Selection & Sewing Tips for Fleece Fabric

One of the hottest items to hit the fashion scene in recent seasons has been fleece. What began as a trademarked fabric by Malden Mills in 1979, (Polarfleece®), the word polarfleece has become a household term among sewers. In today’s world, polarfleece fabric is marketed under a number of different trade names including Polarfleece®, Polartec®, Tundra Fleece™, Yukon™ ECO Fleece, and Arctic Fleece™. Some of these fabrics are actually made all or in part from recycled plastic soda bottles. Regardless of their origins, fleece fabrics are characterized by a deep pile texture, made into a knit fabric structure. Polarfleece may be further defined and described as “a type of high quality, double-sided, napped polyester fleece.”

Fabric Characteristics

There are a number of fleece and fleece-like fabrics on the market. Since 1979, a great deal of research and development has taken place to provide a variety of fleece types and weights. All fleece fabrics have some common characteristics. However, various types may emphasize or focus on certain ones and introduce others.

Common properties:
- provides warmth will being extremely lightweight
- has breath ability, allowing body perspiration to escape (wick) to the outside to be evaporated
- maintains insulative/warmth properties even when wet
- completely washable
- machine dryable on low heat; no ironing.

Other qualities that are introduced in some brands include antimicrobial finish, non-pilling, fleece that is laminated with a waterproof and windproof breathable lining, thin and thick pile, and a wide variety of surface textures. Some companies actually feature a fashion-apparel fabric line as well as an outdoor-enthusiast line geared toward serious climate considerations.

Fiber content is generally 100 percent polyester. However, it may contain other fibers such as Lycra® spandex, rayon, cotton, or wool.

1Nancy Cornwell, Adventures with Polarfleece®: A Sewing Expedition, Krause Publications, Iola, WI, 1997; pg. 15
fleece. Denser fleece indicates higher quality. Check the **recovery** of the fleece by stretching it and letting it relax. High quality fleece has quicker recovery. Check the **durability** of the fleece by rubbing it against itself in a circular motion. Pilling is when little balls of fiber form on the surface of the fabric caused by wear and surface contact or abrasion. Fabrics made of manufactured fibers such as polyester may appear to pill more than fabrics made from natural fibers such as wool. In reality, pilling is often the same. The pills on natural-fiber fabrics break off more easily than pills on manufactured-fiber fabrics. Some fleece pills more than others. Better-quality fleece is less likely to pill because they go through multiple shearing and velouring processes. *Price can be an indicator of quality.*

**Sewing Techniques**

- Select a simple pattern with few design features. Loose-fitting styles work best. Eliminate as many seams as possible as bulk is your greatest challenge. Consider a custom closure such as a separating zipper, buttons/toggles and loops, or heavy-duty grippers instead of buttons and buttonholes.

- Use a “with nap” layout view. Whenever possible, eliminate the underside of collars and cuffs, etc.; or use a coordinating cotton or cotton/polyester fabric instead of double thickness of fleece. Polyester lining fabric is great for the back/underside of pockets. Eliminate facing seams or the facing itself.

- Pattern weights are a good solution to thick fabric when laying out pattern for cutting. Dressmakers’ pins can get lost in deep pile. Long quilter’s pins work well. To cut, use very sharp shears that are in good condition. Cut with long, smooth strokes. Remove the lint from shears with alcohol and a damp cloth.

- If both sides of the fabric look the same, mark the right side along a seam allowance edge, with a small piece of tape. Use standard 5/8-inch seam allowances.

- Either a sewing machine or serger can be used. When using a **sewing machine;** select a size 12(80) Universal needle, for sewing most fleece fabrics. Set machine for a long stitch (8 to 10 stitches per inch). A straight stitch or narrow zigzag works best. It is often helpful to decrease the presser foot pressure if possible. If fleece is very thick, it may be helpful to set pressure foot onto seam allowance about ¼ inch and start stitching. It can also be helpful to hold fabric taut as you sew.

  For **serger;** select a wide 3- or 4-thread stitch. The use of a 4-thread stitch compacts the fleece for less bulk. Use a longer than usual stitch length of 3 to 3.5mm. Reduce presser foot pressure. It may be helpful to hold fabric taut as you sew.

- Fleece does not ravel; therefore, there is no need for a seam finish or edge finish. A mock flat-fell seam is a neat option. Other good options are double stitched together and trimmed, zigzagged together and trimmed, and top stitched seams.

- If darts are used, slash open and trim if necessary. Finger press flat.

- NEVER press with a hot iron as it will melt the fleece fibers. Finger press whenever possible. If
design needs it, a fusible interfacing can be used and applied with a damp press cloth, using moderate iron and steam settings.

Exposed zippers are used frequently in vests, jackets, and coats. Choose a coordinating or contrasting color. If you cannot find the exact length you need, purchase a longer one and shorten it. To shorter, cut off the excess at the top, not the bottom. When applying the zipper, avoid stretching the edges. Consider stabilizing fleece edges and holding the zipper in place at the same time by using wash-away basting tape.

Conventional type hems are generally too bulky. Consider finishing edges with ribbing or contrasting binding made from a two-way stretch fabric such as bathing suit knit.

Other finishes include:
- a hand blanket stitch using yarn
- blanket stitch on serger using a 3-thread flatlock stitch and loosening the needle thread tension (or removing thread from tension entirely)
- a flat hem (turned up, no edge finish) with single, multiple, or decorative row(s) of top stitching.

On sleeveless items; armhole edges can be turned under and top stitched or serged, turned under, and top stitched.

If a drawstring casing is needed for a hood or waistline, use machine-sewn eyelets. They seem to work better than metal grommets which can pull out easily in soft fleece.

Don't be afraid to try decorative machine stitching to stylize a garment. Stabilize area with tear-away or wash-away stabilizer before stitching. Practice stitches on scraps before using them on garment to get the effect. Ripping is not easy or recommended on fleece.

There are a number of specialized sewing references for working with fleece. Some of these include, but are not limited to:

- *Adventures with Polarfleece® A Sewing Expedition*, Nancy Cornwell
- *More Adventures with Polarfleece®,* Nancy Cornwell
- *Polarfleece® Pizzazz*, Ruthann Spiegelhoff
- *More Polarfleece® Pizzazz*, Ruthann Spiegelhoff
- *Knit Trends Booklet and Video*, Nancy Zieman, President of Nancy's Notions

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