

# QUILT BASICS

## Getting Started

### About our Patterns

We recommend that you read all of the instructions before starting a project and that you cut and sew one block before cutting all of your fabric.

Using a rotary cutter, mat and an acrylic ruler, cut the shape to the size indicated in the cutting list.

Our patterns list **finished** block sizes, which are typically  $\frac{1}{2}$ " smaller than unfinished block sizes because they do not include seam allowances.

### Basic Quilting Supplies

- Rotary cutter and mat
- Acrylic ruler: Many shapes and sizes are available; a good one to start with is 6" x 24" with  $\frac{1}{4}$ " and  $\frac{1}{8}$ " markings
- Scissors: A separate pair for paper and fabric
- Sewing machine
- $\frac{1}{4}$ " foot
- Walking foot
- Darning foot
- Pins
- Ironing board & iron
- Marking pencils/markers/ etc.
- Needles
- Thimble
- Safety pins
- Template plastic
- Thread

### Preparing Your Fabric

We recommend that you pre-wash your fabrics. A shrinkage factor is included in our yardage computations.

## Techniques

### Machine Piecing

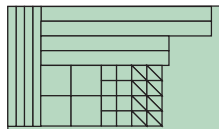
It is important to cut accurately and to sew exact  $\frac{1}{4}$ " seams.

#### Templates

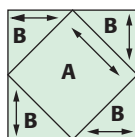
Trace the patterns on template plastic and cut out accurately.

#### Planning

Measure, mark and cut the binding and border strips before cutting patches from the same fabric. Cut larger patches before smaller ones. For best use of the fabric, arrange patches with cutting lines close or touching.



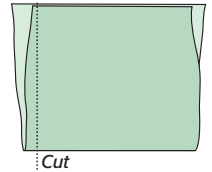
One or more straight sides of the patch should follow the lengthwise (parallel to the selvages) or crosswise (perpendicular to the selvages) grain of fabric, especially the sides that will be on the outside edges of the quilt block.



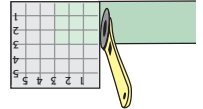
We indicate lengthwise or crosswise grain with an arrow on the templates.

### Cutting

To find the grainline of your fabric for rotary cutting, hold the fabric with selvages parallel in front of you. Keeping the selvages together, slide the edge closest to you to one side or the other until the fabric hangs straight, without wrinkles or folds. Then lay the fabric down on your cutting mat and cut perpendicular to the fold line. Use this cut edge as your straight-of-grain line.



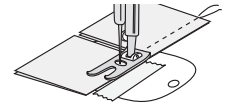
Many patches can be cut from strips of fabric by rotary cutting. First, cut a strip of fabric the width needed. Then, cross-cut strips into patches.



To cut from a template, place the template face down on the wrong side of the fabric and trace with a sharp pencil. Reverse (r) templates should be placed face up on the wrong side of the fabric before tracing.

### Piecing

Align the cut edges of fabric with the edge of the presser foot if it is  $\frac{1}{4}$ " wide. If not, place masking tape on the throat plate of your machine  $\frac{1}{4}$ " away from the needle to guide you. Sew all the way to the cut edge.



### Applique

The instructions give the applique technique used by the designer. Fusible applique patterns are already reversed. To convert between fusible designs and turned-edge, you may need to reverse the design. No turn-under allowances are given on applique patterns. When positioning patches, leave enough space around the outside edges of the block for trimming and seam allowance.

Finger crease the fabric in half lengthwise, crosswise and diagonally as needed to form guidelines for placement of the patches.

Use a tear-away stabilizer on the back to support machine stitching that is dense (like satin stitching) and to keep the fabric from tunneling. Choose a stabilizer that matches the weight of the fabric. After the applique is complete, gently remove the stabilizer.

### Fusible Applique

Raw-edge applique using paper-backed fusible web is a fast and easy way to applique. Add  $\frac{3}{16}$ " underlap allowance to those edges that lie under another.

Trace the pattern pieces, also drawing the needed underlap allowances, on the paper side of fusible web leaving at least  $\frac{1}{2}$ " between all the pieces. Cut about  $\frac{3}{16}$ " outside each drawn line.

