

Technical Bulletin



Glossary of Textile Terminology

A.C.T. Textile Guidelines - Guidelines created for the textile industry by the Association for Contract Textiles, covering abrasion, fire retardancy, color-fastness and physical properties.

Abrasion Resistance - The degree to which a fabric is able to withstand surface wear, rubbing, chafing, and other friction forces.

Abrasion Tests - Tests performed on textiles or surface materials, designed to gauge resistance to abrasion, friction, scuffing and other forms of abuse. The Wyzenbeek is the most commonly used abrasion test.

Absorbency - The ability of a fabric to take in moisture. Absorbency is a very important property, which affects many other characteristics such as skin comfort, static build-up, shrinkage, stain removal, water repellency, and wrinkle recovery. Measured both in terms of how much liquid can be absorbed and the rate at which absorption occurs.

Acetate - A manufactured fiber formed by compound of cellulose, refined from cotton linters and/or wood pulp, and acetic acid that has been extruded through a spinneret and then hardened.

Acrylic - A manufactured fiber derived from polyacrylonitrile. Its major properties include a soft, wool-like hand, machine washable and dryable, excellent color retention. Solution-dyed versions have excellent resistance to sunlight and chlorine degradation.

ASTM - American Society for Testing and Materials, the organization that sets up standard methods of tests for textiles and other merchandise.

Back - The reverse side of a textile; not seen in regular use; the opposite of the front or face.

Backing - A material or coating used on the back of a textile to reduce fraying, slipping and raveling. Also helps the textile keep its shape.

Bale - A package of compressed raw cotton, weighing, for American cotton, about 500 lbs.; for Egyptian, 700 lbs.; Brazilian, 250 lbs.; and East Indian, 400 lbs.

Barree - An imperfection, characterized by a ridge or mark running in the crosswise or lengthwise directions of the fabric. Barree can be caused by tension variations in the knitting process, poor quality yarns or problems during the finishing process.

Blend - A term applied to a yarn or a fabric that is made up of more than one fiber (such as polyester/cotton). In blended yarns, two or more different types of staple fibers are twisted or spun together to form the yarn.

Bolt of Cloth - A rolled or folded length of cloth.

Broken End - A thread or strand of cotton which has broken in a textile machine.

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Glossary of Textile Terminology (con't)

Calender Roll - A unit found on various pieces of machinery which presses the ribbon lap or sliver, as it comes from the drawing rollers, into a loosely matted layer.

Calendering - A process for finishing fabrics in which such special effects as high luster, glazing, embossing, and moiree are produced.

Carding - A process which eliminates fibers too short for inclusion in spun yarn. The process also removes dirt and foreign matter still remaining in the fiber mass and arranges the fibers into a thin layer.

Cellulose - A material derived from the cell walls of certain plants. Cellulose is used in the production of many vegetable fibers, as well as being the major raw material component used in the production of the manufactured fibers of acetate, rayon, and triacetate.

Color - Color properties are hue, value and saturation.

Colorfastness - A term used to describe a dyed fabric's ability to resist fading due to washing, exposure to sunlight, and other environmental conditions.

Colorways - The colors or color combinations that are available for a surface material.

Combing - The combing process is an additional step beyond carding. In this process the fibers are arranged in a highly parallel form, and additional short fibers are removed, producing high quality yarns with excellent strength, fineness, and uniformity.

Converter - A business that develops fabric styles and has them printed or woven to order by a mill. Unlike the mill, the converter owns no printing or weaving equipment. The major function of a converter is to provide rapid response to fashion change, quick delivery and service, and to handle relatively small orders.

Cord - The product formed by twisting together two or more piled yarns.

Cotton - A soft, natural, vegetable fiber obtained from the seed-pod of the cotton plant. Cotton is the most widely used fiber in the world because of its versatility and ability to provide good comfort, particularly in apparel items. The chemical composition of cotton is almost pure cellulose. Cotton fiber lengths vary from less than one-half inch, to more than two inches. Generally, long length cotton fibers are of better quality.

Cuprammonium - A process of producing a type of regenerated rayon fiber, where the wood pulp or cotton liners are dissolved in an ammoniac copper oxide solution. Bemberg rayon is a type of Cuprammonium rayon. This is a common process of dyeing yarns before weaving, making it possible to create multicolored textiles.

