Engineered Stripes

Creative ways to let the lines lead your design

BY JUDITH NEUKAM

Think outside the box for sensational striped garments. Here, a simple linen sheath gets a bold stroke with an appliquéd striped ikat linen.
Right now, fashion is having a love affair with stripes. And it’s no wonder: Stripes can fool the eye to see an improved figure. They can make you appear taller, narrower, or wider, and it’s all in the way they are used. But without question, the most exciting striped garments are the ones with engineered stripes.

When I say “engineered stripes” I refer to using the striped fabric with more panache than laying out the pattern to cut on-grain and assembling in traditional ways. To engineer the construction and design, you can change the pattern shapes, the fabric grain, and manipulate the layout to produce the daring and improved results you’re about to see.

Somewhere in your sewing experience, you learned about matching printed or woven fabric patterns when cutting the fabric. (Read “A Process for Plaids” by Barbara Deckert, Threads no. 73.) This article is about going beyond the matching that takes place when lines meet as they cross seams. It explores ways to use stripes creatively to enhance the garment’s design.

Striped fabric comes in a full range of fibers and weaves, including organza, flannel, satin, denim, cotton, silk, and wool. You’ll see stripes on every type of garment for every gender and age, from overalls to evening gowns. There are knit stripes in classic sweaters and T-shirts. There are lightweight woven stripes that often appear in shirts, and there are more expensive striped fabrics that are used for suits and pants, as well as assertive or subtle stripes for classic eveningwear.

For a delightful time sewing a basic garment with a basic fabric, and to get outstanding results, think about engineering stripes. It engages your design eye, puzzle-solving mind, and sewing brilliance in creating a garment you’ll love wearing.

Judith Neukam is Threads senior technical editor.

www.threads magazine.com

THE ANATOMY OF A STRIPE

Stripes can be woven into a fabric or printed on it. They usually run with the grain, but when they run across the grain, the fabric is known as a railroad stripe. A railroad stripe enables you to use vertical stripes across a width greater than the fabric width without seaming—for example, on the back of a sofa.

Balanced
A balanced stripe reads the same even when inverted. It can be two alternating colors of the same or different size stripes. It can also be more than two colors arranged in a symmetrical pattern.

Unbalanced
Unbalanced stripes are asymmetrical. When viewed from the opposite direction, they produce a mirror image.

Stripes in disguise
Not all stripes are hard-edged, crisp lines; some are soft, broken, or patterned. If you are venturing into engineering with stripes, take a good look so you know what you’re getting into. Try your idea with the fabric in the store before you buy, to ensure that the stripes will behave as you wish.

Two patterns are at work in this fabric: an Austrian-style curtain print and a stripe.

A pattern reminiscent of a cottonwood forest renders soft stripes.
Play with balanced stripes

A common balanced stripe consists of two alternating colors. The stripes don’t have to be the same width—if one color is narrow and the other wide, it is often called a pinstripe. The stripe width of both colors can also be equal and range from very narrow to extremely wide (more than a foot). The two-color examples shown here to illustrate design possibilities could be any stripe—balanced or unbalanced, but with unbalanced stripes, the planning is likely to be more involved.

TURN STRIPES IN DIFFERENT DIRECTIONS

The basic blouse in a pinstripe crepe de Chine, shown at right, has design elements positioning the stripes on different grains. The blouse bodice is on the straight grain, the collar runs on the cross-grain, and the double bands framing the placket follow the bias to form chevrons down the front and appear to miter at the front collar edge. The sheer fabric shows the striped underlayer as a subtle plaid. Here’s how to make the bias-cut placket framing bands.

1 Sew the bias bands as strips folded with wrong sides together; the stripes form a 90-degree angle on the fold and meet at the seam. Cut a bias strip to whatever width you need (two times the finished width plus seam allowances), and fold it in half lengthwise with wrong sides together.

2 Sew the exposed seam allowance into a vertical seam on the blouse. This seam can be added following the method described on page 40. The folded edge remains unattached like a deep tuck.

COMBINE STRIPES OF DIFFERENT SCALES

Two coordinating and balanced candy-stripe fabrics in different scales were used in various directions to create excitement in a skirt. The two-tier skirt was made with a vertical pinstripe on the top tier and a wide bias flounce as the bottom tier. A larger-scale stripe cut in bias strips divides and edges the pinstripes.

1 Assemble the horizontal seam on this skirt with the wrong sides together so the seam allowances can be hidden under the bias bands. Leave one vertical seam open.

2 Cut three bias strips of different widths, turn the long edges of two strips under, and press. Then topstitch them to the skirt along their edges to cover the horizontal skirt seam allowances.

3 Finish the hem with the third strip. Turn under one long edge only and press. Align the unfolded edge to the skirt edge with the strip’s right side to the skirt’s wrong side. Machine-sew with a ⅜-inch seam allowance around the hem. Turn the strip to the right side, press, and topstitch the folded edge from the skirt’s right side.

4 Complete the skirt by sewing the final vertical seam, catching the strip ends in the seam.

Combin stripes in different scales and directions to enliven a simple garment.
Mirror unbalanced stripes

Think twice with unbalanced stripes. These stripes aren’t arranged on the fabric symmetrically. You have to be intentional in the way you lay out and cut your fabric. To engineer a stripe successfully, first study it, so you can position the pattern pieces to make the most effective use of the striped design. You might even photocopy or scan the fabric and print sheets for experimenting with the design.

