Border Hints

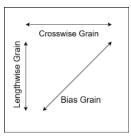
Things to consider

Borders can be a simple way of completing your quilt or can add beautiful decorative accents to the quilt. How they are designed and applied will make a world of difference in how the finished quilt hangs and looks.

Grain

When adding borders, grain is an important consideration.

- Lengthwise grain (parallel to the selvage) –least amount of give.
- Crosswise grain (perpendicular to the selvage) may have some give
- Bias grain stretches the most



Consider:

- When attaching two pieces (quilt & border or border to border), have at least one edge on the straight grain. Bias-to-bias stitching has too much give.
- Always cut off the selvage edge as it is a tighter weave and will distort the border.
- Wait until you finish the quilt top before cutting or assembling your borders. Even a small difference in the finished size can make a difference.

Black Belt:

- If you can cut from the lengthwise grain, your borders will have less give and will have less stretch over time.
 - Example, if you have 1 yard of border fabric, consider cutting lengthwise strips of 36" instead of width of fabric strips of 40".
- If the quilt edge has blocks with bias grain (often the case with design on point or with setting triangles, the quilt will have more give be more careful when applying the border.
- Pieced borders will have more give than solid fabric borders, even if they are on the straight grain. (Not so much borders of pieced long strips, but decorative borders.)

Preparing the borders

The borders may be lengths of fabric, sewn end to end to get the needed length or made of decorative blocks. I prefer to cut or sew my borders after the quilt top is finished and squared up, so I know the exact measurement of the borders. I prepare and attach the borders for the first 2 sides. Then I measure again and finish the borders for the adjacent sides.

I always add 1" to each end of my border or the last blocks of a decorative border. This will be trimmed off later but will help you get square corners.

Squaring up the quilt

Before you can apply borders, you need to have a good surface to work with.

If your quilt does not measure the same on all sides, minor differences can be made up for when you apply the borders. You can ease the quilt top to the border or stretch is slightly. Any more than that and the quilt will not hang straight.

Step 1: Equal length sides

Method 1: Trim to size

With this method, you will trim the quilt so that opposite sides are the same length. This works well when the outer edge is sashing or blocks without points near the edge. You can then use the measurement of the quilt to determine your border lengths.

- 1. Lay the quilt on a flat surface. *Measure the length of the quilt* center from top to bottom.
- 2. Now, take this measure halfway to the left edge and again halfway to the right edge.
- 3. If these are not the same length (or very close), you may want to *trim the top and bottom edges* so they match. If they vary widely, you may need to make adjustments in seams attaching the rows to each other.

Repeat the process measuring across the width of the quilt at the middle, halfway to the top and again halfway to the bottom. Make adjustments as above.

Black Belt Method: Easing with borders

With this method, you will use the borders to help ease or stretch the quilt slightly to end up with the same size. This technique is more difficult but may be desirable when you have points or details on the edges of the quilt that you do not want to trim off. In this case, this process will determine the length of your borders, not the actual quilt measurement on the side.

- 1. Start with the side of the quilt that will have the shorter borders.
- 2. Measure the quilt on both edges and in the middle.

3. Subtract the smallest number from the largest number to find the biggest difference. Divide the difference in half to get the average

Example:
$$72 \frac{3}{4}$$
" $-72 \frac{3}{8}$ " = $\frac{3}{8}$ ". $\frac{3}{8}$ " ÷ $\frac{2}{5} = \frac{3}{16}$ ".

4. Add the result from step 2 to the smallest measurement. This will become the length of these 2 borders.

Example:
$$72 \frac{3}{8}" + \frac{3}{16}" = 72 \frac{9}{16}"$$
 or just a touch over $72 \frac{1}{2}"$.

When you attach these borders, you will make the quilt fit the border, either stretching the quilt slightly or slightly easing the quilt in to the border to take up the excess.

