### This is an excerpt from the book

# **Sewing Lingerie that Fits**

by Karen Morris

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# Fitting and Creating Patterns

itting the human body is probably the single greatest sewing challenge—it often keeps sewers from creating the number and variety of garments that they'd like. But when it comes to fitting, you can relax when sewing most types of lingerie. Lingerie doesn't present nearly as many of the fitting headaches that slow you down when constructing a "serious" garment, like a jacket or pants.

Whether you start with a commercial pattern, make a pattern from a garment you love, or draft your own custom pattern using the instructions in this chapter, there's a certain amount of tinkering involved to get the garment to look and fit the way you want. But thanks to simple shapes, lingerie fabrics that stretch, and a lot of built-in roominess in many cases, fitting is simply less of an issue with lingerie. I'll also include instructions on how to construct a half-slip, camisole, and panty from the custom patterns you make.



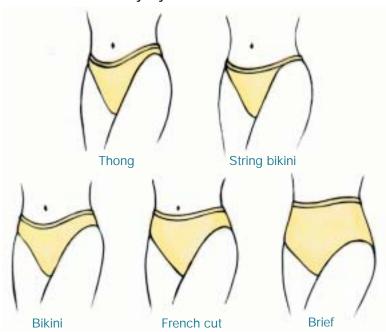
Even though innerwear requires a close fit, pieces like this underwire bra and thong still offer pure comfort, since they're sewn from soft, flexible cotton knit with stretchy elastic at all the edges.

#### **Garment Style Determines Fit**

Getting a pattern to fit the way you want is one of the keys to success for any garment. Luckily, many types of lingerie are very easy to fit, particularly loungewear and sleepwear. Most garments in the loungewear and sleepwear categories are either stretchy or relaxed and roomy enough to be deliciously comfortable and hassle-free, and the patterns tend to have few pattern pieces and simple, fail-proof shapes. So when I talk about fitting lingerie, sleepwear and loungewear have different requirements than other, more fitted types of lingerie.

Innerwear, on the other hand, does need to be fairly fitted and smooth but still comfortable. For this reason, it makes sense to use a lot of knits and Lycra-blend fabrics, which, with their built-in stretch and recovery, take much of the hassle and stress out of fitting. Even a small amount of stretch in the fabric makes a snug garment so much easier to fit and forgives small errors. If

#### **Basic Panty Styles**



## tip. . .

If your slip doesn't have a wrap opening or slit at the hem, try cutting it in a slight A-line shape, or wider at the hem, for ease when walking and sitting. This is especially helpful if the slip is a longer length.

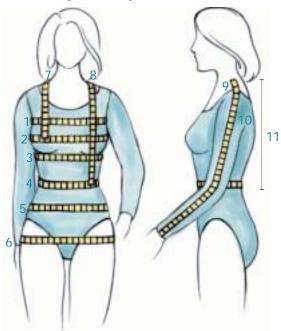
you're working with wovens, you can get a similar effect by cutting the fabric on the bias for a close, smooth fit that's still flexible and comfortable to wear.

Slips, although innerwear, fall somewhere between these two extremes. By design, they are easy to fit. A half-slip is really just a tube, and most full-slips are tubes with adjustable straps.

Panties, however, are a little more complex because of the body's threedimensional shape. Lay a pair of panties on your bed and take a look at the shape: They're fuller in the back, and the leg openings lie on the front of the garment. Fitting a panty pattern starts with choosing a style you like, and a number of interesting pattern options are available (see the illustration at left). Since each woman's preference for panty shape is highly individual, I suggest you use a favorite existing pair of panties as a reference to help you make essential decisions about the perfect style and waist height and the ideal shape and height of the leg openings.

Another great way to get exactly the panties you want is to draft your own panty pattern. While this may sound difficult, it truly isn't. Using just four body measurements—waist, hip, waist to hip, and crotch depth—you can quickly draw a basic panty pattern that's

#### Measuring Your Body



- 1. High bust (directly under arms)
- 2. Bust (fullest level)
- 3. Under bust (ribcage)
- 4. Waist
- 5. High hip
- 6. Hip (fullest level, and note distance from waist)
- 7. Shoulder to bust point
- 8. Shoulder to waist
- 9. Shoulder (width)
- 10. Sleeve length (shoulder to wrist, with arm bent)
- 11. Back waist length

custom-fitted to your body. Once you have this paper pattern, it's easy to adjust and customize the shape to develop the type of leg curve and waist height you want.

