

FACTS ABOUT CLOTHING



A Guide for
Cotton Boll and
Consumer Jamboree



Facts about Clothing

To judge clothing you need some basic knowledge. A garment performs according to what it's made of and how it's made. You need to know about the fibers from which fabric is made, fabric construction, color and design on fabric and fabric finishes. You also need to know about care labels.

A general knowledge of construction methods helps you recognize quality and also predict durability. Design features also determine how suitable a garment is for a person or a particular use.

This manual provides the basics on fiber content, fabric construction, color and design, fabric finishes, seam construction, care labels and general criteria (reasons) for garment selection. It's a lot to learn, but remember – you aren't just learning for a contest – you're learning for a lifetime of smart choices.

Fiber Content

The Textile Fiber Products Identification Act protects consumers and producers from false advertising and mislabeling of the fiber content of textile fiber products.

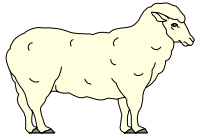
This act requires most textile products sold at retail price to have labels stating the textile fiber

content. To reduce confusion, the law establishes 21 generic or family names of textile fibers. If you learn the generic names, you won't need to remember the hundreds of trade names. For example, polyester is a generic fiber classification; Dacron, Kodel and Fortrel are all manufacturers' trade names for their polyester fibers.

Each label must give the following information.

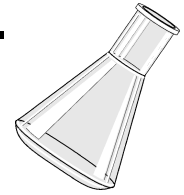
- ☆ The generic or family name of the fiber.
- ☆ The name of the manufacturer or a registered identification number or trade mark.
- ☆ The percent of each fiber in the fabric listed in order of its predominance by weight. If a particular fiber is five percent or less, it may be designated as "other fiber."
- ☆ The country of origin, if other than the United States.
- ☆ The fiber trade name may be given on the label, if desired. If so, the trade name cannot be used without the generic classification and the trade name may not be in larger print than the generic.

Fibers in each generic class behave much the same. It's wise to learn the generic names and their general characteristics.



Here are the most common generic classes used for clothing items:

Fiber	Advantages	Limitations
Cotton	Absorbent. Cool. Comfortable to wear. Durable. Economical. Does not melt.	Wrinkles unless treated. Susceptible to mildew and strong acids. May scorch.
Linen	Best wicking of natural fibers; therefore, cool to wear. Dries quickly. Natural, soft sheen. Strong and durable. Does not melt.	Wrinkles badly unless treated. Susceptible to mildew and strong acids. Color frosts on creases. May be weakened with repeated creasing in the same place. May scorch.
Ramie	Cool. Absorbent. Wicks. Resists mildew, insects and rotting. Very economical. Does not melt.	Wrinkles easily. May be weakened with repeated creasing in the same place. May scorch.
Silk	Luxurious. Lightweight. Dyes in beautiful, rich colors. Absorbent. Strong. Moderately wrinkle resistant. Resists mildew and moths. Does not melt.	Weakened by sunlight, perspiration and chlorine bleach. Absorbs body oils and grease stains. Water spots. Yellows and fades with age. Subject to attack by carpet beetles unless treated. Affected by high temperatures. Loses strength when wet. Should be pressed with a press cloth. Color damaged by hair spray. Damaged by perfumes.
Wool and specialty hair fibers: Alpaca, Camel's hair, Cashmere, Llama, Mohair, Vicuna	Warm and comfortable to wear. Absorbent. Wrinkle resistant. Mold and shape easily when pressed. Water repellent. Flame resistant. Does not melt.	Subject to attack by moths and carpet beetles unless treated. May shrink and felt when laundered unless blended or especially treated. Damaged by chlorine bleach. Damaged by dry heat. Loses strength when wet. Sensitive to alkaline agents. Should be pressed with a press cloth.



Fiber	Advantages	Limitations
Rayon	Dyes easily. Versatile. Relatively inexpensive. Absorbent. Does not melt.	Wrinkles easily. Weaker when wet. Damaged by strong acids and mildew. May shrink or stretch unless treated. May scorch.
Acetate	Feels and appears silky. Has good drapability. Solution-dyed fibers resist fading. Resists pilling. Resists mildew and moths. Dries quickly.	Poor abrasion resistance. Builds up static electricity. Requires care in pressing due to heat sensitivity. Loses strength when wet. Damaged by silverfish. Dissolves in acetone, acetic acid and alcohol. Subject to fume-fading unless solution-dyed. Melts at low temperature.
Triacetate	Good wrinkle resistance. Less sensitive to heat than acetate. Retains creases. Blends well with other fibers. More resistant to sunlight than rayon and acetate.	Dissolves in acetone, nail polish remover, paint remover and some perfumes. Melts at relatively low heat.
Nylon	Extremely strong. Extremely durable. Can be heat set to retain pleats. Wrinkle resistant. Resists mildew and insect damage. Does not burn easily. High elasticity. Very resistant to abrasion.	Builds up static electricity. Low moisture absorption. Grays and yellows with age and poor care. Picks up dye and soil in laundering. Absorbs and holds body oils and perspiration stains. Melts if too hot. Pills if spun.
Polyester	Wrinkle resistant. Retains heat-set pleats and creases. Superior wash-wear performance. Strong. Resists damage from abrasion, strong sunlight, weather conditions, moths, mildew and most strong chemicals.	Absorbs body oils. Accumulates static electricity. May pill and attract lint. Absorbs perspiration odor. Melts if too hot.



Fiber**Advantages****Limitations**

Acrylic

Lightweight.
Strong.
Warm, soft.
Can be heat-set for pleats, un-set and re-pleated.
Absorbs little moisture.
Resists sunlight damage, moths and mildew.
Launders easily.
Does not irritate skin.
Resists wrinkling.

Builds up static electricity.
Pills.
Holds grease and oil stains.
Melts if too hot.

Modacrylic

Warm.
Pleasing to the touch.
Resilient.
Strong.
Resists wrinkling.
Flame resistant.

Extremely heat sensitive.
Melts at low temperature.

Spandex

Provides strength without weight.
Resists perspiration, cosmetic oils and lotions.
Has elasticity; great stretch and recovery.