5. After this set of borders is attached, you will repeat the process with the other set of borders.

Step 2: Straight edges

As the blocks and rows were assembled, the edges will not match exactly and the quilt edges will be slightly jagged. If you have not already trimmed an edge, you may want to trim it now so that you have smooth, straight edges to match the border to.

Black Belt: If you don't want to trim the edges, then mark the stitching line on the wrong side of the fabric.

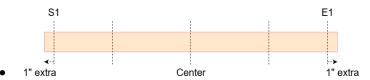
Step 3: Square Corners

Using a square ruler, check each corner to make sure you have a sharp, 90° angle. Trim slightly if needed.

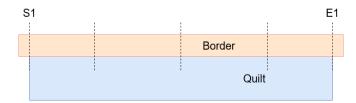
Applying the border

- 1. Mark the following on the quilt with pins
 - Mark the center of the quilt.
 - Mark halfway between each edge and the center.
 - On a larger quilt or if working with bias edges, you will want to mark more often
- 2. **Prepare 2 borders**, for opposite sides of the quilt, using the measurements from the step for squaring up the quilt + 2". Once these are sewn on, measure the "unbordered" sides one more time and cut the other borders (adding the 2").
 - If you are using a pieced, decorative border, add 1" to the last block on each end of the border.

3. Mark the border



- Mark 1" from each edge. This is the extra that you added above.
- On the length between these 1" marks (the real length of the border), mark the same intervals on the binding as you did on the quilt. If you marked the half way and quarter points on the quilt, do the same on the border. If you marked additional intervals on the quilt, mark the same on the border.
- 4. **Pin the border to the quilt**. Match the edges of the quilt to the 1" mark on each end. Then match the remaining markings.



Continue to pin at intervals, lining up the border and quilt. If you have a pieced border or are working with a bias edge, pinning more frequently is important.

5. Stitching:

- Use a walking foot if possible.
- Use the right needle. Lower number = lighter weight needle and it may bend slightly.
- Support the weight of quilt while stitching so that fabrics feed evenly.
- Sew borders to each side.

6. Press border seam.

- Press to one side or press seams open there are 2 schools of thought.
- **7. Trim** the border ends even with quilt edge before applying the other border.
- 8. Repeat these steps for the borders for the adjacent sides.

Second Border

If you have another border to add, repeat the steps above, beginning with checking that your quilt is still square.

Quilt Bindings

Types

Applied Bindings

An applied binding is a separate binding that is attached to the raw edge of the quilt and folded over the edge.

A *double-fold binding* is the most common. It is stronger and wears well. It is easy to apply once you learn a few simple steps.

The length of fabric is folded in half lengthwise and then the raw edge is stitched to the raw edge of the quilt. The binding is then folded over to the other side of the quilt and the folded edge can be stitched down.



a. Straight grain binding

Bindings cut on the *straight grain* of fabric are easier to work with as they are more stable and have less give. They can be used on most quilts with straight edges. Because there is little pressure on the binding, the binding can be cut on the lengthwise or crosswise grain.

b. Bias bindings

Bindings cut on the *bias grain* have more stretch and can be harder to work with but are a must for quilts with curved edges. Some advocate that a bias binding will wear better because the same thread does not run all along the edge.

Back to Front Fold

You can self-bind a quilt by bring the back to the front and using it to finish the edge.

This binding doesn't require applying a separate binding. It appears easy but can be time consuming on a large quilt to fold and pin the folds in place accurately. However, you can machine stitch the binding from the front and know it will look good on the back.

For more info on this method, check out:

- http://cluckclucksew.com/2014/01/binding-quilt-with-quilt-back.html
- YouTube: How to use Backing Fabric as your Binding https://www.youtube.com/watch?v=npTvVGouO6Y

Determining the amount of fabric

Straight-grain binding

Use the following steps to determine the amount of fabric needed for the binding.

• Length of binding: Determine the perimeter of your quilt ((length + width) * 2) and add 10" to 15" to allow for overlap and joining strips. (Adjust the amount if you are using more or fewer strips).

