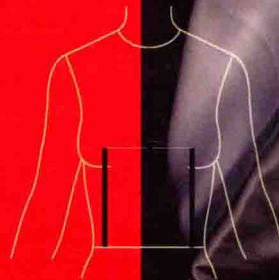
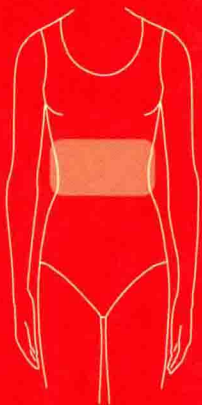


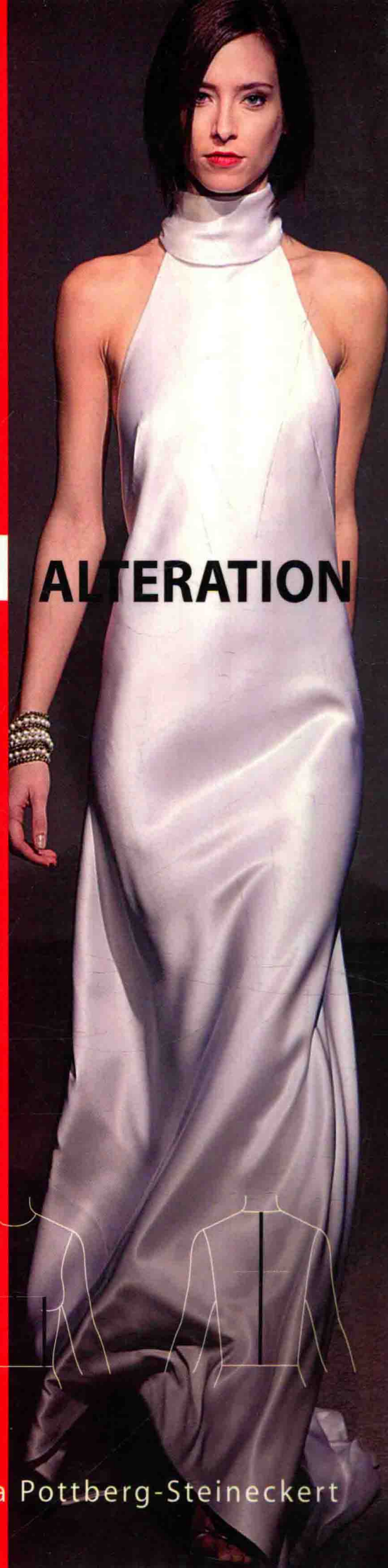
FITTING & PATTERN ALTERATION

A Multi-Method Approach
to the Art of Style Selection,
Fitting, and Alteration

Second Edition



Elizabeth Liechty • Judith Rasband • Della Pottberg-Steineckert



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TO THE ART OF STYLE SELECTION,
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Fitting & Pattern Alteration

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PREFACE

Beautifully fitted and comfortable clothing communicates knowledge, poise, and a positive self-image. This book focuses on appropriate style selection and presents the most innovative and tested methods of fitting and alteration. All content is based on and supported by the authors' academic and industry experience in secondary, college, and university classrooms; in retail settings; in seminar locations; and in conference halls. Written for an academic market, this book will be equally valuable as an encyclopedic reference for custom fit experts, alterations professionals, and fashion sewers.

Elizabeth Liechty, Della Pottberg-Steineckert, and Judith Rasband began working on the first edition of *Fitting & Pattern Alteration: A Multi-Method Approach* in 1975 when they were on the faculty at Brigham Young University teaching fitting and alteration in the Department of Clothing and Textiles. The authors were wrestling with the challenges of traditional methods of alteration, such as simply redrawing lines or slash and lap procedures. Liechty had begun exploring the possibilities of the [then] new pivot and slide method of pattern alteration developed by Edna Bishop, and Pottberg-Steineckert originated and developed her unique "seam" method of pattern alteration. Rasband developed a full-body system of alteration using the "seam" method and set out to find if students could understand and apply it. Obtaining positive results, she recognized the need for a full text on the topic and began writing *Fitting & Pattern Alteration: A Multi-Method Approach* along with Liechty and Pottberg-Steineckert.