Damaged by chlorine bleach.
Absorbs little moisture.
May yellow when exposed to light.
Melts at relatively low heat.

Rubber

Very elastic.
Adapted for many uses.

Sensitive to heat.
Damaged by perspiration, body oils, lotions, cremes and light.
Bondings may become soft from perspiration or cleaning.
Melts at relatively low heat.

Metallic

Adds a rich quality.
Laminated yarns are lightweight, non-tarnishable and relatively inexpensive.

Sensitive to abrasion.
Laminated yarns are sensitive to heat.
Plastic coating on yarns may melt.

Olefin

Good resistance to crushing.
Lightweight.
Dries quickly.
Resists abrasion, stains and weathering.
Resists damage from chemicals, sunlight, moths and mildew.

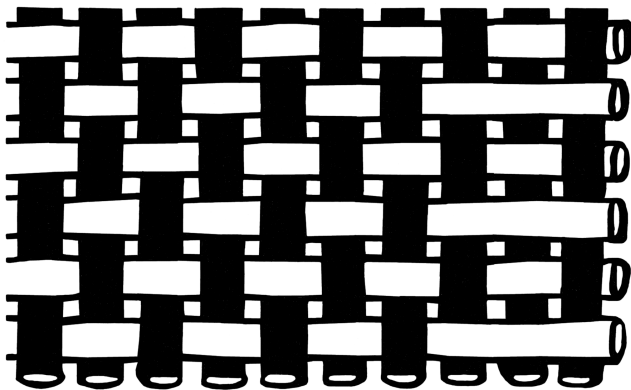
Sensitive to strong sunlight.
Very heat sensitive.
Melts at relatively low temperatures.

Fabrics

Fabrics are usually constructed from yarns. Fabrics vary as much as the fiber(s) yarns and construction processes used to make them. In addition to the many types and varieties of yarns, the yarns may be made into fabric by several processes. The appearance, design, texture, hand and serviceability can be affected by fabric construction.

Woven fabrics are made by interlacing two or more sets of yarn at right angles to each other. The set of yarns running lengthwise is called *warp*; the crosswise yarns are called *filling*. Woven fabrics have grain and the yarns may be raveled in the lengthwise and crosswise direction. The interlacing pattern gives interest to the fabric. The following are three basic weaves and several variations of these weaves:

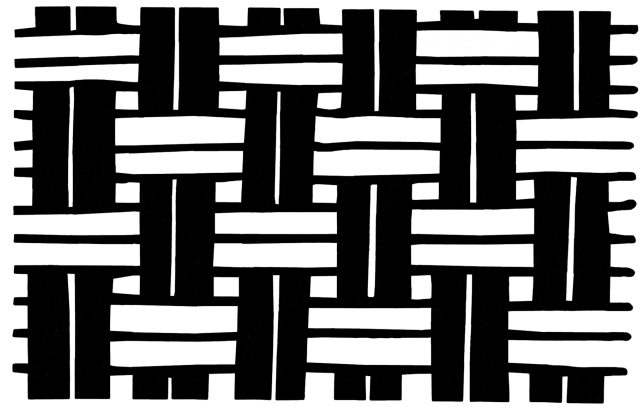
Plain weave is the simplest of weaves. The filling yarn passes over one warp yarn and under the next, alternating across the fabric. Broadcloth, poplin and taffeta are made by a plain weave using heavier yarns in one direction. Bengaline and faille are ribbed fabrics made by using a plain weave and heavy filling yarns.



Plain Weave

The *basket weave* is a plain weave treating groups of yarns as one yarn. Oxford cloth and monk's cloth are basket weave. The more compact the yarns, the more durable the fabric.

When the size and number of yarns in the crosswise direction is almost the same as the size and number of yarn in the lengthwise direction, the fabric is usually stronger and more durable than when they're unbalanced.



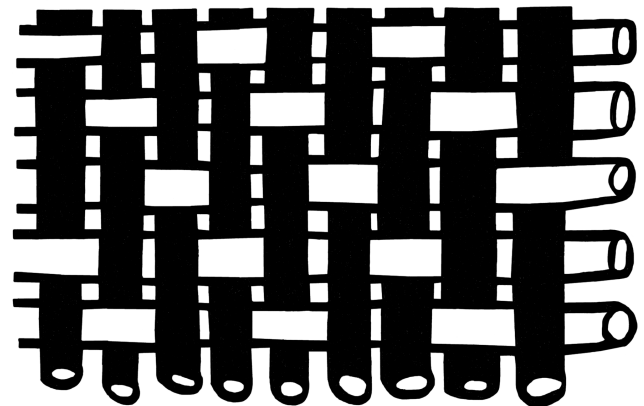
Basket Weave

Twill weave is identified by diagonal ridges on the face of the fabric. In the simplest twill weave, the filling yarn is carried over one and under two warp yarn. Each yarn progresses one yarn to the right or left to create the diagonal pattern.

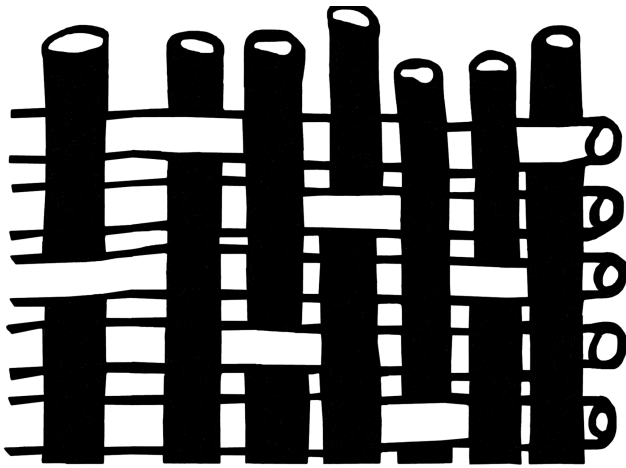
Twill weaves are usually tightly woven. They don't soil as quickly as plain woven fabrics, but are more difficult to clean. They're durable, so they're used often for clothes that get heavy wear.