Cutting Direction - The direction a pattern piece is cut from a roll of fabric - vertical or horizontal.

Denier - A system of measuring the weight of a continuous filament fiber – the lower the number, the finer the fiber; the higher the number, the heavier the fiber. Numerically, a denier is the equivalent to the weight in grams of 9,000 meters of continuous filament fiber.

Glossary of Textile Terminology (con't)

Dobby Loom - A type of loom on which small, geometric figures can be woven in as a regular pattern. Dobby looms produce patterns which are beyond the range of simple looms, but are somewhat limited compared to a jacquard loom, which has a wider range of pattern capabilities.

Dobby Weave - A textile woven on a doobby loom, featuring a decorative weave characterized by small figures, usually geometric, that are woven into the fabric structure.

Double Cloth - A fabric construction in which two fabrics are woven at the same time, one on top of the other. In the weaving process, the two layers of woven fabric are held together using binder threads. The woven patterns in each layer of fabric can be similar or completely different.

Double Knit - A weft knit fabric in which two layers of loops are formed that cannot be separated. A double knit machine, which has two complete sets of needles, is required for this construction.

Double Weave - A woven fabric construction made by interlacing two or more sets of warp yarns with two or more sets of filling yarns. The most common double weave fabrics are made using a total of either four or five sets of yarns.

Durability - The ability of a fabric to resist wear through continual use.

Durable Press - A treatment applied to the fabric in the finishing process in which it maintains a smooth attractive appearance, resists wrinkling, and retains creases or pleats during laundering.

Elasticity - The ability of a fiber or fabric to return to its original length, shape, or size immediately after the removal of stress.

Elongation - The increase in length or deformation of a fiber as a result of stretching, measured as a percentage of the original length.

Embossing - A calendering process in which fabrics are engraved with the use of heated rollers under pressure to produce a raised design on the fabric surface.

End - One thread of the warp.

End and End - Term refers to fabrics with two colors alternating in the warp.

Fabric Treatment - Chemical enhancement of a fabric to improve its stain resistance, fire resistance, abrasion resistance or other properties.

Face - The front or finished side of a fabric; the side designed to be seen.

Facing - A piece of fabric that is sewn to the collar, front opening, cuffs, or arms eye of a garment to create a finished look.

Fiber - The basic entity, either natural or manufactured, which is twisted into yarns, and then used in the production of a fabric.

Glossary of Textile Terminology (con't)

Fiberfill - Specially engineered manufactured fibers, which are used as filler material in pillows, mattresses, mattress pads, sleeping bags, comforters, quilts, and outerwear.

Filament - A manufactured fiber of indefinite length (continuous), extruded from the spinneret during the fiber production process.

Filament Count - The number of individual filaments that make up a thread or yarn.

Filament Number - The linear density of a filament expressed in units such as denier or tex.

Fill Yarns (or Weft) - The horizontal threads of a woven fabric.

Filling - In a woven fabric, the yarns that run cross the fabric from selvage to selvage, and which run perpendicular to the warp or lengthwise yarns (also referred to as the weft).

Findings - Any extra items attached to a garment during the manufacturing process, including trims, buttons, hooks, snaps, or embellishments.

Finished Fabric - Any fabric that has gone through all the necessary finishing processes, and is ready to be used in the manufacturing of garments.

Finishing - Refers to treatment of a fabric to add a desired quality. Different types of finishing processes include washing, drying, shrink control, needle-punching, napping, shearing, backcoating, and stain repellent finishes. A finish often contributes to a fabric's "feel" or "hand", and may also contribute such characteristics as bulk or loft, and resistance to abrasion.

Fire Resistance - The measure of a fabric's ability to resist ignition and burning.

Flame Resistant - A term used to describe a fabric that burns very slowly, or has the ability to self-extinguish upon the removal of an external flame.

Flame Retardant - A chemical applied to a fabric, or incorporated into the fiber at the time of production, which significantly reduces a fabric's flammability.

Flax - The plant from which cellulosic linen fiber is obtained. Linen is used in apparel, accessories, draperies, upholstery, tablecloths, and towels.

