



Clothing Quality Standards



Extension Family Development
and Resource Management Specialists

Clothing construction is a creative skill; it can become an art with time, practice, and the ability to make wise sewing decisions. Many techniques can be used to produce the same end result. The technique chosen should be compatible with the garment style, the fabric, the sewing equipment available, and the individual's skill.

Changing trends in sewing equipment and fabrics can influence the techniques that are appropriate for creating garments. Time-saving construction methods are in tune with busy lifestyles and, when used appropriately, can result in high-quality garments. Even though fabrics and sewing techniques may change, quality standards do not. Garments worn often should be of higher quality than those seldom worn. Only you can decide what quality, price and wearability you want for a particular garment. In general, a high-quality garment looks professionally made, holds up through wear and care, fits well, and is becoming to the individual.

The following quality standards apply to the general appearance and construction of home-sewn garments.

Appearance Standards

Fabric, trim and construction techniques must work together to create a professional-looking garment. The fabric should have the correct weight and drape for the design. Finishing details should complement the fabric and the garment.

The garment should look attractive, even and appropriate, both on and off the body. The garment fit should be becoming and reflect current fashion trends. Construction techniques should not be obvious nor distract from the total garment.

Fabric Coordination and Selection

Fabric(s) should:

- Be suited to the pattern design. (Read the pattern envelope for information concerning one-way designs, napped fabric, knits, etc. Inexperienced sewers should use the fabrics recommended on the pattern envelope.)
- Have the same care characteristics or be easily removed for laundering/dry-cleaning. (This applies to trims also.)
- Be flattering to the personal characteristics, style and coloring of the individual.
- Coordinate with one another in terms of design, color, weight and texture.
- Have balanced grain. (In woven fabrics the lengthwise and crosswise threads will be at right angles unless cut on the bias. In knit fabrics the courses and ribs will be at right angles.)
- Have a fiber content and texture suited to apparel design.
- Have a design that is matched, centered or balanced.
- Be used so that the nap runs in the same direction on all parts of a garment.

Fabric Preparation

Fabrics properly prepared should be:

- Preshrunk (laundered or dry-cleaned) using the recommended method of care, including inner fabrics.
- “Thread perfect,” with lengthwise and crosswise threads at right angles to one another. To determine this, pull a thread on woven fabrics and cut along a wale or course on knits.
- Made “piece perfect,” with lengthwise and crosswise ends at right angles, if at all possible.

Fit

A properly fitted garment should:

- Be fashionable and have an attractive fit. The amount of ease and fullness changes from year to year according to fashion trends.
- Fit smoothly over undergarments.
- Have the appropriate amount of ease for body movement.

- Have proper waistline length and fit.
- Have darts and design details that are properly placed.
- Have correct and properly placed shoulder length unless the design dictates otherwise.
- Have neckline and armholes that fit the body without gapping or straining.
- Have skirt or pant length appropriate for the style and individual.
- Have sleeve fullness and length appropriate for the style and individual.
- Hang straight and parallel.

Construction Standards

There are many sewing techniques that can be used. We each have techniques we prefer—and some that we don't. Some standards apply to almost all techniques. For example, almost all construction techniques should result in a finish or detail that is inconspicuous, functional and durable.

Armholes and Neckline Facings

Well-constructed armholes and necklines should:

- Fit smoothly. Neither the neckline seam nor the facing should show from the outside of the finished garment (unless it is designed to be stitched to the outside as a decorative, functional piece).
- Be the same shape and grain as the edge to be faced (usually 2½ to 3 inches wide and even in width throughout).
- Be flat, smooth and free from bulk.
- Have appropriately finished outside edges (according to fabric type/weight) to prevent raveling.
- Be securely held in place by understitching and tacking at seams or by top stitching. A professional looking facing will never be hand stitched all the way around the outside edge of the facing.
- Be interfaced to prevent stretching and sagging, to cushion the enclosed seam, to reinforce the area, to support the facing and garment, and to provide shape.

