Designation: D123 - 17

# Standard Terminology Relating to Textiles<sup>1</sup>

This standard is issued under the fixed designation D123; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

## 1. Scope

- 1.1 This standard is the compilation of all terminology developed by Committee D13 on Textiles.
- 1.1.1 This terminology, consists mostly of definitions, which are specific to the textile industry. Meanings of the same terms used outside the textile industry can be found in other compilations or in dictionaries of general usage.
- 1.1.2 The specific D13 subcommittee (SC) which has jurisdictional responsibility for every item is the first attribution noted after the definition. The SC terminology standard in which all the terms and definitions appear is listed by number after the jurisdiction for the term. The wording of an entry cannot be changed without the approval of the subcommittee which has jurisdiction. Users of this compilation should also review the SC terminology standard listed for more details or interpretations of these terms and their use by the SC having jurisdiction.
- 1.2 In addition to being a specialized dictionary, Terminology D123 is also a tool for managing the committee's terminology. This includes finding, eliminating, and preventing redundancies, that is, where two or more terms relating the same concept are defined in different words. Redundancies can also occur when one definition is used for two or more terms.
- 1.3 While the review for clarity and form are the responsibility of the terminology subcommittee, the concept of managing terminology is the broad responsibility of every writer of standards, specifically the task group leader and subcommittee chairman.
- 1.4 Subsequent to a listing of specific subcommittee compilations, this standard is comprised of the following sections that are listed in the order in which they appear.
- 1.4.1 Alphabetical listing of terms with definitions followed by SC attribution in brackets and SC terminology standard.
  - 1.4.2 Annex A1 Terms Relating to the Hand of Fabrics.
  - 1.4.3 Annex A2 Industry Accepted Synonyms.

- 1.4.4 Annex A3 Terminology Taken From D13 Standards That Have Been Withdrawn.
  - 1.4.5 Annex A4 Terminology Relating to Leather.
  - 1.4.6 Annex A5 Terminology Revision Procedures.
  - 1.4.7 Appendix X1 Other Sources of Textile Terminology.
- 1.5 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

#### 2. Referenced Documents

2.1 ASTM Standards:<sup>2</sup>

D2050 Terminology Relating to Fasteners and Closures Used with Textiles

D3136 Terminology Relating to Care Labeling for Apparel, Textile, Home Furnishing, and Leather Products

D3888 Terminology for Yarn Spinning Systems

D3990 Terminology Relating to Fabric Defects

D4391 Terminology Relating to The Burning Behavior of **Textiles** 

D4845 Terminology Relating to Wool

D4848 Terminology Related to Force, Deformation and Related Properties of Textiles

D4849 Terminology Related to Yarns and Fibers

D4850 Terminology Relating to Fabrics and Fabric Test Methods

D4920 Terminology Relating to Conditioning, Chemical, and Thermal Properties

D5219 Terminology Relating to Body Dimensions for Apparel Sizing

D5253 Terminology Relating to Floor Coverings and Textile **Upholstered Furniture** 

D5646 Terminology Relating to Seams and Stitches Used in Home Sewing

D5684 Terminology Relating to Pile Floor Coverings

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.92 on Terminology.

Current edition approved March 1, 2017. Published April 2017. Originally approved in 1921. Last previous edition approved in 2015 as D123 – 15b $^{\epsilon 1}$ . DOI: 10.1520/D0123-17.

<sup>&</sup>lt;sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.



D6477 Terminology Relating to Tire Cord, Bead Wire, Hose Reinforcing Wire, and Fabrics

D6798 Terminology Relating to Flax and Linen

D6799 Terminology Relating to Inflatable Restraints

D6963 Terminology Relating to Sewn Products Automation

D7018 Terminology Relating to Glass Fiber and Its Products

D7022 Terminology Relating to Apparel

D7023 Terminology Relating to Home Furnishings

D7139 Terminology for Cotton Fibers

D7722 Terminology Relating to Industrial Textile Stitches and Seams

# 3. Terminology

3.1 Alphabetical listing of terms with subcommittee jurisdiction and attribution for each term.

**A-tuft,** *n*—a single-pass process for aligning hook free fibers on the Fibroliner FL-101. [D 13.11] D7139

**abrasion,** *n*—the wearing away of any part of a material by rubbing against another surface. [D13.60] D4850

**abrasion**, *n*—*for inflatable restraint fabrics*, a fuzzy cluster of broken filaments damaged by scraping. [D13.20] D6799

**abrasion cycle,** *n*—one complete movement across the surface of a material. **[D13.60] D4850** 

**abrasion mark,** *n*—an area damaged by friction. [D13.59] D3990

**absolute humidity,** *n*—the mass of water vapor present in a unit volume of air. (See **humidity** and **relative humidity**)

[D13.51] D4920

**absorbent compound,** *n*—*in textile cleaning*, sponge-like particles which, when saturated with water or dry solvent and detergent and brushed into the textile, remove soil from the textile. See **powder cleaner**. [D13.62] D5253

**absorbent pad,** *n*—*for cleaning textile floor coverings*, a damp textile material (fabric, felt, sponge, or mop) used to agitate and wipe the pile and, in the process, absorb soil.

[D13.62] D5253

**absorption**, *n*—a process in which one material (the absorbent) takes in or absorbs another (the absorbate); as the absorption of moisture by fibers. (See also **adsorption**, and **moisture equilibrium for testing**. Compare **desorption** and **resorption**.) [D13.51] D4920

accelerated aging, *n*—in textile processing and testing, the use of controlled environmental conditions to promote rapid physical or chemical change in a textile material.

[D13.20] D6799

acid content, *n*—*of felt*, the number of milliequivalents of acid present per unit weight of felt, measured under prescribed conditions. [D13.13] D4845

**acromion,** *n*—*in anatomy*, that part of the shoulder blade located at the end of the spine which articulates with the collar bone. (See also **shoulder joint**.) **[D13.55] D5219** 

**across back shoulder width,** n—the horizontal distance across the back from the top of one shoulder joint to the top of the other shoulder joint, taken with the arms down. [D13.55]

across front shoulder width, *n*—the horizontal distance across the front from the top of one shoulder joint to the top of the other shoulder joint, taken with the arms down. **[D13.55) D5219** 

**across shoulder**, *n*—*in body measurements*, the distance from shoulder joint to shoulder joint across the back.

[D13.55] D5219

acrylic fiber—See acrylic in D7641.

**adhesion**, *n*—the property denoting the ability of a material to resist delamination or separation into two or more layers.

[D13.19] D6477

adhesion, *n*—*in tire fabrics*, the force required to separate a textile material from rubber or other elastomer by a definite prescribed method. [D13.19] D6477

adhesive treated-tire cord, *n*—a tire cord whose adhesion to rubber or other elastomer has been improved by the application of a dip followed by rapid drying and (normally) additional heat treatment. [D13.19] D6477

**adsorption**, *n*—a process in which the surface of a solid takes on or absorbs in an extremely thin layer molecules of gases, of dissolved substances, or of liquids with which it is in contact. (See also **absorption**, **moisture equilibrium of testing**. Compare **desorption** and **resorption**.)

[D13.51] D4920

**afterflame,** *n*—persistent flaming of a material after the ignition source has been removed. [D13.92] D4391

**after-flame time,** *n*—the length of time for which a material continues to flame after the ignition source has been removed. [D13.92] D4391

**afterglow**, *n*—glow in a material after the removal of an external ignition source or after the cessation (natural or induced) of flaming of the material. (See also **flame**, **glow**, and **smoldering**.) [D13.92] D4391

**afterglow time,** *n*—the time afterglow continues after the cessation of flaming or after removal of the ignition source.

[D13.92] D4391

**air-jet spinning machine**, *n*—a machine that converts slivers of staple fibers into spun yarn using drafting rollers and a vortex created by an airflow suction orifice. **[D13.58]** 

D3888

**air permeability,** *n*—the rate of air flow passing perpendicular through a known area under a prescribed air pressure differential between the two surfaces of a material.

[D13.60] D4850

air splice, n—for inflatable restraint fabrics, the thicker portion of a yarn resulting from the entanglement of the filaments at the ends of two multifilament yarns to create a continuous yarn.

[D13.20] D6799



- **air-supported roof,** *n*—a fabric roof-system that is properly secured and primarily supported and held in place by air pressure. [D13.59/D13.60] D4850
- air wicking, n—in tires, the passage of air longitudinally along or through yarns in a fabric that has been encased and cured in rubber or other elastomer, that is, air permeability in the plane of the fabric.
  [D13.19] D6477
- **alkali solubility,** *n*—*in wool*, the percent of clean wool that is soluble in a specified alkaline solution under controlled conditions of temperature and time. [D13.13] D4845
- **All-purpose**, *n*—an outerwear garment, often with a removable liner, which is suitable for use in many different weather conditions. [D13.61] D7022
- **alpaca,** *n*—the fleece and fiber produced by the alpaca, an animal of the genus Llama (*Lama glama pacus*). [D13.13] D4845
- alternate grade reference line, *n*—an optional internal line whose orientation is used for the "*x*" axis of a grade rule.

  [D13.66] D6963
- American grain count, n— direct yarn numbering system for expressing linear density, equal to the mass in grains per 120 yards of sliver or roving. [D13.58] D4849
- **amount,** *n*—*in cotton fiber testing with the Length Analyzer*, a measure of the thickness or pneumatic density of the test beard, proportional to the number of fibers present at various distances from the base of the specimen clamp jaws.

  [D13.11] D7139
- amount, *n*—in cotton length testing with the Fibrograph, a measure of the thickness, or optical density, of the test beard, proportional to the number of fibers present at various distances from the comb(s). [D13.11] D7139
- anidex fiber—See anidex in D7641.
- **animal fiber,** *n*—any natural protein-base fiber. See D7641.
- ankle, n—in anatomy, the joint between the foot and the lower leg. [D13.55] D5219
- ankle girth, n—in body measurements, the circumference of the leg over the greatest prominence of the ankle.

  [D13.55] D5219
- ankle height, *n*—*in body measurements*, with the subject standing barefoot, the distance from the center of the prominent outside ankle bone to the floor. [D13.55] D5219
- ankle height (infant special case), *n*—the straight distance from the prominence of the outer ankle bone to the soles of the feet, taken with subject lying down flat with legs extended and the foot positioned at 1.57 rad (90°) to the leg.

  [D13.55] D5219
- annotation text, *n*—optional user text that can be specifically defined and displayed when the pattern piece is plotted.

  [D13.66] D6963
- **apex**, *n*—the greatest protrusion of the breast as seen from the side. [D13.53] D5219

- **apex angle,** n—the angle formed between the incoming and outgoing yarn at the top (and bottom) of the inter-wrapped yarn area in the static condition. [D13.19] D6477
- **applied tension,** *n*—*in yarn abrasion testing*, the static tension exerted on the weighted end of the yarn by the applied weight.

  [D13.19] D6477
- **aqueous extract,** *n*—*in wool testing*, the solution obtained by digesting a material with water or with a sodium chloride solution to dissolve soluble materials. [D13.13] D4845
- aramid fiber—See aramid in D7641.
- **architectural-use,** *n*—*in the building trade*, a descriptive term for fabrics used in fabric roof-systems or similar industrial applications. (See also **fabric roof-system.**)
  - [D13.59] D4850
- arm length, *n*—in body measurements, with the arm bent at 90 degrees and the clenched fist placed on the hip, the distance from the shoulder joint along the outside of the arm over the elbow to the greatest prominence on the outside of the wrist.

  [D13.55] D5219
- **armhole,** *n*—*in garment construction*, the area of a garment through which the arm passes or into which a sleeve is fitted. (Compare **armscye**.) [D13.55] D5219
- **armpit**, *n*—*in anatomy*, the hollow under the junction of the arm and the shoulder. [D13.55] D5219
- armscye, *n*—in garment construction, the opening in a garment for the attachment of a fitted sleeve. (Compare armhole.) [D13.55] D5219
- armscye circumference, *n*—in body measurements, with the arm hanging down, the distance from the shoulder joint through the front-break point, the armpit, the back-break point and to the starting point. [D13.55] D5219
- **assembled button,** *n*—a decorative button consisting of combinations of similar or dissimilar materials, such as plastic and metal or metal and metal, which have been joined together by such processes as gluing, swedging or metal stamping.

  [D13.54] D2050
- **atmosphere for testing,** *n*—air at ambient conditions of relative humidity and temperature in which tests or experiments are conducted. (See also **standard atmosphere for testing.**) [D13.51] D4920
- atmosphere for testing textiles, n—for glass, air maintained at a relative humidity of at least 48 % and no greater than 67 % and at a temperature of at least 20°C (68°F) and no greater than 25°C (77°F). [D13.18] D7018
- **attached cushion,** *n*—*for pile yarn floor covering*, a material, bonded to the backing fabric side of a pile yarn floor covering to provide additional dimensional stability, thickness, and padding.

  [D13.21] D5684
- attached upholstery fabric, *n*—the exterior fabric covering secured to a furniture unit by the furniture manufacturer or custom upholsterer. (See **furniture coverings**) [D13.63] D7023



- automatic lock slider, *n*—a slider that provides involuntary, positive locking action on the chain when the pull is released restricting the movement of the slider to open the chain unless a stress is applied through the stringers that exceeds the locking capacity of the slider. [D13.54] D2050
- average dynamic air permeability (ADAP), *n*—for inflatable restraints, the average of all of DAP measurements within a specified range of pressure differentials. [D13.20] D6799
- average fiber diameter, *n*—the arithmetic mean width of a group of fibers. [D13.13] D4845
- average fiber diameter, *n*—in wool and other animal fibers, the average width of a group of fibers when measured on a projected image. [D13.13] D4845
- azlon fiber—See azlon D7641.
- **B-tuft**, *n*—a two-pass process for aligning hooked fibers on the Fibroliner FL-101. [D13.11] D7139
- back breakpoint, *n*—in anatomy, the location on the back of the body where the arm separates from the body.

  [D13.55] D5219
- back coating, n—in textile floor covering, an adhesive compound applied for such purpose as locking pile yarn tufts into a carpet backing, bonding a secondary backing to a primary backing, or increasing fabric body or stiffness and increasing dimensional stability
   [D13.63] D7023
- **back side,** *n*—*in textile materials*, the side of the material that faces inward in the completed object. (Ant. **face side**, *right side*. Syn *wrongside*.) **[D13.54] D5646**
- **back waist length,** *n*—*in body measurements*, the vertical distance along the spine from the cervicale to the waist. [D13.55] D5219
- back width, *n—in body measurements*, the distance from back-breakpoint to back-breakpoint. [D13.55] D5219
- **backing,** *n*—*for pile yarn floor covering*, all materials in a pile yarn floor covering other than pile yarn. [D13.21] D5684
- backing fabric, *n*—in textiles, a fabric into which a pile yarn is inserted, or a reinforcing layer which is adhered to the reverse side of a fabric. [D13.21] D5684
- **bagging,** *n*—any fabric, of any fiber content, used to protect commodities during shipment and/or storage.

  [D13.60] D4850
- **bail,** *n*—a portion or portions of the slider to which the pull or pulls are attached. (Syn. **lug**) [D13.54] D2050
- **bale (jute),** *n*—a bag, sack, etc., containing packages of yarn. [D13.17] D6798
- **barb**, *n*—*in down*, the primary structure of plumage emanating from a quill point of a down cluster. [D13.61] D7022
- **barb**, *n*—*in feathers*, the primary structure of plumage emanating from the quill of a feather. [D13.61] D7022

- barré, n—an unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric or to the courses of circular knit fabric. (Compare warp streaks and mixed filling, see filling blend.)

  [D13.59] D3990
- **base burn,** *n*—the point at which the flame burns the ground (base) fabric of a raised surface textile fabric and provides a self-sustaining flame. [D13.92] D4391
- **base size**, *n*—the digitized or created size of a style.

[D13.66] D6963

- bast fibers, n—in flax stems, fibers found in the layer of phloem of the flax stem between the inner xylem tissue and the epidermis tissue.
  [D13.17] D6798
- bast and leaf fiber, *n*—fiber derived from the inner fibrous bark and the hard coarse leaves of dicotyledonous plants such as flax, hemp, jute, and abaca. [D13.17] D6798
- **bath mat,** n—an absorbent textile floor covering normally used in the bathroom as a pad on which to step when getting out of the tub or shower. [D13.62] D5253
- **bath rug**, *n*—a scatter rug used in the bathroom. [D13.62] D5253
- **bath sheet,** n—a textile terry product with end hems or fringes and side hems or selvages that is generally much larger than a bath towel. [D13.63] D7023
- **bath towel,** *n*—a textile terry product with end hems or fringes and side hems or selvages, which is used to dry a person's body after bathing or swimming. [D13.63] D7023
- **batting,** *n*—a textile filling material consisting of a continuous web of fibers formed by carding, garnetting, air laying, or other means. [D13.61] D7022
- **batting integrity,** *n*—the ability of a textile filling material to resist distortion or change when subjected to multiple home launderings or drycleanings. [D13.61] D7022
- **bead,** *n*—*in an individual element slide fastener*, an enlarged section on the inner edge of each tape formed by the cord and weft yarns of the tape used to attach the cord to the tape. the interlockable elements are affixed to the bead on an individual element slider fastener. [D13.54] D2050
- **bead,** *n*—in a continuous element woven typeslide fastener, a section of the tape where a cord and/or selected warp yarns are woven in place by the weft yarns of the tape to form a bead. The continuous element is secured to the tape by the bead simultaneously with the bead formation.

  [D13.54] D2050
- **bead,** *n*—in a continuous element sewn type slide fastener, a section of the tape where a cord is attached to the tape by sewing. A cord is optional on a continuous element sewn type slide fastener.

  [D13.54] D2050
- beam, n—in textiles, a large spool containing many ends of yarn wound parallel, and used for such purposes as weaving or warp knitting.[D13.58] D4849



- **beam set,** *n*—*in textiles*, one or more beams of yarn in a single shipment to be further processed together for a specific end use. [D13.58] D4849
- **bedcovering,** *n*—a textile product used on a bed over the sheets for warmth or decoration. [D13.63] D7023
- **bedspread,** *n*—a type of bedcovering that is placed over the blankets and sheets for appearance and warmth.

  [D13.63] D7023
- bench marks, n—marks placed on a specimen to define gage length, that is, the portion of the specimen that will be evaluated in a specific test. [D13.58] D4849
- bending length, n—(1) general—a measure of the interaction between fabric weight and fabric stiffness as shown by the way in which a fabric bends under its own weight. It reflects the stiffness of a fabric when bent in one plane under the force of gravity, and is one component of drape. (2) specific—the cube root of the ratio of the flexural rigidity to the weight per unit area. [D13.59] D4850
- **bicomponent fiber,** *n*—a fiber consisting of two polymers which are chemically different, physically different, or both.

  [D13.51] D4920
- binding site, *n*—for pile yarn floor covering, a place at which the pile yarn is, or can be, bound to the backing fabric.

  [D13.21] D5684
- **birdseye**, *n*—*in knitted fabrics*, an unintentional tuck stitch. [D13.59] D3990
- birefringence, n—(double refraction) a property of anisotropic materials which manifests itself as a splitting of a light ray into components having different vibration directions which are transmitted at different velocities.
   [D13.51] D4920
- **black felt,** *n*—those classifications of felt manufactured to various shades of the color black. [D13.13] D4845
- **blanket,** *n*—*for bedding*, an unquilted fabric covering designed primarily to provide thermal insulation. [D13.63] D7023
- bleach, n—in care of textiles, a product for brightening and aiding in the removal of soils and stains from textile materials by oxidation that is inclusive of both chlorine and non-chlorine products.
   [D13.62] D3136
- bleedthrough, *n*—for coated inflatable restraint fabrics, the presence of coating material on the uncoated sie, between two yarns, without covering either yarn. [D13.20] D6799
- **blending plan,** *n*—the instructions for mixing fibers during specimen preparation. [D13.11] D7139
- **blind hem stitch,** *n—in home sewing*, a complex machine stitch pattern consisting of small groups of straight or narrow zigzag stitches separated by a wide zigzag stitch unit at consistent intervals. [D13.54] D5646
- **blip**, *n*—*for inflatable restraint fabrics*, and short, irregularly shaped or textured portion of an individual multifilament

- yarn that has been woven into the fabric, including slough offs, stripbacks, fuzz balls, snarls, and slubs. [D13.20]
  - D6799
- blister, n—in bonded, fused, or laminated fabrics, a bulge, swelling, or similar surface condition on either the face fabric or the backing fabric characterized by the fabric being raised from the plane of the underlying component over a limited area to give a puffy appearance. [D13.60, D13.61]
- block, n—for cutting standard def., a a sequence of commands
- within a cut file and which activate a response by the automated fabric cutter. [D13.66] D6963
- blocking, n—of coated fiber glass yarn solar screening, an undesired adhesion between touching layers of a material, such as occurs under moderate pressure, during storage or use.
   [D13.18] D7018
- **blocking,** n—the measurement of the development of surface tack and the thermal softening point of the material. [D13.63] D7023
- **blotch,** *n*—an irregularly shaped offcolored area. [D13.59] D3990
- **bobbin,** *n*—a slightly tapered plastic cylinder, mounted on a spindle of a ring spinning frame on which yarn produced from drafting and twisting is wound. [D13.58] D3888
- body dimension, *n*—in garment construction, a body measurement which can be used to build a sizing system or to select an appropriately sized garment. (See also **sizing system**.)

  [D13.55] D5219
- body measurements, *n—in anthropometry*, a standardized distance between two specified points on the human anatomy. [D13.55] D5219
- **body weight,** *n*—*in body measurements*, mass in kilograms (pounds). [D13.55] D5219
- **bond strength,** *n*—of bonded, fused, or laminated fabrics, the tensile force expressed in ounces per 25 mm (1 in.) of width, required to separate the component layers under specified conditions. [D13.60, D13.61] D4850,D7022
- bonded fabric, n—a layered fabric structure wherein a face or shell fabric is joined to a backing fabric, such as tricot, with an adhesive that does not significantly add to the thickness of the combined fabrics. (See also laminated fabric and coated fabric.)
  [D13.60, D13.61] D4850,D7022
- **bonnet,** *n*—*in cleaning pile floor coverings*, an absorbent pad which can be mounted under a rotary shampoo machine.

  [D13.62] D5253
- **book fold,** *n*—a fabric doubled selvage to selvage, then folded back and forth upon itself in predetermined lengths. (See also **shoe fold.**) [D13.60] D4850
- **bottom assembly,** *n*—the components of the lowermost part of a slide fastener that determines whether the slide fastener will be non-separable or separable. (See also **non-separable**



- slide fastener and separable slide fastener.)
  [D13.54] D2050
- bottom stop, *n*—a part affixed to both stringers immediately below, or over, the chain, holding the two stringers together at the bottom and preventing the slider from leaving the chain.

  [D13.54] D2050
- bound seam-finish, *n*—in home sewing, a seam finish in which another material is used to enclose the cut edges of one or more seam allowances. (Compare **Hong Kong seam-finish**.)

  [D13.54] D5646
- **bound water,** *n*—the amount of water in a test specimen that is hydrogen bonded to cellulose and expressed as a percentage of the mass of the specimen. **[D13.11] D7139**
- **boundary friction,** *n*—friction at low sliding speeds (0.02 m/min or less) where lubrication occurs under thin-film lubricant conditions. [D13.58] D4850
- bow, n—a fabric condition resulting when filling yarns or knitted courses are displaced from a line perpendicular to the selvages and form one or more arcs across the width of the fabric. (See also double bow.)
  [D13.59] D3990
- **braid,** *n*—a narrow tubular or flat fabric produced by intertwining a single set of yarns according to a definite pattern (Maypole process). [D13.18] D7018
- **braided fabric,** *n*—a structure produced by interlacing three or more ends of yarns in a manner such that the paths of the yarns are diagonal to the vertical axis of the fabric.

  [D13.60] D4850
- **braided rope,** *n*—a cylindrically produced rope made by intertwining, maypole fashion, several to many strands according to a definite pattern with adjacent strands normally containing yarns of the opposite twist. **[D13.92] D123**
- break factor, *n*—in yarn testing, the comparative breaking load of a skein of yarn adjusted for the linear density of the yarn expressed in an indirect system. [D13.58] D4848
- **breaking,** *n*—the crushing of the structure of the stem; loosening the bond between the fiber bundles and shives and breaking the shives into short pieces to facilitate its removal.

  [D13.17] D6798
- **breaking force,** *n*—the maximum force applied to a material carried to rupture. (Compare **breaking point**. See **breaking strength**.) [D13.58] D4848
- **breaking point,** *n*—on a force-extension or force-elongation curve, or stress-strain curve, the point corresponding with the breaking force or the breaking stress in a tensile test. (Compare **breaking force.**) [D13.58] D4848
- breaking strength, n—the ability or capacity of a specific material to withstand the ultimate tensile load or force required for rupture. (See also tensile strength)

  [D13.58] D4848
- **breaking strength,** *n*—a strength expressed in terms of breaking force. [D13.58] D4848

- **breaking tenacity,** *n*—the tenacity at the breaking force. [D13.58] D4848
- **breaking tenacity,** *n*—the tenacity corresponding to the breaking load. **[D13.13] D4845**
- breaking toughness, *n*—the actual work per unit volume or per unit mass of material that is required to rupture the material. [D13.58] D4848
- **breakout pressure,** *n*—*for inflatable restraints*, the pressure level during deployment which ruptures the module cover.

  [D13.20] D6799
- **bridge,** *n*—the area of a button between the holes partially covered by the sewing threads with dimensions varying upon design and end use. [D13.54] D2050
- **bridge top stop,** *n*—*in zippers*, a part affixed immediately above the chain, holding the tops of the two stringers together and preventing the slider from leaving the chain.

  [D13.54] D2050
- **broken end,** *n*—*in woven fabrics*, a void in the warp direction due to yarn breakage. [D13.59] D3990
- **broken filament,** *n*—*in multifilament yarn*, breaks in one or more filaments. [D13.58] D4849
- **broken pick,** *n*—*in woven fabrics*, a discontinuity in the filling direction caused by a break or cut in the filling yarn.

  [D13.59] D3990
- **bruise**, *n*—*in fabrics*, an area that has been subjected to impact or pressure, which differs from the adjacent normal fabric. [D13.59] D3990
- **brush**, n—a hand-held cleaning tool consisting of a base into which bristles are inserted. [D13.62] D5253
- **brush**, *vt*—in refurbishing textiles, (1) to use a brush to remove surface particulate soils, (2) work a cleaning solution or spot cleaning agent into carpet pile or upholstery fabric, or (3) restore the appearance of pile fabrics. [D13.62] D5253
- **bulk density,** *n*—apparent mass per unit volume. [D13.51] D4920
- bulk sample, n—in the sampling of bulk material, one or more portions which (1) are taken from material that does not consist of separately identifiable units and (2) can be identified after sampling separate or composited units.

  [D13.58] D4849
- **bulk shrinkage,** *n*—a measure of potential stretch and power of stretch yarns or a measure of bulk of textured-set yarns.

  [D13.58] D4849
- bunch, n—a defect in a yarn characterized by a segment not over 6 mm (½ in.) in length that shows an abrupt increase in diameter caused by more fibers matted in this particular place. (See slug, slub.) [D13.58] D4849
- buried pile yarn, *n*—for coated pile yarn floor covering, that portion of the pile tuft elements which remains after the tuft legs have been removed by shearing. [D13.21] D5684



- **burlap,** *n*—a coarse, heavy, plain weave fabric of coarse single bask fiber yarn. [D13.60] D4850
- **burn time,** *n*—the time elapsed from ignition until the stop thread is severed as measured by the timing mechanism of the test apparatus. [D13.92 D4391]
- **burning behavior,** *n*—all the changes that take place when materials or products are exposed to a specified ignition source. [D13.92] D4391
- burr-wool waste, n—waste removed by the burr guard of cards or burr pickers having a very short fiber and full of burrs or seeds. [D13.13] D4845
- bursting force, *n*—the force or pressure required to rupture a fabric by distending it with a force, applied at right angles to the plane of the fabric, under specified conditions

  [D13.60] D4850
- **bursting strength,** *n*—*in fabric*,the capacity of a material to withstand the ultimate bursting force required to rupture a fabric. [D13.60] D4850
- bust girth, *n*—in body measurements, the circumference of the body over the fullest part of the breasts and parallel to the floor. (Compare chest girth.) [D13.55] D5219
- **bust point to bust point,** *n*—*in body measurements*, the distance across the front from the apex of one breast to the apex of the other.

  [D13.55] D5219
- bust point to bust point (halter), *n*—the horizontal distance from bust apex around the back of the neck to bust apex, taken with the arms down. [D13.55] D5219
- **button,** *n*—a knob, disc, or similar object which when forced through a narrow opening or buttonhole, fastens one part of a garment or other flexible substrate to another.

  [D13.54] D2050
- buttonhole stitch, *n*—in home sewing, a complex machine stitch pattern made by coordinated motions of needle and feed, appearing as very close stitches forming a narrow rectangle of stitching that is usually composed of four stitch segments, one on each side and on each of the two ends of the rectangle.

  [D13.54] D5646
- **cable twist,** *n*—the construction of cabled yarn, cord, or rope in which each successive twist is in the opposite direction to the preceding twist; an S/Z/S or Z/S/Z construction.

  [D13.58] D4849
- calf girth, *n*—in body measurements, the maximum circumference around the leg between the knee and ankle, parallel to the floor. [D13.55] D4849
- calibrate,  $\nu$ —to determine and record the relationship between a set of standard units of measure and the output of an instrument or test procedure. [D13.58] D4849
- **calibration cotton standards,** *n*—bales of cotton with established values of micronaire, length, uniformity index and breaking tenacity (strength) for the purpose of calibrating

- cotton classification instruments for length, uniformity index and breaking tenacity (strength). [D13.11] D7139
- **cam lock slider,** *n*—a slider that incorporates a curled projection or projections on the pull that extends through a window or windows to effect a locking action by pressing against the interlocking elements when the cam lock slider is in the locked position.

  [D13.54] D2050
- **camisole,** *n*—waist-length, straight-cup top with shoulder straps worn under outerwear. [D13.61] D7022
- **camping tentage,** *n*—any portable temporary shelter or structure designed to protect persons from the elements, all or a portion of the covering which is made of fabric or other pliable materials. [D13.52] D123
- **candidate bale,** *n*—bale of saw ginned cotton selected for potential use as a calibration cotton standard. [D13.11] D7139
- capacity, *n*—for tensile testing machines, the maximum force for which the machine is designed. [D13.58] D4849
- **carbonized and neutralized wool,** *n*—a term descriptive of scoured wool processed to destroy cellulosic impurities by treating with a mineral acid or an acid salt, drying and baking, crushing, and dusting out the embrittled cellulosic matter followed by neutralization of the acidified wool.

  [D13.13] D4845
- **carded wool,** *n*—scoured wool which has been processed through a carding machine. [D13.13] D4845
- **carded yarn,** *n*—an organized, continuous strand of staple fibers produced by carding, drawing, roving formation, and spinning. (Compare with **combed yarn**.) [D13.58] D3888
- **carding,** *v*—a mechanical preparation, utilized by staple fiber spinning systems, that cleans, straightens, and aligns fibers using wire-covered rolls (or cylinders) that converts fibers into a sliver. [D13.58] D3888
- care instructions, *n*—*in textiles*, a series of directions that describes practices which should refurbish a product without adverse effects and warn against any part of the directions which one could reasonably be expected to use that my harm the item.

