my WOF. Can I make a one seam back? To determine this, I take my useable WOF (41") x 2 subtract $9\frac{1}{2}$ " = $72\frac{1}{2}$ ". This is my figure for 1W. Since neither of my top dimensions is less than 1W, I know I need a two seam back.

So, I take my useable WOF (41") x 3 subtract 11" = 112" This is my figure for 2W. The length of my quilt top (90") is less than 2W, so it is most efficient to piece my two seam back horizontally, as in figure C. I will need 3 pieces of this fabric that measure 83" (width of top 75" + 8" . . . *we will allow for length shrinkage by adding our fudge factor to our calculated estimate before purchasing our fabric.*) To calculate the yardage to buy, I take 3×83 " = 249", then divide this total by 36" to yield our estimated yardage of 6.9, or 7 yards (always round up). Then, because this is a two seam back, I will add my fudge factor of $\frac{1}{2}$ yard to come up with a final purchase amount of $7\frac{1}{2}$ yards.

I will pre-wash my $7\frac{1}{2}$ yards of fabric, iron, then cut my 3, 83" lengths.