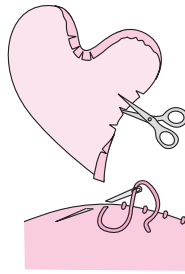
To eliminate stiffness, try this variation for patches larger than 1": Cut out the center of the fusible web  $\frac{1}{4}$ " inside the drawn line, making a ring of fusible web.

Following the manufacturer's directions, iron the web, paper side up, to the wrong side of the fabric. Cut out the shape on the drawn line. Carefully pull away the paper backing. Fuse the patches to the background where marked.

To finish the raw edges, machine satin stitch with a colored thread, or zigzag or blanket stitch using matching or invisible thread.

## Turned-Edge Applique

It is helpful to have as many bias edges as possible on the perimeter of your applique patches. Trace and cut on the seam line of the pattern to make a template. Place the template face up on the right side of the fabric (face down on the right side for a reverse patch) and lightly draw around it. Cut out each patch about  $\frac{3}{16}$ " outside the marked line.



On inward curves, clip the  $\frac{3}{16}$ " allowance almost to the marked seam line. Turn under the allowance and finger press.

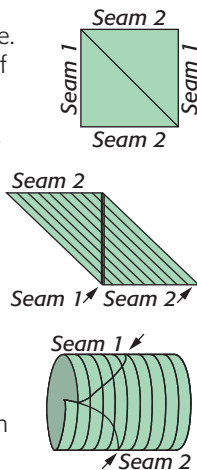
Pin or baste applique patches on the background fabric. To applique by hand, use a blind stitch and a thread color to match the patch. To applique by machine, use a small zigzag or blind hem stitch and a matching or invisible thread.

If the background fabric shows through the appliqued patch, or if there are lots of layers, carefully cut away the background fabric to within  $\frac{3}{16}$ " of the applique patch or use 2 layers of applique fabric.

## Continuous Bias

Remove selvages from fabric and cut a square. (A 40" square should make about 16 yards of  $2\frac{1}{2}$ "-wide bias strip.)

With right sides facing and raw edges aligned, join triangles (seam 1) to form a parallelogram, as shown. Press seam open. Measure and mark across parallelogram with lines equal to the width of your bias strip.



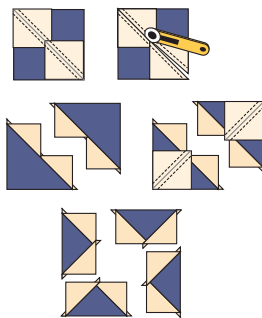
Form a tube by aligning edges marked seam 2, matching your marked lines and offsetting the edge of one strip width beyond line. Stitch and press seam open.

Start at offset end and cut around the tube on marked lines for your continuous bias strip.

## Fast Flying Geese

Align 2 small squares on opposite corners of the large square, right sides together. Draw a diagonal line as shown and then stitch  $\frac{1}{4}$ " out from both sides of the line. Cut apart on the marked line.

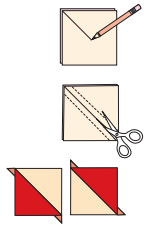
With the small squares on top, open out the small squares and press the unit. On the remaining corner of each of these units, align a small square. Draw a line from corner to corner and sew  $\frac{1}{4}$ " out on both sides of the line. Cut on the marked lines, open the small squares and press.



Each set of 1 large square and 4 small squares makes 4 Flying Geese. These units will finish at the correct size for each pattern. No trimming is needed.

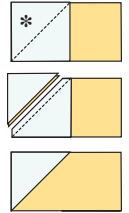
## Triangle-Squares

With right sides together and the lighter fabric on top, pair one square of each color that makes the unit. On the lighter patch, draw a diagonal line from corner to corner. Stitch  $\frac{1}{4}$ " out from both sides of the line. Cut apart on the marked line. With the darker fabric up, open out the top patch and press the unit. A pair of squares will yield 2 units. These units will finish at the correct size for each pattern. No trimming is needed.



## Stitch-and-Flip

Align a patch (\* in this example) on a corner of a unit or second patch right sides together. Mark a diagonal line on the \* patch from corner to corner and sew on the marked line. Trim the seam allowance to  $\frac{1}{4}$ " as shown. Flip the \* patch open and press.