  [D13.62] D3136
- care label, *n*—in textiles, a label or other affixed instructions that report how a product should be refurbished [D13.62] D3136
- care procedure, *n*—*in textiles*, one or more refurbishing methods to which products may be subjected for soil and stain removal and aesthetic improvement such as appearance restoration or hand.

  [D13.62] D3136
- **care symbol,** *n*—a pictorial symbol that gives directions for refurbishing a consumer textile product. [D13.62] D3136
- **career apparel,** *n*—garments, the styling and performance of which are designed for various end uses so as to be suitable for on-the-job wear in a variety of businesses and professions. (See also **dress career apparel** and **vocational career apparel**.) [D13.61] D7022



- **career apparel,** *n*—garments which are manufactured for a variety of end uses and for which performance requirements vary.

  [D13.61] D7022
- **career apparel, dress,** *n*—a category of tailored uniform in which abusive wear is not common and in which appearance is much more important than durability (see also **career apparel, career apparel, vocational**). **[D13.61] D7022**
- **career apparel, vocational,** *n*—a type of garment worn as a uniform in which abusive wear is common and durability is generally more important than appearance (see also **career apparel, dress, career apparel**). [D13.61] D7022
- **carpet,** *n*—all textile floor coverings not designated as rugs. [D13.21] D5684
- **carpet module,** n—textile floor covering sections usually having dimensions of less than 1 m<sup>2</sup>. [D13.21] D5684
- **carpet sweep,** *v*—remove loose soil particles and lint from the textile floor covering surface using a carpet sweeper. [D13.62] D5253
- **carpet sweeper,** *n*—a manually powered machine which has rotary brushes and which is used for light surface cleaning of carpets and rugs. [D13.62] D5253
- carrier, *n*—in braiding machinery, that part of a braiding machine that holds the package of yarn, thread, or cord, and carries the yarn when the machine is operated.

  [D13.18] D7018
- case, n—in textiles, a shipping unit, usually a carton, box, bale, or other container holding a number of yarn packages.
  [D13.58] D4849
- **cashmere,** *n*—*in roving, yarn, or fabrics*, cashmere hair or products made therewith having a cashmere coarse-hair content not exceeding a specified maximum percentage by length.

  [D13.13] D4845
- **cashmere coarse-hair**, *n*—those coarse fibers in cashmere hair having widths greater than 30 μm. [D13.13] D4845
- cashmere coarse-hair content, *n*—the total length of the cashmere coarse-hair fibers that are present, expressed as a percentage of the total length of all the cashmere hair fibers; that is, the percentage by length of cashmere coarse-hair in cashmere hair.

  [D13.13] D4845
- **cashmere down,** *n*—those fibers in cashmere hair widths of 30 μm or less. [D13.13] D4845
- **cashmere hair,** *n*—the fibers produced by a form of goat (*Capra hircus*) indigenous to Asia and known as the cashmere goat. [D13.13] D4845
- catenary length, *n*—the difference between the length of the shortest and the longest component in a plied yarn or cables cord after twisting. [D13.19] D6477
- **center back waist length,** *n*—*in body measurements*, the vertical distance along the spine from the cervicale to the waist. [D13.55] D5219

- **center front waist length,** *n*—*in body measurements*, the vertical distance from the neck baseline at the center front to the waist level. [D13.55] D5219
- cervicale, *n*—in anatomy, the prominent point of the seventh or lowest neck vertebra at the back of the body.

  [D13.55] D5219
- **cervicale height,** *n*—the vertical distance from the cervicale to the floor, taken with subject standing and without shoes.

  [D13.55] D5219
- cervicale height (infant special case), *n*—the straight distance from the cervicale to the soles of the feet, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg. [D13.55] D5219
- cervicale to bust point, *n*—in body measurements, the distance from the cervicale around the base of the neck and down to the bust point. [D13.55] D5219
- cervicale to knee height, *n*—the vertical distance from the cervicale to a point level with the midpoint of the back of the knee (or crease). [D13.55] D5219
- cervicale to knee height (infant special case), *n*—the straight distance from the cervicale to a point level with the midpoint of the back of the knee (or crease), taken with subject lying down flat with legs extended. [D13.55] D5219
- cervical to wrist, n—in body measurements, with the arm bent, the distance from the cervical to the shoulder joints, along the outside of the arm, over the elbow to the greater prominence on the outside of the wrist. [D13.55] D5219
- **cervical to wrist length,** n—the distance from the cervicale over the top of the shoulder joint, along the outside of the arm, over the elbow to the prominent wrist bone, taken with the arm bent 1.57 rad (90°) and the hand placed on the hip. [D13.55] D5219
- **chafer fabric,** *n*—*in tire fabrics*, a woven fabric, usually coated with unvulcanized rubber, which is laid around the bead of a tire before vulcanization. [D13.19] D6477
- **chain,** *n*—the portion of a slide fastener, without its components (top stops, bottom stops, slider, separating parts, etc.), that is formed by alternately interlocking the elements of one stringer with the elements of an opposing stringer.

  [D13.54] D2050
- chain front, n—a general reference of the slide fastener when viewed from the element side on a continuous element fastener (CEF). For slide fastener designs where the chain is bilaterally symmetrical (such as an IEF for example) the front is generally referenced by the location of the slider tab, on a single tab slider, when opening or closing the chain.

  [D13.54] D2050
- **chain thickness,** *n*—the measurement from front to back of the chain. On a continuous element fastener (CEF) the measurement includes the tape and sewing threads on a sewn type fastener or the tape and yarns for securing the element to the



- tape on a woven type of fastener if these parts extend beyond the element. [D13.54] D2050
- **chain width,** *n*—the measurement between the shoulders of the interlocked elements or between the outermost edges of the bead if the bead extends beyond the elements.

  [D13.54] D2050
- **change in surface appearance,** *n*—*for pile yarn floor coverings*, the physical affect of changing the use-surface by mechanical means or foot traffic. [D13.21] D5684
- **charring,** *n*—the formation of carbonaceous residue as the result of pyrolysis or incomplete combustion.

  [D13.92] D4391
- **chemical wash,** *n*—*in rug cleaning*, a specialized professional process used on oriental rugs. [D13.62] D5253
- chest-bust girth, n— the horizontal circumference around the torso, taken under the arms and across the fullest part of the chest/bust apex including the lower portion of the shoulder blades.
   [D13.55] D5219
- **chest girth,** *n*—*in body measurements*, the circumference of the body over the shoulder blades, under the arms and across the upper chest. (Compare **bust girth**.) [D13.55] D5219
- **chlorine bleach,** *n*—a bleach that releases the hypochlorite ion in solution, for example, sodium hypochlorite.

  [D13.62] D3136
- **chopped strand,** *n*—*in glass textiles*, a strand made from short predetermined lengths of cut continuous filament and used as a reinforcing material. (See also **strand**.) [D13.18] D7018
- **chord modulus,** *n*—in a *stress-strain curve*, the ratio of the change in stress to the change in strain between two specified points on the curve. [D13.58] D4848
- **circular bend,** *n*—simultaneous, multidirectional deformation of a fabric in which one face of a flat specimen becomes concave and the other becomes convex. **[D13.60] D4850**
- **clamp,** *n*—that part of a testing machine used to grip the specimen by means of suitable jaws. [D13.58] D4849
- clean-finish seam-finish, n—in home sewing, a seam finish in which the cut edge is folded under and the fold line is edge stitched.
  [D13.54] D2050
- **clean wool fiber present,** *n*—*in raw wool*, the mass of wool base present in the raw wool, adjusted to a moisture content of 12 %, an alcohol-extractable content of 1.5 %, and a mineral matter content of 0.5 %. [D13.13] D4845
- **cleaning agent,** *n*—a chemical compound or formulation of several compounds which loosens, disperses, dissolves, or emulsifies soil to facilitate removal by mechanical action.

  [D13.63] D7023
- clip mark, n—a visible deformation near the edge of a fabric parallel with the lengthwise direction caused by pressure exerted by a clasping device on a clip tenter frame. (See also pin mark.)
  [D13.59] D3990

- **clo,** n—unit of thermal resistance equal to 0.155 Km $^2$ /W. [D13.51] D4920
- **closed-face fabric,** n—a face or shell fabric of closed construction so that no open-face areas appear. [D13.61] D7022
- **coarse end,** *n*—a larger than normal diameter warp end. (Compare **fine end.**) [D13.59] D3990
- coarse pick, *n*—in woven fabrics, one or more picks of larger diameter than the normal filling yarn in the fabric.

  [D13.59] D3990
- coat, n—an outer garment which covers at least the upper half of the body, has sleeves and a front opening, and is usually worn over another garment, such as a shirt or dress.
  [D13.61] D7022
- **coated fabric,** *n*—a flexible material composed of a fabric and any adherent polymeric material applied to one or both surfaces. (See also **laminated fabric**.) **[D13.60] D4850**
- **coating slub,** *n*—*for coated inflatable restraint fabrics*, an irregularly shaped lump of coating material on the surface of the coated layer resembling a yarn slub. [D13.20] D6799
- **coating streak,** *n*—*for coated inflatable restraint fabrics*, minor variation in the color or opacity of the coated layer.

  [D13.20] D6799
- coating transfer, *n*—for coated inflatable restraint fabrics, the presence of coating material on the uncoated side, covering one or more yarns. [D13.20] D6799
- **cockles,** *n*—*in yarns*, irregular, thick, uneven lumps. [D13.58] D4849
- coefficient of friction, n—the ratio of the tangential force that is needed to maintain uniform relative motion between two contacting surfaces to the perpendicular force holding them in contact.
   [D13.58] D4849
- **coefficient of length variation,** *n*—a measure of fiber length distribution. [D13.11] D7139
- **coefficient of variation, CV,** *n*—a measure of the dispersion of observed values equal to the standard deviation for the values divided by the average of the values; may be expressed as a percentage of the average (%CV).

  [D13.58] D4849
- coefficient of variation unevenness, *n*—in textiles, the standard deviation of the linear densities over which unevenness is measured expressed as a percentage of the average linear density for the total length within which unevenness is measured. (See also unevenness and mean deviation unevenness.)

  [D13.58] D4849
- **cohesive force,** *n*—*in a textile strand*, the force required to overcome fiber cohesion as the strand is being reduced in linear density.

  [D13.58] D4849
- collecting surface, n—in the rotor of an open-end spinning machine, that portion of the internal surface of the rotor, often in the form of a groove, in which the fibers are condensed for assembly into yarn. [D13.58] D3888



- color bleeding, n—the loss of color from a dyed fabric when immersed in water, drycleaning solvent, or similar liquid medium, with consequent coloring of the liquid medium.
   (Compare color staining, crocking.) [D13.59] D3990
- color contrast, *n*—*in textiles*, a general term for a visible color difference between two adjacent areas. [D13.60] D4850
- color grading, n—the act of identifying a specimen by a color grade or color score that is specific to the color and the material graded.[D13.11] D7139
- color lamp, n—in color determination of cotton with a Color Meter, a lamp with a specific energy output function used in conjunction with special tristimulus filters to obtain a desired response function.
  [D13.11] D7139
- color meter, n—an instrument which measures the fiber sample color as presented in the viewing window, in terms of the tristimulus values Y and Z and transmits these values to the IC/TC for further processing.
   [D13.11] D7139
- **color space,** n—specific to this standard, the daylight color of opaque specimens are represented by points in a space in terms of three color scales: reflectance,  $R_d$ , and the chromaticity coordinates for redness or greenness,  $\pm a$ , and yellowness or blueness,  $\pm b$ . [D13.11] D7139
- color stability, n—in coated glass textiles, the ability of the applied coating to resist fading from exposure to sunlight and water.
   [D13.18] D7018
- **color staining,** *n*—the undesired pickup of color by a fabric: (*I*) when immersed in water, drycleaning solvent, or similar liquid medium, that contains dyestuffs or coloring material not intended for coloring the fabric, or (2) by direct contact with other dyed material from which color is transferred by bleeding or sublimation. (Compare **crocking** and **color bleeding.**) [D13.59] D3990
- **colored fiber,** *n*—*in wool top*, any fiber the color or shade of which differs from the normal color or shade of the fiber mass of the sample. [D13.13] D4845
- colorfastness, *n*—the resistance of a material to change in any of its color characteristics, to transfer its colorant(s) to adjacent materials, or both, as the result of exposure of the material to any real or simulated environment that might be encountered during processing, storage, use or testing of the material.

  [D13.58] D4849
- combed yarn, n—an organized, continuous strand of staple fibers produced by carding, roving, drawing, formation, combing, and spinning. (Compare with carded yarn.)
   [D13.58] D3888
- comber/brusher, n—an instrument which prepares the test beard of fibers for length, length uniformity, strength, and elongation measurements by combing the test specimen to remove loose or unclamped fibers and paralleling the individually clamped fibers, and by brushing the clamped fibers to remove fiber crimp and smooth the test beard of cotton.
   [D13.11] D7139

- combing, v—an optional mechanical preparation process undertaken to remove additional trash particles, neps, and short fibers (typically fibers less than 12.5 mm or 0.5 in.) from carded sliver to further align the remaining fibers.

  [D13.58] D3888
- combing, v—in flax, the processing of tow so as to produce tops or sliver which have the staple length and width suitable for use in the worsted spinning system. [D13.17] D6798
- **combing wool,** *n*—wool that is strong and strictly of combing length, that is, 2 in. (50 mm) or more. [D13.13] D4845
- **combustible textile,** *n*—a textile that will ignite and burn or that will give off vapors that will ignite and burn when subjected to external sources of ignition. (See **noncombustible textile**.) [D13.92] D4391
- **combustion,** *n*—a chemical process of oxidation that occurs at a rate fast enough to produce heat and usually light either as glow or flames. [D13.92] D4391
- **comforter,** *n*—a bedcovering assembly, consisting of an insulating filler secured between two layers of fabric, used primarily to reduce heat loss. [D13.63] D7023
- **command,** *n*—a two letter sequence, always written in capital letters, that governs interpretation of formatted data. Also known as a **syntax command**. [D13.66] D6963
- commercial allowance, n—an arbitrary value equal to the commercial moisture regain plus a specified allowance for finish, used with the mass of scoured, oven-dried yarn, to compute (1) yarn linear density, (2) the commercial or legal mass of a shipment or delivery of any specific textile material (see also commercial moisture regain) or (3) the mass of a specific component in the analysis of fiber blends.
  [D13.51] D4920
- commercial composition, n—in wool, the percentages by weight of wool base, moisture, and other non-wool base components in wool to which a specific commercial designation is applied.
   [D13.13] D4845
- **commercial designation,** *n*—*in wool*, a term applied to a lot of wool in a stated form, and having a specified commercial composition. [D13.13] D4845
- commercial laundering—a process by which textile products or specimens may be washed, bleached, rinsed, dried, and pressed typically at higher temperatures, higher pH and longer times than used for home laundering.

  [D13.62] D3136
- **commercial mass,** *n*—billed mass as determined by a generally accepted method or as agreed upon between the purchaser and supplier. [D13.51] D4920
- **commercial moisture content,** *n*—*for wool*, the moisture calculated as a percentage of the weight of the wool, top, noils, yarn, fabric, etc., in the "as-is" condition; that is, containing whatever moisture, oil, grease, or other extraneous matter that may be present. [D13.13] D4845



- commercial moisture regain, n—a formally adopted arbitrary value, to be used with the oven-dried mass of textile fibers, when calculating the commercial mass of a shipment or delivery.
   [D13.51] D4920
- **commercial weight,** *n*—billed weight as determined by a generally accepted method or as agreed to by the purchaser and the seller. [D13.13] D4845
- compact spinning, n—a modified ring-spinning process that alters the geometry of the spinning twist triangle to produce a more uniform structure by binding fibers into the body of the yarn.
  [D13.58] D3888
- complex machine stitch pattern, *n*—in home sewing, a machine stitch pattern formed when two or more simple machine stitch patterns are combined in one repeating unit. (Compare simple machine stitch pattern.) [D13.54]

  D5646
- **complex seam,** *n*—*in home sewing*, a seam made in two or more steps. (Ant. **plain seam**.) [D13.54] D5646
- **component,** *n*—as used with textile fiber polymers, a polymer with distinguishable properties. [D13.58] D4849
- components, *n*—for pile yarn floor covering, the individual yarn or fabric elements into which a pile yarn floor covering can be separated. [D13.21] D5684
- **compression,** *n*—the act, process, or result of compacting, condensing, or concentrating. [D13.58] D4848
- **compression molded button,** *n*—a button or button blank which is produced by compression molding thermoset-molding compounds such as urea-formaldehyde, melamine-formaldehyde, styrene-modified polyester or any combination thereof. This method using styrene modified polyester resin, and having in its formulation pearlescent pigments which are oriented in the molding process, form a button or button blank which resembles natural shell.

  [D13.54] D2050
- **compression molding,** *n*—the method of molding a material already in a confined cavity by applying pressure and usually heat. [D13.54] D2050
- **compression recovery,** *n*—the degree to which a material returns to its original dimension(s) after removal of a compressive force. [D13.58] D4848
- **compression resistance**, *n*—the ability of a material to oppose deformation under a compressive force. **[D13.58] D4848**
- **compressive force,** *n*—the perpendicular force applied to surfaces(s) of a material in compaction. [D13.58] D4848
- **condition,** *v*—to bring a material to moisture equilibrium with a specified atmosphere. [D13.51] D4920
- cone, n—in textiles, (1) a yarn holder or bobbin of conical shape used as a core for a yarn package of conical form, also called a cone core. (2) the yarn package obtained when yarn is wound upon a cone core. [D13.58] D4849

- connecting ring, n—a device used to secure a pull, having more than one component in its design, to the bail of the slider. This connecting ring may be of various shapes.

  [D13.54] D2050
- constant-rate-of-extension type tensile testing machine (*CRE*), *n*—*in tensile testing*, an apparatus in which the pulling clamp moves at a uniform rate, and the force-measuring mechanism moves a negligible distance with increasing force, less than 0.13 mm (0.005 in.). [D13.13, D13.58] D4845,D4849
- constant-rate-of-load tensile testing machine (*CRL*), *n*—*in* tensile testing, an apparatus in which the rate of increase of the force is uniform with time after the first 3 s and the specimen is free to elongate, this elongation dependent on the extension characteristics of the specimen at any applied force.

  [D13.58] D4849
- constant-rate-of-loading (CRL) type tensile testing machine, n—in tensile testing, an apparatus in which the rate of increase of the force is uniform with time after the first 3 s and the specimen is free to elongate, this elongation being dependent on the extension characteristics of the specimen at any applied force. [D13.13] D4845,
- constant-rate-of-traverse tensile testing machine (*CRT*), *n—in tensile testing*, an apparatus in which the pulling clamp moves at a uniform rate and the force is applied through the other clamp which moves appreciably to actuate a weighing mechanism, so that the rate of increase of force or extension that is usually not constant and is dependent upon the extension characteristics of the specimen. [D13.58] D4849
- constant-rate-of-traverse (CRT) type tensile testing machine (), *n*—in tensile testing, an apparatus in which the pulling clamp moves at a uniform rate and the force is applied through the other clamp which moves appreciably to actuate a force-measuring mechanism, producing a rate of increase of force or extension that is usually not constant and is dependent on the extension characteristics of the specimen. [D13.13] D4845
- constructional units, *n*—in pile floor covering, the needles, pitch, rows, shot, etc. into which the warp and filling yarns are commonly grouped. [D13.21] D5684
- consumer care, *n*—of consumer textile products, cleaning and maintenance procedures as customarily undertaken by the ultimate user. [D13.62] D3136
- **consumer textile product,** *n*—a textile product intended to satisfy human wants and needs. [D13.62] D3136
- **container,** *n*—a receptacle designed to hold a material, or to give integrity to the material. [D13.58] D4849
- **contamination,** *n*—*for coated inflatable restraint fabrics*, the presence of non-coating material in the coated layer. [D13.20] D6799
- **continuous element,** *n*—a configured element formed continuously along a length of monofilament into the shape of a



spiral (or coil), serpentine or other configuration. The continuous element contains heads formed along its length at the crimp for the purpose of interlocking. The side of the continuous element opposite the crimp is the shoulder and bears the slider flanges during opening and closing of the elements. (Compare separate element.) [D13.54] D2050

continuous element slide fastener, *n*—CEF. can be a sewn type or a woven type slide fastener. The sewn type CEF is a slide fastener consisting of two continuously formed elements, each attached to one of the opposing edges of two tapes, which are engaged and disengaged by the movement of a slider. The continuous elements of the sewn type CEF are formed separately from the tapes and later joined by sewing. The CEF woven type slide fastener consists of two continuous elements formed integrally with the tape, which are engaged and disengaged by movement of the slider. (Compare individual element slide fastener.) [D13.54]

**continuous filament yarn,** *n*—a yarn made of filaments that extend substantially throughout the length of the yarn. [D13.18] D7018

**contract furniture,** *n*—furniture manufactured for use in non-household applications. [D13.63] D7023

control limits, *n*—predetermined ranges based on the variability of past observations between which the instrument data for a test must fall to be considered valid. [D13.11] D7139

**conventional blanket,** *n*—a blanket woven in either a plain or twill weave that is napped on both sides. [D13.63] D7023

cord, n— a twisted or formed structure composed of one or more single or plied filaments, strands, or yarns of organic polymer or inorganic materials.
 [D13.19] D6477

cord, n—a strand of multiple yarns either twisted, knitted or a combination. The cord is used in conjunction with weft yarns of the tape on an individual element fastener; the sewing thread on a continuous element sewn type fastener or the weft yarns and warp yarns (optional) on a continuous element woven type fastener to form a bead.

[D13.54] D2050

cord, n—of glass fiber, a strand made by combining multiple ends of filament strands, including cabled yarns, primarily for structural application.
 [D13.18] D7018

**cord twist,** *n*—the amount of twist in a cord made from two or more single or plied yarns. [D13.19] D6477

corduroy, n—a filling cut-pile fabric in which the cut fibers form a surface of wales (rounded cords or ribs) which usually run warpwise.
 [D13.60] D4850

**core,** *n*—*in sampling fiber packages*, the portion of wool or other fiber obtained using a sampling tube. [D13.13]

D4845

**core,** *n*—a filament or strand that serves as an extended axis about which other elements can be wound.

[D13.19] D6477

**core-spun yarn,** *n*—a compound structure in which a filament or strand serves as an axis around which a cover of either loose fiber or a yarn is wound. [D13.58] D4849

**cored braid,** *n*—*in rope*, a hollow braid construction, either plain or twill, the center of which is filled with yarns which are not braided. [D13.92] D123

corresponding force, *n*—See force-at-specified-elongation.

cortex, *n*—*in mammalian hair fibers*, the principal body of the fiber made up of elongated cells. [D13.13] D4845

cotton, n—a vegetable seed fiber consisting of unicellular hairs attached to the seed of several species of the genus Gossypium of the family Malvaceae. [D13.11] D7139

**cotton color diagram**, n—a diagram showing the color ranges of standards officially established by the U.S. Department of Agriculture for the various grades of cotton in relation to scales of reflectance.  $R_d$ , on the vertical axis, and yellowness, + b, on the horizontal axis. [D13.11] D7139

**cotton count,** *n*—an indirect yarn numbering system generally used in the cotton system equal to the number of 840-yd lengths of yarn per pound. [D13.58] D4849

cotton fiber—See D7641.

**cotton maturity,** *n*—the degree of fiber wall development. **[D13.11] D7139** 

**cotton system,** *n*—a spinning system adapted to fibers less than 65 mm (2.5 in.) in length. [D13.58] D4849

**cotton waste,** *n*—material removed from seed cotton, ginned lint, or stock in process by any cleaning or processing machinery and usually consisting of undesirable fibers or a mixture of cotton fibers with foreign matter. [D13.11]

**cottonizing,** *n*—*in flax*, the processing of flax fiber so as to make it suitable for use in the cotton spinning system. [D13.17] D6798

count, *n*—*in woven textiles*, the number of warp yarns (ends) and filling yarns (picks) per unit distance as counted while the fabric is held under zero tension, and is free of folds and wrinkles.

[D13.60] D4850

**count,** *n*—*in knitted fabrics*, the number (counted units) of wale loops and course loops per 25 mm (1 in.). [D13.60] D4850

**course,** *n*—*in knitted fabrics*, a row of successive loops in the width direction of the fabric. [D13.60] D4850

**cover,** *n*—*in yarns*, the outside layer of fibers that form the surface of a yarn. [D13.58] D4849

**covered yarn,** *n*—a compound structure which contains distinguishable inner and outer fibrous elements which can be different. [D13.58] D4849

**crack mark,** *n*—an open place causing a streak of variable length approximately parallel to the length or width.

[D13.59] D3990



- crack mark, n—in bonded, fused, or laminated fabrics, a sharp break or crease in the surface contour of either the face fabric or the backing fabric that becomes evident when the bonded, fused, or laminated composite is rolled, bent, draped, or folded.
  [D13.59] D4850
- crack mark, n—Crack marks are usually the result of combining tight fabric constructions at least one of which does not have sufficient residual stretch to allow the combined fabrics to be bent in an arc without producing crack marks on the concave side of the arc. Crack marks also occur when bonded fabrics are allowed to remain in a creased or wrinkled state before full adhesive cure has taken place. Other causes include the use of excessive adhesive in bonding, or excessive foam thicknesses and excessive foam collapse in flame lamination, sharp break or crease in the surface contour of either the face fabric or the backing fabric that becomes evident when the bonded or laminated composite is rolled, bent, draped, or folded. [D13.61] D7022
- **crash towel,** *n*—a plain weave nonterry product with hems or selvages which has a rough texture caused by uneven yarns. [D13.63] D7023
- CRE—abbreviation for constant-rate-of-extension. [D13.58] D4849
- CRT—abbreviation for constant-rate-of-traverse.

  [D13.58] D4849
- **crease,** *n*—a fabric defect evidenced by a break, line, or mark in a fabric generally caused by a sharp fold.

  [D13.59] D3990
- **crease mark,** *n*—a visible deformation left in a fabric after a crease has been incompletely removed during fabric processing. [D13.59] D3990
- **crease retention,** *n*—that property of a fabric which enables it to maintain an inserted crease. [D13.60] D4850
- **crimp,** *n*—as applied to a continuous-element slide fastener, the predetermined formation of the monofilament cross-section at the point where the continuous element is interlocked.

  [D13.54] D2050
- **crimp,** *n*—in a textile strand, the undulations, waviness, or succession of bend, curls, or waves in the strand induced either naturally, mechanically, or chemically.

  [D 13.58] D4849
- **crimp contraction,** *n*—an indicator of crimp capacity or a characterization of a yarn's ability to contract under tension.

  [D13.58] D4849
- crimp development medium, *n*—for testing of textured yarn, an environment that allows the temporary set of fiber crimp to be overcome and that allows the filaments to assume their permanently set configuration. [D13.58] D4849
- **crimp frequency,** *n*—*in manufactured staple fibers*, the number of crimps or waves per unit length of extended or straightened fiber. [D13.58] D4849

- **crimp index,** *n*—an indirect measure of the amplitude of the crimp. [D13.58] D4849
- **crimp recovery,** *n*—a measure of the ability of a yarn to return to its original crimped state after being subjected to tension.

  [D13.58] D4849
- **critical defect,** *n*—a serious defect that judgment and experience indicate is likely to prevent the usability or proper performance of a product from its intended purpose.

  [D13.60] D4850
- CRL—abbreviation for constant-rate-of-loading. [D13.58]
  D4849
- crocking, n—a transfer of color from the surface of a colored fabric to an adjacent area of the same fabric or to another surface principally by rubbing action. (Compare color staining, color bleeding.)
  [D13.59] D3990
- **cross-chest width,** *n*—*in body measurements*, the distance from front break-point to front break-point. [D13.55]
- **cross-dye effect,** *n*—variation in dye pick-up between yarns or fibers, resulting from their inherent dye affinities.

  [D13.59] D3990
- **cross-machine direction, CD,** *n*—the direction in the plane of the fabric perpendicular to the direction of manufacture. [D13.92] D123
- **crotch,** *n*—*in anatomy*, the body area adjacent to the vertex of the included angle between the legs. [D13.55] D5219
- **crotch height,** *n*—the vertical distance from the midpoint of the crotch to the floor, taken with the subject standing and without shoes. [D13.55] D5219
- **crotch height (infant special case),** *n*—the straight distance from the midpoint of the crotch to the soles of the feet, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg. **[D13.55] D5219**
- **crotch length (total),** *n*—the distance from waist level at the center front, through the crotch and to the waist level at the center back, avoiding constriction at the crotch. **[D13.55] D5219**
- **crowfoot weave,** *n*—a broken-twill weave 1-up and 3-down or 3-up and 1-down with two ends to the right and two ends to the left, commonly referred to as four-harness satin or broken crow. [D13.18] D7018
- **crown,** *n*—*in anatomy*, the top of the head. [D13.55] D5219
- **crowsfeet,** *n*—*in fabrics*, fine wrinkles of varying degree of intensity, size, and shape. [D13.59] D3990
- **crush,** *n*—*in pile yarn floor coverings*, loss of tuft definition due to entanglement and compression of pile fibers.

  [D13.21] D5684
- **crushed feathers,** *n*—feathers and feather fiber resulting from curling, crushing, or chopping feathers without removing the quill. [D13.61] D7022



- **curing,** *n*—see the preferred term **vulcanization**. **[D13.19] D6477**
- curled selvage, *n*—self-descriptive. [D13.59] D3990
- curve interpolation point, *n*—those intermediate points generated between curve points by means of of CAD vendor's system curve interpolation algorithm; those points used to create a curve in order to represent a contour. [D13.66]
- **curve point,** *n*—a user defined point on a contour. (See **curve interpolation points, validation curve.**) [D13.66] D6963
- curve tolerance, *n*—the maximum perpendicular distance that the resulting curve can deviate from the original curve after transferring data for the first time. [D13.66] D6963
- **cushion,** *n*—*for inflatable restraints*, the inflatable fabric envelope portion of a module. [D13.20] D6799
- **cushion overpressurization,** *n*—*for inflatable restraints*, the process of inflating a cushion at internal pressures greater than design deployment pressures; bag burst.

  [D13.20] D6799
- **cut,** *n*—*in asbestos and glass yarns*, the number of 100-yd lengths of yarn per pound; an indirect yarn numbering system. [D13.58] D4845
- **cut,** *n*—*in wool yarns*, the number of 300-yd lengths of yarn per pound; an indirect yarn numbering system.

  [D13.13] D4845
- **cut,** *n*—as applied to woven fabric, a length approximately 60 yard in the greige. [D13.60] D4850
- **cut file,** *n*—numerically controlled fabric cutter instructions entered in blocks of ASCII characters. [D13.66] D6963
- **cut lines,** *n*—the outside edges of a pattern piece used as a guide for cutting out the pattern piece. (See **piece boundary**.) [D13.66] D6963
- **cut-off,** *n*—the measurement of an individual element from the head side to the pocket side of the legs. [D13.54] D2050
- **cut pile floor covering,** *n*—a pile floor covering in which the pile is composed of adjacent tuft elements that are separated or cut. [D13.21] D5684
- **cut selvage,** *n*—cuts or breaks that occur in the selvage only. [D13.59] D3990
- **cut strip test,** *n*—*in fabric testing*, a strip test in which the specimen is cut to the specified testing width.