Surah, drill, denim, khaki and gabardine are all made with a twill weave. Herringbone fabric reverses the twill line at regular intervals and creates a design that resembles the backbone of a fish.

Satin weave is created by passing a yarn over four or more yarns before going under one yarn. Some satin weaves may cross over as many as seven yarns. The result is long floats that create a luster on the fabric face. The floats may be warp or filling yarns. The long floats are easily picked and pulled. The fabric is easily abraded.



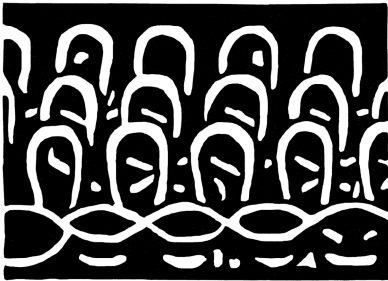
Twill Weave



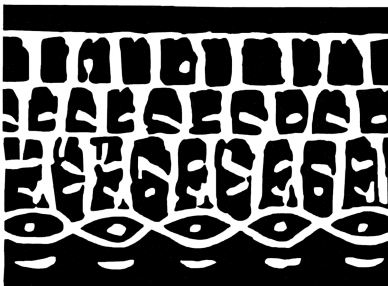
Satin Weave

Because of their smoothness, satin weave fabrics make good linings. Satin, sateen, and crepe back satin are satin weave fabrics. Satin is considered a dressy fabric. But, some satin weaves are used for fabrics suitable for pants, jackets and upholstery.

Pile weave - Some fabrics are made using a base fabric plus an extra set of yarns. The loops of yarn extend above the base fabric.



Uncut Pile



Cut Pile

Terrycloth is an *uncut* pile fabric. It's used in towels, robes and swim coverups. Corduroy, velvet and velveteen are *cut* pile fabrics. The loops have been cut giving a plush surface that reflects light. Cut pile

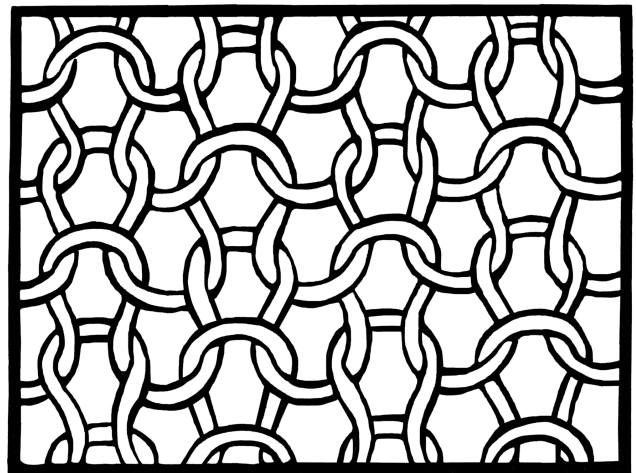
fabrics show crush and abrasion. The ribs of corduroy make this wear less visible.

Knit fabrics are made by interconnecting loops of yarns. They are classified by the direction in which the loops are connected. Knits are known for being pliable, stretchy and wrinkle resistant. The open spaces trap and hold air, acting as insulation.

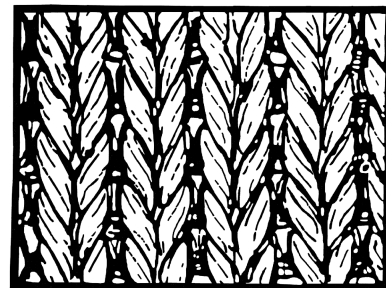
Filling (weft) knits are interlooped, working in a crosswise direction. They're characterized by horizontal stretch. Filling knits can be made by hand or machine, either circular or flat.

Warp knits are inter-looped, working in a lengthwise direction. They're made on flat machines.

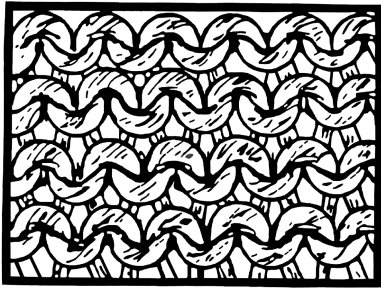
Single knits, often called jersey, are filling knits. They have a definite fabric face. Lengthwise wales show on the face and courses are visible on the under side. Single knits have a soft hand and drape well. T-shirts are single knits. Many sweaters are single knits.



Single Knit

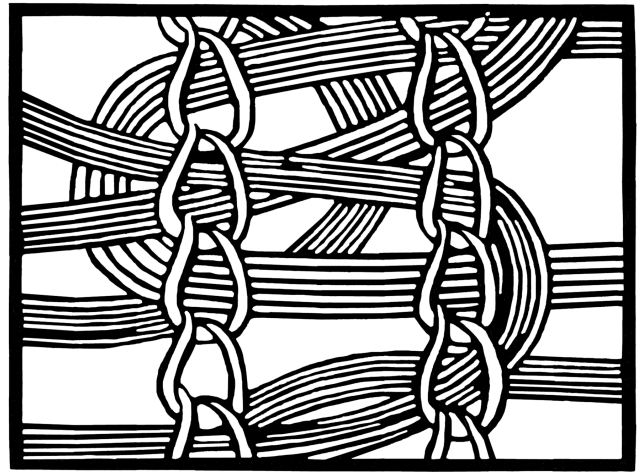


Face (wales)



Back (courses)

Double knits are also filling knits and look the same on the face and back sides, unless the surface is textured or patterned. Because of the double thickness, they are heavier, have a firmer drape, hold shape better and are warmer than single knits. Double knits are used in outer apparel for men, women and children.