Bras, another type of innerwear, require the most fitting. Cup fit is very important, since the vast majority of women are wearing bra cups that are too small! After the cup is correct, getting the band to fit is a relatively easy adjustment. And fitting a bra becomes much easier when you use a fabric with at least some stretch. I'll address more of the unique fitting aspects of bras in chapter 5.

# Good Fit Starts with Accurate Measuring

The first step in making any type of lingerie, whether you're working with a commercial pattern or creating your own, is to take accurate body measurements. It's best to have someone else help take your measurements, although it's not always easy to round up a helper when you need one. To measure for innerwear, wear undergarments that fit well; if you're sewing sleepwear, this isn't really necessary. You won't need to compare all these measurements every time you sew; just use the ones that relate to the garment you're making and to your figure variations.

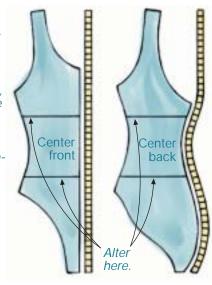
First, place a 1-in.-wide belt or pin a piece of firm, nonstretchy ribbon or trim snugly around your waist and adjust it to your natural waistline. This will serve as a guide when taking your waist measurement and front- and back-waist lengths. Especially if you're working alone, stand in front of a full-length mirror so you can check that the tape is level for each measurement.

#### Measuring Your Full Torso for a Bodysuit or Teddy

Compare your full-torso measurement to that of your pattern to decide whether the pattern needs adjusting.



1. Measure your torso back to front from the bone at the base of your neck, down between your legs, and up front to the hollow at the base of your neck. Follow the curves of your body, keeping the tape snug.



2. Measure the front and back pattern tissue at the center from the shoulder to crotch seam, following the curves at the center back. Add the front and back lengths for the full-torso length, then compare that with your body measurement.

For a pattern with separate straps, measure your body and the pattern from the bust point to the back waist.

3. If you need to alter the pattern, adjust the front and back between the bust and waist and/or between the waist and hip.

The illustration on p. 63 lists the body measurements you'll need to know for sewing various types of lingerie. Take your measurements as shown and record them on a sheet of paper. The full-torso measurement, shown in the illustration above, is helpful for fitting one-piece garments like bodysuits and teddies (and also, by the way, for swimsuits). The crotch-depth measurement,

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tip. . .

Write down your measurements and date the list for future reference. It's best to measure yourself every six months to a year, since your body may change frequently.

shown in the illustration on the facing page, will be used for adjusting pants and for creating a custom panty pattern.

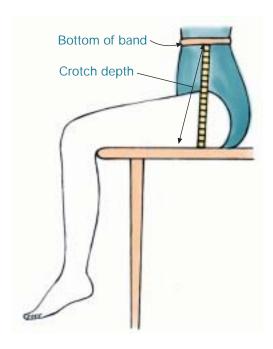
# **Working with Commercial Patterns**

Comparing your body measurements to the suggested measurements on the pattern will, ideally, help you select a pattern size. But many bodies require different sizes in different areas, which can make choosing a pattern size more confusing.

For lingerie other than bras, there's no need to make this complicated. For full-body garments, it's often better to choose a pattern based on your high-

#### Measuring Crotch Depth

Sit on a flat surface such as a table or countertop. Measure at the side of your body from the bottom of the waistband, over your hip, then straight down to the flat surface. This is your crotch depth.



bust instead of your bust measurement, especially if your body is larger than your frame or bone structure or if you once used a smaller-size pattern but have gained weight. This will give you a smaller pattern that fits more nicely through the neck and shoulders (the areas that are more difficult to alter and where most women don't gain much weight), and you can easily add width at the bust, waist, and hip for the correct body measurement, including plenty of ease. How much ease depends on your fabric and the kind of fit you want.

Starting with a smaller pattern than your bust measurement indicates will

#### **Comfort Zone**

ase is the difference between the measurement of your body and the measurement of the pattern or garment in a given area. There are really two types of ease: ease that's added for comfort and wearability, and "design ease," which is ease that's added by the designer to create a style or look.

On the back of a pattern envelope, the words used to describe the garment provide a clue as to how much ease the style includes. Words like "fitted" and "close fitting" indicate that less ease is added, while "loose fitting" or "very loose fitting" suggest that the style includes more ease. In general, fluid fabrics require more ease to look and feel right, and firmer fabrics and those that stretch require less. By comparing your body measurement with that of the pattern (after subtracting seam allowances), you'll get an idea of how much ease you will have in an area so you can add more if needed when cutting out the pattern.