  [D13.60] D4850
- cuticle, n—in mammalian hair fibers, the layers of flattened cells enclosing the cortex, which forms an envelope of overlapping scales surrounding the fiber. [D13.13] D4845
- **cycle length,** *n*—*in braided rope*, the distance, parallel to the rope axis, of the strand to make one revolution around the rope. [D13.16] D123

- **cycles to failure, CTF,** *n*—*in yarn abrasion testing*, the number of cycles applied to the yarn before it fails due to abrasion.

  [D13.19] D6477
- **cylindrical wet-scrub extraction,** *n*—a carpet cleaning method in which (1) a cleaning agent is sprayed onto the carpet, and (2) soil and cleaning agents are removed by a machine which feeds water into two counter-rotating brushes.

  [D13.62] D5253
- dangerously flammable textile, *n*—not defined. This term is implied in the Standard For The Flammability Of Clothing Textiles (16 CFR Part 1610) under the Flammable Fabrics Act (15 USC 1191 et seq.) from which a meaning can be inferred. (See also flammable textile.) [D13.92] D4391
- **data block,** *n*—an organized group of commands and parameters preceded by a header and followed by a terminator. [D13.66] D6963
- **dead cotton,** *n*—a small nep of cotton fibers which is gathered on the surface of the fabric and which is different in color from the surrounding fabric. [D13.59] D3990
- **decating mark,** *n*—a crease mark or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam. **[D13.59] D3990**
- **defect,** *n*—specific for inflatable restraints, an imperfection in a cut piece of fabric that judgment and experience indicate is likely to result in either the hazardous or improper deployment of the inflatable restraint module in which the imperfection is incorporated.

  [D13.20] D6799
- **defect, in inspection and grading,** *n*—the departure or non-conformance of some characteristic from its intended level or state. [D13.60] D4850
- **deformation,** *n*—a change in shape of a material caused by forces of compression, shear, tension, or torsion. **[D13.58] D4848**
- **decorticating**, *n*—*in flax*, the process of mechanically separating fiber bundles from straw. [D13.17] D6798
- **delamination strength,** *n*—the tensile force required to separate the component layers under specified force.

  [D13.21] D5684
- **delayed deformation,** *n*—deformation which is time-dependent and exhibited by material subject to a continuing force. [D13.58] D4848
- **delicate or gentle cycle**, *n*—a cycle in which agitation is slow and time is reduced. [D13.63] D7023
- **delivery roller,** *n*—air-jet spinning frame component that controls yarn tension from the front roll through the nozzle box. [D13.58] D3888
- **denier**, *n*—the unit of linear density, equal to the mass in grams of 9000 m of fiber, yarn, or other textile strand that is used in a direct yarn numbering system. (See also **linear density**.)

  [D13.58] D4849



- **denim**, *n*—a durable woven twill fabric, usually of all cotton or a blend of cotton and manufactured fibers, made from a variety of yarn numbers, and in various fabric weights, colors, designs, and finishes. [D13.60] D4850
- **density**, *n*—mass per unit volume. [D13.51] D4920
- **density frequency variability (DFV),** *n*—an index of the spacing of irregularities; mathematically, the number of times the measured mass crosses over the mean mass line from higher-to-lower values or lower-to-higher values divided by the distance over which the count is made.

  [D13.58] D4849
- **density spread (%DS),** *n*—a value which indicates the degree to which the mass varies from its average; mathematically, the average of the differences between the maximum and minimum values within specified subsections, expressed as a percent based on an overall average. **[D13.58] D4849**
- dents per unit width, n—for woven pile yarn floor covering, the number of binding sites per unit width; dents being the reed spaces through which the warp yarns pass in the loom or the metal strips, in the reed that form these spaces.

  [D13.21] D5684
- **deployment,** *n*—*for inflatable restraints*, the sequence of events related to the activation of a module. [D13.20] D6799
- **de-seeding**, *n*—*in flax*, the process of removing seeds and seed-holding structures from plants. [D13.17] D6798
- **desorption**, *n*—a process in which a sorbed material is released from another material, as the desorption of moisture from fibers; the reverse of absorption, adsorption, or both.

  [D13.51] D4920
- **detergent**, *n*—in textile product care, a cleaning agent containing one or more surfactants as the active ingredient(s).

  [D13.62] D3136
- **dew point,** *n*—the temperature below which condensation of water vapor begins to take place when the atmosphere is cooled. [D13.51] D4920
- **diamond,** *n*—the wedge-shaped portion of a slider between the throats. [D13.54] D2050
- **differential dyeing behavior,** *n*—of cotton, the tendency of cotton fibers to absorb and retain selectively varying proportions of different dyes from a binary dye bath.

  [D13.11] D7139
- **differential shrinkage,** *n*—*in zippers*, the difference in longitudinal dimensional change between the zipper tape and the fabric to which the zipper is attached. **[D13.54] D2050**
- **dimensional change,** *n*—a generic term for changes in length, width, or thickness of a specimen subjected to specified conditions. [D13.59] D4850
- dimensional change, *n*—in pressing and finishing of garments, the change in dimensions of a fabric caused by pressing and finishing during garment manufacture. [D13.61] D7022

- dimensional change in boiling water (felt), *n*—the change in length and width with any associated change in thickness produced by immersion in boiling water under specified conditions. [D13.13] D4845
- dimensional change in pressing and finishing, *n*—the change in dimensions undergone by a fabric subjected to pressing and finishing during garment manufacturing.

  [D13.61] D7022
- **dimensional stability,** *n*—the ability of a material to retain its length and width dimensions under specified conditions.

  [D13.60] D4850
- **dip,** *n*—a chemical composition that is applied to a textile cord or fabric to improve its adhesion to rubber or other elastomer. [D13.19] D6477
- **dip pick-up,** *n*—*in glass cords*, the amount of dip solids present as supplied. [D13.19] D6477
- dip pick-up, *n*—in a textile cord or fabric, the amount of dip or dip components present after processing, including drying, as determined by prescribed methods, and expressed as a percentage of the mass of the oven-dried dip-free material.

  [D13.19] D6477
- **direct cabling technology,** *n*—a single-step manufacturing system that produces a twist-balanced cabled yarn (2 fold) from twistless single yarns. [D13.58] D4849
- **direct yarn numbering system,** *n*—a system that expresses the linear density of yarn in mass per unit length.

  [D13.58] D4849
- **direction of lay,** n—the helical disposition of the components of a strand or cord. [D13.19] D6477
- **direction of slippage,** *n*—at the seam line of movement parallel to either the filling or the warp on a woven fabric in which minimum force is required to produce yarn slippage.

  [D13.60] D4850
- **direction of twist,** *n*—the right or left direction of the helix formed in a twisted strand as indicated by superimposition of the capital letter "S" or "Z." [D13.58] D4849
- **distortion,** *n*—*in fabrics*, a general term for a visible defect in the texture of a fabric. [D13.60] D4850
- **distortion,** *n*—*in textile battings*, defects such as holes, lumps, or thin areas caused by movement of fibers. [D13.61] D7022
- doctor streak, n—in printed cloth, a wavy white or colored streak in the warp direction of printed cloth caused by a defective doctor blade.
   [D13.59] D3990
- **doffing tube,** *n*—a component of an open-end spinning machine, which is an extension to the navel and is used to guide the withdrawn yarn en route to the take-up rollers. (See also **navel**.) [D13.58] D3888
- **double bow,** *n*—two fabric bows, arcing in the same direction, as in a flattened *M* or *W* depending on the viewing angle. (Compare **double reverse bow** and **double bow**.)

  [D13.59] D3990



- **double braid,** *n—in rope*, a braided construction consisting of two hollow braided ropes, one inside the other. **[D13.92] D123**
- **double hooked bow,** *n*—one hooked bow at each side of the fabric that are in opposite directions. (See also **hooked bow**.)

  [D13.59] D3990
- **double pick,** *n—in woven fabrics*, two picks wrongly placed in the same shed. (See also **mispick**. Compare **jerk-in**.)

  [D13.59] D3990
- **double reverse bow,** *n*—two fabric bows arcing in opposite directions. (See also **bow**. Compare **double bow**.) [D13.59] D3990
- **double-stitched seam-finish,** *n*—a finish for the raw edges of a plain seam, in which another row of machine stitching is made through both seam allowances placed together.

  [D13.54] D7722
- **double-stroke,** *n*—*in flex and abrasion testing,* an abrasion cycle that consists of one forward and one backward motion.

  [D13.60] D4850
- **double welt seam,** *n*—a complex seam formed on the inside of the object, in which one trimmed seam allowance is enclosed and two rows of stitching are visible on the face side. (Compare **welt seam**. Syn. **mock flat-felled seam**.)

  [D13.54] D5646
- **down,** *n*—the fine, soft plumage of waterfowl, consisting of light, fluffy filaments having at least two barbs attached; that is, barbs growing from the quill point but without a quill shaft.

  [D13.61] D7022
- **down, nestling,** n—a down not fully developed with a sheath and with soft barbs emanating from the sheath. [D13.61] D7022
- **down fibers,** *n*—detached barbs from down; plumules and detached barbs from the basal end of waterfowl feather quill shafts that are indistinguishable from the barbs of down.

  [D13.61] D7022
- **drafting,** v—the process of attenuating a web, sliver or roving of staple fiber to increase its length per unit mass.

  [D13.58] D3888
- **drafting zone,** *n*—the location on a spinning, draw, and roving frame where pairs of rollers, or cylinders, rotating at differing speeds, control the number of fibers per cross-section of the yarn.

  [D13.58] D3888
- **draw-back**, *n*—a weave distortion characterized by tight and slack places in the same warp yarn. [D13.59] D3990
- **draw ratio** (**DR**), *n*—the relation of the final length per unit mass to original length per unit mass of a material resulting from drawing. [**D13.58**] **D4849**
- **draw texturing,** *n*—*for processing thermoplastic fibers,* the simultaneous or sequential process of drawing and imparting crimp, thus producing increased molecular orientation and increased bulk. [D13.58] D4849

- **drawing,** *n*—*in textile processing*, the process of stretching or attenuating a material to increase the length per unit mass.

  [D13.58] D4849
- **dress career apparel**, *n*—career apparel which is not generally subject to abusive wear and for which appearance is a more important attribute than durability. (See also **career apparel**,

[D13.61] D7022

**dress glove,** *n*—a covering for the hand, often extending part way up the arm, worn primarily for formal or dress occasions. [D13.61] D7022

vocational career apparel)

- **dress shirt,** *n*—*for boys*, a shirt made with a specific collar size or numerical size and designed to be worn with a tie and jacket. [D13.61] D7022
- dress shirt, *n*—*for men*, a shirt made with a specific collar size and sleeve length where appropriate, and designed to be worn with a tie and jacket. [D13.61] D7022
- **drill hole,** *n*—a point that is part of a pattern piece that is not part of any line. [D13.66] D6963
- **drop**, *n*—*in body measurements*, the difference between the chest girth and the waist girth. [D13.55] D5219
- **drop**, *n*—that part of a bedcovering that hangs perpendicular to the floor. [D13.63] D7023
- **dropped stitch,** *n*—*in knitted fabrics*, an unknitted stitch. [D13.59] D3990
- **dry,** *v*—in plant textile floor covering cleaning, suspend textile floor covering in a heated room until dry. [D13.62] D5253
- **dry**, *adj*—the state of a yarn which has not been exposed to excessive moisture. [D13.19] D6477
- dry extraction cleaning, n—a method in which an absorbent compound is dispersed over the surface of a textile product by hand or machine, thoroughly brushed through the pile, allowed to dry, and removed by suction. [D13.62]
   D5253
- dry foam extraction cleaning, *n*—a process by which a highly aerated, low moisture content shampoo is brushed through the textile floor covering pile or applied to the surface of upholstery.

  [D13.62] D5253
- **dry solvent**, *n*—any organic solvent used to dissolve another material. (See **solvent**). [D13.62] D5253
- **drycleanable button,** *n*—a button that can be solvent-cleaned without damage such as dissolving or loss of finish.

  [D13.54] D2050
- **drycleaning,** *n*—*in the care of textiles,* the cleaning of consumer textile products with organic solvents such as petroleum solvent or perchloroethylene. [D13.62] D3136
- duck, n—a compact, firm, heavy, plain-weave cotton fabric, mass per square yard 6 to 50 oz. (See also flat duck, and plied yarn duck)
  [D13.60] D4850
- **durability,** *n*—*for pile yarn floor coverings*, a property of a pile yarn floor covering describing the ability to maintain specific



- physical properties or product integrity without deterioration after a significant amount of time or a significant extended stress. [D13.21] D5684
- durable-press, *adj*—having the ability to retain substantially the initial shape, flat seams, pressed-in creases, and unwrinkled appearance during use and after laundering or drycleaning. (See wash and wear.) [D13.60] D4850
- **dust ruffle,** *n*—a fabric which (1) lies flat over the box spring under the mattress on a bed, and (2) has a pleated, tucked, or gathered drop to the floor. [D13.63] D7023
- **dye streak**, *n*—an unintended stripe in a fabric due to uneven absorption of a colorant. [D13.59] D3990
- **dyestain,** *n*—an area of discoloration due to uneven absorption of a colorant. [D13.59] D3990
- **dynamic air permeability (DAP),** *n*—*for inflatable restraints*, the dynamic air permeability measured at a single specified pressure differential. [D13.20] D6799
- edgecombing, n—for inflatable restraints, the separation of yarns from their normal orthagonal configuration in a woven fabric due to seam stress or similar action near the edge of a cut part.
   [D13.20] D6799
- edge ravel, *n*—in pile yarn floor coverings, the force required to pull a tuft element from a loop pile yarn floor covering along a seam in the lengthwise direction. [D13.21] D5684
- edge-stitched seam-finish, *n*—in home sewing, a seam finish in which machine stitching is placed close to the cut edge of each seam allowance. (Compare zigzagged seam-finish.)

  [D13.54] D5646
- effective carriage mass, n—in CRL-type tensile testing machine, the force actually applied to a specimen by the mass of the carriage, plus any added masses.

  [D13.58] D4849
- effective fiber length, *n*—in vibroscope test for linear density, that portion of the fiber free to vibrate between fixed supports or holders. [D13.58] D4849
- effective gage length, *n*—in tensile testing, the estimated length of the specimen subjected to a strain equal to that observed for the true gage length. [D13.58] D4849
- **effective insulation ratio,** *n*—*in thermal transmittance of textile only*, the increase in insulation afforded by the fabric in comparison to the uncovered test plate under specified conditions of test. [D13.51] D4920
- eight-harness satin, *n*—a warp-faced or filling-faced weave illustrating that the entire face of the fabric surface is covered with warp or filling yarn, respectively. [D13.18]
- elastic fabric, n—a fabric made from an elastomer either alone or in combination with other textiles. (See also elastomeric yarn.)
  [D13.60] D4850
- elastic limit, *n*—the greatest stress that can be applied to a material without permanent deformation (Compare yield point.) [D13.58] D4848

- **elastic tape**, *n*—a tape containing rubber or other elastomers to permit rubber-like stretch in at least one direction.

  [D13.60] D4850
- **elastic webbing,** *n*—a webbing containing rubber or other elastomers to permit rubber-like stretch in at least one direction. [D13.60] D4850
- **elasticity**, *n*—that property of a material by virtue of which it tends to recover its original size and shape immediately after removal of the force causing deformation. [D13.58] D4848
- elastomeric yarn, n—a nontextured yarn which can be stretched repeatedly at room temperature to at least twice its original length and which after removal of the tensile force will immediately and forcibly return to approximately its original length.

  [D13.58] D4849
- **elbow**, *n*—*in anatomy*, the joint which articulates between the upper arm and the lower arm. [D13.55] D5219
- elbow girth, *n*—in body measurements, with the arm bent at 90° and the clenched fist placed on the hip, the circumference of the elbow. [D13.55] D5219
- **electroplated button,** *n*—plastic buttons which have been made conductive by chemical treatment followed by the electroplating of metallic coatings. [D13.54] D2050
- electrostatic decay half-life, *n*—in textiles, the time in minutes for the maximum voltage induced on the textile to be reduced to one half of the maximum voltage by the various decay mechanisms: conduction and ionization of the air.

  [D13.58] D4849
- electrostatic propensity, *n*—the capacity of a nonconducting material to acquire and hold an electrical charge by induction (by means of corona discharge) or by triboelectric means (rubbing with another material). [D13.58] D4849
- **element,** *n* a device designed for interlocking, capable of being affixed along the edge of a tape. (Compare **continuous element** and **individual element**.) [D13.54] D2050
- **elevator,** *n*—a general term describing a mechanical device on the Motion Control, Inc. Fiber Information System which moves the specimen clamp while preparing the specimen or while taking a length/uniformity index or strength/ elongation measurement. [D13.11] D7139
- elongation, *n*—the ratio of the change in length of a rope during application of tension to the original length of the rope when new. [D13.92] D123
- **elongation,** *n*—the ratio of the extension of a material to the length of the material prior to stretching, expressed as a percent. (Compare **extension.**) [D13.58] D4848
- **elongation at break,** *n*—the elongation corresponding to the breaking force. (Compare **elongation at rupture.** See also **elongation.**) [D13.58] D4848
- **elongation at breaking force,** *n*—*in fiber strength testing of cotton*, the elongation corresponding to the maximum load,



- and expressed as a percentage of the ½-in. (3.2-mm) gage length. [D13.11] D7139
- **elongation at rupture,** *n*—the elongation corresponding to the force-at-rupture. (Compare **elongation at break.**) [D13.58]
- **elongation at specified force, (EASF),** *n*—the elongation associated with a specified force on the force-extension curve. [D13.58] D4848
- **embrittlement,** *n*—the formation of a brittle residue as the result of pyrolysis or incomplete combustion. [D13.92]
- end, n—an individual sliver, roving, yarn, or cord. [D13.58] D4849
- end, *n*—in fabric, an individual warp yarn (single or ply) or cord. [D13.60] D4850
- end count, *n*—in woven fabric, the number of individual warp yarns per inch of fabric regardless of whether they are comprised of single or plied components. [D13.59] D4850
- end out, n—a void caused by a missing warp yarn. [D13.59] D3990
- entanglement, *n*—the extent or degree to which the filaments in a yarn are interlocked and cannot be readily separated.

  [D13.58] D4849
- environmental conditions, *n*—in textile testing, the atmosphere in which specified moisture levels, temperature ranges, and concentrations of gases are controlled.

  [D13.20] D6799
- epidermis, *n*—in mammalian hair fibers, the outside or surface layer of the fiber consisting of flat, irregular, horny cells or scales. [D13.13] D4845
- **evaluator,** n—a part of, or an attachment to, an unevenness testing instrument, which automatically gives an estimate of  $R_u$ . [D13.58] D4849
- exponent of dynamic air permeability (EXP), n—for inflatable restraints, a descriptive factor used in a mathematical model integral to the apparatus software which relates the change in dynamic air permeability as the pressure differential changes.

  [D13.20] D6799
- **exposed tape width,** *n*—the part of the tape extending beyond the shoulders of the interlocking elements to the outer tape edge. [D13.54] D2050
- **exposure energy to thermal end point,** *n*—the thermal energy transferred through a specimen that is sufficient to cause ignition of contiguous materials. [D13.92] D4391
- **extensibility,** *n*—that property by virtue of which a material can undergo extension or elongation following the application of sufficient force. [D13.58] D4848
- **extension,** *n*—the change in length of a material due to stretching. (Compare **elongation.**) [D13.58] D4848

- **extension force,** *n*—the force required to stretch a material to a given length. [D13.58] D4848
- extension-recovery chart, n—in elastic materials testing, a continuously plotted graph of tension versus extension resulting from an extension-recovery cycle. (Compare tension-recovery chart. See also extension-recovery cycle and tension-recovery cycle.) [D13.58] D4848
- extension-recovery cycle, *n*—in tension testing, the continuous extension of a specimen, with a momentary hold at a specified extension, followed by a controlled rate of return to zero extension. (Compare tension-recovery cycle. See also extension-recovery chart and tension-recovery chart.)

  [D13.58] D4848
- extra long staple cotton, *n*—also known as Pima cotton, cotton that is of the gossypium barbadense species which is characterized by longer, stronger and finer fibers compared to Upland cotton.

  [D13.11] D7139
- extractable matter, *n*—nonfibrous material in or on a textile, not including water, which is removable by a specified solvent or solvents, as directed in a specified procedure.

  [D13.13] D4845
- **extraction cleaning,** *n*—a general term for a number of refurbishing methods in which the cleaning agent is delivered onto the textile product, agitated, and simultaneously removed by suction. [D13.62] D5253
- **fabric,** *n*—*in textiles*, a planar structure consisting of yarns or fibers. [D13.60] D4850
- **fabric, sliver knitted,** *n*—a single jersey fabric in which untwisted staple fibers are knitted in at each loop to form a pile surface on the technical back of the jersey structure.

  [D13.61] D7022
- **fabric dip,** *n*—*for tire fabrics*, a chemical composition which is applied to a textile cord or fabric to improve its adhesion to rubber compounds. [D13.19] D6477
- **fabric finisher,** *n*—an organization that processes greige woven or greige knitted fabrics by using methods that change the character of the fabric; this may be accomplished by using either chemical processes or physical processes.

  [D13.92]
- fabric growth, n—in stretch testing, the increase in the original dimension of a specimen after the application of a specified force for a prescribed time and subsequent removal of the force. (Compare fabric stretch). [D13.59] D4850
- **fabric jobber,** *n*—an organization that coordinates the sale and distribution of output from a fabric manufacturer to apparel manufacturers unable to purchase large minimum quantities.

  [D13.92]
- fabric stretch, *n*—the increase in the dimension of a specimen of fabric resulting from a force applied under specified conditions. (Compare elongation, extension, fabric growth). [D13.59] D4850



- **fabric package,** *n*—a length of fabric in a form suitable for handling, storing, or shipping. [D13.58] D4849
- **fabric producer,** *n*—an organization that processes yarn into greige woven fabrics, a weaver; or processes yarn into greige knitted fabric, a knitter; and may also perform additional processes that can include the dyeing and finishing of these fabrics.
- fabric roof-system, *n*—a system of coated fabric or laminated fabric along with support cables, edge ropes, clamps, neoprene, roof drains, arch wear strips, and anchor bolts that constitutes the outside top covering of a building.

  [D13.60] D4850
- **fabric stability,** *n*—*in vinyl-coated glass screening and louver cloth*, the property denoting the ability to resist slippage of yarn segments in one direction over yarn segments in the opposite direction.
  [D13.18] D7018
- **fabric stretch,** *n*—the increase in length of a specimen of fabric resulting from a force applied under specified conditions. [D13.60] D4850
- **fabricate,** *v*—*in buttons*, the conversion of a blank into a completed button. [D13.54] D2050
- face, *n*—*in buttons*, that portion which will be exposed after attaching to the substrate. [D13.54] D2050
- **face side,** *n*—*in textile materials*, the side of the material that is outermost in the completed object. (Ant. **back side** *wrong side*. Syn. *right side*.) **[D13.54] D5646**
- **failure,** *n*—an arbitrary point beyond which a material ceases to be functionally capable of its intended use. (Compare **rupture.**) [D13.58] D4848
- **fanhead,** *n*—the process of removing one half of the bands from one end of a cotton bale to expand (swell out) the layers of the bale in order to facilitate bale sampling.

  [D13.11] D7139
- **fanheading,** *n*—the process of removing one half of the bands from one end of a cotton bale to expand (swell out) the layers of the bale in order to facilitate bale sampling.

  [D13.11] D7139
- **fatiguing force,** *n*—*in testing sewn seams*, the force that is repeatedly applied to a test specimen. [D13.59] D4850
- **feather fiber,** *n*—detached barbs of feathers which are not joined or attached to each other. [D13.61] D7022
- **feathers,** *n*—the outgrowth forming the contour and external covering of fowl. [D13.61] D7022
- **feathers, crushed,** *n*—feathers and feather fiber resulting from curling, crushing, or chopping feathers without removing the quill. [D13.61] D7022
- **feathers, damaged,** *n*—feathers that have been broken, damaged by insects, by mildew or rot, or otherwise materially injured. [D13.61] D7022
- feathers, landfowl, n— See feathers, nonwaterfowl.

- **feathers**, **nestling**, *n*—immature feathers in which the barbs are held together and covered by a sheath. [D13.61] D7022
- **feathers, nonwaterfowl,** *n*—feathers derived from chickens, turkeys, or other landfowl. (Syn. *feathers, landfowl*) [D13.61] D7022
- **feathers, quill,** *n*—feathers which are over 100 mm (4 in.) in length or which have a quill point exceeding 9.5 mm (%16 in.) in length. [D13.61] D7022
- **feathers, waterfowl,** *n*—feathers from ducks or geese, or both. [D13.61] D7022
- **feed unit,** *n*—*in an open-end spinning machine*, the device which presents the feed stock to the opening roller by either a feed roller and feed plate combination or interacting feed rollers. (See also **opening device.**) [D13.58] D3888
- **felt,** *n*—a textile (fabric) characterized by the densely matted condition of most or all of the fibers of which it is composed.

  [D13.13] D4845
- **felt,** *n*—a textile structure characterized by interlocking and consolidation of its constituent fibers achieved by the interaction of a suitable combination of mechanical energy, chemical action, moisture, and heat but without the use of weaving, knitting, stitching, thermal bonding, or adhesives.

  [D13.13] D4845
- **fiber,** *n*—*in textiles*, a generic term for any one of the various types of matter that form the basic elements of a textile and that is characterized by having a length at least 100 times its diameter. (See also **manufactured fiber, natural fiber,** and D7641.) [D13.92] D123
- **fiber beard,** *n*—*in length testing of fibers*, fibers caught randomly on a comb which are subsequently straightened and parallelized without stretching or damaging. [D13.58]
- fiber birefringence, *n*—the algebraic difference of the index of refraction of the fiber for plane polarized light vibrating parallel to the longitudinal axis of the fiber and the index of refraction for light vibrating perpendicular to the long axis. (See also birefringence.) [D13.51] D4920
- **fiber bundle,** *n*—group of ultimate fibers which are held together in the flax stem by pectins, lignins or any combination thereof. [D13.17] D5219
- **fiber channel,** *n*—a component of an open-end spinning machine through which the fibers are conveyed by an air current from the opening device to the rotor. (See also **opening device.**) [D13.58] D3888
- fiber chip, *n*—in manufactured textiles, staple fibers that are massed together as a unit and that maintain a single geometry or alignment textiles. [D13.58] D4849
- **fiber cohesion,** *n*—*in textiles*, the resistance to separation of fibers in contact with one another. [D13.58] D4849
- **fiber density,** *n*—mass per unit volume of the solid matter of which a fiber is composed, measured under specified conditions. [D13.51] D4920



- **fiber rope,** *n*—a rope produced primarily from textile fibers. [D13.92] D123
- **fiberfill,** *n*—manufactured fibers especially engineered as to linear density, cut length, and crimp for use as a textile filling material. [D13.61] D7022
- **Fiberweigh,** *n*—an instrument having a capacity for weighing a 51-grain (3.30-g) specimen with a sensitivity of at least 0.2 % of the mass being weighed. [D13.11] D7139
- **fibrogram,** *n*—in cotton length testing with the Fibrograph, the curve representing the second cumulation of the length distribution of the fibers sensed by the length measuring instrument in scanning the fiber board. [D13.11] D7139
- **Fibronaire,** *n*—an instrument which determines the micronaire reading of raw cotton fibers using the "porous-plug" air flow technique. [D13.11] D7139
- fid, n—a wooden or hard plastic tool used as an aid in rope splicing. [D13.92] D123
- **filament,** *n*—*in textiles*, a continuous fiber of extremely long length. [D13.92] D123
- **filament,** *n*—*in steel cord*, the individual element in a steel strand or cord. [D13.19] D6477
- **filament yarn,** *n*—a yarn composed of (continuous) filaments assembled with or without twist. [D13.58] D4849
- fill leakage, *n*—in comforters, either partial or total penetration of the stuffing material through the outer or face fabric.

  [D13.63] D7023
- **filler,** *n*—nonfibrous material, such as insoluble clays or gypsum, together with starches, gums, etc., added to a fabric to increase its weight or to modify the appearance or handle of the fabric. (*Syn.* back-sizing.) [D13.60] D4850
- filling, *n*—yarn running from selvage to selvage at right angles to the warp in a woven fabric. [D13.60] D4850
- **filling band,** *n*—*in woven fabrics*, a visual defect across the width due to a change occurring in the yarn for a large number of picks. (Compare filling bar) [D13.59] D3990
- **filling bar,** *n*—*in woven fabrics*, a visual defect across the width which contains a limited number of picks of different appearance than normal. (Compare **filling band**)

  [D13.59] D3990
- filling elongation and tension, *n*—stretch or tension measured at right angles to the warp direction of the fabric.

  [D13.60] D4850
- filling-faced twill, *n*—a weave in which filling yarns float over warp yarns, to produce a diagonal effect in the resulting fabric. (See also **twill weave** and **warp faced twill.**)

  [D13.60] D4850
- filling material, *n*—for feathers or down, the contents of an industry product containing feathers or down of any kind or type, with or without natural or synthetic materials.

  [D13.61] D7022

- filling tests, *n*—in fabric testing, tests in which the filling yarns are torn. [D13.60] D4850
- filling-to-filling seam, *n*—a sewn seam in which the yarns in the filling direction on both sides of the sewn seam are perpendicular to the seam. [D13.60] D4850
- **final twist,** *n*—the number of turns per unit length in a single yarn component of a plied yarn or the plied yarn component of a cabled yarn as the component lies in the more complex structure.

  [D13.58] D4849
- **fine end,** *n*—a smaller than normal diameter warp end. (*Syn.* light end, thin end. (Compare **coarse end**.) [**D13.59**] **D3990**
- **fineness,** *n*—*of textile fibers*, a relative measure of size, diameter, linear density, or mass per unit length expressed in a variety of units. [D13.13] D4845
- **finger mark**, n—an irregular spot showing variation in picks per inch for a limited width. [D13.59] D3990
- **fingertip towel,** *n*—a textile product with fringes and side hems or selvages which is smaller than a hand towel, generally used as decoration and to dry hands. **[D13.63] D7023**
- finish, n—in buttons, the surface condition or texture. [D13.54] D2050
- **finished,** *adj*—*for inflatable restraint fabrics*, a descriptive term for fabric that has been treated after weaving and that is suitable for coating or piece cutting. [D13.20] D6799
- **finished,** *adj*—*for glass laminates*, a descriptive term for woven fabrics that have passed through a treating procedure which is compatible with a resin matrix or facilitates manufacturing, or both.

  [D13.18] D7018
- **finished,** *adj—in textile floor covering materials*, the completion of all manufacturing operations. [D13.21] D5684
- **finished fabric weight,** *n*—mass per unit area expressed in grams per square metre (ounces per square yard), grams per linear metre (ounces per linear yard), or inversely as metres per kilogram (linear yards per pound), or square metres per kilogram (square yards per pound). [D13.60] D4850
- **finished pile yarn floor covering,** *n*—*in textile floor covering materials*, the pile yarn floor covering that has undergone all steps of the manufacturing process. **[D13.21] D5684**
- **finished yield,** *n*—*in knitted fabrics*, the number of finished square metres per kilogram (square yards per pound) of finished fabric. [D13.60] D4850
- **finishing bar,** *n*—uneven appearance across the entire fabric width. [D13.59] D3990
- **fire,** *n*—as related to textile flammability, an uncontrolled conflagration in which materials are destroyed by burning as evidenced by flames of varying size and shape, and a high-intensity heat source of 5 kw or greater, such as burning contents of a room, a burning basket, burning building, or forest fire.