The first edition of the book, published in 1986, is known popularly as "the bible" on fitting and alteration and has endured as a best seller in the Fairchild line of fashion textbooks. After years of developing and testing methods for fitting even more figure variations, Rasband and Liechty have now collaborated on the book's second edition: *Fitting & Pattern Alteration: A Multi-Method Approach to the Art of Style Selection, Fitting, and Alteration*.

New to the second edition are directives for fashion style selection that can help enhance the figure, as well as alternative methods of figure evaluation, fitting, and pattern alteration in Parts One and Two. Illustrations for measuring the figure and applying these measurements to the pattern have been included in Part Three. These illustrations have been revised to include color to clarify the procedures and directional measuring to facilitate the alteration process. We hope everyone will appreciate this new development.

The new edition continues to incorporate the following valuable features of the first edition:

- Part Three is organized and intended to be used again and again as a ready reference.
- Each figure is drawn to scale. Pattern alterations were carried out in half-scale models to ensure the completeness, consistency, and accuracy of the digital reproduction.
- The cause of the fitting problem is clearly identified in each figure variation. Understanding the *what* and the *why* behind the procedure is incorporated into the explanation to reinforce learning.
- The choice of methods offered in the book allow for varying purposes and abilities.
- The use of the simplest method of pattern alteration is encouraged to increase efficiency.
- Specific alteration procedures are given for multiple variations occurring on the same figure, since most figures varying from the standard require more than one alteration.
- Alteration procedures for basic pattern pieces are also applied to fashion pattern pieces—procedures long unique to this book.
- Each alteration procedure has been developed to eliminate distorted pattern pieces and reduce necessary restorations.

Experience is essential to sharpen perception and perfect any skill. As you apply the methods and procedures set forth in this book, we are confident you will develop self-reliance and the satisfaction of knowing that you, too, can consistently achieve a fault-free, custom fit.

ACKNOWLEDGMENTS

We wish to sincerely thank Fairchild Books, a division of Condé Nast Publications, for the opportunity to revise and expand *Fitting & Pattern Alteration: A Multi-Method Approach to the Art of Style Selection, Fitting, and Alteration*, complete with extensive essential art throughout. We extend special thanks to Jaclyn Bergeron, Senior Associate Acquisitions Editor, for her continued interest and support. Thanks also to Jennifer Crane, Senior Development Editor, for her effort in keeping us on track. We so appreciate the editorial direction and artistic design of the book provided by Ron Edwards, Adrianna Edwards, and their staff at Focus Strategic Communications Inc. Their tireless efforts are responsible for the clarity of the text and page layouts in this incredibly complex project. We are grateful to Lorraine Henry for her continued involvement and teaching ability at our Fabulous Fit Retreats. We thank Lori Lambson for new fashion drawings. We are gratefully indebted to Kathy Adams of the Conselle Institute for her computer expertise, diligence, and unending patience in rendering our more than 2000 illustrations required for this book. Her ability and effort are responsible for making our words, charts, figures, and altered patterns comprehensible and enduring. Long after the words are read, you will still be “reading” the illustrations. And heartfelt thanks to our families for their long-suffering understanding of the time that this project has extracted from our lives. We are confident that our efforts and this amazing book will benefit generations to come.

Elizabeth Liechty
Judith Rasband
Della Pottberg-Steineckert

RESOURCES

The Two-Easy Measuring Tape, the Flexible Curve, a master set of Half-Scale Practice Patterns, and shoulder pads are available through the Conselle Institute of Image Management:

Address: 7052 University Station, Provo, UT 84602
Website: www.conselle.com
Telephone: 801-224-1207
Fax: 801-226-6122

If you do not find the specific fashion fabric you want and need, discover other options with a *Fabric Resource List*, available through the Conselle Institute of Image Management (see above).