Sleepwear and loungewear are generally designed to include plenty of extra ease for comfort so the garment will feel wonderfully unrestricting. Even elegant silk satin and chiffon gowns and robes allow 10 in. or more of ease at the hip. True luxury can also be comfortable! Be sure to check the crotch depth on pajama pants and shorts; I like it to be 1 in. or so deeper than for regular pants. If you don't have plenty of ease, add more. One easy way to check is to compare the crotch depth with that of a pj pant you love.

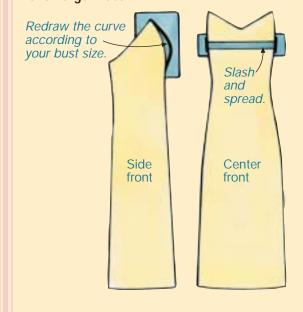
Innerwear garments generally include a minimal amount of ease so they'll be smooth and bulk-free under outer garments. This is why knits and other stretchy fabrics make so much sense for innerwear—the garment can be sleek and close fitting, even cut smaller than the body, and still be comfortable and easy to fit and wear.

# Adjusting a Full-Slip Pattern for a Larger Cup Size

If you're larger than a B cup and want to make a full-slip that fits smoothly in the bust area, a pattern with princess seams is fairly easy to adjust by increasing the curve in the bust area. Tape the side-front pattern over a piece of paper, and redraw the princess-line curves in the bust area to add about ¾ in. for each cup size above B, tapering to the original seamline above and below the bust apex.

On the center-front pattern, draw a horizontal line at the bust point, cut along the line, and spread the pattern the same amount you added to the side front, taping the pattern to paper. Baste the slip together, then try it on wrong side out so you can adjust the bust area if needed before completing the slip.

# Adjusting a Princess-Seam Slip Pattern for a Larger Bust



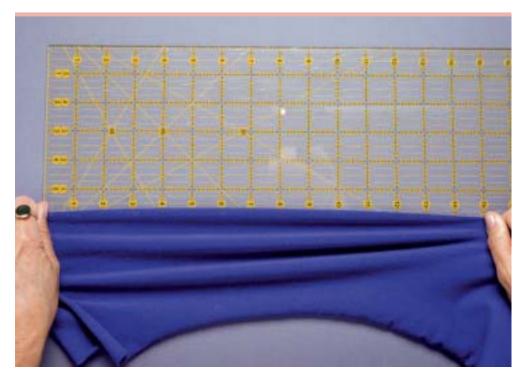
reduce the chance of having pajamas and gowns with gaping neck openings and baggy shoulders, when what you may really need is just extra room in the bust or hip. For a lower-body garment such as a half-slip, panty, or pair of pants, choose the pattern based on your hip measurement.

If the pattern you choose is multisized, with several sizes drawn on each pattern section, then your work becomes easier. Just outline a smaller size to cut the neckline, shoulders, and armholes, and a larger size for the bust and hip to suit your measurements.

#### Taking fabric stretch into account

When sewing with knits and Lycrablend fabrics, it's essential to pay attention to the amount of stretch in your fabric. The amount of stretch varies widely between fabrics, from less than 25 percent to 100 percent, and this variation can dramatically affect the fit of your garment. For example, if you're working with a stretchy Lycra-blend fabric, the additional stretch means that the garment can be cut smaller, often even smaller than your body, depending on how you want the garment to fit. Think of a swimsuit: When you hold it up to your body before putting it on, it's definitely smaller than you are.

Patterns designed for stretch fabrics are created with this stretch factor in mind; the back of the pattern envelope will recommend fabrics and tell you the amount of stretch the designer calculated for that style. Because the stretch dramatically affects the fit, it's best to stick with a fabric that has the recommended amount of stretch, at least until



It's easy to test each stretch fabric to determine its percentage of stretch. If 10 in. of fabric stretches easily to 17½ in., the fabric has 75 percent stretch.

you've had some experience working with stretch fabrics.

Using a ruler or tape measure, it's easy to determine how much stretch a fabric has in each direction. Test the stretch both horizontally and vertically, since most fabrics have more stretch one way than the other. In fact, some have stretch in one direction and none in the other. As a general rule, you'll place the direction of greater stretch going around the body, so the stretch of your particular fabric may also affect the pattern layout.

To determine how much a fabric stretches, start by folding the fabric crosswise, about 12 in. from the cut end. Lay 10 in. of the folded edge along the first 10 in. of the ruler. Holding the left side of the fabric stationary, stretch the fabric with your right hand as far as it will comfortably go (see the photo above). If the fabric stretches easily to

12½ in., it has 25 percent stretch; if it stretches to 15 in., it has 50 percent stretch; if it stretches to 17½ in., it has 75 percent stretch; and so on. To test a fabric's lengthwise stretch, fold the fabric parallel to the selvages and repeat the procedure.