Example: Quilt that is 54 X 72 has a perimeter of (54 + 72)* 2 or 252" + 15" = 267"

Black Belt: To be more specific, you need to add 2 ½" for each strip-to-strip join and about 5" overlap for joining the ends.

• **Number of strips:** If you are using strips, divide the total length of binding by the width of fabric to get the number of strips needed. Round up to the next whole number of strips.

Example: $267" \div 40 \text{ (WOF)} = 6.7 \text{ or 7 strips}$

• **Amount of fabric:** Multiply the number of strips by the (unfolded) binding width to get the amount of fabric needed.

Example: 7 strips * 2 ½" = 17.5" or ½ yard.

Bias binding

The easiest way to create bias binding is to create a continuous bias binding strip from a square of fabric. Use the following steps to determine the amount of fabric needed.

• Length of binding: Follow the step above for determine the length needed.

Example: Quilt that is 54 X 72 has a perimeter of (54 + 72)* 2 or 252" + 15" = 267"

• **Size of square needed:** Calculate the length of binding * width of the (unfolded) binding width. Then find the square root of this.

Example: (267 * 2.5) = 667. Square root of 667 = 25.9. Round up to 26"

Note: To get the square root, enter the number into your calculator, then hit the $\sqrt{}$ button on the calculator

Preparing for Binding

Square Up (again)

Square up quilt again before adding binding Refer to the instructions in the handout on borders.

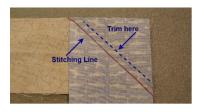
- Pay close attention to the corners to make sure they are 90°.
- Make sure the edges are smooth and straight.

Cutting and piecing binding

Straight grain binding

- **Cut strips** of binding to desired width, usually 2½ to 2½" wide.
- **Join strips** together at right angles. Draw a 45° line from corner to corner. Sew along this line. Trim to a ¼" seam allowance. Press seams open.

Why? When you fold the binding in half, the angled seams will not be on top of each other, which would cause a lump when you sew it to the quilt.





- Press binding in half lengthwise.
- Accordion-fold binding into a pile to make it manageable when working with it.

Bias grain binding

For instructions on creating continuous bias binding strips, check these internet links:

- https://www.craftsy.com/quilting/article/continuous-bias-binding-tutorial/
- YouTube: Continuous Bias Binding Binding Easiest Method How-To https://www.youtube.com/watch?v=7-OZJ27xz0c

Applying binding

General Info

- You want to join the binding ends at a place on your quilt where it will be inconspicuous. It is thought that your eye tends to move to the right and down so the left side would be a good place.
- Generally, stitch binding to the front of the quilt. Bring the other edge to the back and hand stitch.

Black Belt: If you want to machine stitch the fold edge of the binding, attach the binding to the back and bring to the front. This way you can control the top stitching from the front where it is visible.

Seam allowance

There should be the same width of binding on the front and back and you want the binding to be filled with quilt/batting, not flat and empty. The seam allowance used has a lot to do with this.

The seam allowance you use will vary based on the width of your binding and the bulk of your quilt & batting. It is always a good idea to make a test sample.

In general:

Binding cut at $2\frac{1}{2}$ " folded to $1\frac{1}{4}$ " shy $3\frac{1}{8}$ " seam allowance

Binding cut at $2\frac{1}{4}$ " folded to $1\frac{1}{8}$ " fat $\frac{1}{4}$ " seam allowance

Binding cut at 2" folded to 1" $\frac{1}{4}$ " seam allowance

Hint: The narrower the seam allowance, the greater the chance that the binding will pull away from the quilt. It should be no less than $\frac{1}{4}$ ".

Starting and ending

The binding has two ends – the end you start stitching to the quilt and what you have left when you get to the end. We'll refer to these as the *starting end* and the *tail end*.