Raschel Knits

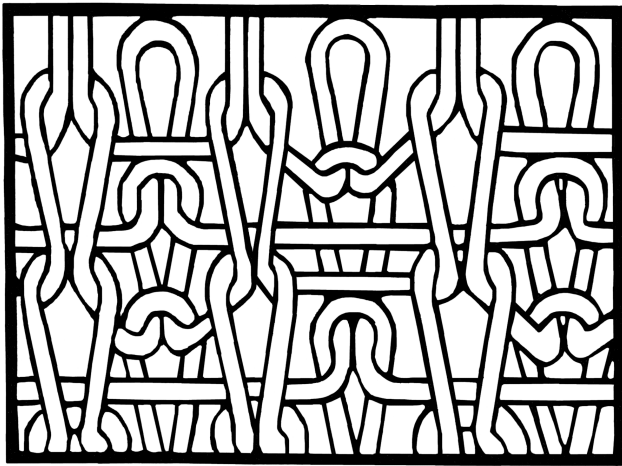
Tricot knits are warp knits. They have fine vertical wales on the face and crosswise ribs on the back. They're run-resistant, non-raveling and have good stability and elasticity. Tricots are usually fine and lightweight. Summer jersey, lingerie fabrics, swimsuit linings and the backings on laminated fabric are usually tricot.

Raschel knits are warp knits with lacy open-work and surface patterns. The yarns are usually textured, giving additional interest. Raschel knits are used for laces, thermal underwear and women's outer apparel.

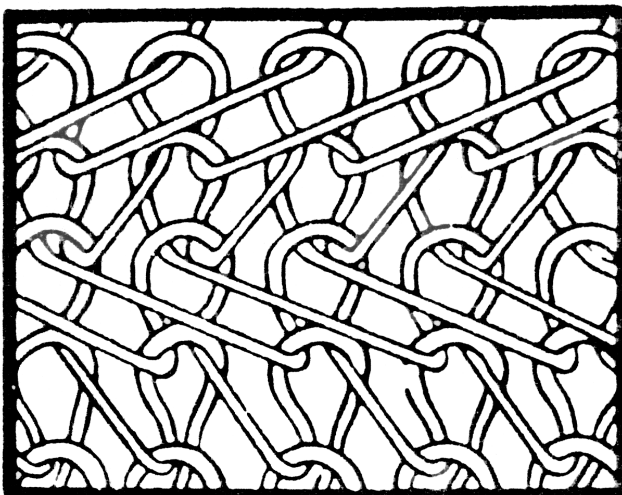
Felt is a mat or web of wool or part wool fibers held together by interlocking of the scales on wool fibers. Heat, soap and agitation are used to mat the fibers and to shrink the cloth. Felt is used for some clothing.

It's widely used for hats, house shoes, clothing decorations and pennants. It doesn't fray, so it requires no finish on cut edges.

Films are made by extruding a fiber solution onto a drum, into warm air or pressing a molding powder between hot rollers. They may vary in thickness from a very thin transparent film to a heavy leatherette. Films may be finished to appear like leather, lace or woven fabric. Supported films have a woven bonded or knitted fabric backing. Expanded films are spongy and soft due to air cells that have been incorporated. Film has the advantages of being waterproof, low cost, resistant to soil and easy to maintain. Rain wear, upholstery fabrics and purses are often made of textile films.



Double Knits



Tricot Knits

Lace is an open work fabric, usually creating figures like flowers, made by knotting, interlacing, interlooping and twisting thread. Lace may vary in width from a fraction of an inch to more than 100 inches. Today lace is machine-made. Generally lace is less durable than most fabric. It has varied uses, like trim on garments, lingerie and as fabric for dresses, blouses and tablecloths.

Color and Design

Color and design make fabrics attractive and fashionable. Durability depends on how the color and design are made into or added to the fabric.

Color

Color may be introduced to fabric at several stages depending on the fiber content and the intended end use. Man-made colors are created by adding dye or pigment to the solution before the fiber is formed. This makes fibers that are the same color throughout. Fibers may be dyed before they're spun into yarns. This method is used for tweeds and heathers. Fabric woven from colored yarn is considered yarn-dyed. However, most fabrics are piece-dyed. This means color is added to the fabric after it is made.

Color fastness is the term used to refer to the durability and performance of fabric color. Many conditions may change or destroy fabric color.

Conditions in the use and care of garments are important. *Crocking* refers to the rubbing of color from the fabric surface to another fabric surface. *Bleeding* is fading or loss of color in water. When color shifts from one area of a printed fabric to another, the change is called *migration*. Home remedies may help, but they aren't satisfactory in making fabric colorfast. This should be done by the manufacturer.

Other conditions may cause color change. *Sunlight* can cause fading in fabric. Draperies, beachwear and fabric intended for outdoor use should be fast to sunlight. *Fume-fading* refers to color changes which take place due to contaminants in the air. These can come from cars, industry and even heating systems. Perspiration may also change a fabric color.

To be sure a garment is colorfast, you must depend on labels, hangtags, personal knowledge and experience.

Design

Design on fabric may be incorporated as the fabric is made or applied afterwards. This affects how it will last with wear and care.

Structural Design

Structural design is incorporated in the fabric as it's constructed. It's as durable as the fabric itself. Yarns, color, size, arrangement and combinations give great variety.

Checks, plaids and stripes are formed by the arrangement of different colored yarns as the fabric is woven. Checks, plaids and stripes that are printed onto a solid color fabric aren't durable and may not follow the grain of the fabric.

Seersucker is formed by varying tensions on the yarns producing the stripes. The lengthwise yarns making up the flat stripes are held at tension; the ones forming the puckered stripes have the tension released at intervals.

Grouping together creates dimity and bengaline. *Spacing of yarns* creates the designs in ephrata cloth and lace striped voile.

Jacquard designs are woven-florals or scrolls. They're made by a complex interlacing of designs as the fabric is woven or knitted. Brocade, tapestry, damask and matelasse' are jacquard designs.

One-tone, satin-stripe fabric is made with a stripe of plain weave alternating with a stripe of satin weave. The choice of yarn for weaving creates tweed, true crepe and boucle fabric.

Applied Design

Design applied to fabric after construction can be created by a mechanical or chemical finish, printing or stitching.

Design by Finish

Moire is used on ribbed fabrics such as taffeta and faille. Light is reflected from the fabric from the fabric in a rippling manner resembling the effect of waves on water.