Shoulder pad patterns are available from Live Guides:

Address: 10207 Marine View Drive, Mukilteo, WA 98275
Website: kathyruddy@earthlink.net
Telephone: 425-501-1801

SUGGESTED READINGS

Davis, Marian L. *Visual Design in Dress*. Englewood Cliffs, NJ: Prentice Hall, 1996.

Doerr, Catherine M. *Smart Sewing*. New York: Macmillan, 1967.

Minott, Jan. *Coordinated Pattern Fit*. Minneapolis, MN: Burgess Publishing Company, 1969.

Minott, Jan. *Fitting Commercial Patterns: The Minott Method*. Minneapolis, MN: Burgess Publishing Company, 1978.

Rasband, Judith. *Wardrobe Strategies for Women*. New York: Fairchild Books, 1996.

Rasband, Judith, and Liechty, Elizabeth. *Fabulous Fit*, 2nd Edition. New York: Fairchild Publications, Inc., 2006.

Smith, Shirley L. *The Art Of Sewing: A Custom Fit*. Sewing Arts Inc., 2000.

Zieman, Nancy. *Sewing Express*. Birmingham, AL: Oxmoor House, 1994.

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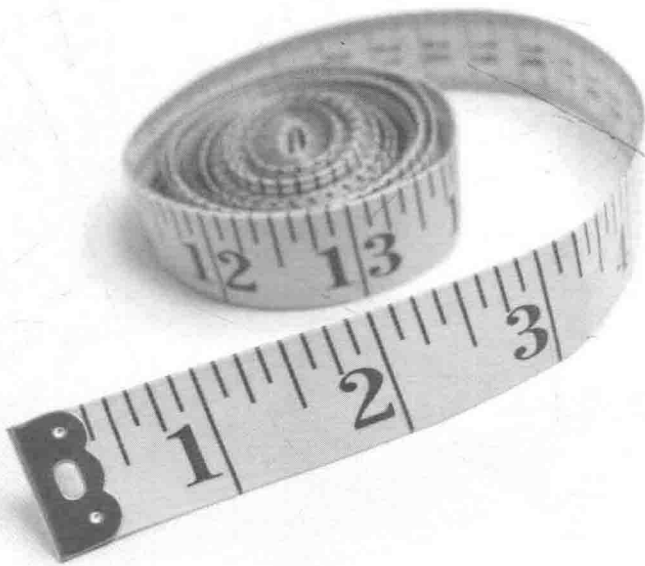
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PART ONE **Get Ready**



Chapter 1

Preparing for Success in Apparel Fitting and Alteration



What makes a fabulous fit? What is it about a person who is wearing a perfectly fitted dress or a crisply tailored suit that makes us sit up and take notice?

What we wear and how we look affects how we think, feel, and behave. It affects how others react to us.

When we wear perfectly fitted clothes,

- we think positively about ourselves and our bodies
- we feel more confident and at ease
- we act with greater competence and productivity
- we command respect

The clothes we wear reflect who we are. Clothes that are carefully chosen and well fitted can help us achieve our goals. The time and effort we put into finding well-fitted clothes are well invested. Everybody deserves a fabulous fit to empower and enable them in all they do—personally, socially, and professionally.

What does it take to achieve a fabulous fit? A positive attitude and a personal desire to accomplish an excellent custom fitting are keys to success. When coupled with dependable methods of selecting, fitting, adjusting the pattern, and altering clothing, a fabulous fit becomes possible (see Figure 1.1).



FIGURE 1.1 Well-fitted basic tailoring is the goal, achieved in this suiting by Max Mara.

THE FITTING PROCESS

Achieving a fabulous fit requires a lot of work. It is not just a matter of following a few rules or taking a few measurements. Fitting is a process, with a definite beginning and end. The classic fitting process is learned. It requires understanding and good judgment. Fitting expertise comes with knowledge backed up by experience. The more you do it, the better you get, as you educate your eye to recognize all of the necessary clues and cues. The fitting process does become familiar, and parts of it may even feel automatic at times, but again, that comes with knowledge and experience—with possible trial and error.