<u>Method 1 – Stitched ends (preferred method)</u>

For this method, you will stitch the ends of the binding together before attaching the last section of

For other info on this technique, check out

- https://www.craftsy.com/quilting/article/joining-quilt-binding/
- YouTube: Tutorial: How to connect binding ends for a perfect fit (https://www.youtube.com/watch?v=ceIcYOqPGyo)
- Google the phrase "how to join binding ends together"

binding to the quilt.

• Mark the workspace

Identify approximately where on the quilt you want to the binding ends to be joined and mark a 12" space.

These will be your start and end points for the initial stitching. The space in between will be your work space for joining the ends.

Black Belt: If you want to be more exact about where the binding is joined, mark the spot where you want to join the binding and then mark 6" to each side of the center mark. If you want a larger workspace, leave a little more unstitched binding when you start to stitch.

• Stitch most of the binding

Measure about 8" in from the starting end of the binding. Line up this mark with the starting point you marked above.



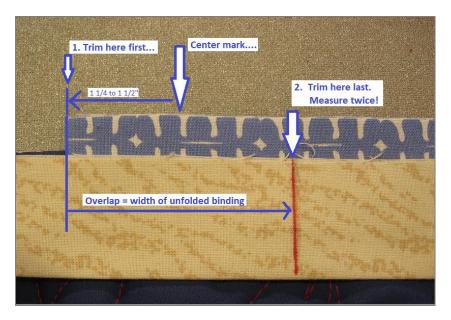
Stitch the binding to the quilt, placing raw edges together, using the desired seam allowance. Stitch from this starting point, around the quilt, until you get to the mark to end the stitching. You should have an unstitched space of 12" and about 8" of binding left at each end.

Black Belt: Keep the raw edges of the binding and quilt aligned as much as possible. Have just a peek of the quilt showing under the binding. To keep an accurate seam allowance, use a combination of the foot you choose, the markings on the stitch plate, and the needle position. Line up the raw edge on something you can keep accurate track of.

Join the ends

Mark & Trim: You will trim the binding so that the overlapping amount = the width of the
unfolded binding. This measurement is critical for the binding to lay flat. If you cut it short or
long, the binding will pucker or ruffle.

Example: If the binding was cut at 2 ½" before folding, the overlap will be 2½".



- Mark the center of the workspace.
- Starting end: With the starting end of the binding, measure about 1½" to the left of the center mark (width of folded binding). Trim the starting end here.
- Tail end: Lay the tail end of the binding over the starting end. From the edge of the starting
 end, measure the amount of overlap (width of unfolded binding). Trim the tail end of the
 binding here.

Sewing the ends.

- Unfold the binding. Turn one end right-side up and the other right-side down.
- Overlap the bindings at right angles, making sure the edges match.
- Draw a line as shown, from the corner of the top binding to the unseen corner of the binding underneath. This will create a seam at a 45° angle.
- Stitch the seam.





- Press the seam and then press the binding fold. The binding should lay flat on the quilt. (Wait to trim until you have verified that everything fits. Then trim the seam.)
- Stitch this last 12" section of binding to the quilt.





Method 2 - "Pocket" method

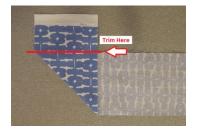
In this method, you create a "pocket" on the leading or starting end of the binding. When you get to the end, the tail end will slip into this pocket and be secured. This method is simple, but requires some careful attention to avoid a gap at the join.

For other info on this technique, check out

- http://thecraftyquilter.com/2016/08/easy-way-join-binding-ends-pocket-method/
- YouTube: How to Bind a Quilt 6 Simple Steps
 https://www.youtube.com/watch?v=xWh90tXr7g4

Prepare the starting edge

If the binding has already been folded, open it flat. Place the binding right-side down, with the binding to your right. Fold the left end up, right-side up, at a 45° angle so that it completely overlaps the binding. Trim the edge even with the binding edge.