If you're using a pattern designed for tricot or stable cotton knit (with 25 percent stretch) and want to substitute a Lycra-blend fabric (with 50 percent to 100 percent stretch), be aware that you'll need to adjust the pattern to be smaller. A stretchy fabric requires little or no ease, or even a negative amount of ease (smaller than the body), and will still move with the body and be quite comfortable to wear. Make a new paper pattern to reflect the changes, and label it "for fabrics with XX percent stretch."

For your first try at making a garment in a Lycra blend from a pattern designed for knits with less stretch, use

## The Skinny on Shoulder Pads

I ou might not associate shoulder pads with lingerie, but think again. In my opinion, they almost qualify as innerwear. Many women wear at least a small shoulder pad in their clothing, not only to balance the proportions but also to help support the weight and shape of a garment. But shoulder pads can present a number of challenges: Which shape and size to wear with each garment? Where to get them? How to attach them? I can suggest two simple solutions: Make use of shoulder pads built into a camisole or attach them to your bra straps.



When you combine a camisole with shoulder pads, like the one shown above made of cotton lace, they'll be smoothly and securely in place for every garment you wear over it, and it's an easy garment to construct. Stretch & Sew 2072 includes a unique camisole pattern with raglan-sleeve lines and a slightly extended shoulder area with a built-in pad. The pattern instructions result in a pad created from several layers of fleece, but you can adjust the number of layers for the thickness you want, which is especially useful when styles dictate a more natural shoulder line.

Another option is to attach removable shoulder pads to your bra straps, using either purchased pads or ones that you sew yourself. This allows you to wear the size and style of pad that suits your shape and garment without sewing a pad into each outfit or being stuck with the pad that comes sewn or Velcroed into every purchased garment.

To make a removable pad that attaches to your bra strap, sew a small strap on the underside of the pad and fasten it either with a snap or with hook-and-loop tape. For the strap, use a 1½-in.- to 2-in.-long strip of %-in.- or ½-in.-wide ribbon, bias tape, or twill tape and a sew-on snap or small piece of hook-and-loop tape. Pin the pad to your bra strap to determine the correct placement with a garment, then turn under the raw ends of the strip and sew one end to the underside of the pad. Sew the hook side of the hook-and-loop tape to the other end of the strip, and sew the loop side to the pad so it lines up with the piece on the strip. Or sew both halves of a snap to the strip and pad.

a couple of sizes smaller than your measurements suggest, then cut out and baste the garment sections together, try it on, and make adjustments as needed. You may not get it exactly right the first time—even clothing designers make a new style more than once—so don't be concerned if you need a second attempt to adjust and make changes. With each experiment, you'll get closer to the perfect fit.

#### **Creating a Pattern**

Because I've never studied pattern drafting, my approach to making my own patterns is extremely basic. I frequently use a garment I already own as a guide, which has always been my most direct route to success. To me, a garment that I can try on and measure is much more tangible than working with a paper pattern alone. So if you have a pajama, gown, or other piece of lingerie that you love, consider creating a pattern from it so you can sew it again (and again!).

I've already talked about how relatively simple garment shapes are for most lingerie and loungewear, especially when compared with jackets and other complicated garments with many pattern pieces. For example, most ready-to-wear sleepwear is constructed as quickly and inexpensively as possible, with simple, boxy shapes, few or no darts, and elastic at openings for comfort and shape. (This is why they're easy garments to copy!) It's the fabric, topstitching, and details that make these garments special.



Copying from favorite garments is the way I developed patterns for several of the pieces in this book—the pearprint pj shirt shown on p. 32 was copied from a favorite old flannel pj shirt, and the simple brown-print camisole shown on p. 60 was copied from a J. Crew one that I recently bought and loved.

If you'd like to copy one of your favorite lingerie garments, first think about small or large improvements you can make, any changes that will make it even more wonderful to wear. Perhaps it A straight half-slip is a simple garment to copy. Basically a tube with a sewn elastic waist, the slip's fabric, color, and rich lace hem are the details that make this piece special. The cut-apart sections of a treasured favorite, like this cotton flannel sleepshirt, provide all the information you need to draw a new paper pattern and sew your own copy. Remember to add seam allowances where needed.



needs to be an inch or two longer? Or have a smoother finish inside? Or more topstitching to prevent the edges from flopping out? You can fix all these problems now, while you're sewing it again.

