

Bra-Making Basics

It's easier than you think to sew bras that fit

BY STEPHANI L. MILLER

At first glance, making your own bras might seem far too troublesome to bother. But it really is surprisingly easy, and the results can be satisfying and well worth mastering a few lingerie sewing techniques.

There are many reasons to sew your own bras. Perhaps your size is difficult to find in retail shops or you're underwhelmed by the limited styles available in your size. Maybe you have specific fitting challenges that ready-to-wear bras can't accommodate, or you need a special configuration for a special garment. Or maybe you just want to get creative with styles and fabrications.

This article will help you understand bra sizing, fitting, and materials and will set you on the path to sewing your own well-fitting, attractive bras.

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Home-sewn bras can be pretty! (From top) Elan No. 645 in liquid satin spandex and lace; Kwik Sew 2101 in lace; Pin-Up Girls Linda in stretch satin; and BravoBella's Bravo Bra No. 2 in stretch charmeuse.



PROFESSIONAL FITTING SECRETS

Here are some essential tips from professional bra makers and fitters to help you make a perfectly fitting bra.

- Breast shape influences cup size, and a top-heavy breast may require a larger cup size. If pushing up or in gently on the naked breast creates mounding at the top, it is either top-heavy or evenly proportioned.

—Beverly Johnson, Bra-maker's Supply

- The deductive method of measuring over and under the breasts is inaccurate about half the time, because it doesn't tell you anything about how the breast tissue distributes. The shape and tissue distribution of the breast has a direct bearing on bra sizing.

—Susan Nethero, founder of Intimacy boutiques (MyIntimacy.com)

- For women who need a lot of bust support, I recommend using self-fabric straps with a short length of elastic at the back for adjustability.

—Mary Clafin, the Clafin Academy of Sewing & Design

- Many women are not symmetrical on each side of the body. When making bras, pad the cup of the smaller side to achieve the same volume as the larger side.

—Anne St. Claire, Needle Nook Fabrics

- If you want a wire-free bra, you still need to apply underwire channeling and fit with underwires because it's the basis for the cup. With a properly fitting bra, the underwire won't be uncomfortable.

—Mary Clafin

- Check the fit of the bra cup piece before cutting the fabric. Measure the breast from apex to intramammary crease (underwire line). Measure the pattern's lower cup piece from its top center edge to its bottom center edge. Factoring in 1/4-inch seam allowances, the measurements should match or require only small adjustments to the cup pattern.

—Beverly Johnson

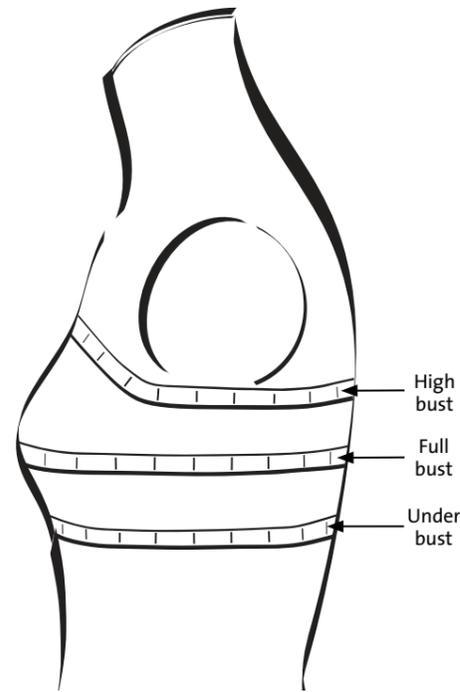
Measure up

Sizing a bra is the biggest challenge in bra making. Bra patternmakers each base their sizing on different calculations, so your size may vary from pattern to pattern. Also, not every pattern will provide the right combination of band and cup size to meet your unique proportions and distributions. It's important to find out which bra-sizing method your chosen pattern uses before purchasing it to ensure you get the correct size combination. Many bra patterns include this information, but some omit it.

Here are two methods commonly used to calculate bra size. Each may deliver a different size, and your pattern may use another method. For each, put on your best-fitting bra; this lifts your breasts into the correct position, even if the fit is imperfect. Keep the measuring tape snug, but don't compress the flesh; keep your arms down.

Method 1—Band Size: Measure around the rib cage (under bust); round to a whole number. Add 4 or 5 to get an even number. Cup Size: Measure around the full bust, then around the high bust; keep the tape high under the arms. Subtract the high bust from the full bust. Every inch of difference is a cup size (1=A, 2=B, 3=C, 4=D, etc.).

Method 2—Band Size: Measure the high bust. Round to the nearest whole, even number. Cup Size: Measure as described in Method 1.