  [D13.92] D4391



- fitted sheet, *n*—in textiles, a product usually made with boxed corners, sometimes elasticized with shape and size to conform to the contours of the mattress and used for covering the mattress on a bed.

  [D13.63] D7023
- **fixed retainer,** *n*—a device permanently attached to the retainer pin at the bottom of one stringer. [D13.54] D2050
- **flagging,** *n*—*in sewn seams*, a mode of failure evidenced by slippage of one or more yarns entirely out of the original seam.

  [D13.60] D4850
- **flame,** *n*—as related to ignition of textiles, a controlled hot, luminous zone of gas or matter in gaseous suspension, or both, of constant size and shape that is undergoing combustion as evidenced by a low-intensity heat flux of less than 1 kw such as candle flame or match flame. (Compare **fire.**)

  [D13.92] D4391
- **flame application time,** *n*—the time interval for which the ignition flame is applied to a material.

  [D13.92] D123,D4391
- **flame resistance,** *n*—the property of a material whereby flaming combustion is prevented, terminated, or inhibited following application of a flaming or nonflaming source of ignition, with or without subsequent removal of the ignition source.

  [D13.92] D4391
- flame resistant, *adj*—having flame resistance. [D13.92]
  D4391
- **flame retardant,** *n*—a chemical used to impart flame resistance. [D13.92] D4391
- flame-retardant-treated, adj—having received a flame-retardant treatment. [D13.92] D4391
- **flame-retardant treatment,** *n*—a process for incorporating or adding flame retardant(s) to a material or product.

  [D13.92] D4391
- **flame spread,** *n*—the propagation of a flame away from the source of ignition. [D13.92] D4391
- **flame-spread time,** *n*—the time taken by a flame on a burning material to travel a specified distance under specified conditions. [D13.92] D4391
- **flaming debris,** *n*—material which continues to flame as it separates and moves away from the flaming source.

  [D13.92] D4391
- **flammability,** *n*—those characteristics of a material that pertain to its relative ease of ignition and relative ability to sustain combustion. [D13.92] D4391
- **flammable textile,** *n*—any combustible textile that burns with a flame. (See also **flammability.** Compare **combustible textile, noncombustible textile.)** [D13.92] D4391
- **flange lock slider,** *n*—a slider with notches in the flanges of the slider that block the shoulders of the elements when the stringers are pulled apart, thus preventing further separation of the chain.

  [D13.54] D2050

- **flanges,** n—the edges of the slider formed to contain the chain. [D13.54] D2050
- **flannel**, *n*—as applied to bed sheeting, a napped fabric used in the fabrication of sheeting products. [D13.63] D7023
- **flare,** *n* the spreading of the filament ends or the strand ends at the cut end of a steel tire cord, expressed as the unravelled length. **[D13.19] D6477**
- **flat duck,** *n*—duck fabric having the warp of two single yarns woven as one and either single or plied filling yarn. (See also **duck**.) [D13.60] D4850
- **flat fabric,** *n*—*for inflatable restraints*, fabric composed of a single woven layer. (See also one-piece woven).

  [D13.20] D6799
- **flat-felled seam,** *n*—*in home sewing*, a complex seam formed on the outside of a product with cut edges enclosed and two rows of machine stitching visible on the face side.

  [D13.54] D5646
- **flat sheet,** *n*—*in textiles*, a flat, hemmed product, usually rectangular, used for covering the mattress on a bed and used for sleeping on or under. [D13.63] D7023
- flax, n—the generic name for plants that are botanically classified as *Linum usitatissimum*, which are cultivated for seed and/or fiber. [D.13.17] D6798
- **fleece,** *n*—the wool of one sheep as obtained by shearing. [D13.13] D4845
- **flexibility,** *n*—that property of a material to endure repeated flexing, bending, or bowing without rupture.

  [D13.60] D4850

### flexural rigidity, *n*—

- general—resistance to bending.
- specific, work per unit width which is required to bend a fabric to unit radius of curvature. [D13.60] D4850
- float, *n*—in woven fabrics, that portion of a warp or filling yarn that extends unbound over two or more warp or filling yarns; in knitted fabrics, that portion of a yarn that is not knitted into loops.

  [D13.59] D3990, D4850
- **flock,** *n*—a material obtained by reducing textile fibers to fragments as by cutting, tearing, or grinding, to give various degrees of comminution. [D13.56] D7023
- **flocked blanket,** *n*—a blanket made with a fishnet-type scrim sandwiched between two thin layers of foam with flock adhered to the outside of the foam. [D13.63] D7023
- **floor covering,** *n*—an essentially planar material, having a relatively small thickness in comparison to its length or width, which is laid on a floor to enhance the beauty, comfort, and utility of the floor. [D13.21] D5684
- **flooring material,** *n*—any pliable planar structure used as a base surface in camping tentage, but excluding such things as rugs or carpets placed in the tent that are not integral parts of the item. [D13.92] D123



- flounce, *n*—a ruffled drop on a bedcovering. [D13.63] D7023
- **foam,** *n*—*in cleaning textiles*, a frothy mass of fine bubbles generated by whipping or agitating a shampoo.

  [D13.62] D5253
- **foam cleaning,** *n*—a process in which a prepared foam is applied to a textile product, scrubbed in, allowed to dry, and the encapsulated soil is removed by suction.

  [D13.62] D5253
- **foam tear,** *n*—a condition wherein the foam portion of a laminated fabric ruptures prior to the failure of the bond. [D13.54, D13.61] D4850,D7022
- fold over, n—for inflatable restraint fabrics, a hard ridge where a layer is overlapped upon itself where if applicable coating integrity is compromised. [D13.20] D6799
- foot length, n—in body measurements, with the subject standing barefoot, the distance from the most prominent part of the heel where it touched the floor to the end of the most prominent toe.

  [D13.55] D5219
- foot traffic units, *n*—for pile floor covering, the number of passes by human walkers over a specific group of carpet samples. [D13.21] D5684
- foot width, n—the straight distance from one side of the foot to the other side at the widest part, taken with the subject standing and without shoes (use stable, flat ruler).

  [D13.55] D5219
- **force,** *n*—a physical influence exerted by one body on another which produces acceleration of bodies that are free to move and deformation of bodies that are not free to move. (Compare **strength.**) [D13.58] D4848
- **force-at-rupture,** *n*—the force applied to a material immediately preceding rupture. (Compare **breaking force.** See also **rupture.**) [D13.58] D4848
- **force-at-specified-elongation (FASE),** *n*—the force associated with a specific elongation on the force-extension or force-elongation curve. **[D13.58] D4848**
- **force-deformation curve,** *n*—a graphical representation of the force and deformation relationship of a material under conditions of compression, shear, tension, or torsion. (Compare **force-elongation curve, force-extension curve,** and **stress-strain curve.**) [D13.58] D4848
- **force-elongation curve,** *n*—a graphical representation of the force and elongation relationship of a material under tension. (Compare **force-deformation curve, force-extension curve,** and **stress-strain curve.**) [D13.58] D4848
- **force-extension curve,** *n*—a graphical representation of the force and extension relationship of a material under tension. (Compare **force-deformation curve, force-elongation curve,** and **stress-strain curve.**) [D13.58] D4848
- **force-recovery cycle,** *n*—*in elastic fabric testing*, a continuous curve or plot of force versus elongation (with movement stopped momentarily at point of reversal) describing the

- elongation and recovery of an elastic fabric; also known as the loading and unloading cycle. [D13.59] D4850
- foreign matter, n—for inflatable restraint fabrics, an extraneous interwoven fabaric whose size, color, or texture indicates that it is not of the same material as the fibers in the base fabric.

  [D13.20] D6799
- **foreign matter,** *n*—*in cotton*, non-lint material commonly referred to as waste or trash such as dust, sand, seed-coat fragments, leaves, and stems normally present in raw and partially processed cotton. [D13.11] D7139
- format classification interrogation, *n*—an interactive direct on-line communication between systems which generates cut file interchange and fabric cutting equipment.

  [D13.66] D6963
- **frame yarn,** *n*—pile yarn in a Wilton-type carpet. [D13.21] D5684
- **frayed,** *adj—in textiles*, a worn condition characterized by damaged yarn surfaces, projecting yarn ends, hairiness, etc.

  [D13.58] D4849
- **free water,** *n*—the amount of water in a test specimen that is hydrogen bonded to other water in cellulose and expressed as a percentage of the mass of the specimen.

  [D13.11] D7139
- **French seam,** *n*—*in home sewing*, a complex seam formed on the inside of a product with both cut edges enclosed and no stitching rows visible on the face side. (Compare **mock French seam**.) [D13.54] D5646
- **friction,** *n*—the resistance to the relative motion of one body sliding, rolling, or flowing over another body with which it is in contact. [D13.58] D4849
- **front break-point,** *n*—*in anatomy*, the location on the front of the body where the arm separates from the body.

  [D13.55] D5219
- front chest width, *n*—the horizontal distance across the chest from front break-point to front break-point, taken with the arms down. [D13.55] D5219
- front high-hip, *n*—*in body measurements*, the distance from one imaginary side seam to the other imaginary side seam at the high-hip level. [D13.55] D5219
- **frosting,** *n*—a change in color in a limited area of a fabric caused by abrasive wear. [D13.59] D3990
- **function codes,** *n*—codes used to control fabric cutter instructions and govern interpretation of subsequent commands and data in a block. [D13.66] D6963
- **fundamental resonant frequency,** *n*—*in linear density testing*, the lowest frequency at which free oscillations can exist in a fiber tensioned between two fixed points. [D13.58]

  D4848
- **furniture covering,** *n*—a general term for attached upholstery fabric, slipcovers and throws. [D13.63] D7023



- **furniture unit,** *n*—*in upholstered furniture*, a complete single piece of upholstered seating, such as a sofa, love seat, lounge chair, rocker, or recliner. [D13.63] D7023
- **fused fabric,** *n*—a type of bonded fabric made by adhering a fusible fabric to another fabric, such as for use in an interlining. [D13.60, D13.61] D4850,D7022
- **fusible fabric**, *n*—a utilitarian fabric which has a thermoplastic adhesive applied to one side, sometimes in a pattern of dots, so that the surface can be bonded to another fabric surface by the use of heat and pressure. **[D13.60, D13.61] D4850, D7022**
- **fusion bonded,** *n*—a method for creating a carpet pile construction by adhering loops or lengths of yarn to the face of a primary backing. [D13.21] D5684
- **fusion bonding,** *n*—*in pile yarn floor covering*, a method of creating a carpet pile construction by attaching loops of yarn to a supporting adhesive material, usually PVC, to form either cut or loop pile structures. [D13.21] D5684
- **fuzz,** *n*—untangled fiber ends that protrude from the surface of a yarn or fabric. [D13.58] D4849
- **fuzz ball,** *n*—loose and frayed fibers that have formed into a ball and have then been woven or knitted into the fabric. (Compare **pills.**) **[D13.59] D3990**
- **fuzzing,** *n*—*in pile yarn floor coverings*, surface appearance change due to the protrusion of broken or unbound fibers.

  [D13.21] D5684
- **fuzzy,** *adj*—characterized by a hairy appearance due to broken fibers or filaments. [D13.58] D4849
- **gage,** *n*—of a tufting machine, the average centerline distance between the needles. [D13.21] D5684
- gage, *n*—of tufted pile yarn floor covering, the average distance between adjacent binding sites in the widthwise direction.

  [D13.21] D5684
- **gage,** *n*—*in knitted fabrics*, a measure of fineness expressing the number of needles per unit of width (across the wales).

  [D13.60] D4850
- gage, n—in full-fashioned hosiery, a measure of fineness expressing the number of needles per 38 m (1.5 in.) on the needle bar.[D13.60] D4850
- gage, *n*—in warp knitting, for simplex, tricot, milanese, number of needles per English inch; for raschel, kayloom, twice the number of needles per English inch. [D13.60] D4850
- gage length, *n*—in tensile testing, the length of a specimen measured between the points of attachment to clamps while under uniform tension. [D13.13] D4845
- gaiting, *n*—in warp knitting, the setting of a guide bar one or more needle spaces to the right or left in order to increase the pattern possibilities. [D13.60] D4850
- **garment,** *n*—an item of clothing.

- Discussion—This can include items of clothing worn as undergarments closest to skin; over-garments, such as trousers, skirts, dresses, shirts; and outer-garments such as coats, jackets, gloves, and head coverings.

  [D13.92]
- garment manufacturer, *n*—an organization, (1) that obtains fabric which is cut into various shapes; (2) determines the seam engineering strategies needed for construction; (3) obtains needed trims and findings to create a finished garment; and (4) assembles the cut pieces together to create a finished product. [D13.92]
- **garment production contractor,** *n*—an organization engaged by a garment manufacturer to do any, or all, of the processes performed by the garment manufacturer. **[D13.92]**
- generic class, *n*—as used with textile fibers, a grouping having similar chemical compositions or specific chemical characteristics. [D13.58] D4849
- ginned lint, n—cotton fibers that have been separated from their seeds by ginning but not subjected to any further processing after ginning. (See lint cotton.)

  [D13.11] D7139
- **girdle,** *n*—an underwear support garment designed to mold various sections of the abdomen and sometimes for legs.

  [D13.61] D7022
- gloss, n—the luminous fractional reflectance of a material in the specular direction. (See specular gloss.) [D13.58]
  D4849
- **glow,** *n*—visible, flameless combustion of the solid phase of a material. (See also **afterglow** and **smoldering**.) [**D13.92**]
- **glued seam,** *n*—*in home sewing*, a seam formed by the use of an adhesive. (Compare **sewn seam, stapled seam, thermally bonded seam.**) [D13.54] D5646
- **gout,** *n*—foreign matter trapped in a fabric by accident, usually lint or waste. (See also **slug.**) [D13.59] D3990
- **grab test,** *n*—*in fabric testing*, a tensile test in which the central part of the width of the specimen is gripped in the clamps.

  [D13.60] D4850
- grade, *n—in warp knitting*, a term used to indicate the defect index evaluation of fabric determined by the number of defects per unit, for example per pound, per linear yard, or per square yard.

  [D13.60] D4850
- **grade,** *n*—*in wool and mohair*, a numerical designation used in classifying wool and mohair in their raw, semi-processed, and processed forms based on average fiber diameter and variation of fiber diameter. [D13.13] D4845
- **grade,** *v*—to assign a numerical value based on number, size, and severity of defects seen during a visual inspection. [D13.60] D4850
- **graded nest,** *n*—a collection of graded piece boundaries that represent every size in the size line for a particular pattern piece. [D13.66] D6963



- **grade reference line,** *n*—the horizontal line that defines the *x* axis for the pattern piece. (See **alternate grade reference line**.) [D13.66] D6963
- grade rule, n—a named set of grade rule values consisting of one grade rule value for each size in the size line. (See grade rule values.)
  [D13.66] D6963
- grade rule identifier, *n*—a user defined numeric name given to a grade rule. [D13.66] D6963
- **grade rule table,** *n*—a collection of grade rules. [D13.66] D6963
- grade rule table data exchange file, *n*—a text file to communicate grade rule values between different CAD/CAM systems. [D13.66] D6963
- **grade rule table name,** *n*—a user defined name given to a grade rule table. [D13.66] D6963
- **grade rule values**, *n*—values that define how an associated data point on a pattern piece moves from one size to another expressed in delta *XY* units. [D13.66] D6963
- **grading**, n—a method of creating multiple sizes from a base or sample size using a grade rule. [D13.66] D6963
- **grading,** *n*—the procedure used to identify and quantify the number of imperfections in a roll of fabric detected during visual inspection. [D13.20] D6799
- grain, *n*—in yarn spinning, a direct yarn numbering system for sliver, top or roving, equal to the mass in grains of 120 yds. (See American grain count.) [D13.58] D4849
- **grain,** *n*—*in measuring mass*, ½7000 lb avoirdupois. [**D13.58**] **D4849**
- **grainline**, *n*—a line used to define the horizontal orientation, normally the *X*-axis, of a piece in a marker. [D13.66]
- **gray felt,** *n*—a blend of white fibers with naturally colored or dyed fibers, *or both*, that has an overall gray appearance. [D13.13] D4845
- **grease wool,** *n*—wool taken from the living sheep and which has not been commercially scoured. [D13.13] D4845
- greige cord, *n*—in tire cords, a cord that has not been adhesive treated, or otherwise treated before use. (See cord.)

  [D13.19] D6477
- **greige goods,** *n*—textile fabrics that have received no bleaching, dyeing, or finishing treatment after being produced by any textile process. [D13.18] D7018
- **greige thread,** *n*—undyed or unfinished sewing thread in the state following final plying or equivalent step in processing sequence, such as extruding, texturizing, or braiding.

  [D13.58] D4849
- greige tire cord, *n*—a tire cord that has not been dip treated or heat treated before use (see tire cord). [D13.19] D6477

- **greige yield,** *n*—*in knitted fabrics*, the number of finished square yards per pound (square metres per kilogram) of greige fabric. [D13.61] D7022
- grex, n—an obsolete direct numbering system for fiber yarn or other textile strand equal to the mass in grams per 10 000 m.

  [D13.58] D4849
- **grin**, *v*—*in sewn seams*, to stress a seam so that the individual stitches can be seen. [D13.54] D7722
- **grip,** *v*—*in tensile testing*, to hold, grasp, or secure, for example, to grip the specimen by the jaws of the clamps.

  [D13.58] D4849
- **group,** *n*—in upholstered furniture, a number of individual upholstered furniture units that are related by one or more physical characteristics such as styling, color, shape or covering.

  [D13.63] D7023
- **growth,** *n*—an increase in one or more dimensions of an object or a material. [D13.58] D4849
- **H-test adhesion,** *n*—the force to extract either end of a textile cord structure that is embedded in a rubber compound under specified conditions. [D13.19] D6477
- hackling, *n*—*in flax*, the process of cleaning and aligning long-line fibers to improve fineness and remove non-fibrous materials and short fibers. [D13.17] D6798
- hair, n—natural animal fiber other than sheep's wool or silk. [D13.13] D4845
- hairiness, *n*—of yarns, an overall condition characterized by filaments or fibers protruding from the yarn surface and uniformly distributed along the yarn length. (Compare wild fibers.) [D13.58] D4849
- hand contamination, *n*—for coated inflatable restraint fabrics, the presence of non-coating material within or on the coating layer, such material visibly appearing to be of large size, coarse or sharp in texture, and of a thickness that protrudes significantly above the surface of the coating layer.

  [D13.20] D6799
- **hand girth,** *n*—the maximum circumference of the hand around the knuckles excluding the thumb, taken with the fingers together. [D13.55] D5219
- hand length, n—the straight distance from the prominence of the longest finger to the inner wrist bone, taken across the palm of the hand with fingers together and palm flat (use a stable, flat ruler). [D13.55] D5219
- hand washing, *n*—the most gentle form of home laundering using hand manipulation without the use of a machine or device such as a scrubbing board. [D13.62] D3136
- hand width, *n*—the maximum width across the palm of the hand excluding the thumb, taken with fingers together and palm flat (use a stable, flat ruler). [D13.55] D5219
- **hand-overcast seam-finish,** *n*—*in home sewing*, a finish in which hand stitches are sewn such that the thread wraps



around the cut edges of each seam allowance.

[D13.54] D5646

**hang pick,** *n*—a pick, caught on a warp yarn knot for a short distance, producing a triangular-shaped hole in the fabric.

[D13.59] D3990

hard size, *n*—sections of cloth containing an excessive quantity of sizing. [D13.59] D3990

hawser twist, n—the construction of cabled yarn, cord, or rope in which the single and first-ply twist are in the same direction and the second-ply twist is in the opposite direction, and S/S/Z or Z/Z/S construction. [D13.58]

D4849

**head,** *n*—*on an individual element fastener*, the portion of an element that engages the pocket of another element on an opposing stringer of the fastener during closing.

[D13.54] D2050

head, n—on a continuous element fastener, partially flattened area of the monofilament located at the crimp. The flattened area forms a mushroom like shape on each crimp of the element that interlocks with the two heads of the element on an opposing stringer.

[D13.54] D2050

**header,** *n*—a specific group of commands required at the beginning of a data block. [D13.66] D6963

head and neck length, *n*—the distance from the crown of the head to the cerivcale (contour), taken with the head erect and the neck unbent. [D13.55] D5219

head and neck length (infant special case), *n*—the distance from the crown of the head to the cervicale (contour), taken with the head erect and the neck unbent, with subject lying down flat with legs extended. [D13.55] D5219

**head girth,** *n*—*in body measurements*, the maximum circumference of the head above the ears. [D13.55] D5219

**heat durability,** *n*—the extent to which a material retains its useful properties at ambient air conditions, following its exposure to a specified temperature and environment for a specified time and its return to the ambient air conditions. (Compare **heat resistance**.) [D13.92] D4391

heat durable, adj—having heat durability. [D13.92] D4391

heat flux, *n*—the thermal intensity indicated by the amount of power per unit area. [D13.92] D4391

**heat resistance,** *n*—the extent to which a material retains useful properties as measured during exposure of the material to a specified temperature and environment for a specified time. (Compare **heat durability**.) [D13.92] D4391

heat resistant, adj—having heat resistance. [D13.92] D4391

**heat shrinkage,** *n*—a decrease in one or more dimensions of an object or material exposed to heat. **[D13.58] D4849** 

**heatset yarns,** *n*—*in a textured yarn*, a yarn that is subjected to a secondary heat during the texturing process, which is

designed to reduce the torque and bulk shrinkage.

[D13.58] D4849

heavy coating streak, n—for coated inflatable restraint fabrics, a narrow area of fabric, generally in the shape of a line oriented in the warp direction of the fabric, in which the coating layer is visibly at a higher rate of coverage than the surrounding material.

[D13.20] D6799

heel-ankle circumference, *n*—in body measurements, with the subject standing barefoot, the distance around the foot from the point where the back of the heel contacts the floor and over the juncture of the foot and leg at the front of the ankle and back to the starting point. [D13.55] D5219

**height,** *n*—*in body measurements*, the vertical distance from the crown of a standing subject to the soles of the feet.

[D13.55] D5219

**height (infant special cases),** *n*—the straight distance from the top of the head to the soles of the feet, taken while subject is lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg. **[D13.55] D5219** 

high elongation, adj—in steel tire cord, a cord with an average elongation at break greater than 3.0 % [D13.19] D6477

high-hip girth, n—in body measurements, the circumference of the body at a point approximately 7.5 cm (3 in.) below the waist and parallel to the floor. (Compare hip girth.)

[D13.55] D5219

high-hip girth, *n*—the maximum horizontal circumference around the torso, taken at a specified distance below the waist level including the abdominal extension.

[D13.55] D5219

**high-hip height,** *n*—the distance from the high-hip girth level to the hip girth level along the side of the body (contour) then vertically to the floor, taken with the subject standing and without shoes. [D13.55] D5219

**high-modulus aramid,** *n*—*for the purpose of these test methods*, those aramid yarns with an initial modulus of at least 400 gf/den (35 N/tex). [D13.19] D6477

high-tenacity fiber, n—a manufactured fiber either (1) belonging to a generic class of fibers having exceptional breaking strength; or (2) having a breaking strength significantly greater than the average strength of other (regular tenacity) fibers in the same generic class and of equivalent linear densities. See D7641 [D13.92] D123

Discussion—High-tenacity fibers are usually used in industrial products where mechanical properties, such as strength, are major factors in fiber selection. Comparative examples are as follows:

Generic Class	Typical Tenacity Range, dN/tex <sup>A</sup>	
	Regular Tenacity	High Tenacity
Aramid	3.3 to 4.9	18 to 22
Carbon		15 to 21
Glass		13 to 18
Nylon	2.2 to 4.4	5.3 to 8.7
Polyester	2.2 to 5.0	5.3 to 8.4
Rayon	0.6 to 2.3	2.6 to 5.3

<sup>&</sup>lt;sup>A</sup> To convert to grams-force per tex, multiply by 88.3.

D123



- **highloft nonwoven fabric,** *n*—a low-density fiber network structure characterized by a high ratio of thickness to mass per unit area. [D13.92] D123
- hip, *n*—*in anatomy*, the laterally projecting region formed by the lateral parts of the pelvis and the upper part of the femur together with the flesh covering them. [D13.55] D5219
- hip girth, *n*—in body measurements, the maximum circumference of the body at the level of maximum prominence of the buttocks. [D13.55] D5219
- hip height (infant special case), *n*—the straight distance from the hip girth level to the soles of the feet along the side of the body, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg.

  [D13.55] D5219
- **hip/seat girth,** *n*—the maximum horizontal circumference around the torso taken at the greatest protrusion of the buttocks as seen from the side. [D13.55] D5219
- hip/seat height, *n*—the vertical distance from the hip/seat girth level to the floor along the side of the body taken with subject standing and without shoes. [D13.55] D5219
- hockle, *n*—*in rope*, a strand kink in a rope causing yarn displacement in the strand resulting in rope deformation and damage.

  [D13.92] D123
- holding strength, *n*—in snap fasteners, the force required to separate the prong-ring from its attached mating part (socket or stud). [D13.54] D2050
- **hole,** *n*—*in fabric*, an imperfection where one or more yarns are sufficiently damaged to create an aperture.

  [D13.59] D3990
- hole—in inflatable restraint fabrics, an opening not characteristic of the normal weave pattern where one or more yarns is cut, torn, or shifted.

  [D13.20] D6799
- hole spacing, *n*—on a button, the distance from the center of one hole to another. [D13.54] D2050
- holland cloth, *n*—a completely filled woven fabric having a smooth gloss finish on both sides used as a separating medium for sheeted rubber compounds. [D13.19] D6477
- **hollow braid,** *n*—*in rope*, a braided construction of either plain or twill braid, having an empty center. [D13.92] D123
- **home laundering,** *n*—a process by which textile products or parts thereof may be washed, bleached, dried, and pressed by any customary method designed for use in a residence, or nonprofessional use. (See also **professional care.**)

  [D13.62] D3136
- Hong Kong seam-finish, *n*—in home sewing, a seam finish in which a binding fabric is used to encase the cut edge of each seam allowance separately and in which the binding fabric has one raw edge enclosed and the other raw edge exposed. (Compare bound seam-finish.) [D13.54] D5646
- **hook and loop fasteners**—a touch fastener, comprised of two flexible mating strips, the surface of one mating strip being

- covered with tiny, stiff protrusions shaped like hooks which engage the other mating strip which is covered with pliable loops. [D13.54] D2050
- **hooked bow,** *n*—a fabric condition in which the filling yarns or knitted courses are in the proper position for most of the fabric width but are pulled out of alignment at one side of the fabric. (See also **double hooked bow**) [D13.59] D3990
- hooks, *n*—*in fiber testing*, curved or bent fiber ends caused by the carding or specimen preparation processes. [D13.11]

  D7139
- **horseshoe,** *n*—a length of sliver folded in a manner such that the two ends can be fed simultaneously into the needle field of the Fibroliner FL-101. **[D13.11] D7139**
- hose reinforcing wire, *n*—a single filament of steel wire with a metallic coating (usually brass) used in the reinforcement of a rubber or other elastomer hose [D13.19] D6477
- hot water extraction cleaning, *n*—a process in which a heated solution of detergent is sprayed into the textile material and immediately removed by a wet suction nozzle behind the spray-head.

  [D13.62] D5253
- **huck towel,** *n*—a plain weave nonterry foundation product constructed with small warp and filling floats, having hems or selvages, which is used to dry a person's hands and utensils such as glasses, plates, bowls, and flatware.

  [D13.63] D7023
- humidity, n—the condition of the atmosphere in respect to water vapor. (Compare absolute humidity and relative humidity.)
  [D13.51] D4920
- **hydrolytic stability**, *n*—the ability to withstand the environmental effects of high humidity. [D13.63] D7023
- **hygrometer,** *n*—any instrument for measuring the humidity of the atmosphere. [D13.51] D4920
- **IC/TC,** *n*—abbreviation for Intelligent Color/Trash Coordinator. [D13.11] D7139
- **IDT,** *n*—abbreviation for Intelligent Data Terminal. [D13.11] D7139
- **ignition**, n—the initiation of combustion. [D13.92] D4391
- **ignition loss,** *n*—*in glass textiles*, the amount of organic material consumed by ignition. [D13.18] D7018
- illumination, *n*—*in lighting*, the density or flux of light on a unit area of surface. [D13.11] D7139
- **immature fibers,** n—(1) (cotton fibers treated with sodium hydroxide solution)—fibers that either (a) have swollen and assumed a spiral form, or (b) remained flat, thinly outlined, and almost transparent. Total wall width is less than the lumen width.
  - (2) (cotton fibers observed under polarized light)—fibers that appear purple, indigo, or blue, turn orange or yellow-orange upon rotation to the subtractive position, and upon removal of the selenite plate show parallel extinction. (Compare **mature fibers.**) [D13.11] D7139



- immediate elastic recovery, *n*—recoverable deformation which is essentially independent of time, that is, occurring in (a time approaching) zero time and recoverable in (a time approaching) zero time after removal of the applied force. (See **delayed deformation**.) [D13.58] D4848
- **impact resistance**, *n*—resistance to fracture under the sudden application of an external force. [D13.54] D2050
- **imperfection,** *n*—a departure of a quality characteristic from its intended level or state. [D13.20] D5426
- impregnated fabric, n—a fabric in which the interstices between the yarns are completely filled with the impregnating compound throughout the thickness of the fabric, as distinguished from sized or coated fabrics, where these interstices are not completely filled. [D13.60] D4850
- indirect yarn numbering system, *n*—a system that expresses the linear density of yarn in length per unit mass.

  [D13.58] D4849
- individual element fastener, *n*—a slide fastener consisting of two series of individually formed elements, each attached to one of the opposing edges of two tapes, which are engaged and disengaged by the movement of a slider. (Compare continuous element slide fastener.) [D13.54] D2050
- indoor furniture, *n*—furniture manufactured for use in the interior of a building. [D13.63] D7023
- industrial yarn, *n*—a yarn composed of continuous filaments, usually of high breaking tenacity, produced with or without twist, and intended for applications in which functional properties are of primary importance; for example, in reinforcing material in elastomeric products (tires, hose, belting), in protective coverings, and in cordage and webbing, etc. [D13.19] D6477
- **industrial textiles,** *n*—a group of fibers, yarn intermediates, yarns, and fabrics chosen for intended uses other than general apparel and home furnishings, where the selection is based principally on performance characteristics and properties instead of aesthetic or decorative characteristics.

Discussion—The variety of industrial textiles is diverse. Examples include yarns and cords used to reinforce hoses, tires, and concrete; fabrics used for flexible chutes to on-load and off-load grain of cargo vessels; and, the multilayer structure used in conveyor belts used to move small packages in an air cargo transportation facility. These types of textiles are also used for the manufacturing of other items, such as awnings, tents, and backpacks. Industrial textiles can also be referred to as engineered fabrics or technical textiles.

industry products, *n*—for feathers or down, products such as furniture, pillows, comforters, sleeping bags, and wearing apparel which are wholly or partially filled with feathers or down; bulk stocks of processed feathers or down intended for use in the manufacture of such products. [D13.61]

inflatable restraint, *n*—a vehicular safety device designed to cushion an occupant or equipment during collision; airbag.