At near right is an example of well-designed stripe planning and at far right is one that isn’t as effective. Note: Both shirts are wearable, but one is far more attractive.

STRIPES WORK IN PERFECT HARMONY

On the well-designed shirt, the distinctively unbalanced stripes were rotated on the right side to supply a mirror image of the stripes on the left. (The placement of the yellow stripe around the neckline also continues down the sleeves to create a well-engineered line.) The deliberate placement of the red stripe on the collar, the blue stripe on the front placket to split at the neckline, and the welted pocket all are smart strategies. This level of attention to detail makes the shirt a stunner, rather than just average. The success starts by reversing the pattern direction to mirror the stripes on one side; to achieve this effect, you need to cut the front pieces in a single layer.

WHEN STRIPES ARE “OFF,” SO IS THE LOOK

The shirt at top far right uses the same mirroring technique, but the designer wasn’t as thoughtful about the placket placement. A better solution would have been to center the stripe at center front, rather than at the edge of the overlap side. If the buttons ran between the white stripes, the effect would have been much stronger.

This shirt fails in other ways, too. The yokes don’t align horizontally. Though the yoke on the left side is dropped only about 1/4 inch, it makes a significant difference in the quality of the blouse. This is what can happen when fabric is cut in a double layer and the layers either shifted during the layout or were never matched.

CUT RIGHT FOR GOOD STYLE

To avoid shifting layers, cut a carefully positioned pattern in a single fabric layer. Then use the fabric piece, flipped, to cut the opposite section, so you can make sure all the stripes are perfectly aligned.

MARK A STRIPE ON THE PATTERN

Trace the key stripe on the pattern tissue, and then use it to cut the single layers. Use a pencil to trace key stripes that you can see through the tissue pattern onto the pattern; these will be your reference lines when you cut the second piece. Don’t forget to reverse the pattern so you don’t end up with two of one side, and be sure to reverse the fabric direction to mirror the stripes.

The blouse on the left uses the stripes to build the design. The blouse on the right misses the opportunity with a mismatched yoke and ill-planned center front.

IT’S HOW YOU SLICE A STRIPE

The three shirt sketches below illustrate how the same fabric can create different effects by planning for and adjusting emphasis of particular sections of a striped fabric. The whole fabric swatch for these examples is shown at center right on page 35.
Create a mitered design

Stripes don't have to be straight lines. Even if the stripes you're using aren't perfectly linear, you still need to make sure that all the stripes end up matched precisely the way you want them—otherwise, the effect will be ruined. This vintage dress is an excellent example. Its “stripes”—actually rows of printed ruffles—are perfectly mitered to create a flattering and eye-catching chevron design. Here’s how you can achieve equally good results.

1. Start with a pattern that is designed for a bias construction, and cut one panel.

2. Press under the center-front seam allowance.

3. With right sides up, position the cut piece over the uncut fabric to find a good match for the front seam. Stretch the underlayer, if needed, to get a match. Baste a seamline on the uncut fabric.

4. Align the fold to the basting. Use a fell or whipstitch to baste the pressed fold to the uncut fabric.

5. Place the pattern over the fabric, and cut the piece on the three unbasted sides. Repeat for each adjoining panel. The fell stitching or whipstitching acts like a hinge— you can open it to machine-stitch the seam inside the fold before removing the basting.
Add seams for a zigzag effect
This dress combines several of the previous techniques but with a different result. The garment looks complicated, but it is actually easy. In this dress, you work within the original pattern pieces, adding seams with seam allowances, and then cutting the striped fabric on different grains to add personality to the shape.

1. **Mark the new seamlines on the pattern.** Draw the direction of the stripes on each pattern section, and number the pieces so you can easily reassemble them.

2. **Make sure that every shape you draw on the pattern has its own grainline that is parallel to the original grainline.** You will interface the pieces on the grain, but cut them on the bias.

3. **Draw short hash lines across the new lines.** Cut the sections apart.

4. **Add seam allowances to each new cut edge by adding paper to the edges or retracing each pattern piece on fresh paper.** Preserve the hash marks, grainlines, and stripe directions.

5. **Interface the fabric on grain with fusible interfacing before cutting the pattern on the bias.** This helps neutralize any problems that could occur from cutting the fabric off grain.

---

*Princess-seam pattern McCall’s 6027 received extra seams to make the chevrons on the bodice.*
Apply a stripe like a brush stroke

In the previous examples, stripes were engineered within the confines of the pattern pieces. Now I’ll show you how to blow out the pattern edges to let the stripes take over.

For your first venture in bold strokes, choose a garment pattern with simple lines and no details. A sleeveless dress pattern without a waist seam or darts is ideal.

My goal was to use the stripe as an appliqué across the single-colored dress front, and to let parts of the stripe spill over the shoulders and side seams to the back. I experimented with a striped piece of paper to find the design placement I wanted and then enlarged the design to fit my pattern.

1 Experiment with the stripe placement on a line sketch of the garment and a striped paper band. Make a full front pattern piece, and transfer the outline to the pattern pieces. Here, the stripe over the shoulder disappears into the seam, but it crosses over the side seams and even makes a pocket on one.

2 Add seam allowances to the striped sections, and cut the fabrics to match the stripe direction. Turn the long edges under \(\frac{1}{4}\) inch and press.

3 On the dress shown, the whole solid fabric was interfaced. Interface the fabric before cutting the pattern pieces.

4 Shape the striped bands to match the drawing, and miter the corners. Then appliqué the striped fabric by topstitching close to the folded edge.