Buttons and Buttonholes

Well-constructed buttons should:

- Fit the purpose to which they are intended—functional or decorative.
- Be neat in appearance on the right and wrong sides of the garment.
- Be securely fastened with double thread and neat stitches.
- Have a shank (thread or part of the button) to accommodate the thickness of the fabric it will button through.
- Be reinforced, according to use and fabric type, with interfacing and/or another button.
- Be spaced in good proportion between top and bottom opening and in relation to the other buttons.
- Be placed in relation to the buttonhole on the center line or lap line. The placket should be smooth and flat so there is no gaping or pulling when buttons are secured in buttonholes.
- Be the appropriate size and style for the garment design and fabric.
- Have no rough edges.
- Be smooth when covered with fabric and have no “shine” or off-color visible from the base.

Well-constructed buttonholes should be:

- Neat in appearance on the right and wrong sides of the garment.
- Flat and attractive.
- Made with the grain of the fabric unless a bias-cut garment or unusual design dictates otherwise.
- An equal distance apart, unless spaced for special design effects.
- An even distance from the garment edge and aligned with the center line or lap line.
- Sized in relation to the button size and thickness.
- Applied to an area that has been properly interfaced.
- The same length and width when the same size/shape button has been used.
- Spaced according to the size of the button and garment design/function. Buttons and buttonholes should hold a garment securely closed without strain or stress.

- Positioned so that the button can be secured and will ride slightly toward the garment edge in a horizontal buttonhole and toward the top in a vertical buttonhole.
- Neatly slashed and unsightly threads removed.
- Made with secure stitching and have uniform “lips.”

Casing

A well-formed casing should:

- Be flat, uniform and of even width.
- Have a row of stitching at the top (head) and lower edge of the casing.
- Be slightly wider than the elastic drawstring.

Collar

A well-applied collar should:

- Be smooth and free from wrinkles. The outer edge seam should not be visible from the right side.
- Have smooth curves or sharp points (the same shape and length) depending on the type and style of collar.
- Have bulk properly distributed through grading/layering, notching, clipping and/or trimming.
- Fit the neckline area without unsightly gaps or wrinkles.
- Be interfaced properly to maintain shape.
- Be understitched on the outer seam edge to roll under the seam.
- Be well pressed.

Darts, Ease, Gathers, Pleats, Shirring, Tucks

A well-constructed fitting dart should:

- Be directed toward the body curve.
- Usually end ½ to 1 inch from the fullest part of the body curve.
- Be tapered so it is smooth and free of puckers.
- Be even and smooth in appearance.
- Be pressed before being crossed by another line of stitching.
- Have threads secured at both ends by tying a knot, lock stitching or back-stitching (use only on medium to heavy fabric or in a seam line).

Well-constructed gathers, pleats, shirring and tucks should:

- Be distributed evenly and/or in accordance with the garment design.
- Be even and smooth in appearance.
- Hang straight without pulling.
- Have ease for comfort but appear as a straight silhouette (pleats).
- Provide relaxed but defined fullness. They may be used in place of gathers or fitting darts (tucks).

Fasteners (Hooks and Eyes, Snaps, Self-Gripping)

Well-constructed, well-applied fasteners should be:

- Appropriate for the garment design and fabric being used.
- Applied to an area that has been reinforced with interfacing.
- Secured so that stitches do not show on the right side of the garment/fabric.
- Appropriately placed so edges are held together smoothly and evenly.
- Used appropriately. Use a straight eye when edges lap, round eye when edges meet, hooks and eyes for strain openings, and snaps for areas with little stress. The ball side of a snap and the loop side of a self-gripping fastener are placed on the overlap side.

Hand Stitching

A well-made hand stitch will:

- Be composed of a thread type, weight/thickness and color suitable to the situation for which it is used. Buttonhole twist is used for hand-worked buttonholes and can be used for sewing on buttons and for top stitching. Heavier and decorative threads, such as embroidery and metallic, can be used for decorative stitching. Use the same color, or slightly darker, when permanently stitching.
- Have a uniform stitch formation that is appropriate to the fabric and garment for which it is used.
- Have thread ends appropriately secured at the beginning and ending of the stitching. If a knot is used in permanent stitching, it should be out of sight against an inside layer of fabric.