[D13.20] D6799

inflator, *n*—for inflatable restraints, a device for generating and directing expansion gases into a cushion.

[D13.20] D6799

- inherent flame-resistance, n—as applied to textiles, flame resistance that derives from an essential characteristic of the fiber from which the textile is made. (Compare flame resistance.)
   [D13.92] D4391
- **inherently flame-resistant,** *adj*—having inherent flame-resistance. [D13.92] D4391
- initial modulus, *n*—the slope of the initial straight portion of a stress-strain or force-elongation curve. [D13.58] D4848
- injection molded button, n—a method of forming which requires the filling of a cavity under pressure with polymer that will take the form of the mold when cooled.

  [D13.54] D2050
- injection molding, *n*—the process of forming a material by forcing it, in a fluid slate under pressure, through a runner system (sprue, runner, gate(s)) into the cavity of a closed mold.

  [D13.54] D2050
- ink stain, *n*—for inflatable restraint fabrics, presence of marking ink in an area of fabric not provided for identification by an applicable specification. [D13.20] D6799
- in-plant cleaning, *n*—for textile floor coverings, a cleaning process performed in a facility away from the location where the product is used. [D13.62] D5253
- insect screening, *n*—in coated glass yarn fabrics, a woven netting having an approximately even spaced mesh of 12 by 12 yarns or more per 25.4 mm (1 in.) [D13.18] D7018
- inside-leg length, n—in body measurements, the vertical distance from the crotch to the soles of the feet.

  [D13.55] D5219
- inside seam, *n*—in home sewing, a seam having seam allowance located on the interior, or the underside, of the product. (Compare outside seam.) [D13.54] D5646
- **inspection,** *n*—the process of measuring, examining, testing, gaging, or otherwise comparing a characteristic or property of a material with applicable requirements. In this case only by visual examination. [D13.60] D4850
- **inspection,** *n*—*in fabric grading*, the process of viewing, measuring, examining, or otherwise comparing the visual characteristics of a fabric with applicable requirements.

  [D13.20] D6799
- integrator, n—in the tensile testing of textiles, a device for obtaining the time integral of the load. [D13.60] D4849
- integrator, *n*—in textile unevenness testing, a device that calculates the coefficient of variation unevenness or the mean deviation unevenness. [D13.58] D4850
- interlining, *n*—any textile which is intended for incorporation into an article of wearing apparel as a layer between an outer shell and inner lining. [D13.60. D13.61] D4391,D4850, D7022



- internal cut outs, *n*—lines, part of a pattern piece, not part of the piece boundary, which are cut during the cutting process.

  [D13.66] D6963
- internal lines, *n*—lines, part of a pattern piece, not a part of the piece boundary, which are not cut. [D13.66] D6963
- **intimates**, *n*—broad term for women's underwear including camisoles, girdles, panties, slips and bras. [D13.61] D7022
- invisible waste, *n*—*in cotton testing*, weight loss due to dust, moisture, loose fibers, etc., carried away by the air stream during the test. [D13.11] D7139
- **ironing,** *n*—a method of pressing using a heated hand iron, sometimes together with moisture or steam, and a gliding motion. [D13.62] D3136
- **jacket**, *n*—a textile, woven or felted into tubular or sleeve form, ready for covering and shrinking on a machine roll.

  [D13.60] D4850
- **jaw face,** *n*—in tensile testing machines, the surface of a jaw which in the absence of a liner contacts the specimen. [D13.58] D4849
- **jaw liner,** *n*—*in tensile testing machines*, any material placed between the jaw face and the specimen to improve the holding power of the jaws. [D13.58] D4849
- **jaws,** *n*—*in tensile testing machines*, the elements of a clamp which grip the specimen. [D13.58] D4849
- jerk-in, n—in woven fabric, an extra filling thread dragged into the shed with the regular pick and extending only part of the way across the cloth. (Compare double pick, mispick.)
   [D13.59] D3990
- **jute,** *n*—soft fibers from the inner bark of the round pod jute (*Corchorus capsularis*), the long pod jute (*Corchorus olitorius*), and from the inner bark of other closely related plants, such as kenaf, sometimes referred to as Meshta (*Hibiscus cannabinus*). (See D7641) [D13.16]
- **kelvin**, *n*—the unit of thermodynamic temperature; the SI unit of temperature for which an interval of one Kelvin (K) equals exactly an interval of one degree Celsius (1°C) and for which a level of 273.15 K equals exactly 0°C.

  [D13.92] D123
- **kemp fiber,** *n*—a medullated animal fiber in which the diameter of the medulla is 60 %, or more, of the diameter of the fiber. [D13.13] D4845
- **kinetic friction,** *n*—friction developed between two bodies in motion. (Compare **static friction**.) [D13.58] D4849
- **kink,** *n*—*in fabric,* a short length of yarn that has spontaneously doubled back on itself to form a loop.

  [D13.59] D3990
- **kink**, *n*—*in rope*, an abrupt bend or loop in the rope which is the result of an unbalanced twist relationship in the rope structure. [D13.92] D123

- **kinky filling,** *n*—*for inflatable restraint fabrics*, an area of the fabric in which a short section of the weft yarn is folded back upon itself, causing the appearance of a thick or heavy section of yarn. This is contrasted to a loop in that the excess yarn does not protrude from the surface of the fabric.

  [D13.20] D6799
- **knee**, *n*—*in anatomy*, the joint between the lower and upper leg. [D13.55] D5219
- **knee girth,** *n*—*in body measurements*, with the leg straight, the circumference of the knee over the knee cap and parallel to the floor. [D13.55] D5219
- **knee height,** *n*—the vertical distance from the midpoint (or crease) to the floor, taken with subject standing and without shoes. [D13.55] D5219
- knee height (infant special case), *n*—the straight distance from the midpoint (or crease) of the knee to the soles of the feet, taken with subject lying down flat with legs extended and the foot positioned at 1.57 rad (90°) to the leg.

  [D13.55] D5219
- **knitted fabric,** *n*—a structure produced by interlooping one or more ends of yarn or comparable material. [D13.59,
  - D13.60] D3990,D4850
- **knot breaking force,** *n*—*in tensile testing*, the breaking force of a strand having a specified knot configuration tied in the test method portion of the strand mounted between the clamps of a tensile testing machine. (Compare **knot breaking strength.** See also **breaking force.**) [D13.58] D4848
- **knot-breaking strength**, n—strength expressed in terms of knot breaking force. (See **knot breaking force.**) [D13.58]
  D4848
- laboratory sample, *n*—a portion of material taken to represent the lot sample, or the original material, and used in the laboratory as a source of test specimens.

  [D13.13] D4845,D4849
- **laboratory sample,** *n*—*in wool top*, portions drawn from the lot in accordance with the described procedure. [**D13.13**] **D4845**
- **laid fabric,** *n*—a fabric made without filling yarn, the parallel warp yarns being held together by means of rubber latex or other binding material. [D13.60] D4850
- laminated fabric, *n*—a layered fabric structure wherein a face or outer fabric is joined to a continuous sheet material, such as polyurethane foam, in such a way that the identity of the continuous sheet material is retained, either by the flame method or by an adhesive, and this in turn normally, but not always, is joined on the back with a backing fabric such as tricot. (See also **bonded fabric**, **coated fabric**.) [**D13.60**, **D13.61**] **D4850,D7022**
- **laminated fabric,** *n*—*in fabric roof systems*, a flexible fabric system composed of superimposed layers of fabric firmly united by bonding or impregnating with an adherent polymeric material to one or more surfaces. [D13.60] D4850



**lapped seam,** *n*—a class of seams which requires that plies of materials are lapped and seamed with one or more rows of stitches.

Discussion—Lapped seams are identified by the letters, LS, as shown in D6193. [D13.54]

lapped seam for leather or nonwoven material, *n*—in home sewing, a complex seam formed on the outside of the product, with neither cut edge enclosed, and having one or two rows of stitching and a cut edge visible from the outside. (Compare lapped seam for woven or knitted fabric.)

[D13.54] D5646

lapped seam for woven or knitted fabric, *n*—in home sewing, a complex seam formed on the inside of the product with neither raw cut edge enclosed, and having one visible line of topstitching on the face side and a small fold formed by topstitching. (Compare tucked seam.) [D13.54] D5646

lateral, *adj*—a descriptive term for a textile fiber composed of two or more polymers at least two of which have a continuous longitudinal external surface. [D13.58]

D4849

D4

lateral holding strength, *n*—the force required to disengage a snap fastener resulting from a pull in the plane parallel to the material to which the snap fastener is attached. [D13.54]

**launderability**, *n*—the ability of a button to undergo multiple cycles of laundering without damage such as cracks or loss of finish.

[D13.54] D2050

**laundering,** *n*—*in textile product care*, a process intended to remove soil or stains by treatment (washing) with an aqueous detergent solution (and possibly bleach) and normally including subsequent rinsing, extracting, and drying.

[D13.62] D2050,D4391

laundering, n— a process used to refurbish a textile product or parts thereof by (1) cleaning it in water containing a cleaning agent, and possible bleach, (2) drying it, and (3) usually ironing or pressing it. [D13.54] D2050,D4391

**lea,** *n*—*in cotton yarns*, the number of 120-yd lengths of yarn per pound; an indirect yarn numbering system.

[D13.58] D4849

**lea,** *n*—*in linen yarns*, the number of 300-yd lengths of yarn per pound; an indirect yarn numbering system.

[D13.58] D4849

**least count,** *n*—*in tensile testing machines*, the smallest change in the indicated property that can customarily be determined. (See **sensitivity**.) **[D13.58] D4849** 

**legs**, *n*—the two portions of an individual element that affix the element to the bead. [D13.54] D2050

**length** (**for cotton classification**), *n*—an industry term for upper half mean length reported in millimeters or inches. [D13.11] D7139

**length,** *n*—*of a fabric*, the distance from one end of a fabric to the other, measured parallel to the side edge of the fabric

while it is under zero tension and is free of folds or wrinkles.

[D13.60] D4850

**length analyzer,** *n*—an instrument which determines the upper-half-mean length and length uniformity index of a test beard of cotton. [D13.11] D7139

**length between,**  $L_b$ , **n**—in textile unevenness testing, the length between which unevenness is measured; the equivalent of the length of strand segments weighed in a direct method of measuring unevenness. [D13.58] D4849

**length distribution,** *n*—of staple fibers, a graphic or tabular presentation of the proportion or percentage (by number or by mass weight) of fibers having different lengths.

[D13.58] D4849

**length group,** *n*—all fibers, or pulls, whose lengths fall within a given length interval. [D13.11] D7139

**length interval,** *n*—a class interval of ½ in. (3 mm), usually designated by its midpoint length in odd-numbered sixteenths of an inch. [D13.11] D7139

**length of lay,** *n*—the axial distance required to make one complete revolution of any element of a strand or cord.

[D13.19] D6477

**length of tear,** *n*—*in tear testing of fabrics*, the measured distance propagated in a specimen by a tearing force from the initiation of the test to the termination of the test.

[D13.60] D4850

**length within,**  $L_w$ , n—in textile unevenness testing, the length over which unevenness is measured. [D13.58] D4849

**lengthwise direction,** n—in textiles, the direction in a machine-made fabric parallel to the warp yarns [D13.21] D5684

**leno weave,** *n*—a weave in which two adjacent warp yarns cross each other between the picks. [D13.18] D7018

**let-off mark**, *n—in woven fabrics*, a corrugated defect pattern distributed across the fabric width. (See **crack mark** and **shier**.) [D13.59] D3990

**level pile,** *n*—*for pile yarn floor covering*, pile in which all tuft legs are of substantially the same length. [D13.21] D5684

**ligne,** n—a unit of measure for buttons, one ligne equals 0.635 mm (0.025 in.) [D13.54] D2050

**ligne size,** *n*—a unit of measure for button diameter; one ligne equals 0.635 mm (0.025 in.). [D13.55] D5219

**light coating,** *n*—for coated inflatable restraint fabrics, a localized amorphous area of fabric in which the coating layer is visitly at a lower rate of coverage than the surrounding material.

[D13.20] D6799

**light coating streak,** *n*—or coated inflatable restraint fabrics, a narrow area of light coating, generally in the shape of a line oriented in the warp direction of the fabric.

[D13.20] D6799



- **line**, *n*—a collection of points that define part of a pattern piece. [D13.66] D6963
- **linear density,** *n*—*for fiber and yarn,* mass per unit length.

  [D13.58] D4848
- linear integrator, *n*—in textile unevenness testing, an integrator that operates continuously and reports unevenness for a certain, and unchanging, time past. (*Syn.* fading memory integrator.) [D13.58] D4849
- **linear lea,** *n*—an indirect yarn numbering system in the linen spinning system equal to the number of 300-yd lengths per pound. [D13.58] D4849
- **linen,** *n*—a yarn or fabric made solely from flax fibers. [D13.17] D6798
- **linen blend,** *n*—a yarn or fabric made from a combination of flax and other fibers. [D13.17] D6798
- **lining fabric,** *n*—*for apparel*, a textile used to cover the inner sides of garments. [D13.61] D7022
- lint, *n*—in loose cotton, fibers mostly of spinnable length. (See also linters.) [D13.11] D7139
- lint content, n—that portion of a mass of cotton fiber consisting of fiber, including normal moisture content, but excluding foreign matter.[D13.11] D7139
- **lint cotton,** *n*—loose cotton fibers in any form, either raw or processed, free of seeds and not bound together in yarn or fabric. (See also **ginned lint**.) [D13.11] D7139
- **linters,** *n*—the short fibrous material adhering to the cotton seed after the spinnable lint has been removed by ginning and which is subsequently recovered from the seed by a process called "delinting." [D13.11] D7139
- **lisle,** *n*—a plied cotton yarn, comprising highly-twisted single yarn components, produced with combed, long staple fibers.

  [D13.59] D4850
- **load,** *vt*—to apply a force. [D13.58] D4848
- **lockstitch,** *n*—*in home sewing*, a type of stitch formed with two threads; one needle thread and one bobbin thread interlaced with each other. [D13.54] D5646
- **long float,** *n*—*for inflatable restraint fabrics*, a small change in the weave pattern where a warp or filling yarn extends over six or more filling or warp yarns with which it should be interlaced.

  [D13.20] D6799
- long knot, n—in raw silk, knots which have loose ends from 3 to 25 mm in length. [D13.59] D3990
- **long line,** *n*—flax fiber bundles that have a minimum length of 50 cm. [D13.17] D6798
- long slug, *n*—*in raw silk*, a slug which exceeds 10 mm (½ in.) in length or which is very much larger in diameter than the yarn. [D13.59] D3990
- **loom fly,** *n*—waste fibers created during weaving, that are woven into a fabric. [D13.59] D3990

- **loop,** *n*—*for inflatable restraint fabrics*, a continuous yarn that curls back on itself and protrudes from the surface of the fabric. (Syn. *kink*, *snag.*) [D13.20] D6799
- **loop breaking force,** *n*—*in tensile testing*, the breaking force of a specimen consisting of two lengths of strand from the same supply looped together in a specified configuration and mounted between the clamps of a tensile testing machine. (Compare **loop breaking strength.** See also **breaking force.**) [D13.58] D4848
- **loop-breaking strength,** *n*—strength expressed in terms of loop breaking force. (See **loop breaking force, strength.**)

  [D13.58] D4848
- **loop pile yarn floor covering,** *n*—a pile yarn floor covering in which the pile is composed only of uncut loops.

  [D13.21] D5684
- loop tension, n—in elastic material testing, the total tension at any specified extension that is exerted on a specimen in a loop formation.[D13.59] D4850
- **loop pile floor covering,** n—a pile yarn floor covering in which the pile is composed only of uncut loops. [D13.21]
- **loopy,** *adj*—a descriptive term for yarns having randomly sized loops of fibers or filaments protruding from the yarn surface.

  [D13.58] D4849
- **loopy selvage,** *n*—an improperly woven selvage of uneven width or a selvage containing irregular filling loops extending beyond the outside selvages. [D13.59] D3990
- **loose course,** *n*—*in knitted fabrics*, a row of loops in the widthwise direction that is larger, looser, or longer than the stitches in the main body of the fabric. [D13.59] D3990
- **loss of tuft definition,** *n*—*for pile yarn floor coverings*, the bursting, opening, and untwisting of pile yarn, decrimping of the fibers in the surface pile, or any combination of these.

  [D13.21] D5684
- **lot,** *n*—*in acceptance sampling*, that part of a consignment or shipment consisting of material from one production run. [D13.92]
- **lot,** *n*—*in acceptance sampling*, that part of a consignment or shipment consisting of material from one production lot. [D13.13] D4845
- **lot,** *n*—*in acceptance sampling of cotton*, the main stock, supply, or source of fibers to be sampled. [D13.11] D7139
- lot, n—in bonded, fused, or laminated fabric, a single run on the bonding or laminating machine in which the processing is carried out without stopping or changing processing conditions, and consisting of either a single dye lot or a single gray goods lot.
  [D13.60] D4850
- **lot,** *n*—*in wool top*, the entire quantity, not exceeding 20 000 lb (9100 kg) of a single combing, that comprises a single unit for which a test for neps, vegetable matter, or colored fiber, or all three combined is desired. [D13.13] D4845



- **lot sample,** *n*—one or more shipping units taken at random to represent an acceptance sampling lot and used as a source of laboratory specimens. [D13.92] D4845
- **lot sample,** *n*—*in cotton*, a relatively large sample taken in the field to represent a consignment, shipment, or lot, for use in the preparation of the laboratory samples. [D13.11] D7139
- **louver cloth,** *n*—*in coated glass yarn fabrics,* a woven netting having an approximately even-spaced mesh of fewer than 12 by 12 yarns per 25.4 mm (1 in.) **[D13.18] D7018**
- **low power stretch,** *n*—that property of a fabric whereby it exhibits high fabric stretch and good recovery from low tension. [D13.60] D4850
- **lumen,** *n*—*in vegetable fibers*, the central canal of the fiber. [D13.11] D7139
- **luster,** *n*—*in buttons*, the degree of brilliance exhibited in pearlized or pearl buttons. [D13.54] D2050
- machine direction, MD, *n*—the direction in the plane of the fabric parallel to the direction of manufacture.

  [D13.92] D123
- machine stitch, *n*—in home sewing, the resulting arrangement of sewing threads in a repeating unit formed by a sewing machine. [D13.54] D5646
- main components, *n*—*in textiles*, those sections of a consumer product which constitute the largest continuous homogeneous areas of the product that are typical of the product.

  [D13.62] D3136
- **major defect,** *n*—a defect other than critical, that judgment and experience indicate is likely to materially reduce the usability of a product for its intended purpose. [D13.60] D4850
- major imperfection, *n*—in fabric grading, a deviation in a roll of fabric that judgment and experience indicate is likely to have an adverse affect upon subsequent processing of the fabric. [D13.20] D6799
- man-made fiber, *n*—a class name for various genera of filament, tow or staple produced from fiber forming substances which are chemically synthesized or modified. (Syn. manufactured fiber.) [D13.92] D123
- manufactured staple fiber, *n*—fiber of spinnable length manufactured directly or by cutting filaments. [D13.92] D123
- manufactured fiber, *n*—a class name for various genera of filament, tow, or staple produced from fiber forming substance which may be (1) polymers synthesized from chemical compound, (2) modified or transformed natural polymers, or (3) glass. (See man-made fiber.)

  [D13.92] D123
  - Discussion—Acrylic, nylon polyester, olefin, urethane, and polyvinyl are examples of fiber synthesized from chemical compounds. Cellulose base fibers, such as acetate and rayons, and alginate fibers are examples of modified or transformed polymers.
- marking link, *n*—for inflatable restraint fabrics, pigment in the shape of characters or patterns intentionally applied on fabric for the purpose of identification. [D13.20] D6799

- mass, n—the quantity of matter in a body. (See also weight.) [D13.58] D4849
- material, *n*—*in home sewing*, a planar structure such as textile fabric, plastic film, or leather. [D13.54] D5646
- matrix, *adj*—a descriptive term for a textile fiber in which one or more polymeric fibrous material(s) is dispersed in another.

  [D13.58] D4849
- matting, *n*—for pile yarn floor covering, loss of tuft definition due to entanglement. [D13.21] D5684
- mature fibers, *n*—(cotton fibers treated with sodium hydroxide solution)—fibers that have swollen into unconvoluted and almost rod-like shapes, where total wall width is equal to or greater than the lumen width. [D13.11] D7139
- **mature fibers,** n—(cotton fibers observed under polarized light)—fibers that appear yellow, yellow green, or green and are yellow or light yellow upon rotation to the subtractive position (through 90°) and show little or no parallel extinction on removal of the selenite plate. (Compare **immature fibers.**) [D13.11] D7139
- maturity index, *n*—a relative indication of cotton fiber maturity. [D13.11] D7139
- maximum inflation pressure, *n*—for inflatable restraints, the maximum internal cushion pressure occurring after breakout pressure. [D13.20] D6799
- mean deviation unevenness, U%, n—in textiles, the average of the absolute values of the deviations of the linear densities of the integrated lengths between which unevenness is measured and expressed as a percentage of the average linear density for the total length within which unevenness is measured. (See also unevenness, coefficient of variation unevenness.)

  [D13.58] D4849
- mean length, *n*—in testing of cotton fibers, the average length of all the fibers in the test specimen based on mass-length data. [D13.11] D7139
- mean temperature, *n*—in thermal transmittance of textiles only, the average of the hot plate temperature and the temperature of the calm, cool air that prevailed during the test.

  [D13.51] D4920
- med fiber, *n*—a medullated animal fiber in which the diameter of the medulla is less than 60 % of the diameter of the fiber.

  [D13.13] D4845
- median force, *n*—in tensile testing, that force level that is exceeded by half the recorded peaks and which in turn exceeds the other half of the recorded peaks, in a specified distance of cross-head travel.

  [D13.60] D4850
- medulla, n—in mammalian hair fibers, the more or less continuous cellular marrow inside the cortical layer in most medium and coarse fibers.[D13.13] D4845
- medullated fiber, *n*—an animal fiber that in its original state includes a medulla. [D13.13] D4845



- **melting,** n—the liquefaction of material under the influence of heat. [D13.92] D4391
- merino, adj—from pure-bred merino sheep. [D13.13] D4845
- mesh, *n*—in coated glass yarn fabrics, the number of warp yarns or ends per linear 25.4 mm (1 in.) followed by the number of filling yarns or picks per linear 25.4 mm (1 in.).

  [D13.18] D7018
- metal cast button, *n*—a button produced by the casting of molten metals and metal alloys into single cavity or multiple cavity molds. [D13.54] D2050
- metric count, *n*—an indirect yarn numbering system for sliver roving, and yarn, equal to the number of kilometers per kilogram (1000 m/kg). [D13.58] D4849
- microfiber batting, *n*—a textile filling material containing fibers, such as polyester or olefin, which have a diameter of less than 10 μm. [D13.61] D7022
- micronaire reading, *n*—a relative measurement of fiber fineness derived from the porous plug air-flow method.

  [D13.11] D7139
- mid-neck girth, *n*—in body measurements, the circumference of the neck approximately 25 mm (1 in.) above the neck base (See neck base girth.). [D13.55] D5219
- mid-thigh girth, n—in body measurements, the circumference of the upper leg between the hip and the knee.

  [D13.55] D5219
- mill grain, *n*—in rubber, grain which is imparted to rubber sheeting while being mixed or conditioned in a rubber mill and which is parallel to the direction the rubber moves in the mill.

  [D13.19] D6477
- minor defect, n—a defect that is not likely to materially reduce the usability of the product from its intended purpose, or is a departure from established standards having little bearing on the effective use of operation of a product.

  [D13.60] D4850
- minor imperfection, *n*—in fabric grading, a deviation in a roll of fabric that judgment and experience indicate is likely to have no bearing on subsequent processing of the fabric.

  [D13.20] D6799
- mirror line, *n*—a line, part of a pattern piece, that divides two symmetrical parts. [D13.66] D6963
- mispick, *n—in woven fabrics*, a pick not properly interlaced which causes a break in the weave pattern. (See **double pick**.) [D13.59] D3990
- **misprint,** *n*—*in printed fabric*, colors or patterns, or both, either missed, or partially missed, or incorrectly positioned relative to each other. [D13.59] D3990
- misregister, *n*—*in printed fabric*, colors or patterns not correctly positioned. (Compare misprint.) [D13.59] D3990
- missing coating, *n*—for coated inflatable restraint fabrics, portions of the coated layer containing exposed base fabric or scrape marks in the coated layer. [D13.20] D6799

- missing yarn, *n*—for inflatable restraint fabrics, a yarn discontinuity resulting in a change in weave pattern. [D13,20]
- miss-knit, *n*—in knitted fabrics, a deviation from the designated knitting pattern. [D13.59] D3990
- **misweave,** *n*—*for inflatable restraint fabrics*, a change in the weave pattern caused by incorrect interlacing or insertion of a yarn. (Includes *mispick*, *wrong*, *draw*, *jerk-in*.)

  [D13.20] D6799
- mixed end, *n*—in woven fabrics, a warp yarn differing from that normally being used in the fabric. [D13.59] D3990
- mixed filling, *n*—in woven fabrics, a filling yarn differing from that normally being used in the fabric. (See also filling band. Compare barré.) [D13.59] D3990
- mock French seam, *n—in home sewing*, a complex seam formed on the inside of the product with cut edges enclosed and no stitching visible on the face side; similar in appearance to the French seam but constructed differently. (Compare French seam.) [D13.54] D5646
- mock leno weave, *n*—a weave in which the warp yarns remain parallel but form open warp stripes by programmed interlacing of warp and filling yarns simulating a leno appearance.

  [D13.18] D7018
- modified grab test, n—in fabric testing, a tensile test in which the control part of the width of the specimen is gripped in the clamps and in which lateral slits are made midlength of the specimen severing all yarns bordering that portion of the specimen held between the two clamps. [D13.60] D4850
- modified worsted system, *n*—a worsted system for spinning manufactured fibers which relies on pin control of fibers during sliver weight reduction, but which bypasses the system of combing required with wool to remove noil.

  [D13.58] D4849
- **module,** *n*—*for inflatable restraints*, an assembly composed of an inflator, a cushion, a mounting device, a trigger, and a cover. [D13.20] D6799
- modulus, *n*—the property of a material representative of its resistance to deformation. (See also **chord modulus, initial modulus, tangent modulus, Young's modulus**). [D13.58]
- **mohair,** *n*—the hair of the Angora goat, *Capra* species. [D13.13] D4845
- **moisture,** *n*—*as used with textiles*, water absorbed, adsorbed or resorbed by a material. (See also **water**.) [D13.51]
- moisture content, n—the amount of moisture in a material determined under prescribed conditions and expressed as a percentage of the mass of the moist material, that is, the original mass comprising the oven-dried substance plus any moisture present.

  [D13.13] D4845



- moisture content, *n*—that part of the total mass of a material that is absorbed or adsorbed water, compared to the total mass. (Compare moisture pick-up and moisture regain.)

  [D13.51] D4920
- moisture content, *n*—at moisture-equilibrium, the moisture content of a material in equilibrium with air of known, or specified, temperature and relative humidity. [D13.51]
- moisture equilibrium, *n*—the condition reached by a material when it no longer takes up moisture from, or gives up moisture to, the surrounding atmosphere. (Compare moisture-free.) [D13.51] D4920
- moisture equilibrium for preconditioning, *n*—the moisture condition reached by a material during free exposure to moving air in the standard atmosphere for preconditioning.

  [D13.51] D4920
- moisture equilibrium for testing, *n*—the condition reached by a sample or specimen during free exposure to moving air controlled at specified conditions. [D13.51] D4920
- moisture equilibrium for testing, *n*—for industrial yarns and tire cords, the condition reached when, after free exposure to a test atmosphere which is in motion, two successive weighings not less than 4 h apart, show not more than 0.1 % progressive change in mass of the specimen or sample.

  [D13.19] D6477
- moisture-free, *adj*—the condition of a material that has been exposed in an atmosphere of desiccated air until there is no further significant change in its mass. [D13.13] D4845
- moisture-free, adj—in textiles, a descriptive term for a material that (1) has been exposed to a flow of desiccated air at a specified temperature until there is no further significant change in mass, or (2) has been treated by a distillation process using a suitable solvent. (Compare moisture equilibrium.) [D13.51] D4920
- moisture pick-up, *n*—the mass of absorbed and adsorbed water that is held by material, compared to the mass of the dried material. (Compare moisture content, and moisture regain.)

  [D13.51] D4920
- moisture pick-up, n—at moisture-equilibrium, the moisture pick-up of a material in equilibrium with air of known, or specified, temperature and relative humidity.

  [D13.51] D4920
- moisture regain, *n*—the amount of moisture in a material determined under prescribed conditions and expressed as a percentage of the mass of the moisture-free material. (See moisture content.) [D13.13] D4845
- moisture regain, *n*—the amount of water resorbed by a dried material at specified equilibrium conditions of temperature and humidity, compared to the mass of the dried material. (See standard moisture regain. Compare commercial moisture regain, moisture content, and moisture pick-up.)

  [D13.51] D4920

- monofilament, *n*—a single filament which can function as a yarn in commercial textile operations, that is, it must be strong and flexible enough to be knitted, woven, or braided, etc. (See yarn.) [D13.58] D7139
- mote, *n*—a whole, immature cotton seed. [D13.11] D7139
- mouth, *n*—the opening in a slider that receives the chain. [D13.54] D2050
- mouth width, *n*—the measurement between the slider flanges at the point where they bear against the shoulders of the interlocked elements. [D13.54] D2050
- movable retainer, *n*—a movable or sliding device performing a similar function to that of the fixed retainer, yet able to open and close the chain like to a slider. The purpose of the moveable retainer is to permit separation of the two stringers from the bottom, while the stringers remain connected at the top by the moveable retainer and the slider on the slide fastener. A slider fastener with a moveable retainer device is sometimes referred to as a "Two Way" separable fastener and is able to function like a separable fastener when using the slider.

  [D13.54] D2050
- multilevel pile, *n*—for pile yarn floor coverings, pile in which some tuft legs are substantially longer than others, resulting in a sculptured appearance or pattern [D13.21] D5684
- multiple length staple fibers, *n*—manufactured staple fibers that are two or more times the nominal cut fiber length.

  [D13.58] D4849
- multiple stitch zigzag, n—in home sewing, a simple machine stitch pattern of alternating diagonal segments with each segment of two or more stitches having equal length and width.

  [D13.54] D5646
- muslin, n—as applied to bed sheeting, a plain weave fabric with not fewer than 128 yarns/in.<sup>2</sup> (645 mm<sup>2</sup>). [D13.63]
- **mussiness,** *n*—surface distortion in a fabric characterized by undesirable unevenness due to many minor deformations.

  [D13.59] D3990
- N<sub>1</sub> air nozzle, *n*—the first nozzle that creates an air vortex through which the leading, free, surface fibers are twisted while trailing ends remain fixed under the front spinning roll.