There are several things you can do to reduce the error part of this trial-and-error process. First, you can learn the elements of design and how these affect fit. You also need to become knowledgeable about standards used in evaluating clothing fit. Then, you can move through the following well-defined fitting process each time you approach a new project:

- Begin by assembling all the materials and tools you need, including the pattern.
- Evaluate the figure to be fitted; understand the body you will be fitting.
- Select and coordinate fashion styles to fit and flatter the body.
- Select the appropriate and most accommodating pattern size.
- Prepare the body, the tissue pattern, and/or the fabric for fitting.
- Fit by the measurement, pinned-pattern, or trial garment method.
- Adjust the pattern or alter the garment by the seam method, pivot method, or a newly corrected slash method.
- Construct the garment, evaluate, and refine to achieve a fabulous fit.

As you can see, an effective fitting process begins long before you make any adjustments to the pattern or alterations to the garment.

All of the steps in the fitting process are interrelated. It is essential to complete one task before moving on to the next; the success of each task affects the final fit. Any step that is done poorly, whether pattern style or size selection, fabric selection, or pattern or fabric handling, can set up a chain reaction that compounds the chance of poor fit in all succeeding steps.

Learning to fit is a never-ending lesson in recognizing figure and body types and how they change over time. There are countless variations in body shapes and sizes. Bodies vary from one individual to another, and for each individual as he or she moves from one life stage to the next. Many people are self-conscious about their bodies. Fashion and beauty articles regularly refer to figure “flaws” or “faults,” which contributes to the notion that there is shame in not having that supposed ideal figure. This is of course not true. In describing the wide array of body types, this text refers to “figure variations” or “body variations”—specifying individual areas on the body that vary from the average in a given population. For example, wider-than-average shoulders and shorter legs qualify as figure variations.

Learning to fit entails understanding how clothing style selection relates to figure variations, figure type, and fabric. As your understanding develops with time and experience, and as you refine your ability to accommodate and counterbalance, you will learn that there are more options for any figure type than you might have realized before. You will realize, however, that even the most beautiful fabric and color won’t make a garment look terrific if it doesn’t fit well.

Careful planning and preparation can go a long way toward creating a positive and productive fitting experience for you and your students or clients. A pleasant, well-equipped workspace and a professional attitude are two essentials. As you will see, attention to detail makes the difference (see Figure 1.2).

The following section describes how you can create a workspace that will set you up to achieve a fabulous fit.

THE FITTING AREA

It is important to keep the fitting area neat and well organized, with all tools put away when not in use. Other considerations include adequate space and appropriate decor, and good ventilation and lighting. Mirrors, chairs, racks, and work surfaces all play an important role in getting a proper fit.

Space and Decor

The fitting area must provide enough space to allow the person being fitted to walk several steps to and from the mirror, giving both of you a clear view of the whole garment. Adequate space allows you to check the fit from the back, front, and side while the body is in motion. Ideally, the room decor should be plain and in soft, neutral colors, so that the focus is not distracted from the garment being fitted.



FIGURE 1.2
Attention to detail in well-fitted, decorative costume clothing is achieved in this ensemble by Slava Zaitsev.

Ventilation

Proper ventilation is very important, especially when working with several individuals in the room. A supply of fresh circulating air helps prevent the person being fitted from feeling faint or nauseated when standing for long periods of time.

Lighting

Good lighting is essential for effective fitting. It can reveal fabric distortion and reduce visual strain. A source of light above or to the side of the mirror prevents glare and shadows.

Full-Length Mirror

A full-length mirror allows the person being fitted to observe the fitting process, make suggestions, and respond to questions (see Figure 1.3). The advantage of a full-length mirror over a smaller one is that it allows the effect to be evaluated on the total figure rather than on isolated areas only. When the budget allows, invest in a three-way mirror, which enables you and the person being fitted to observe the back, front, and side images simultaneously. Less expensive full-length mirrors that can be hung on the back of a door are readily available at most department and hardware stores. The person being fitted can then use a large handheld mirror, held over either shoulder, to see the fit from the back.



FIGURE 1.3 Fit to be seen.



FIGURE 1.4 An assistant facilitates the measurement process.