- Usually use a single thread for hand-worked hems and basting and a double thread to secure hook and eyes, snaps and buttons, and to tack seams.
- Be neat and well formed, appropriately spaced, and secured with no thread ends showing or unsightly thread “mess” visible.
- Be invisible on the right side when hemming or tacking seams.

Hems

A well-made hem should:

- Be inconspicuous on the right side, except when it is a decorative part of the garment design.
- Be an appropriate distance from the floor.
- Be even in width and an appropriate depth for the fabric and garment design.
- Be free from bulk in seams that fall within the hem area.
- Have fullness eased in and evenly distributed for a smooth, flat appearance.
- Have an edge appropriately finished for the type and weight of fabric and hem stitch to be used.
- Be firmly secured with a hem stitch appropriate for the fabric and the hem edge finish.
- Be neat with evenly spaced hand stitches ½ inch apart and with about ⅛ inch give (or have even machine stitching).
- Be lightly pressed.

Interfacing

A suitable, well-applied interfacing should:

- Be appropriate for the outer fabric’s fiber content, care and construction type (knit, woven, non-woven) and for the manner in which it is applied (sew-in versus fusible). Interfacing fabrics range from commercially designed fabrics to self-fabric.
- Be, or have, the same “grain” or “give” as the outer fabric with which it is used.
- Coordinate in color as closely as possible. Use a light color with light-colored fashion fabrics and dark with dark.
- Provide the appropriate support or reinforcement needed to improve the shape of the garment or area. Interfacing is used in the appropriate locations in a garment.

- Not alter the color or hand of the outer fabric. If an appropriate weight cannot be found, it is best to use a lighter interfacing than a heavier one.
- Appear flat and smooth with no bubbles, wrinkles or folds.
- Not be visible or noticeable from the outside/ right side of the garment.
- Suit the design, so it may vary in type and weight within the same garment. Multiple types and weights of interfacing could be used depending on the area and function.

Markings

Markings should:

- Be appropriate for the fabric.
- Not show on the right side of the fabric.
- Not leave holes or discoloration in the fabric.

Machine Stitching

A well-made stitch will:

- Use a thread type and needle size appropriate to the fabric and situation for which it is used. Generally, the finer the fabric, the finer the needle and thread. (Thread expands to or takes up the entire area created by the needle.) There should be no excessive holes created by the needle.
- Be a controlled, consistent length appropriate to the fabric and situation for which it is used. As a general rule, the heavier the fabric, the longer the stitch; the lighter weight the fabric, the shorter the stitch. Within this rule adjustments are made according to fabric texture and structure.
- Have equally balanced top and bottom threads that look the same on both sides of the fabric (appropriate thread tension).
- Be the type of stitching (regular sewing machine or overcast/serger) or stitch pattern (standard or decorative) appropriate to the fabric and situation for which it is used.
- Be appropriately secured at the beginning and end of the line of stitching.
- Be spaced an appropriate distance from the edge of the fabric according to the function of the stitching.
- Be neat, straight, and fit the purpose for which it was done (functional or decorative).

Pressing

A well-pressed garment should:

- Maintain the original texture of the fabric.
- Show no shine or press marks on the right side of the fabric.
- Have no wrinkles or crinkled areas.
- Have seams and darts pressed smoothly on the stitching line, so that the fabric does not fold over the stitching line or look bubbled. Edges of seam allowances and fold edges of darts do not form ridges on the right side of the garment.
- Have no water-spot or steam marks.
- Help create and maintain the proper shape and curve to the garment and the various garment segments (collar, sleeve, etc.).