Choose the right materials

The best bra materials aren't widely available, and it may be necessary to purchase from different sources. Purchasing a packaged kit of materials can save time and effort. (See "Resources," page 54, for materials and kit sellers.)

FABRICS

Firm stretch fabrics are best for bras; a stretchier cup gives less support. Simplex, low-stretch satins, 50-denier nylon tricot, and lace are good cup fabrics. Bands should be made from powernet (or substitute a firm shaper net). Powernet has ample stretch, but it's strong enough to make a supportive band. Cover it with the cup fabric, or use it alone.

ELASTICS

You'll need two types of elastic: plush-back elastic, which has one soft, fuzzy side, for the bra band; and satin-finished strap elastic for straps. Some bras combine self-fabric straps with elastic straps; some use only elastic. Both elastic types come in multiple widths. Smaller sizes may find narrower widths sufficient, while larger sizes may prefer the extra support of wider strap or band elastics.

UNDERWIRES AND CHANNELING

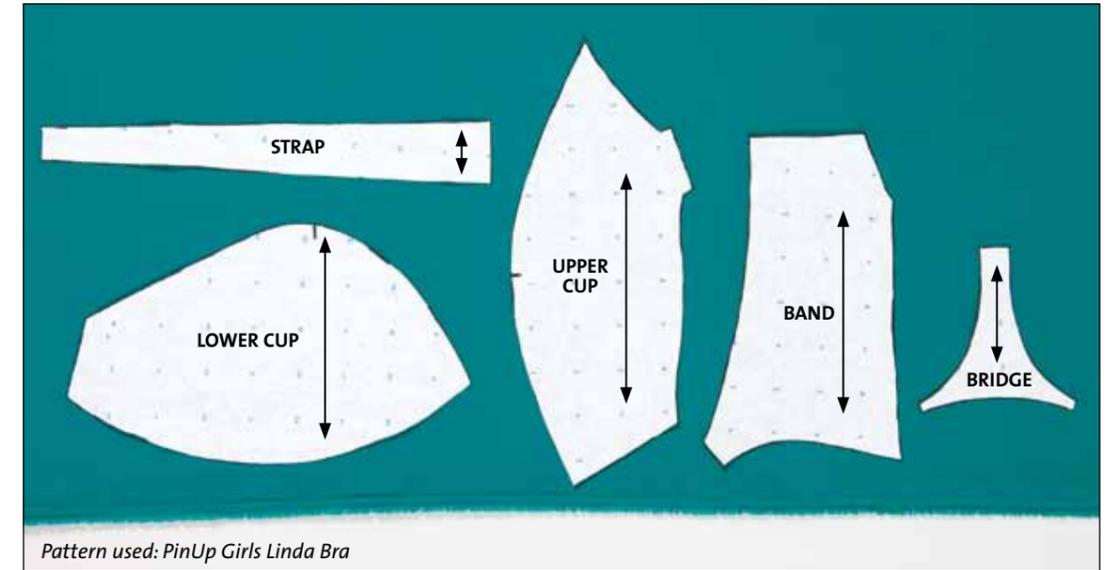
Underwire options are coated flexible steel or plastic. Coated steel underwires are thinner and very flexible, while the uncoated variety are slightly thicker and a bit less flexible. Both come in multiple lengths for different styles of bra cup. Plastic underwires are lighter in weight, flexible, and can be trimmed to fit any cup style. Larger cup sizes may find either of the steel underwire types give better support. Underwires are inserted into channeling, a soft casing that cushions them.



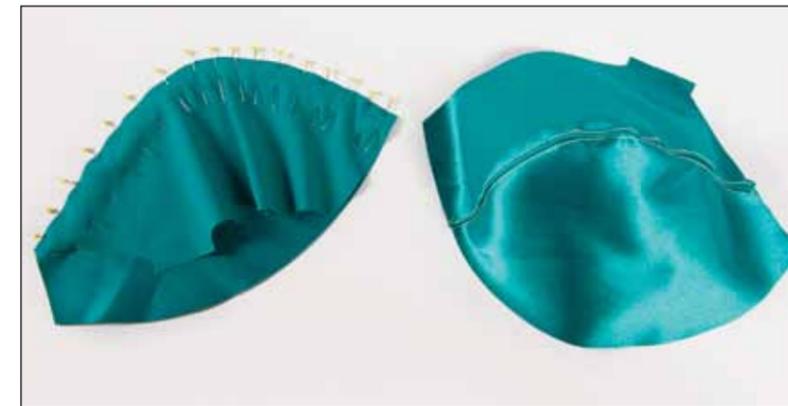
Fashion a beautiful bra

Specific bra construction steps depend on the pattern you choose, but the techniques are similar in most patterns. Below and on the following pages is a general guide to the basics of bra construction. If possible, cut the fabric with a rotary cutter—fitted with a fresh blade—on a mat, and use pattern weights, not pins, to eliminate fabric distortion and ensure accuracy. A bra's narrow seam allowances (typically 1/4 inch) allow low tolerance for variation, so start right by cutting accurately.