Embossed designs are created with heat and pressure. Fabrics which are heat-sensitive (thermo-plastic) can be made to have a permanent design.

Other fabrics can be resin-treated to give design permanence. *Pleating* is a variation of embossing.

Flocking is a process by which very short fibers are glued to the fabric surface. The fiber flocks are usually rayon. Flocking may be an overall pile surface or applied in areas to create designs such as dots, flowers, animals and scrolls.

Plissé is a fabric resembling seersucker. It's made by chemically treating the fabric in lengthwise stripes. Plissé crinkles are not as durable as the woven-in crinkle of seersucker. In fact, the wrinkles can be removed by excessive heat in ironing. Plissé has the same number of yarns in all areas, while seersucker has a more dense weave in the smooth stripes.

Design by Printing

In the printing process, dye is applied to the fabric in a definite pattern by some mechanical means and a treatment is used to fix the dye.

Print designs are created by applying dye to fabric in a definite pattern. One or more colors may be used. A treatment is used to fix the dye. A print fabric can be recognized from the wrong side. The design is not as distinct and the colors aren't clear and bright. You can tell that the fabric was solid and the print added. The clearer the design on the wrong side, the longer the fabric will hold color. You may hear these terms used to describe types of printing: roller, warp, duplex discharge, photographic, stencil, silk screen, block, tie-dye and batik.

Consumer Tips

Color fastness is important. Check labels and hang tags for information. Select fabrics with color-fastness suited to the intended use. Using textile products for the purpose the manufacturer intended will also help assure good performance.

Structural design, achieved by use and arrangement of yarns, is usually more durable than design applied after the fabric is constructed.

Plaids, checks and stripes which are woven are more satisfactory than when printed. In addition to being more durable, the grainline is true with the design.

Embossed designs and pleating are most durable on heat-sensitive (thermoplastic) fibers.

Flocked designs are subject to abrasion.

The puckered design of *seersucker* is more durable than that of plisse.

Burnt-out or etched designs tend to weaken the fabric.

Printed fabrics with a good penetration of color on the back side tend to hold color longer.

Block printing, tie dye, batik, and hand screening are all hand-crafted. Expect fabrics with these designs to be more expensive, come in shorter yardage length and many times one of a kind.

Embroidered designs are subject to picking and pulling. Longer stitches are less durable than shorter ones.

Quilting threads may break, pick or pull. Consider use when purchasing.



Fabric Finishes

Finishes are applied to fabrics to improve their appearance and to make them more serviceable. With today's technology, fabrics can be finished to meet many demands made by consumers. These finishes play an important role in the consumer's satisfaction with fabrics or clothing they buy.

Read labels and hangtags to find out if a garment has a special finish and what this finish will do for the garment. Many finishes are on garments today. Here are some common ones with a few trade names:

Controlled shrinkage	Treatment used to reduce shrinkage. Some are more effective than others. Improper care may still cause fabric to shrink.	Bancora Dylanized Sanfor Set Sanforized Sanforknit Zeset
Mercerization	Process increases strength, luster and dyeing quality of cotton fabrics.	Word "mercerized" on the label.
Glazed	Shiny, slick, somewhat stiff surface achieved with resins, glue, shellac or starch. May not be permanent. Chintz is most common example.	Vita-glaze
Napped	Fuzzy surface produced by brushing fabric. Adds warmth by making surface soft and fuzzy. May pill with wear. Examples are flannel, brushed blankets and fashion fabrics.	
Antibacterial Antiseptic Bacteriostatic	Chemical treatment applied to a fabric to slow or prevent bacterial growth. Prevents odors and prolongs life of the fabric. Desirable for shoe linings, coat linings, lingerie, undergarments, socks, luggage, carpets and rugs.	Cyna-finish Hygenized Permacide Sani-Age Sanigard Vancide Vita-Fresh
Antistatic	Chemical treatment applied to fibers or fabric to prevent the buildup of static electricity. Some are temporary and others permanent. Desirable for undergarments, socks, various garments, carpeting.	Aston Negastat Permastat Staticide
Crush-resistant	Resin treatment applied to pile fabrics to prevent crushing.	

Flame-resistant Flame-retardant	Chemical treatment on a fabric that enables it to resist the action of a flame. Does not make fabric fireproof. Most finishes will remain durable even though they may be laundered as many as 50 times, while some are semi-durable or non-durable.	Banfire Durette Firegard FireStop FWWMR Lynrus FR-1 Permaproof Pyrovatex CP Roxell
Mildew resistant	Chemical finish applied to a fabric to slow the growth of mildew and mold. May be used with other finishes such as water repellents.	Fresh-Tex Mel-Tron 80
Moth resistant	Chemical treatment of wool to make it resistant to moth attack. There are durable and non-durable finishes. Some non-durable formulas can be used for moth-proofing by consumers or dry cleaners.	Mitin Moth Snub Mothspray Woolgard
Permanent Press Durable press	Garments maintain sharp creases, pleats, flat seams and smooth appearance. Ironing is eliminated when garments are tumble-dried with cool-down cycle and are promptly removed from dryer. Garment alterations (lengthening and enlarging) cannot be done satisfactorily.	Semeriset Coneprest Dan-Pres Kara Set Koratron Never-Press Onyx Set Pak-Nit RX Penn-Press Perma-Prest Ranedare Press Sharpe/Shape Sta-Prest Super-Crease Tanapress
Soil release	Chemical finish applied on permanent press fabrics to provide greater ease in removing soil. Fabrics tend to resist oil-borne stains.	Come Clean Cran-Set SR Danclean Dual Action Miraclean Rhoplex SR-488 Scotchguard Soil-Out Soilex Visa Wash Ease