Seams, Seam Finishes, Seam Treatments

A well-constructed seam should:

- Be smooth and even in appearance on the inside and outside of garment. Machine tension, stitch length and presser foot pressure are properly adjusted to suit the fabric and thread.
- Be even in width throughout.
- Be secure.
- Be pressed open (and with no puckers) or pressed properly according to the type of seam it is and the way it is used in garment construction.
- Be stitched with thread appropriate to the fabric type, fabric content and color. (Thread color should match or be slightly darker than the fabric.)
- Have consistent stitch length.
- Be flat and trimmed and/or graded, if needed, to reduce bulk.
- Match fabric designs such as plaids and stripes.

A well-applied seam finish:

- Is appropriate to the type and weight of fabric.
- Is smooth and neat in appearance inside and out.
- Does not create excess bulk.
- Is not visible from the right side of the garment.
- Is even in width throughout.
- Uses understitching to “roll under” an enclosed seam and is not visible on the right side.
- Uses reinforcement stitches on areas of stress.

Sleeves

A well-constructed and correctly fitted set-in sleeve should:

- Have a smooth, rounded cap with no pleats or gathers unless they are a garment design feature.
- Be applied so that there is ease in the underarm area and in the sleeve cap area.
- Have a good armhole line resulting from straight, even stitching, and well-matched seam lines that conform to the body.
- Have a crosswise grain parallel to the floor, a lengthwise grain perpendicular to the floor, and no diagonal wrinkles.
- Have evenly distributed gathers in gathered set-in sleeves.
- Have seams finished appropriately for the fabric.
- Be comfortable with no binding.

A well-constructed shirt sleeve should:

- Be correctly positioned on the body.
- Be shaped properly and on-grain.
- Not have gathers or puckers.

A well-constructed sleeveless garment should:

- Hug the body without binding.
- Fit the curve of the arm accurately.
- Have a facing seam that is graded, understitched, free from bulk, smooth and flat.
- Have the facing tacked loosely at seams.
- Be $\frac{1}{2}$ inch from the underarm.

Topstitching

Topstitching should:

- Be a straight line or smooth curve, whichever is appropriate.
- Have stitch length (usually longer) and tension (usually looser on top) appropriate for the fabric.
- Have the ends of the stitching pulled to the wrong side to secure appropriately.

Waistband

A well-constructed waistband should:

- Be smooth, flat, and free from bulk and wrinkles.
- Be even in width according to the garment style.
- Be on-grain and reinforced or interfaced to maintain shape.
- Have underlap under the waistband and extend beyond the placket unless the pattern indicates differently; overlap should be even with the placket unless the pattern indicates differently.
- Have the skirt or pants eased slightly on the waistband.
- Have square corners at the ends of the waistband.
- Be securely stitched with smooth, even stitching.
- Have appropriate fasteners that are properly located and secured in place.

Zippers and Zipper Plackets

A well-constructed zipper placket and well-applied zipper should:

- Be flat when closed and neat in appearance. The zipper should lie smooth without stretching or puckering of the fabric.
- Have smooth, even stitches, evenly spaced from the placket edge.
- Have stitching across the bottom opening $\frac{1}{8}$ inch beyond the zipper stop.
- Have thread ends secured and hidden in folds of fabric so that they will not be caught in the zipper teeth.
- Be a weight compatible with the fabric (light with light, heavy with heavy).
- Have seam lines matching, if the zipper crosses a seam.
- Have matching fabric design, if needed, such as stripes and plaids.

A well-constructed zipper placket should:

- Be properly prepared and pressed before the zipper is inserted.
- Be sized to the zipper length.
- Leave $\frac{1}{4}$ inch at the top of a neckline zipper for a fastener.
- Be the same length on both sides.

A zipper should be:

- Suited in terms of weight, size and length to the garment design, the fabric and the opening location on the garment. Its color should match or coordinate with the fabric color.
- Concealed beneath the edge of a placket overlap from top to bottom.
- Positioned to fit the placket opening. The placket should open to the end of the zipper teeth and close at the top of the zipper. (There should not be a "hole" above a skirt/pant or neckline zipper placement.)

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