  [D13.58] D3888
- $N_2$  air nozzle, n—the second air nozzle that creates an air vortex in the opposite direction than the  $N_1$  air nozzle resulting in a false twisting motion. [D13.58] D3888
- narrow elastic fabric, *n*—an elastic fabric that is less than 150 mm, (6 in.), in width. (Compare wide elastic fabric.) [D13.59] D4850
- **narrow fabric,** *n*—a fabric not exceeding 12 in. (300 mm) in width. [D13.60] D4850
- **natural fiber,** *n*—a class name for various genera of fibers (including filaments) of (*I*) animal, (2) mineral, or (3)



- vegetable origin. (Compare **man-made fiber.** See also D7641.) [D13.13] D4845
- **navel,** *n*—a component of an open-end spinning machine located on the axis of the rotor through which the yarn is withdrawn from the rotor and which modifies the twist of the yarn inside the rotor. (See **doffing tube**.) **[D13.58] D3888**
- neck base girth, *n*—in body measurements, the circumference of the neck over the cervicale at the back and at the top of the collar bone at the front. [D13.55] D5219
- **necktie,** *n*—a decorative band of fabric worn around the neck and tied in a knot or a bow. [D13.61] D7022
- **neck to bust point,** n—the distance from the side of the neck base to the bust apex (contour), taken with the arms down. [D13.55] D5219
- needle damage, *n*—in sewn fabrics, the partial or complete yarn severance or fiber fusing caused by a needle passing through a fabric during sewing. [D13.54] D7722
- needled felt, n—a textile structure composed entirely of fibers principally interlocked and reoriented through the action of felting needles.
   [D13.13] D4845
- **needle-punched batting,** *n*—a textile filling material which is stabilized by mechanically entangling the fibers. **[D13.61] D7022**
- needles per unit width, *n*—for tufted pile yarn floor covering, the number of binding sites per unit of floor covering width; needles being the means of inserting the pile yarn into the backing fabric. [D13.21] D5684
- **neoprene treated,** *adj—in glass fiber*, a descriptive term for the application of polychloroprene rubber compound to improve the stability, knot holding properties, and abrasion resistance of the cord. [D13.18] D7018
- **nep,** *n*—one or more fibers occurring in a tangled and unorganized mass. [D13.13] D4845
- **nep**, *n*—a tightly tangled knot-like mass of unorganized fibers. [D13.58] D4849
- **nestling down,** *n*—a down not fully developed with a sheath and with soft barbs emanating from the sheath. **[D13.61] D7022**
- noil, n—the short fibers removed in combing; applied particularly to wool, but also to other fibers as cotton, silk, and rayon.[D13.13] D4845
- **nominal gage length,** *n*—*General in tensile testing*, the length of a specimen under specified pretension measured from nip-to-nip of the jaws of the holding clamps in their starting position at the beginning of the test, and including any portion of the specimen in contact with bollard or snubbing surfaces.
  - *Specific 1*, the length of a specimen under specific pretension between frets, in instruments where the specimen is not held by clamps, for example, in a vibroscope.
    - Specific 2, the length of a specimen measured between the

- points of attachment to the tabs while under specified pretension. [D13.58] D4849
- **non-chlorine bleach,** *n*—a bleach that does not release the hypochlorite ion in solution, for example, sodium perborate, sodium percarbonate. [D13.62] D3136
- **noncombustible textile,** *n*—a textile that will neither ignite nor give off vapors that will ignite when subjected to external sources of ignition. (Compare **combustible textile**)

  [D13.92] D4391
- **non-elastic elongation,** (*NE*), *n—of rope*, elongation after cyclic tensioning the rope to a specified force for a specified number of cycles. [D13.92] D123
- nonflammable textile, *n*—any combustible textile that burns without a flame. (See also **glow**, **smoldering**. Compare **flammable textile**, **combustible textile**, and **noncombustible textile**.) [D13.92] D4391
- **non-lint content,** *n*—that portion of a mass of cotton fiber which is essentially foreign matter. [D13.11] D7139
- non lock slider, *n*—a slider that does not contain a locking mechanism allowing free movement of the slider to open the chain when a force is applied without restriction by a locking device. Sometimes referred to as a Free Slider.

  [D13.54] D2050
- nonseparable slide fastener, n—a slide fastener having two stringers that are permanently attached to each other at one or both ends. (Compare separable slide fastener.)

  [D13.54] D2050
- **nonwoven blanket,** *n*—a blanket produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means, or combination thereof.

  [D13.63] D7023
- **nonwoven fabric,** *n*—a textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means and combinations thereof.

  [D13.60] D4850
- **notch**, *n*—a shape used to mark a location. **[D13.66] D6963** *novaloid fiber*, *n*—See **novaloid** in D7641.
- **nozzle box,** *n*—an air-jet spinning frame component where parallel fibers are twisted and wrapped to create the yarn structure. [D13.58] D3888
- **number of pieces of trash,** *n*—in testing cotton with the Trash Meter, a number correlated with the total number of pieces of trash on the surface of the sample of cotton over the viewing window. [D13.11] D7139
- olefin fiber—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of ethylene, propylene, or other olefin units, except amorphous (noncrystalline) polyolefins qualify under rubber.
   [D13.58] D4849
- on-location cleaning, *n*—for textile floorcoverings and upholstered furniture, a cleaning process performed in the location where a product is used. [D13.62] D5253



- one-piece woven, adj—for inflatable restraints, a descriptive related to either (1) a tubulary woven fabric composed of two-layer inflatable sections, visible lines where the two layers initially interlace, and non-inflatable woven sections, or (2) the cushion cut from such fabric. [D13.20] D6799
- one-percent length (L1 %N), n—in fiber testing, the length exceeded by 1 % of the number of fibers in a test specimen.

  [D13.11] D7139
- open-end spinning machine, n—a textile machine for converting staple fiber into spun yarn by a continuous process in which the individual fibers or groups of fibers are caused to assemble at the open end of the forming yarn. (See rotortype open-end spinning machine.)
   [D13.58]
- **open-face fabric,** *n*—a face or shell fabric constructed with specifically designed open areas to show the substrate when joined to another material. [D13.61] D7022
- **opening device,** *n—in open-end spinning*, either a drafting system or an opening roller which separates the feed stock into individual fibers or very small tufts prior to their reassembly into yarn. (See **feed unit**.) [D13.58] D3888
- opening roller, n—a component of the opening device in open-end spinning machines, a roller covered with pins or teeth or similar device used to separate the feed stock into individual fibers or very small tufts by a continuous combing action.
   [D13.58] D3888
- orientation, n—in buttons, the degree of order and spatial alignment of pearlescent pigment crystals internally or in a coating.
   [D13.54] D2050
- original length, *n*—of yarns, the length of the yarn under a specified tension. [D13.58] D4849
- original twist, *n*—the twist in a single or plied yarn component of a plied or cabled yarn as the component was before incorporation into the more complex structure.

  [D13.58] D4849
- **orthopedic and surgical felt,** *n*—a white, soft, low-density, highly resilient felt. [D13.13] D4845
- other alkali-insoluble impurities, n—in scoured wool, the oven-dried, ash-free, alcohol-extractives-free, alkali-insoluble substances other than vegetable matter base, such as skin, cotton or other fibers, paper, string, tag (dung) pieces, and paint pieces, etc.
  [D13.13] D4845
- **outerwear,** *n*—a coat or jacket. [D13.61] D7022
- outside-leg length, n—in body measurements, the distance from the side waist to the soles of the feet, following the curve of the body.

  [D13.55] D5219
- outside seam, *n*—in home sewing, a seam in which the seam allowance of the completed seam is visible from the face side of the sewn product. (Compare inside seam.)

  [D13.54] D5646
- **oven-dried,** *adj*—the condition of a material that has been heated under prescribed conditions of temperature and

- humidity until there is no further significant change in its mass. [D13.13] D4845
- oven-dried, adj—a descriptive term for a material that has been heated under prescribed conditions of temperature and humidity until there is no further significant change in the mass of the material.
   [D13.51] D4920
- **oven-dried wool,** *n*—wool dried to moisture equilibrium under specified conditions. [D13.13] D4845
- **over-retting,** *n*—in flax, indicates that decomosition has caused excessive deterioration of bast fibers.

  [D13.17] D6798
- overall cleaning, *n*—for upholstered furniture, the application of an appropriate cleaning agent to the entire fabric covering, accomplished while the upholstery fabric remains attached to the furniture unit. [D13.63] D7023
- overlength staple fibers, n—manufactured staple fibers that are at least 10 % longer than the nominal or average cut length. [D13.58] D4849
- **oxygen number,** *n*—*for plumage*, a measure of the degree of cleanliness; the amount of oxidizable water soluble and fine suspended matter present in a water extract.

  [D13.61] D7022
- **packability**, *n*—*for inflatable restraints*, the compressibility of a folded airbag cushion relative to the space available in an airbag module. [D13.20] D6799
- **package,** *n*—plastic, open cylinder onto which rotor and air jet yarns are wound. [D13.58] D3888
- pad clean, v—clean using an absorbent pad. [D13.62] D5253
- **pajamas,** *n*—a two piece ensemble consisting of a top and a bottom generally used for, but not limited to, nightwear. [D13.61] D7022
- **panties,** *n*—garments worn under clothing covering the torso below the waist. [D13.61] D7022
- papermaker's felt, *n*—a fabric, made from wool or man-made fibers or mixtures of both, fabricated as an endless belt for use on a paper making machine. (See also *felt* and *needled felt*.) [D13.13] D4845
- **parameters,** *n*—variables that modify the action of a command. [D13.66] D6963
- **part,** *n*—*in upholstered furniture*, one component of a furniture unit, such as a seat, back, pillow, or arm cushion. [D13.63] D7023
- part wool felt, *n*—a felt composed of any one of or a combination of new and recycled wool fibers mixed with one or more man-made fibers, vegetable fibers, or animal fibers other than wool. [D13.13] D4845
- partial cleavage, *n*—in textiles, a transverse gouge, cut or other cross-wise rent in the fiber. Clearly penetrating at least the cuticle of the fiber. [D13.13] D4845



- partially oriented yarn, *n*—filament yarn in which polymer molecules are only partially aligned. [D13.58] D4849
- PBI fiber—See D7641.
- **peak force,** *n*—*for pile floor coverings*, the force required to separate two or more layers and registered on a chart as a peak, that is, a value exceeding the value immediately preceding and following it.

  [D13.21] D5684
- **peak force,** *n*—*in tear testing of fabrics*, the maximum force required to break one or more yarn components in a woven or knitted fabric specimen, or break the fiber, fiber bonds or fiber interlocks in other manufactured forms.

  [D13.60] D4850
- **pearlized,** *n*—*in buttons*, the addition of synthetic or natural pearlescent pigments to the button resin formulation or to the formulation used for coating. [D13.54] D2050
- **percale,** *n*—as applied to bed sheeting, a plain weave fabric with not fewer than 180 yarns/in.<sup>2</sup> (645 mm<sup>2</sup>). [D13.63]
- percent area, *n*—in testing cotton with the Trash Meter, the ratio of total area of trash on the surface of a sample of cotton to that of the area of the viewing window, expressed in a percentage of the area of the viewing window.

  [D13.11] D7139
- percent elongation, *n*—the increase in length of a specimen expressed as a percentage of the original length. [D13.19]
- permanent care label, *n*—as applied to textile products, a care label that remains legible and attached to a textile product throughout its useful life. [D13.62] D3136
- **permanent deformation,** *n*—the net long-term change in a dimension of a specimen after deformation and relaxation under specified conditions. [D13.58] D4849
- **permeability,** *n*—the rate of flow of a fluid under a differential pressure through a material. (See also **air permeability, porosity**.) [D13.60] D4850
- **pH**, *n*—*in common usage*, a measure of the acidity or alkalinity of a solution, on a logarithmic scale, with neutrality represented by a value of seven, with increasing acidity represented by decreasingly smaller values, and with increasing alkalinity represented by increasingly larger values.

  [D13.13] D4845
- pick, *n*—an individual filling yarn. [D13.60] D4850
- **pick count,** *n*—*in woven fabrics*, the number of filling yarns per unit fabric length. [D13.60] D4850
- pick count, n—in braided rope, the number of strands rotating in one direction in one cycle length. [D13.92] D123
- **pick out mark,** *n*—a fillingwise band or bar characterized by a chafed or fuzzy appearance. [D13.59] D3990
- piece boundary, *n*—a collection of lines that define the shape of a piece. [D13.66] D6963

- **piece information,** *n*—information that is piece specific. [D13.66] D6963
- **piece system attributes**, *n*—information provided in the transfer file that is piece specific. [D13.66] D6963
- piece system text, *n*—information provided in the transfer file that is piece specific. [D13.66] D6963
- **piecing,** n—a thick place in a spun yarn caused by poor splicing. [D13.59] D3990
- pile, n—for pile yarn floor covering, the texture surfaces composed of many tuft legs bound to a backing fabric in an orderly and repetitive array.[D13.21] D5684
- pile, n—in pile fabric, the raised loops or tufts (cut loops) that form all or part of the fabric surface. (See also cut pile floor covering and looped pile floor covering.) [D13.60] D4850
- pile floor covering, *n*—a pile fabric intended for use as a floor covering. The pile may be in the form of cut loops or loops, or both. Both the cut loops and the loops may vary in height.

  [D13.21] D5684
- pile height, n—in determination of tuft height, a measurement that uses a small graduated ruler inserted until it touches the backing to measure the pile from the top surface of the primary backing to the top of the tuft. [D13.21] D5684
- pile lay, n—in floor covering, the direction in which most of the pile fibers lean in the original, uncrushed carpet.

  [D13.21] D5684
- pile lift, v—raise the pile on a textile floor covering.

  [D13.62] D5253
- pile lifting, n—the process of raising the pile on a textile. [D13.62] D5253
- pile retention, *n*—in corduroy, the degree to which cut-pile yarns are held secure and intact during wear.

  [D13.60] D4850
- pile reversal, *n*—a persistent change in the direction of pile lay in certain areas, resulting in an apparent visual difference of shade. (Syn. **watermarking**, **pooling**, **shading**)

  [D13.21] D5684
- pile thickness, *n*—in pile yarn floor covering, the difference in the unextended height of the tuft elements above the backing measured as the difference between two parallel plates exerting a specified compression on the pile and backing and on the backing with the pile removed. [D13.21] D5684
- pile yarn floor covering, n—a textile product in which yarn or yarn segments are attached intermittently to a backing fabric to project above the backing fabric and form pile, in the form of cut loops or loops, or both, with the yarn entering the backing fabric substantially perpendicular to the plane of the backing fabric. (Syn. cut pile, cut pile floor covering, cut-loop pile, level pile, loop pile, loop pile floor covering, multilevel pile)
- pile yarn mass, *n*—for back coated pile yarn floor covering, the mass per unit area of pile yarn. [D13.21] D5684



- **pilling resistance,** *n*—resistance to the formation of pills on the surface of a textile fabric. [D13.60] D4850
- pills, n—bunches or balls of tangled fibers which are held to the surface of a fabric by one or more fibers. (Compare fuzz ball.)[D13.50] D3990
- pin hole, *n*—in fabrics, a very small hole, approximately the size of the cross section of a pin. [D13.59] D3990
- pin lock slider, *n*—a slider that incorporates a projection on the pull that fits between adjacent interlocking elements of a slide fastener when a pin lock slider is in the locked position.

  [D13.54] D2050
- **pin mark,** *n*—a series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding device on a pin tenter frame. (See also **clip mark.**) [D13.59]
- pinked seam-finish, n—in home sewing, a seam finish in which a zigzagged or scalloped cut edge is produced. (Compare stitched and pinked seam-finish.)

  [D13.54] D5646
- pitch, *n*—for woven pile floor covering, the number of binding sites in 27 in. (686 mm) of width. [D13.21] D5684
- **plaid reference line(s),** n—used for alignment of pattern pieces on plaid material during marker making. [D13.66]
  D6963
- plain braid, n—in rope, a braided construction in which one strand of one direction of rotation about the axis of the rope passes over one strand of the opposite direction. (See braided rope.)
  [D13.92] D123
- **plain seam,** *n*—*in home sewing*, a seam formed by a single line of stitching. (Ant. **complex seam**.) [D13.54] D5646
- plain surface textile fabric, n—any textile fabric which does not have an intentionally raised fiber or yarn surface such as pile, nap, or tuft, but shall include those fabrics that have fancy woven, knitted or flocked-printed surfaces.
   [D13.92 D4391]
- **plain weave,** *n*—a fabric pattern in which each yarn of the filling passes alternately over and under a yarn of warp and each yarn of the warp passes alternately over and under a yarn of the filling.

  [D13.60] D4850
- plaited rope, n—rope made from eight strands arranged in four pairs in which one strand is placed adjacent to a second in each pair and in which each strand of each pair has been twisted in one direction while each strand in each alternate pair has been twisted in the opposite direction and the four pairs of strands are intertwined maypole fashion in a manner such that each pair of strands passes over and under adjacent pair of strands.

  [D13.92] D123
- **pleat,** *n*—three layers of fabric involving two folds or reversals of direction; the back fold may be replaced by a seam.

  [D13.60] D4850

- plied yarn duck, *n*—duck fabric with plied yarns in both warp and filling. (See flat duck.) [D13.60] D4850
- **plot file,** *n*—instructions organized in formatted blocks of ASCII characters and stored in a computer file which are used to control a plotter or printer. [D13.66] D6963
- **plumage,** *n*—the outgrowth of fowl, consisting of feathers and down (waterfowl) or feathers only (nonwaterfowl). [D13.61] D7022
- **plumules,** *n*—downy waterfowl plumage with underdeveloped soft and flaccid quill with barbs indistinguishable from those of down. [D13.61] D7022
- **pocket,** *n*—the cavity of an element on an individual element fastener designed to receive the head of an element on an opposing stringer. [D13.54] D2050
- pneumatic tire, *n*—a hollow tire that becomes load-bearing upon inflation with air, or other gas, to a pressure above atmosphere. [D13.19] D6477
- **polymer,** *n*—a macromolecular material formed by the chemical combination of monomers having either the same or different chemical composition. [D13.58] D4849
- polyolefin, *n*—any long-chain synthetic polymer composed of at least 85 % by weight of ethylene, propylene, or other olefin units (monomers), except amorphous (non-crystalline) polyolefin qualifying under Rubber 1, as defined by the Federal Trade Commission. (Compare Olefin) [D13.58]
- **polyolefin-material cleanliness,** *n*—the degree to which a polymer melt is free of filterable particles which remain insoluble in the melt under the specified test condition.

  [D13.58] D4849
- polyolefin monofilament, *n*—as used in this specification D3218, a flat single filament of the slit-film type, which can function as a yarn in commercial textile operations. [D13.58]
- **porosity,** *n*—the ratio of the volume of air or void contained within the boundaries of a material to the total volume (solid matter plus air or void) expressed as a percentage. (See also **air permeability** and **permeability.**) [D13.60] D4850
- **powder cleaner,** *n*—a cleaning agent in which an absorbent compound is the principal ingredient. See **absorbent compound**. [D13.62] D5253
- **practice,** *n*—a definitive procedure for performing one or more specific operations or functions that does not produce a test result. [D13.92] D123
- **precondition,** *v*—to bring a sample or specimen of a textile material to a relatively low moisture content (approximate equilibrium in an atmosphere between 3 and 25 % relative humidity) prior to conditioning in a controlled atmosphere for testing.

  [D13.51] D4920
- **pressed-in crease**, *n*—a sharp crease inserted intentionally in a fabric usually by application of pressure, heat, and moisture.

  [D13.60] D4850



- **pressing,** *n*—*in the care of textiles*, a process of smoothing and shaping by heat and pressure, with or without the presence of steam.

  [D13.62] D3136
- pressing and finishing, *n*—this term takes into account all of the industrial pressing and finishing treatments used in garment production. [D13.61] D7022
- pressing and finishing, *n*—this term takes into account a variety of industrial pressing and finishing treatments used in garment manufacturing. [D13.61] D7022
- **press-off,** *n*—*in knitted fabric*, a condition in which the yarn fails to knit and either the fabric falls off the needles or the design is distorted or incomplete. [D13.60] D3990
- **pressure,** *n*—the force exerted to a surface per unit area. [D13.60] D4850
- **pretension,** *n*—the specified tension applied to a specimen preparatory to making a test. [D13.58] D4848
- **pretreat,** *vt*—preapplication of cleaning agent to spots, stains, and areas of high soil concentration to maximize activation time and therefore facilitate soil removal during overall cleaning. [D13.62] D5253
- **primary backing,** *n*—*for tufted pile yarn floor covering*, the fabric through which the pile yarn is carried by needles to form tufts; the backing fabric. [D13.21] D5684
- primary sampling unit, *n*—the sampling unit containing all the sources of variability which should be considered in acceptance testing; the sampling unit taken in the first stage of selection in any procedure for sampling a lot or shipment.

  [D13.58] D4849
- **production lot,** *n*—that part of one manufacturer's production made from the same nominal raw material under essentially the same conditions and designed to meet the same specifications.

  [D13.58] D4849
- professional care, *n*—for consumer textile products, cleaning and maintenance procedures requiring the services of a person specially trained and skilled in their use. [D13.62]
- prong-ring type fastener, *n*—generic name for snap fasteners which use a multi-pronged ring to penetrate through fabric to mechanically set a matching socket on one side of a closure and to set a matching stud on the facing closure allowing the outer and inner closure facings to be snapped together.

  [D13.54] D2050
- **protrusion,** *n*—*in fabrics*, a general term for a visible group of fibers, a yarn, or a yarn segment that extends above the fabric surface.

  [D13.60] D4850
- psychrometer, n—a variety of hygrometer comprising a dry bulb temperature indicator and a wet bulb temperature indicator which is cooled to the wet bulb temperature by the spontaneous evaporation of moisture.
   [D13.51] D4920
- **puckering,** *n*—*in bonded, fused, or laminated fabrics*, a wavy, three-dimensional effect typified by closely spaced wrinkles,

- on either the face fabric or the backing fabric, or both. [D13.60,D13.61] D4850,D7022
- pull, n—a group of fibers grasped by the forceps at one time and drawn from the specimen in the combs. [D13.11]D7139
- **pull,** n—a part connected to a slider by which the slider is operated. [D13.54] D2050
- **pulled wool,** *n*—wool taken from the pelt of a slaughtered sheep and which has not been commercially scoured. (syn. *slipe wool, skin wool*) [D13.13] D4845
- QD—abbreviation for quick disassembly slide fastener. (See releasing stop.) [D13.54] D2050
- QR—abbreviation for quick disassembly slide fastener. (See releasing stop.) [D13.54] D2050
- **quadratic integrator,** *n*—*in textile unevenness testing*, an integrator that operates continuously and reports unevenness for the time during which it has been active, giving equal weight consideration to all portions of the input.

  [D13.58] D4849
- quill, *n*—in feathers, the stem or central shaft. [D13.61] D7022
- **quill point,** *n*—*in feathers*, the section of quill extending beyond the section of barb attachment. [D13.61] D7022
- **quill shaft,** *n*—*in feathers*, the section of quill from which the barbs emanate. [D13.61] D7022
- **quilt,** *n*—a bedcovering assembly used primarily for warmth, consisting of an insulating filler secured between two layers of fabric, but generally lighter in weight and thinner than a comforter. [D13.63] D7023
- rack, *n—in warp knitting*, a unit of length measure consisting of 480 courses. [D13.60] D4850
- rack length, *n*—*in warp knitting*, the length of the fabric produced by knitting one rack, measured on the machine under operating take-up tension. [D13.60] D4850
- radian, *n*—the plane angle between two radii of a circle which intersects the circumference of the circle making an arc equal in length to the radius. [D13.58] D4849
- **rainwear,** *n*—a coat or jacket which has the capability to resist wetting and penetration, by water. [D13.61] D7022
- raised fiber surface, *n*—in textile fabrics, intentionally lifted fibers or yarns such as pile, napped, tufted, flocked, or similar surfaces. [D13.92 D4391]
- ratch-setting by number (L1 % N), n—the basis for setting roll spacing in the drafting zone, namely, the length exceeded by 1 % of the number of fibers in a test specimen.

  [D13.11] D7139
- **ratchet lock slider**, *n*—a slider with a locking mechanism that permits the slider to slip along the chain upon application of a predetermined force so as to prevent damage that would



- impair either the service or use of either the slider or chain.

  [D13.54] D2050
- raveled strip test, *n*—in fabric testing, a strip test in which the specimen is cut wider than the specified testing width and an approximately even number of yarns are removed from each side to obtain the required testing width. [D13.60] D4850
- raw cotton, *n*—ginned lint that has not been subjected to any textile manufacturing process. (See also **ginned lint**.) [D13.11] D7139
- raw wool, *n*—wool or hair of the sheep in the grease, pulled, or scoured state. (See also *scoured wool.*) [D13.13] D4845
- $R_d$  and b, n—for the purpose of this test method for color, the daylight color of opaque cotton specimens represented by points in a space as described by Hunter in terms of three color scales: reflectance,  $R_d$ , and the chromaticity coordinates for redness or greenness, +a and yellowness or blueness, +b. [D13.11] D7139
- **recoverable elongation** (*CE*), *n*—of rope, elongation which may be reclaimed after a period of relaxation after the rope was cyclic tensioned. [D13.92] D123
- recycled wool, n—as defined in the Wool Products Labeling Act as amended in 1980, "the resulting fiber when wool has been woven or felted into a wool product which, without ever having been utilized in any way by the ultimate consumer, subsequently has been made into a fibrous state, or the resulting fiber when wool or reprocessed wool has been spun, woven, knitted, or felted into a wool product which, after having been used in any way by the ultimate consumer, subsequently has been made into a fibrous state."

[D13.13] D4845

- **reed mark**, *n—in woven fabrics*, a crack between groups of warp ends, either continuous or at intervals. [D13.59]
- reference standard, *n*—*in cotton testing*, a homogeneous lot of cotton having a known or accepted value for one or more physical properties. [D13.11] D7139
- reference tension, *n*—a low tensile force, generally about 1 % of the rope breaking strength, and used for initial rope tension determination. [D13.92] D123
- refraction, *n*—the deflection from a straight path undergone by a light ray in passing obliquely from one medium (as air) into another (as glass) in which its velocity is different.

  [D13.51] D4920
- **refractive index (index of refraction),** *n*—the ratio of the velocity of radiation (as light) in the first of two media to its velocity in the second as it passes from one into the other.

  [D13.51] D4920
- **refurbish,** *v*—as applied to textile products, to brighten or freshen up and restore to wearability or use by cleaning such as drycleaning, laundering, or steam cleaning.

  [D13.62] D3136,D4391

- reinforced seam, *n*—*in sewn seams*, a seam that includes an additional layer of material on the face or back side of the seam allowance. [D13.59] D4850
- **reinforcing cord,** *n* a cord made from industrial yarns and used to provide added support to other materials, such as tires, hose, belting, protective coverings, webbing, etc.

  [D13.19] D6477
- relative humidity, *n*—of air, the ratio of the pressure of water vapor present to the pressure of saturated water vapor at the same temperature. (See **absolute humidity**, **humidity**.)

  [D13.51] D4920
- releasing slider, *n*—a slider with a mechanical means for loosening the slider on the chain. [D13.54] D2050
- releasing stop, *n*—a device attached at or near the top of the stringer on the separable pin side which limits the travel of the slider at the open end of the chain under normal closing operations.

  [D13.54] D2050
- **remove loose soil,** *v*—subject textile to agitation, impact, and suction to remove dust and particulate soil.

  [D13.62] D5253
- **residual elongation** (*RE*), *n*—of rope, elongation after cyclic tensioning the rope to a specified force for a specified period of time. [D13.92] D123
- residual fiber shrinkage, *n*—of textured yarns, the shrinkage that remains in a yarn after texturing; the difference between the original length and the length after developed crimp has been removed.

  [D13.58] D4849
- **residual torsion,** *n*—revolutions made by a specified length of steel tire cord when one end is held in a fixed position and the other is allowed to turn freely. **[D13.19] D6477**
- **residue,** *n*—*for plumage*, quill pith, quill fragments, trash, or foreign matter. [D13.61] D7022
- resilience, *n*—that property of a material to recover to approximately its original size and shape after deformation.

  [D13.60] D4850
- **resin bonded batting,** *n*—a textile filling material which is stabilized by spraying it with an acrylic, polyvinyl acetate, or other suitable resin emulsion after which the batting is dried and cured. [D13.61] D7022
- resistance to delamination, *n*—for pile yarn floor covering, the force/unit width measured when separating component layers. [D13.21] D5684
- **resistance to slippage,** *n*—the force required to separate the parts of a standard seam by a specified amount. [D13.60] D4850
- resistance to ultraviolet radiation, *n*—in polyolefin tape yarn, the time-to-failure of yarns exposed to xenon-arc weathering. [D13.58] D4849
- resistance to yarn slippage, *n*—at the seam, the force required to displace one or more yarns in a fabric from the original



- position, causing differences in alignment, or spacing, or both. [D13.60] D4850
- **resorption,** *n*—the process by which a material that has given material by desorption takes up some more of the material given up. [D13.51] D4920
- **response time,** *n*—*in tensile testing machines*, the time required by the indicating or recording device to reflect an instantaneous change in force, usually 0 to 90 % of full scale.

  [D13.58] D4849
- resultant yarn number, *n*—the yarn number based on the observed mass per unit length of a plied yarn, a cabled yarn, or a yarn whose number has been changed by processing such as twisting or bulking.

  [D13.58] D4849
- **retainer pin,** *n*—a tube-like element, similar to the separable pin, attached over the bead at the bottom end of the stringer opposite to the separable pin and that is designed to hold the fixed retainer in position. [D13.54] D2050
- **retraction,** *n*—*in yarns and cords*, the reduction in length when previous restraint is removed and relaxation is allowed, thus causing a directionally proportional increase in linear density.

  [D13.19] D6477
- **retting,** *n*—*in flax*, the process of partial biological or chemical decomposition of pectins and other components which bind the fiber, fiber bundles, and the non-fiber structures, thereby facilitating removal of bast fibers from stems.

  [D13.17] D6798
- reverse bail, n—in a continuous element fastener, configuration of a slider with a single bail where the bail is located on the opposite side of the slider body in relation to the flanges of the slider. Reversing the location of the bail, in this fashion, allows opening or closing of the elements with the back of the slide fastener facing the user with the fastener installed in the application.

  [D13.54] D2050
- **rework,** *n*—*for inflatable restraints*, the deviation from normal process flow remedially altering finished fabric, coated fabric, or cut pieces for the purpose of minimizing or removing a major imperfection. [D13.20] D6799
- **ribbon,** *n*—a fine-textured, narrow fabric which weighs less than 510 g/m<sup>2</sup> (approximately 2.6 lb/100 yd per inch of width or 15 oz/yd<sup>2</sup>) and which is used primarily for trimming or decorative purposes. (See also **narrow fabric**.)