Work Surface

You will need a clean counter, table, or desk to work on. A fold-up cork or cardboard cutting board or table with a measurement grid imprinted on the surface would be ideal. These items are available from many fabric and sewing supply stores. A tray at a convenient standing height is useful for holding pins, pens, tape, and other small fitting tools you will use during the fitting process.

Chair

A chair allows you to observe both the figure and the garment when the person being fitted is seated. View the garment while the wearer sits in the usual positions appropriate for it. A chair also permits the fitter to sit while adjusting the fit of a skirt or pant and to see the fabric at eye level. It is easier for you, as the fitter, to recognize where change needs to be made in fabric position when you are looking straight ahead at the garment rather than looking down at it. Work progresses more quickly and with less strain on both you and the person being fitted.

Rack

It is useful to have a closet or rack close by for hanging cut fabric sections, garment units, or completed garments during fitting and construction. Wooden or padded hangers help retain the shape of garments. Cloth or plastic garment bags help keep the fabrics clean.

GET HELP

You cannot measure or fit yourself, by yourself. During the fitting process, the assistance of another person or two is

quite necessary, particularly for the beginner (see Figure 1.4). Choose an assistant—a fitting buddy—who can be available at pre-arranged times, is observant, objective, reliable in judgment, and interested in fitting. Two fitters are better than one—position one in front and one in back, one on the right side, one on the left—each analyzing what's happening. If at all possible, your assistant should also be knowledgeable about clothing construction processes. "Get a trusted friend or hire a professional to assist you," advises master fitter Lorraine Henry.

PERSONAL APPEARANCE

Personal cleanliness should be maintained at all times. When people must work closely together, breath, body, or foot odor can be offensive. Good grooming will exert a positive influence on the appearance of the garment you are fitting, setting yourself up to be more objective in your assessments.

Hairstyle

An attractive hairstyle adds to a positive self-image. Hair length, however, should not interfere with fitting. If your hair is shoulder length or longer, wear it in a style that holds it off your neck and shoulders. Apply your usual makeup. If you make your appearance as pleasing as possible, it contributes to a more positive fitting experience for all concerned.

Undergarments

Choose well-fitted undergarments. This is very important. Undergarments create a personal support system that will affect the look, feel, and fit of what goes over them. Even the finest clothes fit poorly and look out of shape—or make you look out of shape—if you wear them over undergarments that do not fit.

Well-fitted undergarments will minimize, not emphasize, figure variations; they will not create additional unnatural contours. They can comfortably lift, support, and control body areas, and improve fit.

To ensure that the undergarments fit properly, consider the effect of seams and elastic. They should not be visible through outer clothing. For fitting purposes, a waist-height panty and



✓ REALITY CHECK

Here are some more tips on selecting well-fitted undergarments:

- Overall fit should be comfortably close to the body and smooth, without binding or constriction of any sort. Elastic, bands, and straps should not cut into the body or create bulges.
- Straps and openings should allow for adjustment.
- Waist areas should allow for expansion as you move or sit down.
- Undergarments should stay in place at all times—never ride up or slide down.

one-piece slip are recommended. If bikini or hipline briefs are worn, the elastic should be soft, smooth, and wide enough to prevent a depression and bulge across the hips.

Sales personnel in many lingerie departments and specialty stores are trained to help customers choose well-fitted undergarments.

For each step in the fitting process, it is essential to wear the style of undergarments that will be worn with the finished garment. Keeping this consistent each time will help to avoid unnecessary changes in darts, waistline position, and the amount of ease needed. Certain clothing styles demand specific types of undergarments—for example, a straight or flared slip, half or full slip, strapless or long-line bra, camisole, control-top pantyhose, and so on.

Shoes

Wear shoes in the style that will be worn with the garment being fitted. The shoes should be comfortable and allow the client to stand for fairly long periods of time during fitting. Wearing shoes of the heel height and style to be worn with the finished garment help to establish pleasing garment proportions and contribute to the overall harmony between the garment and figure.