Stain and spot resistant	Treatment that imparts soil resistance as well as water and oil repellence. Laundering and abrasion during wear tend to reduce stain resistance; pressing after laundering helps restore stain resistance.	Aerotex Aquaguard Drilene Hydro-Pruf Norance Permal Ramedane Plus Scotchguard Syl-Mer
Wash and Wear Drip-Dry	Garments will dry smooth and need little or no ironing after washing. Similar to wrinkle-resistant finishes, but garment will not retain creases or pleats. Read and follow care labels carefully.	SanCare Relfast Coneset Everglaze Minicare Perma-Pressed
Waterproof	Fabric completely sealed with rubber, lacquer, linseed oil compounds or a synthetic resin. Treated fabric will not absorb water. Does not allow passage of air or evaporation of perspiration.	K-Kote Koroseal Reevair
Water repellent	Resists penetration of water into the fabric, but it is not waterproof. Fabric is porous and permits the passage of air, water vapor and perspiration. Finishes are often non-durable to dry cleaning.	Cravenette Hydro-Pruf Impregnole
Water-resistant	Resists penetration of water for a limited time. Not to be confused with water repellent finishes.	
Wrinkle-resistant Crease-resistant	Fabrics are resistant to wrinkles and creases and have improved wrinkle-recovery properties. Heat will not set sharp creases or pleats on treated fabrics.	Ayana Banguard Cransheen Fresh-Tex Permel Plus Winset



DRY CLEAN ONLY

Care Label

CARE INSTRUCTIONS:
 Machine wash warm gentle cycle
 Do not bleach. Tumble dry low
 or hand wash line dry. Use
 cool iron. Do not dry clean.

Study care labels. You must read them carefully, so your favorite purchases will remain favorites after being worn and cleaned several times.

	When Label Reads:	<i>It Means:</i>
MACHINE WASHABLE	Machine wash	Wash, bleach, dry and press by any customary method, including commercial laundering and dry-cleaning.
	Home launder only	Same as above, but do not use commercial laundering.
	No chlorine bleach	Do not use chlorine bleach. Oxygen bleach may be used.
	No bleach	Do not use any type of bleach.
	Cold wash Cold rinse	Use cold water from tap or cold washing machine setting.
	Warm wash Warm rinse	Use warm water or warm washing machine setting.
	Hot wash	Use hot water or hot washing machine setting.
	No spin	Remove wash load before final machine spin cycle.
	Delicate cycle Gentle cycle	Use appropriate machine setting; otherwise, wash by hand.
	Durable press cycle Permanent press cycle	Use appropriate machine setting; otherwise, use warm wash, cold rinse and short spin cycle.
	Wash separately	Wash alone or with like colors.

Continued

	When Label Reads:	<i>It Means:</i>
NON-MACHINE WASHING	Hand wash	Launder only by hand in lukewarm (hand comfortable) water. May be bleached. May be dry-cleaned.
	Hand wash only	Same as above, but do not dry-clean.
	Hand wash separately	Hand wash alone or with like colors.
	No bleach	Do not use bleach.
	Damp wipe	Surface clean with damp cloth or sponge.
HOME DRYING	Tumble dry	Dry in tumble dryer at specified setting – high, medium, low or no heat.
	Tumble dry Remove promptly	Same as above, but in absence of cool-down cycle, remove at once when tumbling stops.
	Drip dry	Hang wet and allow to dry with hand shaping only.
	Line dry	Hang damp and allow to dry.
	No wring, No twist	Hand dry, drip dry or dry flat only. Handle to prevent wrinkles and distortions.
	Dry flat	Lay garment on flat surface.
	Block to dry	Maintain original size and shape while drying.
IRONING OR PRESSING	Cool iron	Set iron at lowest setting.
	Warm iron	Set iron at medium setting.
	Hot iron	Set iron at hot setting.
	Do not iron	Do not iron or press with heat.
	Steam iron	Iron or press with steam.
	Iron damp	Dampen garment before ironing.
MISCELLANEOUS	Dry-clean only	Garment should be dry-cleaned only, including self-service.
	Professionally dry-clean only	Do not use self-service dry-cleaning.
	No dry-clean	Use recommended care instructions. No dry-cleaning materials to be used.

Seams

The type and quality of a garment's seams contribute to its general appearance and durability.

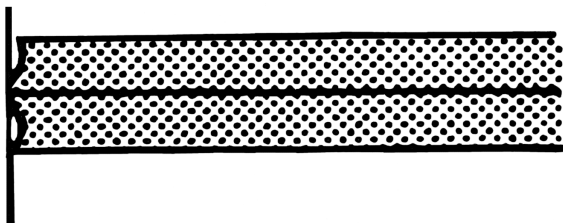
In appearance a seam should be:

- ☆ flat
- ☆ smooth
- ☆ even in width
- ☆ well-pressed
- ☆ sewn with stitches of the same length
- ☆ sewn with balanced tension
- ☆ sewn with matching thread or one chosen for decorative color
- ☆ finished to prevent raveling (if fabric ravel)
- ☆ as durable as the fabric
- ☆ reinforced when appropriate

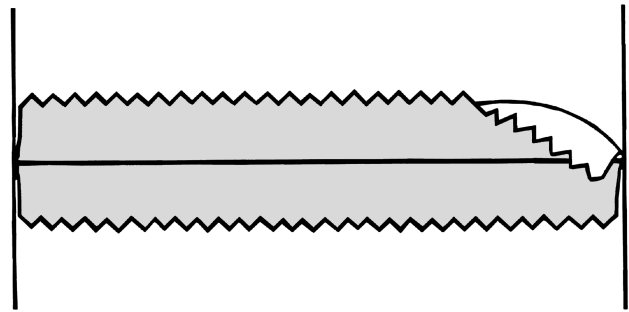
A garment should be made with seams that will be as durable as the garment. A good seam choice can sometimes increase the durability of a garment.

A *plain seam* is often used. The cut edges of the fabric almost always needs a *finish* to prevent fraying or raveling in wear and washing or cleaning. A finish should be secure, without bulk and not show through to the right side.

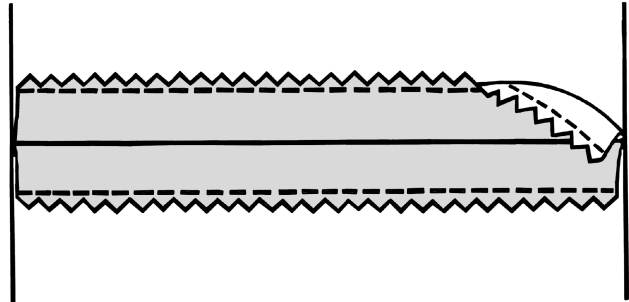
Plain seams may be top stitched for reinforcement or a decorative look. Lace, cording or other trim may be stitched in the seam as it is formed.