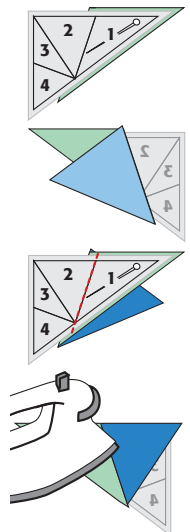


## Foundation Piecing

Make paper copies of each foundation. Sew patches in numerical order. Center fabric under #1 extending beyond the seam allowances, wrong side of the fabric to the unprinted side of the paper, and pin in place from the paper side.

Turn fabric side up. Using a patch of fabric sufficient to cover #2 and its seam allowances, position the #2 patch right sides together on patch #1 as shown, so that the fabric's edge extends at least  $\frac{1}{4}$ " into the #2 area. Pin in place. Set a very short stitch length on your sewing machine (18–20 stitches per inch or 1.5 mm). Turn the assembly paper side up. Stitch through the paper and the fabric layers along the printed seam line, beginning and ending  $\frac{1}{4}$ " beyond the ends of the line.

Turn assembly to the fabric side. Trim the seam allowances to approximately  $\frac{1}{4}$ ". Press the fabric open to cover #2 and seam allowances. Repeat this process to complete the blocks or sections.



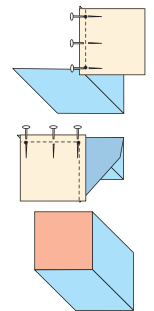
Use a rotary cutter and ruler to trim  $\frac{1}{4}$ " outside the seam line of the foundation, creating a seam allowance. Once all the seams around a foundation section have been sewn, remove the paper foundations.

## Set-In Seams (Y Seams)

A set-in patch is inserted in an angle formed by two other patches.

On the wrong side of the patches, use a ruler to mark an accurate  $\frac{1}{4}$ " seam line in all corners. With right sides together, align the edges of two patches and pin through the  $\frac{1}{4}$ " marks of both patches.

Sew the seam between the  $\frac{1}{4}$ " marks, backstitching to secure the seam at the beginning and end. Pivot the set-in patch so the adjacent edge aligns with the edge of the third patch. Matching seams, pin in place. Starting exactly where the previous seam ended, sew 2 stitches, then backstitch, taking care not to stitch into the seam allowance. Stitch to the outer edge.



## Borders

**Squared borders** are added first to the sides of the quilt center, then to the top and bottom. Lay the quilt top flat on a large table or the floor. Lay both border #1 side strips down the vertical center of the quilt top and smooth carefully into place. Slip a small cutting mat under the quilt top (you'll need to do this at the top and the bottom) and use a rotary cutter and ruler to trim the border strips to the same length as the quilt top. Matching centers and ends, sew the border side strips to the quilt. Gently press the seam allowances away from the quilt center. Repeat this process along the horizontal center of the quilt, including the newly added borders. Repeat for any remaining borders.



## Marking

Trace the quilting motif on tracing paper. Place tracing paper under the quilt top with a light source behind. Lightly mark the design on the quilt top with a hard lead pencil or a marker of your choice. Test any marking product for removability before using it on your quilt.

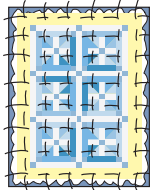
Straight lines may be "marked" as you quilt by using masking tape that is pulled away after quilting along its edge.

## Backing and Basting

Make the quilt backing 4"–8" larger than the quilt top. Remove the selvages to avoid puckers. Usually 2 or 3 lengths must be sewn together; press the seam allowances open. Place the backing wrong side up on a flat surface, stretch slightly and tape or pin in place. Smooth the batting over the backing. Center the quilt top right side up on top of the batting. Pin the layers as necessary to secure them while basting.

### Basting for Machine Quilting

Tops to be machine quilted may be basted with rustproof safety pins. Begin at the center and place pins 3" to 4" apart, avoiding lines to be quilted.

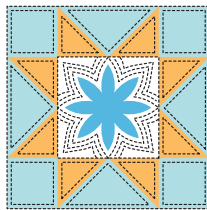


### Basting for Hand Quilting

Beginning in the center of the quilt, baste horizontal and vertical lines 4" to 6" apart.