Shoe style and heel height influence the fit, hang, and attractiveness of clothes. Very often, an inch or two of heel height is just what is needed to visually lengthen the leg for better proportion and overall balance. A tapered wedge can often give needed height along with the comfort of a flat. Heavy, chunky shoes seldom flatter a skirted leg. These look better when worn with pants. T-strap shoes are for slim legs and ankles only.

FITTING TOOLS AND MATERIALS

Assemble your tools, ready to use. Quality tools facilitate a fabulous fit.

Measuring Tools

Measuring tools are needed to locate and define the points from which measurements originate and terminate. Achieving a fabulous fit depends on accurate measuring throughout the entire fitting process. Investing in quality tools will facilitate accuracy in measuring and layout.

- **Measuring tape:** The best measuring tapes are made of fiberglass or cloth specifically treated to prevent stretching, tearing, and wrinkling. Roll the tape in a slightly loose coil and store it on its edge. The new interlocking Two Easy Tape with its Inseam Companion Tape (see Figure 1.5) offers measurement options not previously available. The set of tapes is designed to measure both the inseam and crotch length from a secure point of reference.

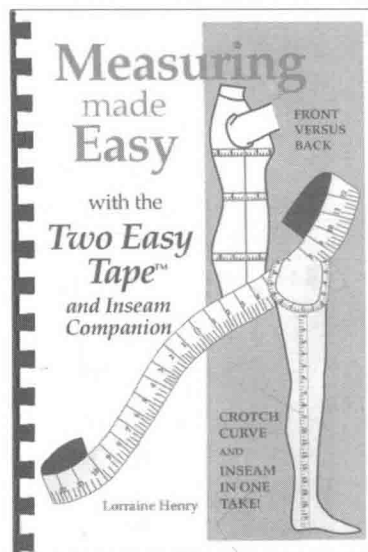


FIGURE 1.5 Measuring just got easier!

- **Flexible ruler:** A clear, plastic ruler allows you to see pattern details through it. The flexibility allows you to use the ruler in a curved shape, standing on its edge. A grid ruler facilitates grain analysis as well as measuring.
- **Seam gauge:** Use this small, adjustable tool to measure short distances while fitting and during garment construction. Store it flat and do not bend it.
- **Yardstick:** Made of smooth metal or waxed hardwood, a yardstick is best for measuring or marking long, straight lines. It should be stored flat or hanging to prevent warping.
- **French curves:** These tools are not essential, but they can be helpful for perfecting curved lines on the pattern.
- **Flexible curve:** This rubber-coated metal wire can be hand-shaped to any body curve. It is particularly effective in repeating the shape of the crotch curve for work in fitting pants.
- **Elastic:** Narrow elastic works well to define body break-points and stays in place. Other options include twill tape or grosgrain ribbon.
- **Necklace or drapery cord:** An optional item, this short, thin necklace chain or cord can be used to define the width of the front neckline and position of the back neckline.
- **Hem marker:** This is an optional item for use on bias-cut skirts.
- **Measurement chart:** A chart allows you to record measurements in an orderly format (see Chapters 8, 9, and 10).

Marking Tools

Marking tools are needed to identify points and levels on the body and to transfer pattern markings to the fabric. A well-stocked workroom will include the following items:

- **Masking tape:** This can be used to mark body break-points.