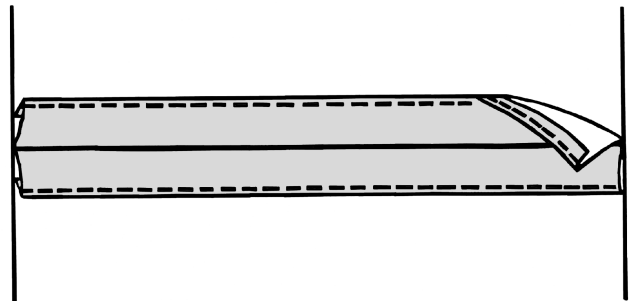
Plain Seam



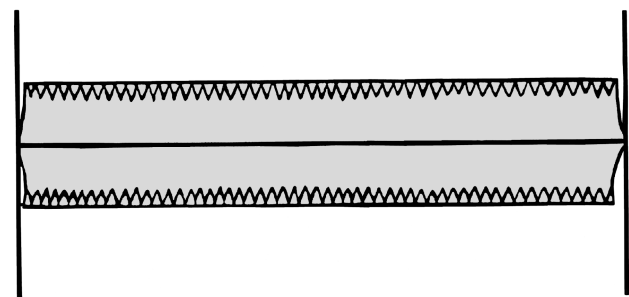
Pinked Seam Finish



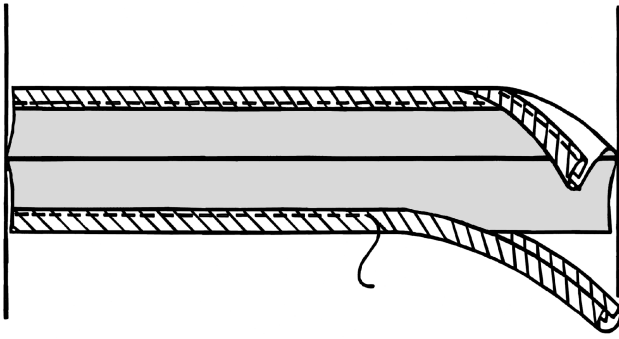
Stitched and Pinked Seam Finish



Turned and Stitched Seam Finish

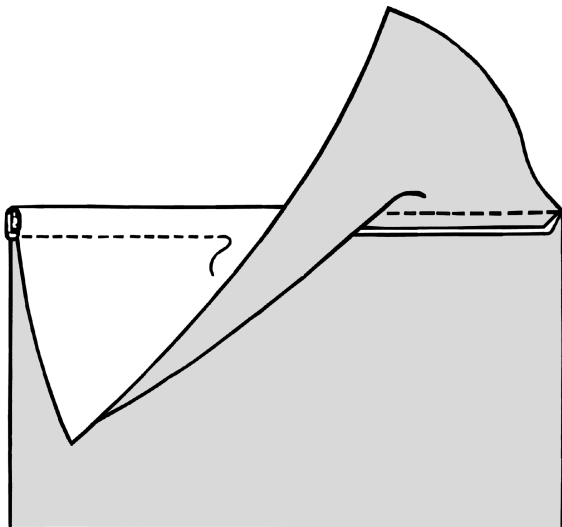


Zig-Zagged or Overcast Seam Finish



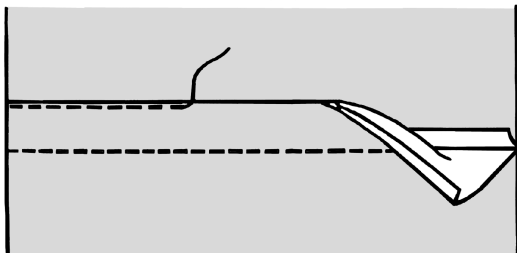
Bound Seam Finish

A *French seam* looks like a plain seam on the right sides and a small, neat tuck on the wrong side. It's a good finished look for sheer or semi-sheer fabrics.

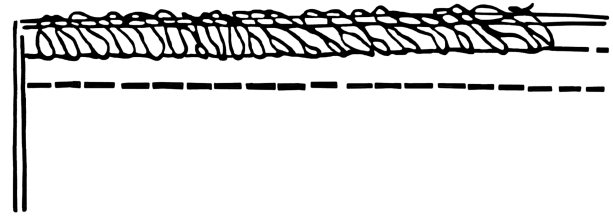


French Seam

A *flat felled seam* is very sturdy. It's often used on sportswear and menswear. Two rows of stitching show on both the right and wrong side. On the right side you can see where the edge of the fabric has been folded under.



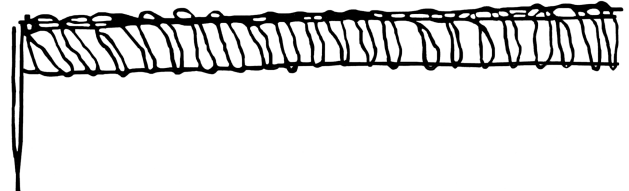
Flat-Felled Seam



Stitched and Serged Seam

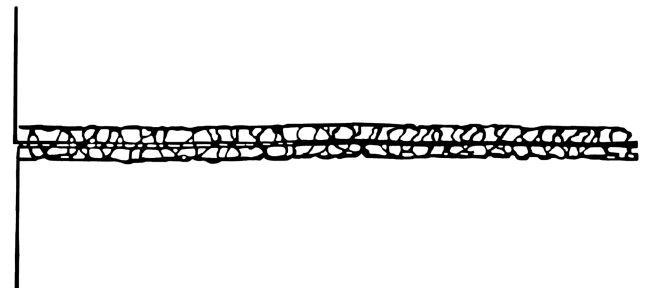
A *stitched and serged seam* is a plain seam about 3/8 inch in width. It's stitched with a regular or chain stitch. The two edges are stitched together with a serging or over-edge stitch.