Float - The portion of a yarn in a woven fabric that extends or floats, unbound, over two or more adjacent ends or picks.

Gauge - A measurement most commonly associated with knitting equipment. It can mean the number of needles per inch in a knitting machine (in full fashioned hosiery and sweater machines, the number of needles per 1-1/2" represents the gauge).

Geotextiles - Manufactured fiber materials made into a variety of fabric constructions, and used in a variety of civil engineering applications.

Glossary of Textile Terminology (con't)

Glass Fiber - An inorganic fiber which is very strong, but has poor flexibility and poor abrasion resistance. Glass will not burn and will not conduct electricity, it is impervious to insects, mildew, and sunlight. The primary use of glass fiber is in such industrial applications as insulation or reinforcement of composite structures.

Greige Goods (or Grey Goods) - Term used to describe cloth woven on a loom with warp and filling yarns that have not been dyed (the woven fabric may be dyed after weaving, as in piece dyed fabrics).

Hand - The way a fabric feels when it is touched. Terms like softness, crispness, dryness, silkiness are all terms that describe the hand of the fabric.

Hydrophilic Fibers - Fibers that absorb water easily, take longer to dry, and require more ironing.

Hydrophobic Fiber - Fibers that lack the ability to absorb water.

Interfacing - Fabrics used to support, reinforce and give shape to fashion fabrics in sewn products. Often placed between the lining and the outer fabric, interfacing can be made from yarns or directly from fibers, and may be woven, nonwoven, or knitted. Some interfacings are designed to be fused (adhered with heat from an iron), while others are meant to be stitched to the fabric.

Interlining - An insulation, padding, or stiffening fabric, either sewn to the wrong side of the lining or the inner side of the outer shell fabric. The interlining is used primarily to provide warmth in coats, jackets, and outerwear.

Jacquard - A system of weaving which utilizes a highly versatile pattern mechanism to permit the production of large, intricate designs.

Jobber - A distribution company that purchases fabric in full piece quantities from mills or converters and then sells smaller quantities of cut yardage to other wholesalers, decorators, or upholsterers.

Lamb's Wool - The first clip of wool sheered from lambs up to eight months old. The wool is soft, slippery and resilient, and is used in fine grade woolen fabrics.

Lightfastness - A color's ability to stay true and unfaded when exposed to light.

Lining - A fabric that is used to cover the inside of a garment to provide a finished look. Generally, the lining is made of a smooth lustrous fabric.

Loom - A machine used for weaving fabrics (warp and filling yarns) to produce cloth.

Lyocell Fiber - A manufactured fiber composed of regenerated cellulose. Lyocell has a similar hand and drape as rayon, but is stronger, more durable, and in many cases machine washable. Lyocell possesses low shrinkage characteristics, as well as good absorbency and wrinkle resistant qualities.

Man-Made Fiber - A class of fibers and filaments produced from substances which may be polymers synthesized from chemical compounds (i.e. acrylic, nylon, polyester, polyethylene, polyurethane and polyvinyl), modified or transformed natural polymers (i.e. acetates and rayons) and minerals (i.e. glasses). Usually refers to all chemically produced fibers to distinguish them from truly natural fibers such as cotton, wool, silk and flax.

Glossary of Textile Terminology (con't)

Martindale Tester - European abrasion testing machine that is also used in ASTM (American Society for Testing and Materials) tests for fabric abrasion resistance and pilling resistance.

Memo - A larger textile sample, used to view pattern and color for specification.

Mercerization - A process of treating a cotton yarn or fabric, in which the fabric or yarn is immersed in a caustic soda solution and later neutralized in acid. The process causes a permanent swelling of the fiber, resulting in an increased luster on the surface of the fabric, an increased affinity for dyes, and increased strength.

Metallic Fiber - An inorganic fiber made from minerals and metals, blended and extruded to form fibers. The fiber is formed from a flat ribbon of metal, coated with a protective layer of plastic, which reduces tarnishing. Metal used in apparel fabric is purely decorative.

Microfibers - The name given to ultra-fine manufactured fibers and the technology of developing these fibers. Fibers made using microfiber technology weigh less than 1.0 denier. Comparatively, microfibers are two times finer than silk, three times finer than cotton, eight times finer than wool, and one hundred times finer than a human hair. There are four types of microfibers being produced - acrylic microfibers, nylon microfibers, polyester microfibers, and rayon microfibers.