- **Narrow fineline tape:** Use this narrow tape to mark and blend seamlines. It is generally available wherever automobile paint and accessories are sold.
- **Narrow elastic:** Purchase enough to wrap around the body five times. It is used to mark various levels on the body.
- **Fitting bands:** Create these by cutting 1 inch-wide strips of firmly woven fabric to secure a pattern for pin-fitting. Leftover scraps of muslin or gingham will do nicely.
- **Marking pen:** A marking pen with washable ink may be used on the body and on fabrics that will not water-spot when washed. On the body only, a typical eyebrow pencil also works well.
- **Pencil:** A pencil with medium-soft black lead marks clearly on paper for most purposes.
- **Markers:** Select clay or wax markers in pencil or brick form. White or light blue are less likely to stain. Bar soap, worn to a narrow edge, is another option for marking.
- **Tracing wheel:** This is used to transfer markings for seam, dart, and trim lines from pattern to fabric.
- **Tracing paper:** This is used with a tracing wheel to transfer markings. Choose white or a color lighter than the fabric. It is essential for marking seamlines on multi-size patterns.
- **Pattern:** Depending on your goals, purchase a basic fitting pattern or a fashion pattern. (We discuss different types of patterns below.)
- **Tissue paper:** Use lightweight tissue paper to fill in needed length or width on an adjusted pattern. Heavier-weight pattern paper is too stiff to pin-fit. It is smart to trace the pattern onto tissue and use that in the fitting process. Tissue paper is generally available where gift wrap is sold. You can also find special grid-marked tissue paper, such as McCall's Perfect Pattern Paper, at fabric and sewing supply stores. It can simplify the measuring process.
- **Medical-purpose paper:** Some fitters like to use medium-weight, matte-finish medical-purpose paper, available at medical supply stores, to back and reinforce the tissue pattern during pin-fitting and to increase the longevity of the pattern. The use of this paper is a matter of preference based on experience. Choose the wider width, at least 20 to 21 inches wide. It is excellent for making additional copies of the pattern for adjustment purposes.
- **Fusible interfacing:** The use of this item is optional and even a bit controversial, but it is useful for long-term pattern use. When fused to the back side of a pattern, lightweight fusible interfacing, or similar material, can reinforce an unadjusted pattern during fitting. A medium-weight interfacing should be used to reinforce an adjusted paper pattern. Pellon Tru-Grid works well.
- **Scotch Brand Magic Tape (green box):** Use this translucent tape to reinforce curved edges on the pattern prior to pin-fitting.
- **Scotch Brand Magic Plus Removable Transparent Tape (blue box):** Use this easily removable tape to secure seams or areas needing change during fitting and alteration.
- **Tape dispenser:** A weighted tape dispenser aids in efficiency, allowing you to pull tape and cut it with one hand.
- **Half-scale practice patterns:** Highly recommended, these small patterns are invaluable to the process of learning to adjust patterns

Cutting Tools

Choose high-quality cutting tools with sharp edges to safeguard patterns and fashion fabric. Select these tools in a weight and size comfortable for your hand and compatible with the fabric weight.

- **Shears:** Use larger, heavier-weight shears on fabric only; they should not be used to cut paper or other materials as this will dull them quickly.
- **Scissors:** Use lighter-weight scissors with long blades for paper, and smaller scissors for snipping fabric or cutting thread during garment construction.
- **Rotary cutter:** Anyone who has used a rotary cutter for trimming patterns and cutting out patterns on fabric is unlikely to go back to using scissors. This tool helps to make cutting more accurate because the fabric is not lifted off the cutting surface. It is particularly well suited to cutting on the bias.
- **Clippers:** Use these for snipping threads and seam stitches during garment construction.
- **Seam ripper:** This is an essential item to aid in fast removal of unwanted stitching. Seam rippers are available in different sizes. They are sharply pointed and must be stored with the cap on.

Pattern Fitting and Adjustment Tools

Pattern fitting and adjustment tools make it easier to adjust the patterns and practice pattern alteration.

(see Figure 1.6). You can practice an alteration on the appropriate, easy-to-handle, half-scale sized pattern before you cut into your expensive, full-scale fashion pattern. (Quarter-scale patterns are also available, but experience has shown that these are usually too small to easily learn with.)

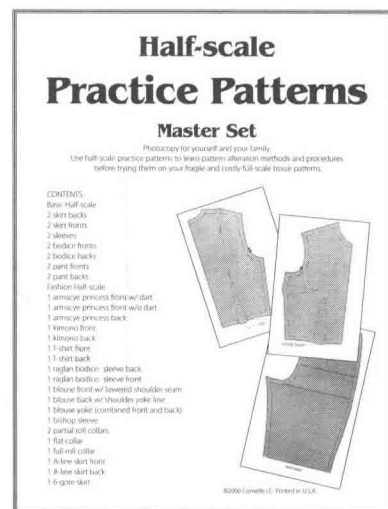


FIGURE 1.6 Half-scale practice patterns facilitate learning how to alter a pattern.