## Quilting

**Quilt in the ditch** refers to quilting right next to the seam line on the side without seam allowances. **Outline quilting** refers to quilting  $\frac{1}{4}$ " from the seam line. **Echo quilting** refers to quilting one or more lines of stitching in uniform distances away from a patch.



### Machine Quilting

Before machine quilting, bring bobbin thread to the top of the quilt so it doesn't get caught as you quilt: lower presser foot, hold the top thread and take one stitch down and up, lift the presser foot to release the thread tension and tug on the top thread to draw a loop of the bobbin thread to the top of the quilt. Pull the bobbin thread to the top. Lower needle into the same hole created by the initial stitch, lower the presser foot, and start quilting. A walking foot is used for straight-line or ditch quilting. To free-motion quilt, drop (or cover) the feed dogs and use a darning foot. Start and end quilting lines with  $\frac{1}{4}$ " of very short stitches to secure.

## Hand Quilting

Hand quilting is done in a short running stitch with a single strand of thread that goes through all three layers.



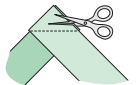
Use a short needle (8 or 9 between) with about 18" of thread. Make a small knot in the thread, and take a long first stitch (about 1") through the top and batting only, coming up where the quilting will begin. Tug on the thread to pull the knotted end between the layers. Take short, even stitches that are the same size on the top and back of the quilt. Push the needle with a thimble on your middle finger; guide the fabric in front of the needle with the thumb of one hand above the quilt and with the middle finger of your other hand under the quilt.

To end a line of quilting, make a small knot in the thread close to the quilt top, push the needle through the top and batting only and bring it to the surface about 1" away; tug the thread until the knot pulls through the quilt top, burying the knot in the batting. Clip the thread close to the surface of the quilt.

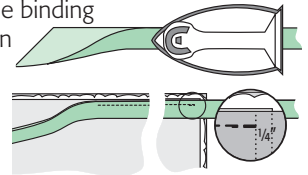
## Binding

Baste around the quilt  $\frac{3}{16}$ " from the edges. Trim the batting and backing  $\frac{1}{4}$ " beyond the edge of the quilt top.

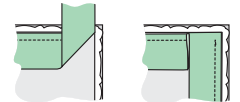
To prepare the **binding strips**, place the ends of 2 binding strips perpendicular to each other, right sides together. Stitch diagonally and trim to  $\frac{1}{4}$ ". In this way, join all the strips and press the seam allowances open.



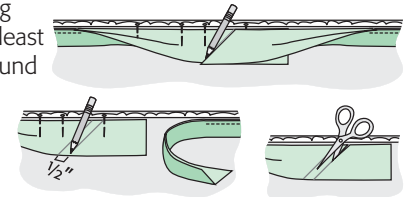
Cut the beginning of the binding strip at a 45° angle. Fold the binding strip in half along the length, wrong sides together, and press. Starting in the middle of a side and leaving a 6" tail of binding loose, align the raw edges of the binding with the edge of the quilt top. Begin sewing the binding to the quilt using a  $\frac{1}{4}$ " seam allowance. Stop  $\frac{1}{4}$ " from the first corner; backstitch. Remove the needle from the quilt and cut the threads.



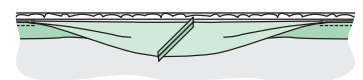
Fold the binding up, then back down even with edge of the quilt. Begin stitching  $\frac{1}{4}$ " from the binding fold, backstitch to secure and continue sewing. Repeat at all corners. When nearing the starting point, leave at least 12" of the quilt edge unbound and a 10" to 12" binding tail. Smooth the beginning tail over the ending tail.



Following the cut edge of the beginning tail, draw a line on the ending tail at a 45° angle. To add a seam allowance, draw a cutting line  $\frac{1}{2}$ " out from the first line; make sure it guides you to cut the binding tail  $\frac{1}{2}$ " longer than the first line. Cut on this second line.



To join the ends, place them right sides together. Offset the points so the strips match  $\frac{1}{4}$ " in from the edge and sew. Press the seam allowances open. Press the section of binding in half and then finish sewing it to the quilt. Trim away excess backing and batting *in the corners only* to eliminate bulk.



Fold the binding to the back of the quilt, enclosing the extra batting and backing. Blind stitch the binding fold to the backing, just covering the previous line of stitching.

