



# Wool

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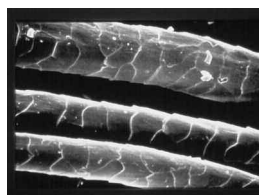
Warm and wonderful wool is nice to wear and easy to cut and sew. It's also one of the oldest known fibers, dating back to 4000 B.C. in ancient Mesopotamia and Babylonia. Today, wool is widely available and considered one of the most versatile fabrics. It's available in a wide range of weaves, blends, weights, textures and grades.

## What is Wool?

Wool is derived from the fleece of many sheep breeds, each offering unique characteristics. It's a protein fiber like human hair, and has three layers responsible for wool's appealing attributes. The outer layer, called the epidermis, is made of overlapping scales with a coating that creates the ability to repel liquid, but absorb and evaporate moisture. The center (cortex) is comprised of long flat cells responsible for the fiber's natural crimp and elasticity, resulting in its inherent ability to resist wrinkles; higher quality fibers have more crimp than those of lesser quality. The innermost layer (medulla) varies in size and determines the fiber diameter; if it's fine, the fiber will be easy to spin and dye. A thick medulla results in a coarse fiber that is stiffer.



*Fiber crimp makes for fuzzy wool fabrics.*



*Microscopic view of wool fibers.*

*Photos courtesy of American Sheep Industry*

After sheep are sheared, the fleece is graded and sorted by length, fineness and color. Longer fibers are used for worsted yarns and shorter fibers are for woolen yarns. After sorting, the fibers are cleaned and may be dyed, but they can also be dyed after spinning or weaving. The wool is then carded—a process that separates the fibers into a smooth, fine web twisted to make roving. For smoother worsted fabrics, the roving is combed to remove shorter

fibers. Woolen and worsted roving are both then spun into strands that are twisted into yarn.

## Woolen vs. Worsted

**Woolen fabrics.** Made from shorter fibers, yarns used for woolens are fuzzier, thicker and weaker than worsted yarns and are spun with a low to medium twist. They are used to make heavier fabrics with a slightly fuzzy surface, such as coatings, tweeds and flannels and are ideal for jackets, coats, skirts, blankets and rugs. Woolen fabrics are usually less expensive, more durable and felt more easily than worsted wool fabrics. They also hide stains better and are ideal for beginning sewers as stitching irregularities are more easily hidden in the fabric thickness.

**Worsted wool fabrics.** Made from longer fibers, worsted yarns yield fabrics that are smoother, lighter weight, stronger and faster drying than woolen fabrics. Worsted wool fabrics such as gabardine, suitings, twills and crepe are ideal for making suits, pants, dresses and upholstery fabrics. Worsted fabrics hold creases well and resist sagging.

## Wonderful Wool Characteristics

- Wicks moisture away from the body and evaporates it into the air.
- Water-resistant and repels light rain or snow.
- Insulates and keeps body heat in.
- Durable, resilient and resists abrasion and tearing, making it wear well and retain its shape. Adding a lining also helps retain shape.
- Resists wrinkling. Wrinkles more and is weaker when wet. Wrinkles are easily removed with steam.

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- High-quality wools are less likely to feel scratchy when worn.
- Dyes easily and resists fading, but may fade in direct sunlight.
- Resists stains and cleans well. Because it shrinks and felts when exposed to heat and agitation, dry-cleaning is best unless the fabric is labeled “washable wool.”
- Shapes easily with steam, making it easy to ease seams without puckering and shape curved areas.
- Can be damaged by hot iron, alkali-based stains and moths.

**Selecting Fabric**

Consider the garment style and the differences between worsted and woolen fabrics when selecting wools. For a dressy or tailored garment, or style with sharp creases, pleats or fine details, worsted wools are best. For casual wear with a heavier, textured look and less tailoring or soft gathers, woolens are best. Medium-weight wools are often easier to work with than very heavy or lightweight fabrics.

Examine the fabric to determine the quality. Closely-woven fabrics won't ravel easily when cut, resist snags and are more durable than those with a loose weave. Rub the fabric and squeeze it tightly in your hand, then let go. A higher quality fabric won't pill when rubbed and the wrinkles will fall out.

**Preparing Fabric**

Unless the fabric is labeled “pre-shrunk” or “ready-for-the-needle,” test it first to determine if it's going to shrink. To test, cover a corner of the fabric where the selvedge and cut edge meet with a press cloth. Set a steam iron on the wool setting and press the iron in place for 10 seconds. Lift the iron; if the fabric has shrunken around the imprint of the iron, it should be pre-shrunk before cutting. Ask the dry cleaner to steam press it, or do it yourself.

Use a “with nap” layout when laying out pattern pieces; the scales of the wool fibers will sometimes reflect the appearance of the shading. For heavy or bulky wools, lay the pattern pieces out and cut one layer at a time to prevent distorting the shape of the pieces. For lightweight fabrics, pin closely to prevent the fabric from shifting as you cut. Use tailor's chalk or basting to

mark darts and other pattern details. If the fabric appears the same on both sides, determine which side to use for the right side and mark the wrong sides of each piece after cutting.

Any interfacing can be used with wool fabric; use the fabric weight and drape as a guide when selecting interfacing. Always test fusible interfacing before using it to make sure it doesn't cause the surface of lightweight wools to pucker; if so, replace with sew-in interfacing.

**Sewing**

To sew wool, use a universal needle size appropriate for the fabric weight: 60/8 for lightweight, 70/10 to 80/12 for medium weight or 90/14 for heavy weights. Use all-purpose thread, a standard presser foot and stitch length appropriate for the fabric weight.

Staystitch bias and curved edges to prevent stretching. When sewing, press seams open to reduce bulk, grading them for heavy or bulky fabrics. To grade a seam allowance, trim each seam allowance a little narrower than the one above it, keeping the layer longest closest to the garment outside. Lining will help the garment keep its shape and eliminates the need for seam finishing. If the project is unlined, finish the seam allowances with serging, zigzagging or binding.

For best results when hemming your wool garment, hang it up for 24 hours before you mark the hemline.

**Take Care**

Always use a steam iron with a dry press cloth or a dry iron with a damp press cloth to press wool; dry heat will dry out the fibers. Let the fabric air-dry before folding or hanging to avoid wrinkles or stretching. To prevent a shine on dark or lightweight worsted wools, press from the wrong side; strips of brown paper under darts and seam allowances will prevent imprints. A tailor's ham is helpful for pressing curved areas, such as sleeve caps.

Dry-clean wool garments unless the fabric was labeled “washable.”

For more information, see Guidelines 4.120 Napped Fabrics and 4.218 Working with Napped Fabrics. 🖨️