1 Lay out the pattern on the fabric. The grainline markings on bra patterns indicate the fabric's direction of stretch (or greatest stretch, if it is a two-way stretch). Cutting the pieces in the correct direction of stretch ensures the best support. Cut the bra pieces.



2 Follow your pattern's cup assembly directions. The construction order will depend on the style of the cup, the number of pieces, and whether there is a lace overlay, a lining, or an interfacing. Your first set should be test cups to evaluate fit. Make them in the same fabric as your final bra, and mark the seam allowances.



3 Evaluate the fit of the test cups. They should cover the breasts completely from side to side without wrinkling or gaping. Seam allowances should extend beyond the breast's edges. Sew the cups for the final bra.



Tip

STRETCH TEST. Check your fabric's direction and degree of greatest stretch (DOGS). Stretch a 10-inch length of the fabric alongside a ruler until it resists. Expanding from 10 to 13 inches indicates 30 percent stretch, 14 inches equals 40 percent, etc. Any fabric with more than 40 percent stretch isn't suitable for bra cups.

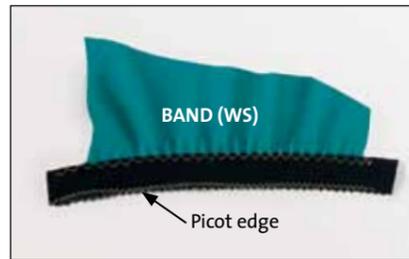
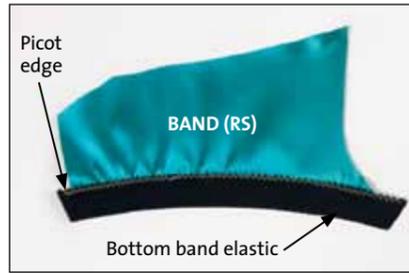
—Beverly Johnson, Bra-maker's Supply

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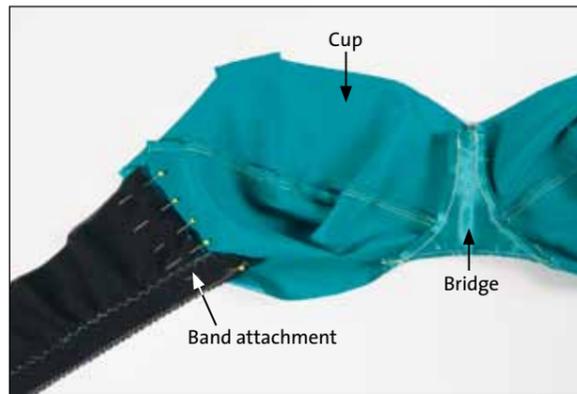
4 Prepare the band. For a full-band bra with a separately cut bridge, sew the band pieces to the bridge to create a single unit (shown). Some patterns may have a one-piece band with an integrated bridge.



5 Attach the elastics. This sample is a partial-band bra. Construction order for attaching band elastics varies. Lap the plush-back elastic, fuzzy side up, on the band's right side with the picot edge facing the band. Zigzag the picot edge first, then turn the elastic to the band's wrong side and zigzag the opposite edge.



6 Sew cups to band. For a partial-band bra, band pieces and bridge attach to the cups separately (shown). A full-band bra's cups attach to a band/bridge unit (see step 4).



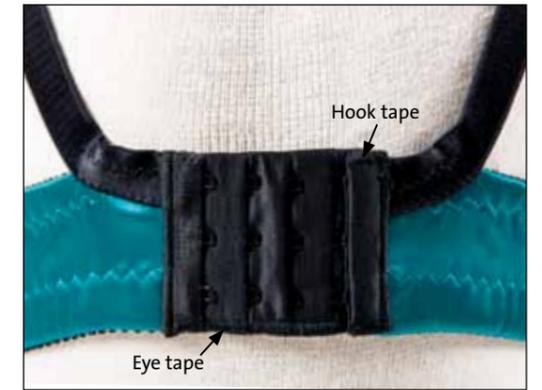
7 Add underwires. Pin and stitch one underwire channeling edge to the right side of each cup's bottom seam allowance, turn to the wrong side and finish. (Method varies.) Insert the underwires and satin-stitch the channel ends closed.