  [D13.60] D4850
- ring, n—in buttons, a split ring used to fasten a staple attached button to the substrate. [D13.54] D2050
- **ring,** *n*—*in hosiery,* a narrow, visually different horizontal band. [D13.59] D3990
- ring or toggle attached staple button, *n*—a button attached to one part of a flexible substrate by means of a ring or toggle rather than a needle or thread. The staple passes through an eyelet in the flexible substrate and is secured by the ring or toggle that passes through the staple eye. [D13.54] D2050

- ring spinning machine, *n*—a machine that converts roving of staple fiber (produced from carded or combed sliver) into spun yarn by drafting, twisting, and winding onto a removable bobbin. (Syn. ring-spinning frame.) [D13.58] D3888
- ringer cotton, *n*—bale of saw ginned cotton with established values referenced to the benchmark cottons for the purpose of assuring consistency in the establishment of calibration cotton standards between value settings. [D13.11] D7139
- rise height, *n*—the vertical distance from the waist level at the side of the torso to the crotch level, taken with subject standing. [D13.55] D5219
- **rod cast button,** *n*—a button fabricated from a disc sliced or sawed from a cast rod of formulated styrene modified polyester resin. [D13.54] D2050
- rolled seam-finish, *n*—*in home sewing*, a seam finish in which both cut edges are enclosed by rolling them to one side and hand stitching the rolled edge close to the seam line within the seam allowance. [D13.54] D5646
- **roller ginned cotton,** *n*—lint cotton extracted from the cotton-seed by frictional forces between a rotating roller and a fixed knife. [D13.11] D7139
- **rope**, *n*—a compact and flexible, generally torsionally balanced continuous structure, greater than 4-mm (5/32-in.) diameter capable of applying or transmitting tension between two points. [D13.92] D123
- rope mark, n—in dyed or finished fabrics, a long irregularly shifting longitudinal mechanically induced streak.

  [D13.59] D3990
- **roping,** *n*—a term used for roving in the woolen system of spinning. [D13.13] D4845
- **rotary extraction cleaning,** n—a cleaning procedure which uses a rotating brush machine or a series of rotating jets through which shampoo is fed or sprayed into the carpet pile and simultaneously removed by suction. [D13.62] D5253
- **rotary shampoo,** *n*—a cleaning procedure which uses a rotating brush machine through which shampoo is fed into the pile of a textile floor covering. See also **rotary extraction cleaning**. [D13.62] D5253
- **rotation cast button,** *n*—a button fabricated from a disc blanked from a partially polymerized sheet formed in a rotating cylinder (also known as centrifugal casting and wheel casting). [D13.54] D2050
- rotor, n—in open-end spinning machines, a device resembling a centrifuge, in which the fibers are assembled and in which, by virtue of its rotation, real twist is inserted in the forming yarn.

  [D13.58] D3888
- rotor groove, *n*—the collection slot inside the rotor cup on a rotor-spinning machine where fibers are assembled.

  [D13.58] D3888
- **rotor-spinning machine**, *n*—a machine that converts sliver of staple fiber, usually carded, into a spun yarn by a process in



- which fibers are opened and drawn by air suction into a rotor cup rotating at a high rate of speed, where they become attached to a loose (open) end of yarn, exiting the rotor cup. (Syn. open-end spinning.) [D13.58] D3888
- rotor-type open-end spinning machine, n—an open-end spinning machine wherein the assembly of individual fibers and the insertion of real twist are effected by a rotor. (See also open-end spinning machine.) [D13.58] D3888
- rough, *adj*—a descriptive term for a fabric surface which has the feel of sandpaper. [D13.59] D3990
- routine maintenance, *n*—in textile cleaning, superficial daily or weekly cleaning to remove particulate soil and dust. [D13.62] D5253
- **rove,** *n*—*in jute processing*, a continuous strand of spun-jute fiber having a spyndle number of 50 or greater.

  [D13.92] D123
- **roving,** *n*—the intermediate product between sliver and spinning that is a loose assembly of fibers drawn into a single strand that has very little twist. [D13.58] D3888
- **roving,** *n*—a loose assemblage of fibers drawn or rubbed into a single strand, with very little twist. In spun yarn systems, the product of the stage, or stages, just prior to spinning.

  [D13.58] D4849
- **roving,** *n*—*in glass textiles*, a multiplicity of filaments or yarns gathered together into an approximately parallel arrangement without twist. [D13.18] D7018
- rubber, n—a material that is capable of recovering from large deformations quickly and forcibly, and can be, or already is, modified to a state in which it is essentially insoluble (but can swell) in boiling solvent, such as benzene, methylethyl ketone, and ethanol-toluene azeotrope. [D13.19] D6477
- **rubber compound,** *n*—as used in the manufacture of rubber articles, an intimate mixture of elastomer(s) with all the materials necessary for the finished article.

  [D13.19] D6477
- **rubberize**, *v*—to impregnate or coat with rubber compound or both. [D13.19] D6477
- **rug,** *n*—a textile floor covering of limited area which is complete in itself and is intended for use as a partial covering of a floor or another floor covering. [D13.21] D5684
- run, *n—in knitted fabrics*, a series of dropped stitches. (See dropped stitch.) [D13.59] D3990
- **run,** *n*—*in the American woolen system*, the number of 1600-yd lengths of yarn per pound; an indirect yarn numbering system generally used for yarns spun on the woolen system.

  [D13.58] D4849
- **rupture,** *n*—the breaking or tearing apart of a material. (Compare **failure.**) [D13.58] D4848
- **sample**, n—(I) a portion of a lot of material which is taken for testing or for record purposes. (2) a group of specimens used, or observations made, which provide information that can be

- used for making statistical inferences about the population from which they were drawn.
  - [D13.13,D13.58] D4845,D4849
- **sample size,** *n*—the base size from which grade rule values are established. **[D13.66] D6963**
- **sample skein,** *n*—skein reeled from the package or beam of the laboratory sample, and used in the laboratory as a source of specimens. [D13.58] D4849
- sampling unit, *n*—*in wool*, a portion of material that is taken at one time from one physical location and that is combined with similar portions to make up the laboratory sample.

  [D13.13] D4845
- **sampling unit,** *n*—an identifiable, discrete unit or subunit of material that could be taken as part of a sample.

  [D13.58] D4849
- sanforizing mark, *n*—a crimped, rippled, wavy, pebbled, or cockled place in the cloth showing distortion of the texture.

  [D13.59] D3990
- **sawed ginned cotton,** *n*—lint cotton extracted from the cottonseed by pulling forces between a set of rotating saws and a set of fixed ribs. [D13.11] D7139
- scalloped selvage, *n*—an abrupt, narrow indentation in the selvage. [D13.59] D3990
- **scarf,** n—in apparel, an oblong or square piece of cloth worn for warmth or as a decorative item. [D13.61] D7022
- scatter rug, *n*—a small rug which is designed to be flexible and is usually cleaned by laundering. [D13.62] D5253
- **scoured wool,** *n*—wool from which the bulk of impurities has been removed by an aqueous or solvent washing process.

  [D13.13] D4845
- **scratch-combed yarns,** *n*—the process of combining comber and carded sliver to produce a continuous yarn strand of staple fibers. [D13.58] D3888
- **scutching,** *n*—the mechanical beating and scraping of flax straw subsequent to breaking to separate the shives and tow from the long line flax fiber. [D13.17] D6798
- scye depth, *n*—in body measurements, the distance from the cervicale to a point level with the armpit. [D13.55] D5219
- sealant-sealed seam finish, *n*—in home sewing, a seam finish in which a clear liquid seam-sealant is used as the treatment to prevent fraying. [D13.54] D5646
- **seam,** *n*—*in home sewing*, a line along which two or more sections of a product have been joined. (Syn. *joining line*. See also **sewn seam, glued seam, stapled seam, thermally bonded seam.**) [D13.54] D5646
- seam, n—a line where two or more fabrics are joined, usually near the edge. (See also sewn seam. See Terminology D5646 for *glued seam*, stapled seam, and thermally bonded seam.)
   [D13.54]



- seam allowance, *n*—in sewn fabrics, the width of material between the cut edge of a fabric section and the line parallel to the cut edge along which that section will be joined to another section during assembly of the finished product.

  [D13.54] D5646
- **seam allowance,** *n*—*in sewn fabrics*, the distance from the edge of a fabric to the parallel stitch line furthest from that edge.

  [D13.54] D7722
- **seam damage,** *n*—*in sewn fabrics*, an adverse change in the physical condition of one or more of the components in a seam which would reduce the seam acceptability such as yarn slippage, needle damage, or fabric rupture.

  [D13.54] D7722
- seam efficiency, *n*—*in sewn fabrics*, the ratio, expressed as a percentage, of the breaking force required to rupture a sewn seam to that required to rupture the fabric; seam strength to fabric strength.

  [D13.54] D7722
- **seam engineering,** *n*—*in sewn fabrics*, the procedures used to select a specific combination of sewing thread, stitch type, seam type, and stitch density to achieve the maximum sewn seam strength for a particular fabric type. [D13.54] D7722
- seam failure, *n*—*in sewn fabrics*, that point at which an external force (1) ruptures the sewing thread, (2) ruptures the fabric, (3) causes excessive yarn slippage adjacent to the stitches, or (4) causes any combination of these unacceptable conditions. [D13.54] D7722
- **seam-finish,** *n*—*in home sewing*, a treatment of the fabric cut edges of the seam allowance in a plain seam.

  [D13.54] D5646
- **seam interaction,** *n*—*in sewn fabrics*, the net effect of the relationship between the combination of fabric, seam type, stitch type, and stitch density on seam efficiency. [D13.54]
- seam mark, *n*—in finished cloth, a pressure mark caused by the thickness of the seam being pressed against the cloth.

  [D13.59] D3990
- seam slippage, n—in sewn fabrics, the displacement of one or more fabric yarns from their original position, so as to cause differences in alignment, spacing, or both. [D13.54]
   D7722
- **seam strength,** *n*—*in inflatable restraints*, the maximum force required to create a seam failure. [D13.20] D6799
- **seam type,** *n*—*in sewn fabrics*, an alphanumeric designation relating to the essential characteristics of fabric positioning and rows of stitching in a specified sewn fabric seam.

  [D13.54] D7722
- **seamless knit garment,** *n*—apparel, made of knitted fabric without vertical seams. [D13.61] D7022
- **secondary backing,** *n*—*for pile yarn floor covering*, a suitable material adhered to or adhered to the underside of the primary backing fabric. [D13.21] D5684

- second-hand filling material, *n*—an industry product which contains any filling material which has previously been used should not be offered for sale unless a clear and conspicuous disclosure of that fact is made on the label thereof and in all advertising and invoices relating to such product.

  [D13.61] D7022
- **section mark,** *n*—*in woven fabrics*, warp bands of different color, texture, or luster. [D13.59] D3990
- **seed coat fragment,** *n*—*in cotton*, a portion of a cotton seed, usually black or dark brown in color, broken from a mature or immature seed, and to which fibers and linters may or may not be attached.

  [D13.11] D7139
- **seed cotton,** *n*—cotton, as harvested and before ginning, consisting of seeds with the fibers attached and usually including measurable amounts of foreign matter.

  [D13.11] D7139
- **self-bound seam-finish**, *n—in home sewing*, a seam finish in which one seam allowance encloses both cut edges.

  [D13.54] D5646
- self-extinguishing, adj—not defined; the Board of Directors of ASTM has ruled that the term "self-extinguishing" shall not be used in ASTM standards. It has no meaning except in association with a specific test method or specific conditions of burning.
  [D13.92] D4391
- selvage, *n*—the woven edge portion of a fabric parallel to the warp. [D13.60] D4850
- selvage mark, *n*—in finished cloth, a lengthwise crease mark along the selvage caused by an edge being folded or doubled. [D13.59] D3990
- semi automatic lock, *n*—a slider that provides involuntary, positive locking action on the chain when the pull is in a designated position on the slider body restricting the movement of the slider to open the chain unless a force is applied that exceeds the locking capacity of the slider.

  [D13.54] D2050
- **semi-restraint,** *adj*—of or relating to a method of mounting that allows an object a limited degree of movement (for example, contraction or expansion of a fabric).

  [D13.58] D4849
- sensitivity, *n*—in electronic systems, the minimum change in the input signal that produces a change in the output signal that can be reliably measured. [D13.58] D4849
- sensitivity, *n*—*in mechanical systems*, the smallest change that can be induced on a material by the system and be reliably measured. (See also least count.) [D13.58] D4849
- separable pin, *n*—a tube-like element attached over the bead at the bottom end of one stringer. [D13.54] D2050
- separable slide fastener, *n*—a zipper fitted with special components at the bottom of the chain, so as to permit complete disengagement and then reengagement of the two stringers. (Compare **nonseparable zipper**.)

  [D13.54] D2050



- **separate-element slide fastener**, *n*—Deprecated term, see individual element fastener. [D13.54] D2050
- **separator,** *n*—a component of some open-end spinning machines located inside the rotor to direct the incoming fibers to the slide surface. [D13.58] D3888
- **set mark,** *n*—a stop mark resulting from a prolonged loom shut-down. [D13.59] D3990
- **sew**, *v*—to unite or fasten with stitches, sewing usually involves a needle and sewing thread. [D13.58] D4849
- sew, v—to unite or fasten with stitches. [D13.58] D7722
- **sew lines,** *n*—lines that indicate where stitching of pattern pieces is to be done. [D13.66] D6963
- **sewing force,** *n*—the force applied to a sewing thread at the needle eye during penetration of a material by the needle.

  [D13.58] D4849
- **sewing hole,** *n*—*of a button*, a hole in either the flange or shank used to attach the button to the substrate by means of a needle and thread. [D13.54] D2050
- sewing machine, *n*—*in home sewing*, a machine that uses needles and bobbin threads in the stitch formation and is primarily for home sewing use rather that industrial use.

  [D13.54] D5646
- **sewing thread,** *n*—a flexible, small-diameter yarn or strand, usually treated with a surface coating, lubricant, or both, intended to be used to stitch one or more pieces of material or an object to a material. [D13.54,D13.58] D4849,D7722
- sewn seam, n—in sewn materials, a juncture at which two or more planar structures such as textile fabrics, are joined by sewing. (Compare glued seam, stapled seam, thermally bonded seam. Syn. stitched seam.)
   [D13.54]
- **sewn seam,** *n—in sewn fabrics*, a juncture at which two or more planar structures such as textile fabrics, are joined by sewing, usually near the edge. [D13.54] D7722
- **sewn seam strength,** *n*—*in sewn fabrics*, the maximum resistance to rupture of the junction formed by stitching together two or more planar structures. [D13.54] D7722
- **sew-through flange button,** *n*—a button that has two or more holes in its flange for passage of a needle and thread so that the button can be attached to a flexible substrate.

  [D13.54] D2050
- **sew through flange button,** *n*—a button attached to one part of a flexible substrate by means of a needle and thread passed through two or more holes in its flange and through the substrate. (Compare **sew-through shank button.**)

  [D13.54] D2050
- sew through shank button, n—a button attached to one part of a flexible substrate by means of a needle and thread passed through a hole or loop in the integral shank and through the substrate. (Compare sew-through flange button.)
   [D13.54] D2050

- shading coefficient, *n*—the ratio of the solar heat gain through a glazing system under a specific set of conditions to the solar gain through a single light of double-strength sheet glass under the same conditions. [D13.18] D7018
- **sham,** *n*—a fabric covering for a bed pillow, usually of decorative fabric that matches the bedcovering.

  [D13.63] D7023
- **shampoo**, *n*—a solution of detergent in water formulated for specialized cleaning tasks. [D13.62] D5253
- **shampoo,** *v*—in the cleaning of textile floor coverings, use a cleaning machine which applies detergent solution, brushes it in, rinses, and extracts as much water as possible.

  [D13.62] D5253
- **shank**, *n—in buttons*, that part positioned perpendicular to and at the center back of the flange, and having a hole or loop for use in attaching the button to one part of a flexible substrate by means of a needle or thread, a ring, or a toggle.

  [D13.54] D2050
- **shank eye,** *n*—*in buttons*, the hole or loop in the shank of a sew-through shank button or the hole in the loop of the staple of a staple button. [D13.54] D2050
- **sharp crease,** *n*—*for inflatable restraint fabrics*, a sharp ridge that can be felt easily, caused by a hard folding of the fabric over itself not by design. [D13.20] D6799
- **shear strength,** *n*—the resistance to forces that cause, or tend to cause, two contiguous parts of a body to slide relatively to each other in a direction parallel to their contact. [D13.54]
- sheath, n—in feathers, a covering at the quill point end of nestling feathers or nestling down which holds the barbs together.
  [D13.61] D7022
- **sheath-core,** *adj*—a descriptive term for a multicomponent textile fiber consisting of a continuous envelope which encases a continuous, central, internal region.

  [D13.58] D4849
- **sheer,** n—a fabric that is transparently thin or diaphanous. [D13.61] D7022
- **sheet,** *n*—*in textiles*, a large rectangular usually plain woven fabricated product which is used over a mattress on a bed. The product may be carded or combed yarn in a wide range of constructions.

  [D13.63] D7023
- **sheet blanket,** *n*—a thin blanket of cotton or cotton and synthetic blend having a nap on both sides.
  - [D13.63] D7023
- **sheet cast button,** *n*—a button fabricated from a disc blanked from a cast sheet of formulated styrene-modified polyester resin. [D13.54] D2050
- shier, n—in woven fabrics, fine fillingwise cracks randomly distributed across the fabric width. (Compare let-off mark and crack mark.)
  [D13.59] D3990



- shiner, *n*—a streak, usually short, caused by a lustrous section of a filament yarn. [D13.59] D3990
- **shipment,** *n*—goods or commodities which are transported together as a unit; a quantity of product for which a bill of lading has been signed by the carrier. **[D13.58] D4849**
- shipping unit, *n*—*in textiles*, any type of packaging used to facilitate the handling and shipping of fibers, yarns and fabrics. [D13.58] D4849
- **shives,** *n*—the woody parts of the flax plant which are not fibers. [D13.17] D6798
- **shoe fold,** *n*—a fabric folded from both ends into twelve or sixteen folds to the piece, the length of the fold depending upon the length of the piece. (Compare **book fold.**)

  [D13.60] D4850
- **shorn pile,** *n*—pile that is removed when the face pile is sheared. [D13.21] D5684
- **short-fiber content (SFC),** *n*—that percentage of fibers (by number or by weight) in a test specimen, that is shorter than 12.5 mm (0.5 in.) in length. **[D13.11] D7139**
- short float, *n*—for inflatable restraint fabrics, a warp or filling yarn extending over five or fewer filling or warp yarns with which it should be interlaced. [D13.20] D6799
- **short knot,** *n*—*for inflatable restraint fabrics*, a small knob of yarn and associated tails where two yarns are tied together by interlocking loops for the purpose of maintaining yarn continuity.

  [D13.20] D6799
- **shoulder,** *n*—*in zippers*, the bearing surface of an interlocking element by which the chain is contained inside the flanges of the slider. [D13.54] D2050
- **shoulder and arm length,** *n*—the distance from the side of the neck base across the shoulder joint and along the outside of the arm over the elbow to the prominent wrist bone, taken with the arm bent 1.57 rad (90°) and the hand placed on the hip.

  [D13.55] D5219
- **shoulder circumference,** *n*—*in body measurements*, with arms down at sides, the maximum distance around the shoulders at the top of the arm. [D13.55] D5219
- **shoulder drop,** *n*—the vertical distance from the side neck base level to the shoulder joint level. [D13.55] D5219
- **shoulder girth,** *n*—the horizontal circumference around the shoulders, taken at the front break-point level with the arms down. [D13.55] D5219
- **shoulder joint,** *n*—*in anatomy*, the junction of the collarbone and the shoulder blade. (See also **acromion**.) [D13.55]
- shoulder length, *n*—in body measurements, the distance from the side neck base to the armscye line at the shoulder joint.

  [D13.55] D5219
- **shoulder slope,** *n*—*in body measurements*, the angle formed when the slant of the shoulder line deviates from the

- horizontal line that originates at the side neck base.

  [D13.55] D5219
- **shoulder to elbow length,** n—the distance from the top of the shoulder joint along the outside of the arm to the prominent point of the elbow, taken with the arm bent 1.57 rad (90°) and the hand placed on the hip. [D13.55] D5219
- **shrinkage,** *n*—a decrease in one or more dimensions of an object or material. [D13.58] D4849
- **shuttle mark,** *n—in woven fabrics*, a fine fillingwise line caused by damage to a group of warp yarns by shuttle abrasion. [D13.59] D3990
- side waist length, *n*—the distance from the mid-underarm point of the armscye to the waist level, taken along the side of the torso (contour). [D13.55] D5219
- simple machine stitch pattern, *n*—in home sewing, a repeating segment of machine stitches, with each repeat consisting of one or more stitches long. (Compare complex machine stitch pattern.) [D13.54] D5646
- single-level pile, *adj—in floor coverings*, having all pile tufts at the same level. [D13.21] D5684
- single stitch zigzag, *n*—in home sewing, a simple machine stitch pattern made by the needle moving up and down and alternately from one side to the other while the fabric moves through the feed mechanism in either the forward or reverse direction with all segments having equal length and equal width. (Compare multiple stitch zigzag.) [D13.54] D5646
- single-strand breaking force, *n*—in tensile testing, the breaking force of one strand that follows a specified path, usually a straight line, between the clamps of a tensile testing machine.

  [D13.58] D4848
- single twist, *n*—the amount of twist in each individual single yarn element in a tire cord structure based on the length of the element after twist has been removed from the cord.

  [D13.19] D6477
- **single yarn,** *n*—the simplest strand of textile material suitable for operations such as weaving, knitting, etc. [D13.58] D4849
- sitting spread, *n*—in body measurements, the circumference of the widest part of the hips with the subject seated.

  [D13.55] D5219
- **size list,** *n*—a list of all size names, in order from smallest to largest, for a particular style. [D13.66] D6963
- size name, *n*—a user defined name for a graded size. [D13.66] D6963
- sizing, *n*—a generic term for compounds which, when applied to yarn or fabric, form a more or less continuous solid film around the yarn and individual fibers. (See also **filler**.)

  [D13.60] D4850
- **sizing system,** *n*—*in garment construction*, a method of designating garment sizes. [D13.55] D5219



- **skein,** *n*—a continuous strand of yarn, wound on a hand or motorized reel. [D13.58] D4849
- skein break factor, n—in yarn testing, the comparative breaking force of a skein of yarn adjusted for the linear density of the yarn expressed in an indirect system; the product of the breaking force of the skein and the yarn number expressed in an indirect system.
  [D13.58] D4848
- **skein breaking force,** *n*—the force required to rupture a skein of yarn. (See **skein strength**.) [D13.58] D4849
- **skein breaking tenacity,** *n*—the skein breaking load divided by the product of the yarn number in a direct numbering system and the number of strands placed under tension.

  [D13.58] D4848
- **skein loop-length,** *n*—the inside length of a coil of yarn mounted vertically as measured under a specified force. [D13.58] D4849
- **skein shrinkage**, *n*—a measure of true or intrinsic yarn shrinkage not including crimp contraction. [D13.58] D4849
- **skein strength,** *n*—the force required to rupture a skein of yarn, expressed in units of force, as breaking force. [**D13.58**]
- **skew,** *n*—a fabric condition resulting when filling yarns or knitted courses are angularly displaced from a line perpendicular to the edge or side of the fabric. [D13.59] D3990
- **slack end,** *n*—a warp yarn woven under insufficient tension. [D13.59] D3990
- **slack pick,** *n*—a single filling yarn woven under insufficient tension. [D13.59] D3990
- slack selvage, *n*—slack ends in the fabric edge. [D13.59] D3990
- slam-off, *n*—in woven fabrics, a distortion due to the entrapment of the filling carrier in the shed. [D13.59] D3990
- **sleeving,** *n*—braided, knitted, or woven fabric of cylindrical form having a width less than 100 mm (4 in.) (circumference less than 200 mm (8 in.). (See also **tubing**.) [D13.18] D7018
- sley, n—the number of warp ends per 25 mm (1 inch) of fabric width, exclusive of selvage.[D13.60] D4850
- **slide fastener,** *n*—a closure device consisting of interlockable elements each attached to one of the opposing edges of two tapes and a movable part called a "slider" that spans the interlockable elements. When the slider is moved in one direction it causes the elements on one tape to interlock with the elements on the other tape, and when moved in the opposite direction causes the elements to disengage. The term slide fastener and zipper are used interchangeably.

  [D13.54] D2050
- **slide fastener size,** *n*—the chain width of the slide fastener is generally used as the basis for size identification.

  [D13.54] D2050

- **slide surface,** *n*—*in the rotor of an open-end spinning machine*, that part of the internal surface of the rotor on which the fibers are deposited and are caused to slide to the collecting surface.

  [D13.58] D3888
- slider, *n*—the part that opens a slide fastener when it is moved in one direction and closes the slide fastener when it is moved in the opposite direction. [D13.54] D2050
- slip, n—undergarment worn by women and girls under dresses and skirts.[D13.61] D7022
- slipcover, n—a removable, fitted protective textile cover, often decorative and specifically made for upholstered furniture.
   (See furniture covering.) [D13.63] D7023
- **slippage**, *n*—*in sewn fabrics*, the displacement of one or more fabric yarns from their original position, so as to cause differences in alignment, spacing, or both. [D13.54] D7722
- **sliver,** *n*—a continuous strand of loosely assembled fibers that is approximately uniform in cross-sectional area and without twist. [D13.58] D4849
- **sliver knitted fabric,** *n*—a single-jersey fabric in which untwisted staple fibers are knitted in at each loop to form a pile surface on the technical back of the jersey structure.

  [D13.61] D7022
- slot seam, n—in home sewing, a complex seam formed on the inside of the product, having a decorative seam underlay slightly visible from the face side, and held in place by two visible rows of stitching.
  [D13.54] D5646
- **slough-off,** *n*—*in woven fabrics*, a defect caused by several coils of yarn slipping off the filling bobbin simultaneously and being woven into the fabric in a group.

  [D13.59] D3990
- slub, n—an abruptly thickened place in a yarn. (See lump, piecing, slough-off, slug. Compare cockles.)
  [D13.58] D4849
- slug, n—in glass, unattenuated particles of glass of substantially larger diameter than the average filament diameter.
   (Syn. lump, piecing, slough-off, slub) [D13.59] D3990
- **slug,** *n*—*in raw silk*, a thickened place several times the diameter of the yarn, 3 mm (½ in.) or over in length.

  [D13.59] D3990
- smash, n—in woven fabrics, a relatively large hole characterized by broken warp ends and floating picks. (Compare slam-off.) [D13.59] D3990
- **smoldering,** *n*—the combustion of a solid material without accompaniment of flame but generally with the production of smoke. (See also **afterglow** and **glow**.) [D13.92] D4391
- smoothing, n—a process in a CAD vendor's system that adds curve interpolation points to a curve. (See curve interpolation point).
  [D13.66] D6963
- snag, *n*—*in fabrics*, a yarn or part of a yarn pulled or plucked from the surface. [D13.59] D3990



- **snagging resistance,** *n*—*in fabrics*, the property of a fabric whereby yarns or parts of yarns are prevented or inhibited from being pulled or plucked from the surface.

  [D13.59] D4850
- snap action, n—the force required to disengage a snap fastener resulting from a pull exerted perpendicular to the plane of material to which the snap fastener is attached.
  [D13.54] D2050
- **snap fastener,** *n*—a device for attaching one material to another consisting of matching male and female parts, each of which is attached to a separate material so that the parts can be joined by a low compressive force and separated by a low perpendicular tensile force. [D13.54] D2050
- **soap,** *n*—a cleaning agent usually consisting of sodium or potassium salts of fatty acids. [D13.62] D3136
- socket, n—in snap fasteners, the female functional part of the fastener which engages with the stud part of the fastener to form the closure of two parts of the item on which the fastener is used.

  [D13.54] D2050
- soft contamination, *n*—for coated inflatable restraint fabrics, the presence of non-coating material within or on the coating layer, such material visibly appearing to be of small size, smooth in surface texture, and of a thickness that does not protrude significantly above the surface of the coating layer.

  [D13.20] D6799
- **soft window coverings,** *n*—curtains, draperies, or other accessories on wall or window openings that are either lined or unlined and primarily constructed of textile fabrics.

  [D13.63] D7023
- softness, *n—in water*, the relative absence of dissolved calcium, magnesium, and other salts that react with soluble soaps to form insoluble precipitates. (Compare hardness.)

  [D13.62] D3136
- soiling, *n*—for pile yarn floor covering, a process by which dirt and other foreign material becomes attached to the surface pile causing a change in appearance. [D13.21] D5684
- solar screening, *n*—of coated fiber glass yarn solar screening, a woven fabric that imparts a shielding or protection from light, heat, wind, and insects without excessive alteration or impairment of visual viewing, and that has a mesh in excess of 12 by 12 in. with a rib pattern in the warp direction formed by the weaving of two or more contiguous yarns with a minimum of space between such yarns followed by space equivalent to the width of one or more of the yarns in the rib.

  [D13.18] D7018
- solid braid, n—in rope, a braided construction in which each strand alternately passes under and over one or more of the other strands while all strands are rotating around the axis with the same direction of rotation.
  [D13.92] D123
- **solvent,** *n*—any liquid used to dissolve another material. [D13.62] D5253
- **solvent relative humidity,** *n*—the humidity of air over a drycleaning bath and in equilibrium with the solvent and its small amount of water. [D13.62] D3136

- **sorption,** *n*—the process of taking up or holding a material by adsorption or absorption, or both. **[D13.51] D4920**
- sour, v—in refurbishing textiles, to neutralize the alkalinity of a material after cleaning by using a weak acid such as acetic acid or an acid-forming salt.
  [D13.62] D5253
- **span length,** *n*—*in length testing of cotton with the Fibrograph*, the distance spanned by a specified percentage of the fibers in the test beard, taking the amount reading at the starting point of the scanning as 100 %.

  [D13.11] D7139
- **specialty felt,** *n*—one of a number of special purpose felt structures available for, but not limited to, a specific end-use application. [D13.13] D4845
- **specific area,** *n*—*of wool*, the ratio of the fiber surface to fiber volume. [D13.13] D4845
- **specific clo**, *n*—the specific thermal resistance in clo units per unit thickness. [D13.51] D4920
- **specific gravity,** *n*—*of felt*, the relative mass per unit volume of felt expressed as a percentage of the mass per unit volume of water. [D13.13] D4845
- **specific packability,** *n*—*for inflatable restraints*, volumetric index of compressibility for a folded fabric specimen measured at specified levels of compression. **[D13.20] D6799**
- **specification,** *n*—a precise statement of a set of requirements to be satisfied by a material, product, system, or service that indicates the procedures for determining whether each of the requirements is satisfied. [D13.92] D123
- **specimen,** *n*—a specific portion of a material or a laboratory sample upon which a test is performed or which is selected for that purpose. [D13.13,D13.58] D4845,D4849
- specimen clamp, n—the device which is used to transport the fiber test beard of cotton through the gathering, combing, brushing, length, length uniformity, strength, and elongation measurement operations.
   [D13.11] D7139
- **specimen loader,** *n*—an instrument which obtains the test specimen by lowering an open specimen clamp onto the surface of the raw cotton samples, closing the jaws of the specimen clamp and ascending with a portion of the fibers retained in the jaws awaiting the combing and brushing procedure.

  [D13.11] D7139
- specks, n—in woolen fabrics, small pieces of undyed vegetable matter which can be removed by carbonizing or can be covered by dyeing or inking.
  [D13.59] D3990
- **specular gloss,** *n*—the relative luminous fractional reflectance of a specimen in the specular direction. (See **gloss**.) [D13.58] D4849
- **spit mark,** *n*—*for coated inflatable restraint fabrics*, an essentially round spot of coating material on the surface of the coated layer. [D13.20] D6799
- **spindle**, *n*—a slender, tapered rod, placed in a vertical position on a ring-spinning frame that rotates at a high rate speed



- around its axis and on which a bobbin mounted.

  [D13.58] D3888
- **split-stitch,** *n*—*in knitted fabrics*, a stitch in which one part of the yarn is knit and the other part is dropped.