Modacrylic Fiber - A manufactured fiber similar to acrylic in characteristics and end-uses. Modacrylics have a higher resistance to chemicals and combustion than acrylic, but also have a lower safe ironing temperature and a higher specific gravity than acrylic.

Moisture Regain - The amount of water a completely dry fiber will absorb from the air at a standard condition of 70° F and a relative humidity of 65% (expressed as a % of the dry fiber weight).

Moisture Transport - The movement of water from one side of a fabric to the other, caused by capillary action, wicking, chemical or electrostatic action.

Monofilament - A single filament of a manufactured fiber, usually made in a denier higher than 14. Monofilaments are usually spun singularly, rather than extruded as a group of filaments through a spinneret and spun into a yarn. End-uses include hosiery and sewing thread.

Nonwoven Fabric - Fabrics made directly from individual fibers that are matted together by forming an interlocking web of fibers either mechanically (tangling together) or chemically (gluing, bonding, or melting together).

Nylon – First produced in 1938, the first completely synthetic fiber developed. Known for its high strength and excellent resilience, nylon has superior abrasion resistance and high flexibility.

Nytril - A manufactured fiber, most often used in sweaters or pile fabrics, where little or no pressing is recommended, as the fiber has a low softening or melting point. However, it has also been successfully used in blends with wool for the purpose of minimizing shrinkage and improving the shape retention in garments.

Olefin (or Polyolefin or Polypropylene) - A manufactured fiber characterized by its light weight, high strength, and abrasion resistance. Olefin is also good at transporting moisture, creating a wicking action. End-uses include activewear apparel, rope, indoor-outdoor carpets, lawn furniture, and upholstery.

Glossary of Textile Terminology (con't)

Open-line textiles - A non-exclusive collection, produced and sold to many manufacturers and textile distributors.

Panel fabric - A fabric that is ideally suited for furniture panels and tackboards. Also known as a vertical surface textile.

Pattern - A design that is either woven into a textile or applied after weaving using dyes or printing.

Pattern repeat - The length and width of a single unit of a design that is repeated to create a pattern.

Pick - A filling yarn that runs horizontally in woven goods. The pick interlaces with the warp to form a woven cloth (also known as weft, or filling).

Piece Dyed Fabric - Fabric that is dyed after it is woven, in full piece form. The greige goods for piece dyeing can be cotton, polyester, or blends. Construction can be a dobby, jacquard, epinglé, or velvet.

Piece - One bolt or roll of fabric.

Pill - A tangled ball of fibers that appears on the surface of a fabric, as a result of wear or continued friction or rubbing on the surface of the fabric.

Pilling - When wear causes abraded fibers to roll up and form small balls on the surface of a textile.

Polyester - A manufactured fiber introduced in the early 1950s, and is second only to cotton in world-wide use. Polyester has high strength (although somewhat lower than nylon), excellent resiliency, and high abrasion resistance. Low absorbency allows the fiber to dry quickly.

Printed Fabrics - Textiles with design elements or motifs which are applied to the surface of the fabric with colorants such as dyes or pigments (as opposed to woven fabrics in which the design woven in as part of the structure of the textile itself).

Proprietary textiles - These products are developed and created exclusively for specific customers and can only be specified or purchased through those textile distributors and furniture manufacturers.

Quilting - A fabric construction in which a layer of down or fiberfill is placed between two layers of fabric, and then held in place by stitching or sealing in a regular, consistent, all-over pattern on the goods.

Railroad pattern cutting - When a pattern is cut horizontally from the roll, leaving selvages at the top and bottom. The selvages represent the long rails of a train track and the width of the fabric represents the ties.

Railroaded - The orientation of a pattern's direction. When looking at a railroaded pattern, the filling yarns are in the vertical direction, while the warp yarns are in the horizontal direction. Some industries and manufacturers prefer railroaded patterns, while others prefer up-the-roll patterns for their application (i.e. a sofa upholsterer may prefer a railroaded pattern to avoid excessive seams and waste fabric).