#### Making a copy

If your old garment is worn out, simply cut it apart along the seamlines, clip or remove any elastic, and use the sections to make a new pattern (see the photo above). Smooth out, press, and then trace each section on paper, adding length for hems, drawing on seam allowances where you cut them away, and making any needed improvements.

If you're not ready to cut apart the garment just yet, you can still copy it. One option is to trace the shapes of the garment sections on paper to create pattern pieces. Another way is to find a pattern that's as similar to it as possible, then measure each section of your garment and jot the numbers on a quick rough sketch of each section's shape. Using your measurements and observations, alter the pattern so it's as close as possible to your favorite, including piping, topstitching, pocket and button placement, and other important details.

If the shape is very simple, like my camisoles shown on p. 25 and p. 92,

you may not even need to find a similar pattern. Instead, lay the garment flat on pattern paper, side seams together, and draw the front and back pattern shapes on the paper. Then add seam and hem allowances where needed. Cut out the pattern pieces, and you're ready to make the new garment.

If the garment you want to copy is a bra, be persistent; a bra is a more complex garment. Search for the right fabrics and findings, and use the old bra to make a new pattern (see pp. 91–92). And, again, be willing to make the bra more than once if necessary. The results will be worth it.



Make your own easy, custom-drafted patterns for a wrapped half-slip and V-neck camisole, like the ones shown here, which are both cut on the bias and sewn from silk seersucker.

#### Drafting a new pattern

Another way to create a pattern is called drafting—using your own body measurements to develop a custom pattern. To illustrate how simple this process can be, I'll show you how to create your own patterns for a wrap-style half-slip, a V-neck camisole, and a basic, brief-style panty. The basic panty pattern is the most exciting, I think, because once you create the pattern, it's easy to adjust it to your favorite style, whether you prefer a high-cut leg, a low-cut waist, or a bikini.

Each of the three patterns is designed for knits or woven fabrics (be sure to cut wovens on the bias so they'll be fluid and comfortable). These patternmaking instructions are adapted from the work of Jan Bones, teacher of patternmaking, garment construction, tailoring, and draping at the University of Manitoba in Canada.

#### **Tools for making patterns**

To make your own patterns, you'll need some fairly large, paper, a tape measure,

#### **Karen's Closet**

While visiting my sister in Galveston, Tex., we used to shop at a fabulous military-surplus store called Colonel Bubbie's. This store stocked absolutely everything (including a genuine NASA space capsule, displayed out front) and was a wonderful place to prowl around. One day I found an incredibly soft, thick, cotton-flannel sleepshirt in a soothing medium blue, with a sort of Nehru collar and utilitarian ring snaps up the asymmetrical front. This English-army pajama shirt turned out to be the most perfect, goofy pj shirt I ever owned. When it started to show wear, I bought another one by mail. These two wonderful shirts lasted for years and became the backbone of my early at-home comfort-clothing outfits.



When the second shirt started to wear out, I panicked. I stitched machine-embroidery on the front in an effort to strengthen it and did other last-ditch mending jobs to keep the shirt going. Finally, when it was too fragile to wear, I washed it one last time and folded it into a ziplock bag, then labeled and stored it in my attic with the intention of making a pattern from it someday and sewing a new, perfect pj shirt. For some reason, I never did, although each time I moved to a new house, that silly shirt went with me. The original Englisharmy shirt is pictured here, and the result (finally!) of my efforts to copy it, the pear-print pajama shirt, is pictured on p. 32. The new shirt is made from fabric that, if possible, is even softer and thicker than the original. My only style change was to lengthen and curve the hemline to create shirttails; the original had a straight hem.

a ruler (I prefer a large, clear plastic ruler like the 6-in. by 24-in. one from Omni-grid shown on p. 70, so I can see what I'm doing), and a pencil. Also have handy your basic body measurements described earlier in this chapter. You can purchase a roll of gridded pattern paper (see Resources on p. 135), which is perfect for the task, or a reasonably priced roll of medical examining-table paper at medical-supply stores. There's also a patternmaking material called Mönster paper, made from a strong synthetic similar to Tyvek. The advantage of Mönster paper is that it's nearly inde-

structible; you can fit the pattern by actually basting it together and trying it on before cutting out your fabric.

All these options are great, but I sometimes end up simply using freezer paper. It's sturdy, inexpensive, readily available at grocery stores, and fairly wide (25 in.). If you need wider paper for certain sections, you can easily tape two pieces of paper together. For smaller patterns, don't forget that classic—the sturdy brown paper grocery bag, which makes a very durable pattern.