Sewing Tools

The fitting process entails very little actual sewing, so few sewing tools are needed. Basting may be all you need to be prepared for.

- **Sewing machine:** A basic, well-maintained machine is all you really need. Be sure to test your selection before you buy.
- **Fabric:** Use muslin or gingham as appropriate for the basic trial fitting garment. Use fashion fabric appropriate for the fashion garment you are fitting. For example, when making a trial fashion garment, use a muslin weight similar to your fashion fabric.
- **Needles:** Have a variety of lengths of needles, short to long, for short stitching or long basting stitches. Select needle size relative to the texture and weight of the fabric you are working with. Store these separately from pins.
- **Thread:** When working with fitting fabric, use thread in a contrasting color; when working with fashion fabric, use thread in a matching color. Choose an appropriate quality for fitting or fashion fabric.
- **Straight pins:** Select extra-fine steel dressmaker pins with colored glass or plastic heads; the advantage of glass is that it doesn't melt during pressing. Longer quilting pins are not recommended since they are heavier and more likely to leave holes or tears in the tissue pattern. Store pins in a pincushion or hard case.
- **Pincushion:** Bag, wrist, and magnetic pin holders are available and useful.
- **Thimble:** A closed dressmaker's thimble, an open-ended tailor's thimble, and leather thimbles are available. Select one according to third-finger size, preference, and ease in handling.

Pressing Tools

Specialized tools are not needed during the fitting process, and the finishing touches often require only an iron and an ironing board.

- **Ironing board:** Purchase a standard ironing board, one that can be adjusted to your height.
- **Iron:** You need only a basic iron with dry and steam settings, and variable heat settings that can be adjusted according to the fabric. Use a dry iron on paper pattern and fitting fabric that has not been pre-shrunk.

THE PATTERN

Patterns continue to be one of the best buys available when you consider the engineering that is involved in creating them, and the information and direction they provide.

The front of a pattern envelope presents an illustration or photograph of the finished garment to be made using the

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Select the pattern 1) according to purpose; 2) in a fashion style that will most easily accommodate the body, taking figure type into consideration; 3) in a size corresponding to the high bust circumference or full bust circumference depending on bust size, and waist or hip circumference depending on skirt or pant style.

pattern. Commonly, this is a line illustration of a fashion figure that is lengthened in the torso and the leg. It is important to understand that this image does not represent the average body, and that the buyer should not compare herself to such an unrealistic figure. If a photographed figure is included, that should be the focus, since it is a more realistic representation of the style. Additional line drawings with styling cues are printed on the back of the pattern envelope.

We All Have Figure Variations

Begin to think seriously about figure type, clothing style, and pattern size by considering fitting problems concerning height, shoulders or bust size, waist, abdomen, or hip curve, or something else. We tend to be unkind to ourselves when considering our bodies, focusing on figure "faults" and "flaws." It is important to understand that, despite the unrealistic advertising images we are all exposed to, there is no one ideal body type to which we should all aspire. It is time to change the way we talk about ourselves and others.

Modern Feminine Figures

How times have changed! While women in the 1950s were accustomed to wearing form-fitting foundation garments, women in the 1970s quit wearing most of them. A girdle is the last thing a woman at the end of the 1990s would have considered wearing, yet a few years later we have a growing market for "body shapers," supposedly more comfortable one-piece elasticized undergarments intended to firm up the figure.

Women in the 1950s frowned on wearing padded bras; however, most women in the new millennium are wearing padded and push-up bras, which is not surprising given the number of women with larger bust measurements than women of previous generations. Research reveals that post-modern feminine figures are not much different from

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Remember this—there are no such things as figure flaws, faults, liabilities, deformities, or abnormalities! What we all have are figure variations—variations from whatever is the average in a given population. It is important to avoid such negative words as "flaws" and "faults," which contribute to needless and unhealthy feelings of anxiety and low self-esteem. We need to speak kindly to ourselves and to others. Use more positive "self talk." There are no figure flaws or figure problems—only predictable fitting issues that, together, we can solve.