Ravel - Wear that causes individual yarns in a knitted or woven textile to wear out, separate or pull away.

Glossary of Textile Terminology (con't)

Rayon - A man-made fiber composed of regenerated cellulose, or wood pulp. The two main types of rayon are cuprammonium rayon and viscose rayon. Viscose rayon uses a solution of cellulose xanthate, and is the most popular method of producing rayon. Cuprammonium rayon uses a solution of cellulose in ammoniacal oxide.

Recolored fabrics - Fabrics with new colors applied - the content and pattern of the fabric remain unchanged from the original design.

Repeat - Complete unit of pattern for design. Repeats vary in size considerably, depending on the weave, type of material, texture, and the use of the cloth. Measured vertically and horizontally, repeat information is used in defining how to layout the fabric, such as on furniture.

Repellency - The ability of a fabric to resist such things as wetting and staining by water, stains, soil, etc.

Resiliency - The ability of a fabric to spring back to its original shape after being twisted, crushed, wrinkled, or distorted in any way.

Rip-Stop Nylon - A lightweight, wind resistant, and water resistant plain weave fabric. Large rib yarns stop tears without adding excess weight to active sportswear apparel and outdoor equipment such as sleeping bags and tents.

Seam Slippage - A measure of a fabric's ability to hold together when sewn so that it doesn't pull apart at the seams. Seam slippage may be due to improper woven construction or finish, or may also be caused by stitching that does not have proper holding power.

Seating Upholstery, Textiles and Fabrics - Textiles and other materials that are ideally suited for seating purposes.

Selvage or Selvedge - The thin compressed edge of a woven fabric which runs parallel to the warp yarns and prevents raveling. It is usually woven, utilizing tougher yarns and a tighter construction than the rest of the fabric.

Serging - An overcasting technique done on the cut edge of a fabric to prevent raveling.

Sizing - A generic term for compounds which are applied to warp yarn to bind the fibre together and stiffen the yarn's abrasion resistance during weaving. Starch, gelatin, oil, wax and man-made polymers such as polyvinyl alcohol, polystyrene, polyacrylic acid and polyacetate are employed.

Skein - A continuous strand of yarn arranged in a loose coil.

Sley - The number of warp ends per inch in a fabric exclusive of selvage (a fabric of "high sley" has a high number of warp yarns per inch).

Slub Yarn - A yarn of any fiber which is irregular in diameter and characterized by contrasting fat and thin areas along the length of the yarn. The effect may be purposely created to enhance a woven or knitted material, or may occur in error as a yarn flaw.

Glossary of Textile Terminology (con't)

Solution-dyed - A type of fiber dyeing in which colored pigments are injected into the spinning solution prior to the extrusion of the fiber through the spinneret. Fibers and yarns colored in this manner are color-fast to most destructive agents.

Spinneret - A metal nozzle type device with very fine holes used in the spinning process of manufactured fibers. The spinning solution is forced or extruded through the small holes to form continuous filament fibers. The holes in the spinneret can vary in diameter to produce fibers of various denier.

Spinning - Process of drawing and twisting loose fibers to create yarn that can be woven into textiles.

Spun Yarn - A yarn made by taking a group of short staple fibers, which have been cut from the longer continuous filament fibers, and then twisting these short staple fibers together to form a single yarn, which is then used for weaving or knitting fabrics.

Staple Fibers - Short fibers, typically ranging from ½" up to 18" long. Wool, cotton, and flax exist only as staple fibers. Manufactured staple fibers are cut to a specific length from the continuous filament fiber. A group of staple fibers are twisted together to form a yarn, which is then woven or knit into fabrics.

Stock Dye - When loose fibers are dyed before spinning. These are then used to create multicolored yarns and fabrics.

Strength - A textile or yarn's ability to withstand stress without breaking.

Tare Weight - The weight of the container or wrappings in which goods are purchased. It is deducted from the total (gross) weight to obtain the net weight of a product.

Tear Strength - The force necessary to tear a fabric, usually expressed in pounds or in grams. The most commonly used method for determining tear strength is the Elmendorf tear test procedure.

Tenacity - The tensile stress when expressed as force per unit linear density of the unstrained specimen.

Textile - Natural and synthetic fibers or yarns that are spun or woven into cloth. Textiles can be woven or unwoven.