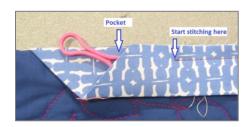




Then fold (refold) the binding in half as usual. This end will be the starting end of the binding.

Stitching the binding

Pin the starting end of the binding to the quilt.
 Measure about 1 to 2" to the right of where double layer of the binding begins. Begin stitching here. The unstitched area becomes the *pocket*. The tail end will slip into this pocket when we get to the end.

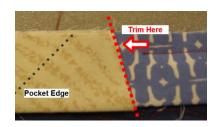


 Stitch around the quilt until you get close to the point of the starting end.



Join the ends

Mark & Trim: Overlap the tail end over the pocket.
 Trim the tail end so that it will slip into the pocket completely but does not extend past the initial stitching



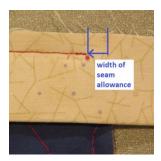
 Slip the tail end into the pocket and pin. Stitch the remaining section of binding to the quilt.

Note: It is important that the folded edges of the binding and the pocket are tight or you will get a gap when you turn the binding and you will not be happy with the outcome. Pin tightly, baste, or use a touch of fabric glue to hold in place.



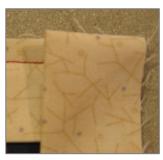
Handling the Corners

Make a note of the seam allowance you are using. As you
approach the first corner, measure in from the edge the amount
of seam allowance you are using. Stop stitching at that point.
Backstitch and cut your thread.



• Fold the binding up to create a 45° angle and finger press. Then turn it down so the fold is even with the quilt edge and finger press. Stitch the next side, starting at the top.







• When you press the binding away from the quilt, there is a natural miter.



 When you fold the binding to the back, fold one side down, allowing a 45° degree to form. Then fold the other side over. Again, you will have a natural miter.





Black Belt: You may need to trim the point on the corner of the quilt slightly if it is bulky. Also, you may find a difference based on which side you fold down first.

Press and turn

- **Press** the binding seam all around the quilt to set the seam.
- From the right side, press the binding away from the quilt.
- Fold the binding to the other side, press, and pin or clip. See notes above for corners.

Stitching

Slip stitch vs whip stitch vs machine stitch

When machine stitching a binding down, be very careful that your stitches are either on the binding or in the ditch.

If you are going to machine stitch, you may want to attach the binding to the back and bring toward the front, then top stitch from the front. You will have more control over the stitching visible on the front.

Decorative, zigzag, serpentine stitches are all good choices when you want to machine stitch but need "camouflage". (This is great on kids's quilts, veterans' quilts, and quilts that will get a lot of use and/or washing).

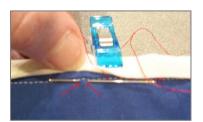
Slip Stitching

Hand stitching should always be done with a *slip stitch*, not a *whip stitch*. Slip stitching is invisible. Whip stitching is very visible.

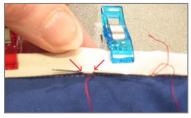


For other info on this technique, check out:

- YouTube: Hand-Stitching Your Binding https://www.youtube.com/watch?v=vFlc6ff-wTM
- You Tube: How to Hand Sew: Slip Stitch & Blind Hem Craftsy Sewing Tutorial https://www.youtube.com/watch?v=jlHyqT4K-p0
- Take a stitch in the quilt back by inserting the needle into the back, catching the back and some batting but not the front of the quilt. Quickly pull the needle back out of the fabric, taking a very short stitch. This stitch should be along the machine sewn line.



 Take the stitch into the binding by inserting the needle into the fold line of the tunnel and then bringing it back out about ¼ " later, catching just this edge. Pull the thread tight to close the gap. These stitches will be invisible.



Continue around the quilt. Be sure to stitch shut the miter on the corners. If you use the *pocket method* of joining your binding, be sure to stitch the overlap closed. Unstitched, these are
 areas of weakness where something could catch and tear your quilt.