8 Prepare the strap assembly and attach the straps. Zigzag stitch the strap elastic to the bra band's back upper raw edge (shown). Different patterns use different strap styles: Straps may be entirely bra fabric or strap elastic, or a combination of both. Some patterns omit strap rings and sliders, but most use them.



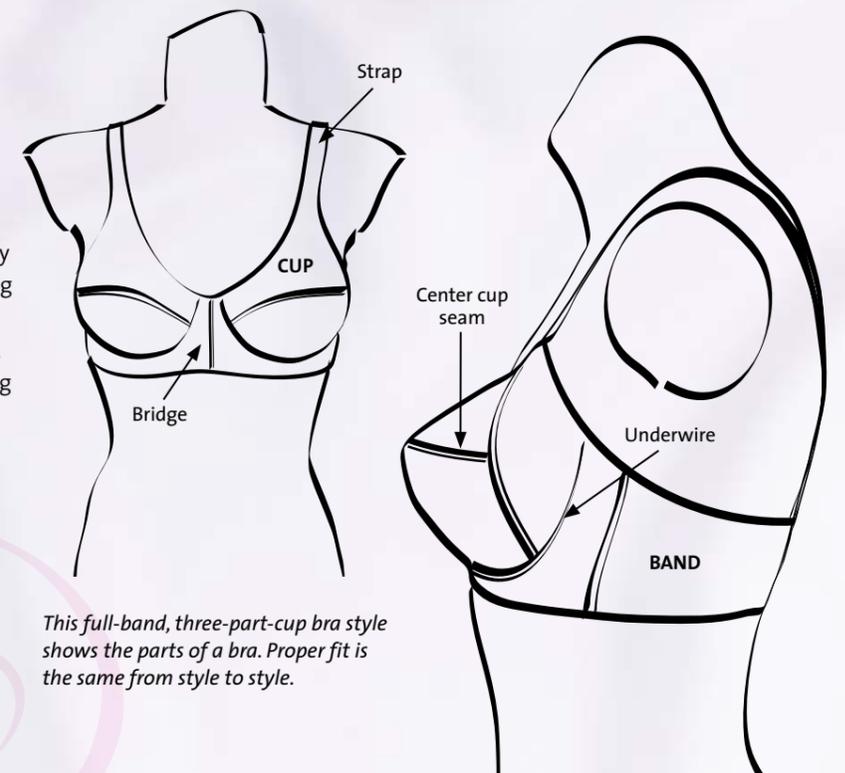
9 Apply the back fastener. Fold the hook tape over the band's right end, as worn, with the hooks face down. Place the eye tape on the band's left end, eyes face up. Sew each with a straight stitch, then overcast and finish the hook-and-eye tape edges using a short, wide zigzag stitch.



EVALUATE YOUR BRA'S FIT

A perfect fit enables each part of a bra to perform its intended function—to firmly but comfortably support the bust. To determine whether your bra fits correctly, compare it to the ideal fit guidelines listed below.

- **The Band** sits level all the way around the body, but may also sit slightly lower in back. It fits snugly on the last eye setting without rolling or squeezing the rib cage. The band provides 90 percent of the bra's support and can be tightened as it stretches.
- **The Cups** contain the breasts without compressing the flesh. The cup material does not wrinkle or pucker, and the breast fills the cup without overflowing. The center cup seam—whether vertical, horizontal, or diagonal—aligns with the breast apex.
- **The Underwires** sit comfortably around the perimeter of the breasts against the chest wall without pinching or squeezing.
- **The Bridge** sits flush against the chest wall, or within a pinkie's-width. It does not tip forward or pull away from the body.
- **The Straps** fit snugly on the shoulder without digging into the flesh or slipping.



This full-band, three-part-cup bra style shows the parts of a bra. Proper fit is the same from style to style.

RESOURCES

For even more information on bra making, look to these references to guide you through the minutiae of sizing, fitting, and finishing. See materials sources at right.

- *Intimately Yours: Bras That Fit* by Anne St. Claire—ideal for the home sewer intent on perfectly fitting bras. NdINookFab.blogspot.com.
- *The Bra-maker's Manual* by Beverly Johnson, Bra-maker's Supply—written for custom bra makers, it also offers home sewers a master's education in bra fit and construction. BraMakersManual.com.
- "Basic Bra Making" class, taught by Mary Claflin, the Claflin Academy of Sewing & Design. ClaflinAcademy.com.
- "Bras 102—Basic Construction, two-disc set" by Monica O'Rourke Bravo, BravoBella Bras. BravoBellaBras.com.

- BraMakersSupply.com
- NdINookFab.blogspot.com
- FabricDepotCo.com
- SewSassy.com
- ELingeriA.de
- BraMakingSupplies.com
- BraComponents.com
- Etsy.com
- Fabric.com