Thread - A slender, strong strand or cord, especially one designed for sewing or other needle work. Most threads are made by plying and twisting yarns. Examples include spun cotton and spun polyester, core-spun cotton with a polyester filament core, polyester or nylon filaments and monofilament threads.

Thread Count - The number of warp and filling yarns per inch in a woven fabric.

Ticking - A tightly woven, very durable fabric, usually made of cotton, and used for covering mattresses, box springs, pillows, and work clothes.

Tissue Pick - Term which describes supplementary filling yarn or yarns which "float" along the back of fabric in bands, and are brought up in selected areas for added color detail on the face of a fabric. Sometimes tissue picks are referred to as "dead picks" because the fabric on the loom doesn't advance while the extra pick is applied.

Glossary of Textile Terminology (con't)

Triacetate - A manufactured fiber which, like acetate, is made by modifying cellulose. However, even more acetate groups have been added to create this fiber. Triacetate is less absorbent and less sensitive to high temperatures than acetate. It can be hand or machine washed and tumble dried, with relatively good wrinkle recovery.

Tufted - A fabric formed by punching lengths of yarn through the surface of a fabric to create a pile.

Twist - The number of turns and the direction that two yarns are turned during the manufacturing process. The yarn twist brings the fibers close together and makes them compact, which helps the fibers adhere to one another, increasing yarn strength.

UFAC - Upholstered Furniture Action Council (an American association of furniture manufacturers and retailers). This association conducts research and disseminates information on voluntary guidelines for more fire resistant upholstery materials.

Ultraviolet (UV) Stability - The ability of a finish or textile to resist fading.

Up-the-Roll - Describes the orientation of a pattern's direction (see also railroading). When looking at an up-the-roll pattern, the warp yarns are in the vertical direction, while the filling yarns are in the horizontal direction. Some industries and manufacturers prefer up-the-roll patterns, while others prefer railroaded patterns for their application.

Value - The lightness or darkness of a color.

Vertical Surfaces - Textiles used on furniture panels, tackboards and other vertical product applications.

Viscose - A special form of rayon that is produced by putting wood pulp or cotton linters through a specialized spinning and chemical process. Viscose yarn is popular in high end upholstery fabrics, particularly viscose chenilles, because of the yarn's lustrous appearance and strength. Viscose is the most common type of rayon.

Warp - The yarns which run vertically or lengthwise in woven goods. The warp yarns are threaded through the loom before weaving begins. In upholstery fabrics, the warp yarns are typically finer than the fill or weft yarns, but not always.

Warp-Faced - A textile that has predominantly vertical yarns (warp yarns) on its face.

Water Repellent - A term used to describe fabrics that have been treated with a finish which causes them to shed water, but are still air-permeable.

Waterproof - A term describing fabrics whose pores have been closed, and therefore, will not allow water or air to pass through them.

Weft - In woven fabric, the filling yarns that run perpendicular to the warp yarns.

Weft Knitting - A common type of knitting in which one continuous thread runs crosswise in the fabric making all the loops in one course. Weft knitting types are circular and flat knitting.

Glossary of Textile Terminology (con't)

Weight - Textile weight is measured in ounces per linear yard. This helps to identify the density or thickness of a fabric's construction.

Wickability - The ability of a fiber or a fabric to disperse moisture and allow it to pass through to the surface of the fabric, so that evaporation can take place.

Wrinkle Recovery - Similar to resiliency, it is the ability of a fabric to bounce back after it has been twisted, wrinkled, or distorted in any way.

Wyzenbeek Tester - An abrasion testing machine used in ASTM (American Society for Testing and Materials) tests for fabric abrasion resistance.

Yarn - A generic term for an assemblage of fibers or filaments, either natural or man-made, twisted together to form a continuous strand that can be used for weaving, knitting, braiding, or the manufacture of lace, or otherwise made into a textile material. In upholstery fabrics, the most commonly used yarns are made of cotton, polyester, acrylic, rayon, and polypropylene.

Yarn Dyed Fabric - Fabric woven with yarns that have been dyed prior to the weaving of the goods, as opposed to piece dyed fabrics, which are woven with undyed warp and fill yarns.