A *serged seam* is found in garments made of knits and stretch fabrics. The seam is very narrow. An over-edge or serging stitch is used. The multiple threads interlock over the cut edges. The two pieces of fabric are jointed and edges finished with the same stitching. The seams should give and stretch with the fabric without breaking any threads.



Serged Seam

An *abutted seam* is formed by placing the cut edges of two fabrics together and stitching over them with an interlocking stitch. This seam is not very strong. It's found in sweat clothes, which fit loosely.



Abutted Seam

A *reinforced seam* has a woven tape stitched into the seams. This gives added strength or prevents stretching.

General Criteria for Garment Selection

As a review of what you've learned, use this checklist when choosing a garment.

Color	Is there a color that will be cooler or warmer than the others for the specified wear and use?
Fabric	Is the fabric of good quality? Is the fabric free from flaws? Is the fabric a good one for the style of the garment? Is the fabric a good one for the way the garment will be used? When the garment is washed or dry-cleaned, will it feel and look almost the same as when new? Will the fabric shrink? Will the fabric stretch out of shape? Will the fabric "pill"? Will the fabric pick, pull or abrade with normal use? Will the fabric look fresh while the garment is worn?
Fiber Content	How does the fiber content relate to moisture absorbency and thermal comfort (coolness, warmth)? How does the fiber content relate to durability?
Finishes	Is there a special finish on the fabric that would make it a better choice for the person and the intended use? (Wrinkle resistant, permanent press, water resistant, waterproof, bacterial resistant)
Care	What does the fiber content and care label indicate about: <input type="checkbox"/> drying time? <input type="checkbox"/> ironing required? <input type="checkbox"/> wrinkle resistance? <input type="checkbox"/> special care? Are there any extra costs involved with garment care? Is there any extra caution needed to care for the garment?
Inner Fabrics And Materials	Is the pocket fabric durable and firmly woven? Is the elastic of a good quality? Is the elastic appropriate for the garment? Is the waistband backing of good quality? Will the waistband maintain shape? Is the lining a good quality? Can the lining be washed, ironed or cleaned the same way as the garment? Do interfacings (fabric that shapes collars and lapels and supports buttons and buttonholes) have the same hand as the outer fabric, not making these areas stiff but helping them hold their shape? Are zippers, snaps, hooks and other notions the correct weight or type for the garment?

Trim	<p>Will the trim wear as long as the garment? Can the trim be given the same care as the garment? Will the ribbing maintain its shape?</p>
Style Features	<p>Are there any style features that make one garment more useful or fashionable than another?</p>
Closures	<p>Is there an advantage to one type of sleeve or leg opening over another? (Cuffs, bands, elastic or no closures) Is there an advantage for one type of closure over another for wear or ease in putting on or taking off? (Buttons and buttonholes, zipper, nylon loop fastener, hook and eyes, snaps, grippers or plackets) Will the garment stay closed in wear?</p>
Waist	<p>Is there an advantage to one type of waist treatment over another? (Elastic, drawstring, fitted shape waistband) Is the number, style, size and placement of belt loops adequate?</p>
Sleeves	<p>Is one sleeve style more fashionable than another? Does one sleeve style provide more wearing comfort than another?</p>
Necklines	<p>Is there a preferred neckline style or treatment for comfort? Is one neckline better than another for the way the garment will be used? If two or more necklines are the same, is one better than another?</p>
Pockets	<p>Are pockets needed for the intended use? Is one style of pocket better than another? Is a pocket closure desirable? Is one type of pocket closure better than another? Are pockets placed so they can be used?</p>
Construction	<p>Are the garment pieces cut on the grain of woven fabric or with the rib of knit fabric? Do plaids or stripes match? Is the fabric design matched, centered or balanced? Is fabric nap or one-way design all in the same direction? Does the hem lie flat and smooth, and is the width even? Is the hem visible from the right side? Is the top edge of the hem finished to prevent raveling? Are seams smooth and free from puckers? Are darts smooth, tapered and secured at the point? Are darts evenly spaced? Are the sleeves smooth, without puckers; are gathers even? Are pockets flat, smooth and evenly spaced? Is the type of seam used the best for the garment type and the wear it will be given? Are seams straight and even in width? Are seams flat and smooth? Are seam edges finished so they won't ravel?</p>

Construction
(*cont.*)

Are seams reinforced to prevent stretching or to provide durability?
Is stitching neat, continuous and straight?
Does the thread match the garment?
Is there extra stitching or reinforcing at points of strain such as underarms, seams, openings, pleats, pockets, knees and elbows?
Is the reinforcement adequate for how the garment will be used?
Are buttonholes neat and sturdy?
Are buttonholes the correct size for buttons?
Are button, hooks and eyes securely attached?
Is the zipper flat and smooth?
Is the zipper correct weight for garment?
Does the zipper work properly and smoothly?
Is trimming and decoration neat and firmly attached?
Are pockets even, flat and smooth?
Is the collar the same on each side?
Does the collar lie flat and smooth?
Is the collar stitched and pressed so the undercollar does not show?
Is the collar neatly joined to the garment?
Are collars, facings, waistband, cuffs and area behind the buttonholes and buttons interfaced for support and strength?
Are the lapels flat but not over-pressed?
Do facings lie flat and smooth?
Are outer edges of facings finished?
Is fusing smooth, with no bubbles?
Are linings finished and attached so they don't show?
Are gathers evenly distributed?
Are pleats uniform and smooth?

Price

How does the price relate to the amount of money available for the purchase?
How does the price relate to the overall quality of the garment?
How does the price relate to the amount of wear that will be expected from the garment?

Special Need

Does the garment have a particular feature that will make it especially suitable for the intended use? (Styling, fabric, finish, color, etc.)

By now, you should feel pretty confident of your garment-buying skills. Use that same buying confidence for the **4-H Cotton Boll and Consumer Jamboree Judging!**

Notes



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Judging Curriculum

JM-02

Revised August, 2000

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, The University of Georgia College of Agricultural and Environmental Sciences and the U.S. Department of Agriculture cooperating.

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