  [D13.59] D3990
- splitting resistance, *n*—of felt, the force required to overcome the interfacial strength of a material and specifically to separate a felt into two layers (of approximately equal thickness). [D13.13] D4845
- **sport shirt**, *n*—*for men*, a shirt designed for informal wear and made with body sizes such as small, medium, or large; they may be worn with or without a jacket. [D13.61] D7022
- **spot**, *n*—a small discolored area on, or in, a fabric.

[D13.59] D3990

- spot and stain removal, n—a cleaning procedure for localized areas with cleaning agents and mechanical action specific to the removal of the foreign substances present. [D13.62]
   D3136
- **spot clean,** *n*—to remove spots and stains by treating them with cleaning agents and mechanical actions specific to the fiber, fabric, product type, and the foreign material present.

  [D13.62] D5253
- **sport shirt,** *n*—*for boys*, a shirt made in numerical sizes, designed for informal wear and may be worn with or without a jacket. [D13.61] D7022
- **spun yarn,** *n*—*in a staple system*, a continuous strand of fibers held together by some binding mechanism.

  [D13.58] D4849
- spyndle number, *n*—*in jute*, a direct yarn-numbering system for jute rove and jute yarns in which the number of pounds per spyndle, or 14 400-yd (13 167-m) length, is expressed as pounds per spyndle. (See also **direct yarn numbering system.**) [D13.17] D6798
- stability to thermal oxidation, *n*—for polyolefin monofilaments, the time-to-failure, when polyolefin monofilaments exposed to circulating air, at 125°C.

  [D13.58] D4849
- stable fabric, n—a fabric, the dimensions of which do not change significantly during processing or use.

  [D13.60] D4850
- **stain,** n—an area of discoloration that penetrates the fabric surface. [D13.59] D3990
- standard atmosphere for preconditioning, n—in textiles, an atmosphere having a relative humidity of 5 to 25 %,  $\pm 2$  % tolerance for the selected relative humidity, and a temperature of not over 50°C (122°F), with  $\pm 1$ °C ( $\pm 2$ °F) tolerance for the selected temperature and used to partially dry the material before further treatment or conditioning. [D13.51]
- **standard atmosphere for testing,** *n*—an atmosphere for testing in which the conditions for relative humidity and

- temperature are specified and controlled. (Compare **atmosphere for testing**). [D13.51] D4920
- standard atmosphere for testing, n—in glass textiles, an atmosphere for testing in which the air is maintained at a relative humidity of at least 45 % and no greater than 67 %, tolerance of  $\pm 2$  % for the selected relative humidity, and a temperature of at least 20°C (68°F) and no greater than 25°C (77°F), with a tolerance of  $\pm 1$ °C ( $\pm 2$ °F) at the selected temperature. (Compare **atmosphere for testing.**). [D13.51] D4920
- standard atmosphere for testing, n—in textiles, an atmosphere for testing in which the air is maintained at a relative humidity of 65  $\pm$  2 % and at a temperature of 21  $\pm$  1°C (70  $\pm$  2°F). (See atmosphere for testing.) [D13.51] D4920
- standard atmosphere for testing, n—in tire cord and industrial yarn textiles, an atmosphere for testing in which the air is maintained at a relative humidity of  $55 \pm 2\%$  and at a temperature of  $24 \pm 1^{\circ}\text{C}$  ( $75 \pm 2^{\circ}\text{F}$ ). (Compare D885 atmosphere for testing.) (See atmosphere for testing.) [D13.51] D4920
- standard atmosphere for testing textiles, *n*—laboratory conditions for testing fibers, yarns, and fabrics in which air and relative humidity are maintained at specific levels within established tolerances. [D13.19, D13.59] D6477,D3990
- **standard moisture regain,** *n*—the moisture regain of a material at equilibrium with the standard atmosphere for testing textiles. (See **moisture regain**.) **[D13.51] D4920**
- **standard polyolefin monofilament,** *n*—as used in this specification, a flat polyolefin strand, approximately 0.05 mm (2 mil) thick by 2.5 mm (100 mil) wide and oriented with a draw ratio between 5:1 and 7:1. **[D13.58] D4849**
- **standard seam,** *n*—a seam assembly which uses a specific seam type for a designated fabric having specific weight, density and construction. [D13.54] D7722
- staple, *n*—natural fibers or cut lengths from filaments. [D13.58] D4849
- **staple**, *n*—*in buttons*, a looped metal shank securely positioned perpendicular to and at center back of the button flange for use in attaching the button to one part of a flexible substrate by means of a needle and thread, a ring, or a toggle.

  [D13.54] D2050
- **staple,** *n*—*in grease wool*, a tuft or lock of fibers which naturally cling together, as found in a fleece.

  [D13.13] D4845
- staple glass yarn, n—yarn made from filaments that are nominally 200 to 380 mm (8 to 15 in.) in length.

  [D13.18] D7018
- staple length, *n*—in grease wool, the length of a staple obtained by measuring the natural staple without stretching or disturbing the crimp of the fibers. [D13.13] D4845
- **stapled seam,** *n*—*in home sewing*, a seam formed by shaped metal devices such as U-shaped staples. (Compare **glued**



- seam, sewn seam, thermally bonded seam.) [D13.54] D5646
- static friction, *n*—friction developed between two touching bodies at the time one body starts to move relative to another. (Compare kinetic friction.) [D13.58] D4849
- static force, *n*—*in textile testing*, a mass which exerts a force by means of the mass alone without motion. (Syn. dead load)

  [D13.58] D4848
- **status switches,** *n*—switches located on the mainframe electronic chassis in the console used to set the number of specimens tested on each laboratory sample and turn off instruments not being used in operating the system.

  [D13.11] D7139
- **steel cord,** *n*—a formed structure made by twisting together two or more steel filaments when used as an end product or a combination of strands or filaments and strands. [D13.19]
- **steel cord wrap,** *n*—a filament wound helically around a steel cord. [D13.19] D6477
- **steel filament,** *n*—the individual element in a steel strand or cord. **[D13.19] D6477**
- **steel strand,** *n*—a group of steel filaments combined together to form a unit product. [D13.19] D6477
- stick-slip, *n*—a phenomenon occurring when boundary lubrication is deficient, manifested by alternate periods of sticking and slipping of the surfaces in contact.

  [D13.58] D4849
- stiffness, *n*—resistance to bending. [D13.60] D4849
- stiffness, *n*—with regard to circular bending of textiles, resistance to multidirectional bending. [D13.60] D4850
- **stitch,** *n*—the repeated unit formed by a sewing thread(s) through a material or materials such as textile fabric. [D13.54] D5646
- stitch, *n*—in sewn seams, the repeated unit formed by the sewing thread(s) in the production of seams.

  [D13.54] D7722
- stitch, *n*—in making rubberized articles, to press uncured rubber compound into or around yarns or cords to form a composite of the materials and to remove entrapped air.

  [D13.19] D6477
- stitch density, *n*—in sewn seams, the number of stitches per unit length in one row of stitching in the seam.

  [D13.54] D7722
- stitch gage, *n—in sewn fabrics*, the perpendicular distance between adjacent parallel rows of stitching.

  [D13.54] D7722
- **stitch type,** *n*—a numerical designation relating to the essential characteristics of the interlacing of sewing thread(s) in a specified seam in sewn fabric. [D13.54] D7722

- stitched and pinked seam-finish, *n*—in home sewing, a seam finish in which a zigzagged or scalloped cut edge is reinforced by a line of stitching. (Compare pinked seam finish.) [D13.54] D5646
- **stitches,** *n*—*in tufted pile floor covering*, the number of pile tufts per inch in the lengthwise direction. [D13.21] D5684
- stitching, *n*—a series of stitches embodied in a material or materials such as woven, knitted or textile fabrics for ornamental purposes, forming a seam, attaching functional items, or finishing an edge.

  [D13.54] D5646
- stitching, *n*—a series of stitches embodied in a material or materials of planar structure such as woven textile fabrics usually for ornamental purposes or finishing an edge, or both.

  [D13.54] D7722
- stock in process, *n*—in textiles, staple fibers at any stage of manufacture between the opening of the bale and the completion of the spinning process. [D13.11] D7139
- **stop,** *n*—the device at the top and bottom of chain or stringer that prevents the slider from leaving the chain.

  [D13.54] D2050
- stop mark, *n*—a visible change in the density of the weave across the width of the fabric caused by the tension on the warp not being adjusted properly after the loom has been stopped. (See set mark.) [D13.59] D3990
- straight stitch, *n*—in home sewing, a simple machine stitch pattern of straight, single stitch segments of equal length. The simple machine stitch pattern is formed by the down and up movement of the needle while the fabric moves through the feed mechanisms in either the forward or reverse direction.

  [D13.54] D5646
- **straightness,** *n*—*in steel cord*, the property of a cord characterized by a lack of deviation from its central axis over short lengths of a cord.

  [D13.19] D6477
- **strain,** *n*—deformation of a material caused by the application of an external force. (See also **tensile strain**.) [D13.58] D4848
- **strand**, *n*—(1) a single fiber, filament, or monofilament, (2) an ordered assemblage of textile fibers having a high ratio of length to diameter and normally used as a unit, including slivers, rovings, single yarns, plied yarns, cords, braids, ropes, etc. [D13.58] D4849
- **strand,** *n*—*in fiber rope*, an ordered assemblage of textile yarns used to make fiber rope. [D13.92] D123
- **strand**, *n*—in braided rope, one of a number of similar units which are intertwined to produce a braided rope, each unit consisting of one or more yarns which are not twisted together and which follow a prescribed path through the braided rope.

  [D13.92] D123
- **strand irregularity,** *n*—*in textiles*, variation in a property along a strand. [D13.58] D4849



- **straw**, *n*—*in flax*, refers to dried stems and plant parts such as roots, leaves, and seed holding structures. [D13.17] D6798
- **streak,** *n*—an extended unintentional stripe of narrow width, often a single yarn. [D13.59] D3990
- **strength (for cotton classification),** *n*—an industry term for breaking tenacity reported in grams per tex.

  [D13.11] D7139
- strength, *n*—the property of a material that resists deformation induced by external forces. (Compare force.) [D13.54, D13.58] D2050,D4848
- **strength analyzer,** *n*—an instrument which determines tensile strength and elongation at breaking load for a test beard of cotton. [D13.11] D7139
- **strength at rupture,** *n*—strength expressed in terms of the force at rupture. (Compare **breaking strength.**) [D13.58]
  D4848
- stress, *n*—the resistance to deformation developed within a material subjected to an external force. [D13.58] D4848
- stress decay, *n*—*in mechanics*, the reduction in force to hold a material at a fixed deformation over a period of time.

  [D13.58] D4848
- stress-strain curve, *n*—a graphical representation of the stress and strain relationship of a material under conditions of compression, shear, tension, or torsion. (Compare force-deformation curve, force-elongation curve, and force-extension curve.)

  [D13.58] D4848
- stretch stitch, *n*—in home sewing, a complex machine stitch pattern or of various combinations of straight stitch, single stitch zigzag, or multiple stitch zigzag. It is produced by coordinated motions of needle and feed as the fabric moves through the feed mechanism in the forward or reverse direction.

  [D13.54] D5646
- **stretch woven fabric,** *n*—a woven fabric which is capable of at least 20 % stretch in either warp or filling direction, or both, under forces and conditions encountered in use, and of almost complete recovery after removal of the force.

  [D13.60] D4850
- **stretch yarns,** *n*—a generic term for a filament or spun yarn having a high degree of potential elastic stretch. [**D13.58**] **D4849**
- **stringer,** n—the tape, bead, and element assembly that constitutes one side of a chain. [D13.54] D2050
- **stripe reference line,** *n*—line used for alignment of pattern pieces on stripe material during marker making.

  [D13.66] D6963
- **stripper,** *n*—*in textiles*, a product, usually the reducing agent, that changes the coloring material dye, or soil stain to reduced color. (See also **bleach**.) [D13.62] D5253
- **strip test,** *n*—*in fabric testing*, a tensile test in which the full width of the specimen is gripped in the clamps. [D13.60]
  D4850

- **stubble,** *n*—*in shorn floor covering*, the portion of the pile that remains after shearing. [D13.21] D5684
- **stubble height,** *n*—the distance the stubble extends above the backing fabric. [D13.21] D5684
- stud, n—in snap fasteners, the male functional part of a snap fastener which engages with, or snaps into, the mouth of the socket to form a closure of two parts of the item, or garment on which the fastener is used.
  [D13.54] D2050
- **stuffer yarn,** *n*—an extra backing yarn running in the warp direction through a woven pile floor covering.

  [D13.21] D5684
- **style,** *n*—a collection of pattern pieces and related information that defines a sewn product. [D13.66] D6963
- **subassemblies,** *n*—any component or structure that is used in the assembly of textile product. [D13.54] D2050
- sulfar fiber—see sulfar in D7641.
- supported needled felt, n—a needled felt that is composed entirely of fibers physically interlocked and reoriented in combination with interlay, scrim, or foundation of knitted, stitched, bonded, or extruded structure. [D13.13]
  D4845
- **surface contour,** *n*—divergence of a surface from planeness rough (high) to smooth (low). [D13.60] D4850
- **surface flash,** *n*—the burning of the surface fibers, with no base fiber burning. [D13.92 D4391]
- **surface friction,** *n*—resistance to slipping offered by surface harsh (high) to slippery (low). [D13.60] D4850
- **surface water absorption,** *n*—*by a fabric*, the process of removing liquid water from a surface such as human skin, dishes, or furniture.

  [D13.60] D4850
- **swimwear,** *n*—textile garments intended for wear in fresh, chlorinated, or salt water. [D13.61] D7022
- **swimwear,** *n*—close fitting apparel worn for swimming or sun bathing. [D13.61] D7022
- **syntax command,** *n*—see *command*.
- **T-shirt,** *n*—a knitted garment, typically constructed of jersey or 1 by 1 rib fabric, used as either an undergarment or as an outer casual top with a rib collar, hemmed sleeves and bottom, and a body configuration that resembles the letter "T". [D13.61] D7022
- **tabby sample,** *n*—the section of tire cord fabric between two tabbies that have been woven separately with a distance of 0.5 to 1.0 m (18 to 36 in.) between them. **[D13.19] D6477**
- tack, *n*—for rubber or rubber compounds, a property that causes two layers of these materials, when pressed together, to adhere at the area of contact. [D13.19] D6477
- tack tear, n—the measurement of the resistance of a coated fabric to tearing under conditions simulating an installation that has been tacked in place. [D13.63] D7023



- **tacking cut,** *n*—small holes or cuts along the selvage. [D13.59] D3990
- tag, *n*—a paper item, such as ticket or slip, which is marked to provide information to the consumer at the time of purchase, which is permanently affixed to the product.

  [D13.62] D3136
- take-up, *n*—in fabrics, the difference in distance between two points in a yarn as it lies in a fabric and the same two points after the yarn has been removed from the fabric and straightened under a specified tension, expressed as a percentage of the straightened length. [D13.60] D4850
- **take-up package,** *n*—a cone on which spun yarn is wound for downstream processing. [D13.58] D3888
- **take-up rollers,** *n*—*in open-end spinning machines*, a pair of closely set, continuously rotating cylinders which withdraw the spun yarn from the rotor. [D13.58] D3888
- tangent modulus, *n*—the ratio of change in stress to change in strain derived from the tangent to any point on a stress-strain curve. [D13.58] D4848
- tape, *n*—*in textiles*, a narrow fabric with a mass per unit area of less than 0.5 kg/m<sup>2</sup> (0.1 lb/ft<sup>2</sup>) for each 25.4 mm (1 in.) of width and which is used primarily for utilitarian purposes. (See also **narrow fabric** and **textile ribbon**.)

  [D13.18] D7018
- tape, *n*—a strip of woven fabric, film or other material of various designs to which the bead and elements are attached along one edge. Attachment of the bead and elements to the tape may be achieved by sewing as in the CEF sewn type slide fastener, weaving integral with the tape as in the CEF woven type slide fastener, pressing, injection or other methods in order to from a stringer. [D13.54] D2050
- tape ends, *n*—the tape extending beyond the stops at either or both ends of the stringers. [D13.54] D2050
- **tape yarn,** *n*—a yarn of a flat, tape-like character produced by slitting an extruded film. [D13.58] D4849
- tare, n—the mass of all external and internal packing materials (including bobbins, tubes, etc.) of a case, bale, or other type of container.[D13.58] D4849
- **tear drop,** *n*—*in woven fabrics*, short elliptical deviations of one or more adjoining picks. [D13.59] D3990
- **tear resistance**, *n*—*in fabrics*, the resistance to a tearing force. [D13.60] D4850
- **tearing energy,** *n*—the work done in tearing a material. [D13.60] D4850
- tearing force, *n*—*in fabric*, the force required either (1) to start or (2) to continue or propagate a tear in a fabric under specified conditions. [D13.60] D4850
- **tearing strength,** *n*—*in fabrics*, the capacity of a material to withstand the ultimate tearing force required to propagate a tear after its initiation. [D13.60] D4850

- **temperature difference**, **T**, *n*—temperature difference between two surfaces of a fabric, °C. [D13.51] D4920
- temperature regulating factor, TRF, *n*—amplitude of the temperature variation of the hot plate divided by the product of the amplitude of the hot plate flux variation and the steady state R-value, all determined according to the test protocol described below. The temperature regulating factor is useful in comparing fabrics that store and release energy and thereby regulate their surface temperature.

  [D13.51] D4920
- **temple mark,** *n*—*in woven fabrics*, small holes or distortions adjacent to the selvage. [D13.59] D3990
- tenacity, *n*—the tensile stress expressed as force per unit linear density of the unstrained specimen. [D13.13] D4845
- **tenacity,** *n*—*in a tensile test*, the force exerted on the specimen based on the linear density of the unstrained material.

  [D13.58] D4848
- **tenacity at rupture,** *n*—the tenacity at the force-at-rupture. (See also **force-at-rupture, rupture, tenacity.**)

  [D13.58] D4848
- **tenacity-at-specified-elongation, TASE,** *n*—the tenacity of a material at its force-at-specified-elongation. (Compare **breaking tenacity.**) [D13.58] D4848
- tensile, *adj*—relating to tension in, or on, a material. [D13.58] D4848
- tensile hysteresis, n—in mechanics, hysteresis resulting from the extension of a material. (See hysteresis.)

  [D13.58] D4848
- **tensile hysteresis curve,** *n*—a complex load-elongation or stress-strain curve obtained under either of two conditions:
  - (1) When a specimen is successively subjected to the application of a load or force less than that causing rupture, and the removal of the load or force according to a predetermined procedure.
  - (2) When a specimen is stretched less than the breaking elongation and allowed to relax by removal of the strain according to a predetermined procedure. [D13.58] D4848
- **tensile strain**, *n*—the strain on a material subjected to tension. [D13.58] D4848
- **tensile strain recovery,** *n*—the percent of recoverable extension to the total extension impressed on a fiber under specified conditions. [D13.58] D4848
- **tensile strength,** *n*—the strength of a material under tension as distinct from compression, torsion, or shear.

  [D13.58] D4848
- **tensile stress**, *n*—the stress within a material subjected to tension. [D13.58] D4848
- tensile test, *n*—*in textiles*, a test in which a material is extended in one direction to determine one or more of its force-extension, or stress-strain, characteristics; for example, breaking force, elongation at break. [D13.58] D4848

tensile testing machine, *n*—an apparatus designed to impart, or transmit, force/extension, or stress/strain, to a material and to measure the effect of the action. (See also constant-rate-of-extension tensile testing machine, constant-rate-of-load tensile testing machine, and constant-rate-of traverse tensile testing machine.) [D13.58] D4848

**tension,** *n*—a uniaxial force tending to cause the stretching of a material. [D13.58] D4848

tension-recovery chart, *n*—in tension testing, a continuously plotted graph of tension versus extension resulting from a tension-recovery cycle. (Compare extension-recovery chart. See also extension-recovery cycle and tension-recovery cycle.)

[D13.60] D4850

**tension-supported roof,** *n*—a fabric roof-system, that is properly secured and primarily held in place by tensile forces applied across the system. [D13.60] D4850

**tension test,** *n*—*in textiles*, a test designed to measure the tautness of a textile strand or fabric. (See also **tensile test.**)

[D13.60] D4850

**tenter mark,** *n*—a visible deformation on the side edge or body of a fabric due to pressure from clips or pins. (See **clip mark, pin mark.**) [D13.59] D3990

**terminator,** *n*—ASCII character(s) that signify the end of an instruction (with any associated parameters), or a data block. [D13.66] D6963

**terry fabric,** *n*—a fabric with a woven warp pile or a knitted pile, with uncut loops on a single side or uncut loops on both sides, and which is used for such products as toweling, beachwear, and bathrobes. [D13.60] D4850

**terry towel**, *n*—a textile product with end hems or fringes and side hems or selvages which is made with loop pile on one or both sides generally covering the entire surface or forming strips, checks, or other patterns. [D13.63] D7023

test beard, n—in length testing of cotton, the portion of the test specimen that has been combed and brushed into a "beard" which protrudes from the outside of the comb(s) or the clamp(s).

[D13.11] D7139

**test method,** *n*—a definitive procedure for the identification, measurement, and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result. (Compare **practice**.)

[D13.92] D123

**test panel,** *n*—*for in air wicking tests*, the composite structure of a rubber compound and fabric which is used to test the fabric for air wicking. [D13.19] D6477

**test skein,** *n*—a small skein which has a prescribed length of yarn and is used for the determination of linear density or breaking force, or both. [D13.58] D4848

**test specimen,** *n*—(*Fibrograph*), the cotton fibers placed randomly on a pair of Fibrograph combs for fiber length measurements. [D13.11] D7139

**test specimen,** *n*—*in cotton length tests with the Length Analyzer*, the cotton fibers protruding randomly from the base of a Motion Control Inc. specimen clamp for fiber length measurement before being combed or brushed.

[D13.11] D7139

**test specimen,** *n*—*in cotton maturity tests*, the series of slides observed by one technician as one half of the test. [D13.11] D7139

**test specimen,** *n*—*in lint cotton water tests with the volumetric Karl Fischer (KF) titration*, the cotton fibers placed in a KF specimen container before it is sealed. [D13.11] D7139

**test specimen,** *n*—*for wool top*, a length of specified mass taken at random from a length of wool top selected as a laboratory sample. [D13.13] D4845

**tex,** *n*—the unit of linear density, equal to the mass in grams of 1000 meters of fiber, yarn, or other textile strand, that is used in a direct yarn numbering system. (See also **linear density** and **direct yarn numbering system**.) [D13.58] D4849

**textile,** *n*—a general term for fibers, yarn intermediates, yarns, fabrics, and products that retain all the strength, flexibility, and other typical properties of the original fiber or filaments.

Discussion—General, a structure made from any combination of natural or manufactured fibers, having either a measured staple length or a continuous filament length, that can be in the form of a woven, nonwoven, braided, plaited, knitted, entangled or twisted product and which retains its characteristic flexibility and drape. Specific, as applied to: (1) staple fibers and filaments suitable for conversion to or use as yarns, or for the preparation of nonwoven fabrics, (2) yarns made from natural or manufactured fibers, (3) fabrics and other manufactured products made from fibers as defined above, and form yarns, and (4) garments and other articles fabricated wholly from one or more of the above, and articles made principally from the above when the products retain the characteristic flexibility and drape of the original fabrics.

[D13.92] D123

**textile**, *n*—originally a woven fabric, now generally applied to: (1) staple fibers and filaments suitable for conversion to or use as yarns, or for the preparation of nonwoven fabrics, (2) yarns made from natural or manufactured fibers, (3) fabrics and other manufactured products made from fibers as defined above, and from yarns, and (4) garments and other articles fabricated wholly from one or more of the above elements, and articles made principally from the above when the products retain the characteristic flexibility and drape of the original fabrics. [D13.92] D123

textile, adj—of or pertaining to textiles. [D13.92] D123

**textile fiber,** *n*—*general*, a generic term for the various types of matter that form the basic elements of textile fabrics and other textile structures.

Discussion—Typical commercial fibers include elongated single-cell hairs such as cotton and kapok; elongated, multicellular structures such as wool or hair; aggregates of elongated cells such as flax, jute, or sisal; continuous filaments or short lengths of filaments of organic materials such as silk, rayon, nylon, acrylic, and polyester; and fibers consisting of inorganic materials such as glass, asbestos, and metal.. (See also D7641.)

[D13.92] D123

**textile fiber,** *n*—*specific*, a unit of matter that is characterized by having a length at least 100 times its diameter or width



- and which can be spun into a yarn or made into a fabric by interlacing in a variety of methods, including weaving, knitting, braiding, felting, and twisting. (See also D7641.)

  [D13.92] D123
- **textile floor covering,** *n*—a system having a use-surface composed of textile material and generally used for floor covering. [D13.21] D5684
- **texture,** n—the surface appearance and hand of a textile. [D13.60] D4850
- **texture,** *n*—*in pile yarn floor coverings*, in the case of pile yarn floor coverings, the detailed configuration of loops, cut pile ends, and individual fibers in the pile. **[D13.21] D5684**
- **textured glass yarn,** *n*—a yarn processed from continuous filament yarn in such a manner to induce bulk to the yarn by disorientation of the filaments. [D13.18] D7018
- thermal blanket, *n*—a blanket woven so that cells or openings are created in the fabric so that air warmed by the body is trapped between the yarns, such as textured or leno weaves; this product can be napped or unnapped. [D13.63] D7023
- thermal bonded batting, *n*—a textile filling material which contains low-melting point fibers or polymers which, when heated, fuse the batting materials together.

  [D13.61] D7022
- thermal character, *n*—apparent difference in temperature of the fabric and the skin of the observer touching it.

  [D13.59] D4850
- thermal character, *n*—that property of a fabric that makes it feel warm to the touch. [D13.60] D4850
- **thermal conductivity,** *n*—time rate of unidirectional heat transfer per unit area, in the steady-state, between parallel planes separated by unit distance, per unit difference of temperature of the planes. [D13.51] D4920
- **thermal resistance,** n—the reciprocal of thermal transmittance. [D13.51] D4920
- **thermal resistivity,** *n*—the reciprocal of thermal conductivity. **[D13.51] D4920**
- thermal shrinkage, *n*—of textile yarns and cords, contraction in length caused by heat. [D13.19] D6477
- **thermal shrinkage force,** *n*—that force induced when a restrained material is restricted from shrinking upon exposure to heat. [D13.19] D6477
- thermal shrinkage force tester, *n*—an apparatus that measures the force achieved when a yarn or similar specimen, held at a constant (fixed) length, is subjected to a temperature above that at which the specimen was mounted in the apparatus.

  [D13.19] D6477
- thermal transmittance, *n*—time rate of unidirectional heat transfer per unit area, in the steady-state, between parallel planes, per unit difference of temperature of the planes.

  [D13.51] D4920

- thermally bonded seam, *n*—in home sewing, a seam formed by use of a heat-sensitive material that fuses two material sections together along a seam line when heat and pressure are applied. (Compare glued seam, sewn seam, stapled seam.)

  [D13.54] D5646
- thick place, *n*—a yarn defect characterized by a diameter greater than that of the adjoining segments and extending for 6 mm (½ in.). (See also thin place.) [D13.58] D4849
- **thick place,** *n*—*in fabric*, an unintentional change in fabric appearance characterized by a small area of more closely spaced yarns, or by a congregation of thick yarns as compared to the adjacent construction. [D13.59] D3990
- thickness—the distance between one surface and its opposite.

  [D13.60] D4850
- thigh girth, n—in body measurements, the maximum circumference of the upper leg close to the crotch. (Compare mid-thigh girth.) [D13.55] D5219
- thin filling, *n—in woven fabrics*, a filling yarn smaller in diameter than normal. [D13.59] D3990
- thin place, *n*—a yarn defect characterized by a segment that is substantially (at least 25 %) smaller in diameter than the average diameter of the yarn. (See also **thick place**.)

  [D13.58] D3888
- thin place, *n—in fabric*, an unintentional change in fabric appearance characterized by a small area of loosely spaced yarns or by a congregation of thin yarns as compared to the adjacent construction. [D13.59] D4849
- thong, *n*—part connected to a slider with a function like a pull. Thongs are usually a narrow woven fabric, cordage or other material and of various designs used in place of the pull. When a thong is attached to the pull its function is primarily for added decoration and not for slider operation.

  [D13.54] D2050
- thong hole, n—in zippers, the opening at the end of a pull. [D13.54] D2050
- thread count, n—in woven textiles as used in sheets and bedding, the sum of the number of warp yarns (ends) and filling yarns (picks) per unit distance as counted while the fabric is held under zero tension and is free of folds and wrinkles, individual warp and filling yarns are counted as single units regardless of whether comprised of single or plied components.

  [D13.63] D7023
- thread, element attaching—Deprecated term. [D13.54] D2050
- thread holder, *n*—the support package on which a sewing yarn is wound. [D13.58] D4849
- **throats,** n—the two openings in a slider that receive the stringers. [D13.54] D2050
- **throw,** *n*—a removable, unfitted protective textile cover, used over upholstered furniture. (See **furniture covering.**) [D13.63] D7023



- **throwster,** *n*—*for filament yarns*, an organization that processes filament yarn by adding twist and cabling to improve its textile processability. [D13.92]
- ticket number, *n*—*in sewing thread*, the designator assigned to a sewing thread to designate its approximate linear density.

  [D13.58] D4849
- **tight end,** *n*—*in woven fabrics*, a yarn which was woven under excessive tension or has shrunk more than a normal amount.

  [D13.59] D3990
- **tight pick,** *n—in woven fabrics*, a filling yarn which was woven under excessive tension or has shrunk more than a normal amount, which may cause puckering at the junction with normal picks. (Compare **wavy cloth.**)

  [D13.59] D3990
- **tight selvage,** *n*—*in woven fabrics*, selvage yarns shorter than warp yarn in the body of the fabric. [D13.59] D3990
- **tight twist end,** *n*—a single end with higher than normal twist. [D13.59] D3990
- **tight yarn,** *n*—*for inflatable restraint fabrics*, a yarn with less crimp than surrounding fibers that may create puckering, which may appear to be shinier or to lie straighter in the weave pattern, or a combination thereof. [D13.20] D6799
- time of integration, *n*—in yarn evenness testing, the time during which a point-to-point integrator stays switched on.

  [D13.58] D4849
- **time-to-break,** *n*—the time interval during which a specimen is under prescribed conditions of tension and is absorbing the energy required to reach maximum load. **[D13.58] D4849**
- **tire,** *n*—a load-bearing, ground-contacting circumferential attachment to a vehicle wheel. [D13.19] D6477
- **tire bead,** n—that part of a tire that comes in contact with the rim and that is shaped to secure the tire to the rim. [D13.19] D6477
- **tire bead wire,** *n*—a monofilament steel wire with a metallic coating, usually bronze, used in forming a tire bead.

  [D13.19] D6477
- **tire cord,** *n*—a twisted or formed structure composed of two or more single or plied industrial yarn elements having the same nominal twist, direction of twist, length, and tension.

  [D13.19] D6477
- **tire cord fabric,** *n*—a fabric consisting of tire cord warp with widely spaced (usually 1 to 5 picks/in.) single yarn filling.

  [D13.19] D6477
- **tire fabric,** n—a textile fabric, other than tire cord fabric, which is used as a reinforcement in tires. [D13.19] D6477
- **toggle,** *n*—*in buttons*, a clip used to fasten a staple button to the flexible substrate. [D13.54] D2050
- **top,** *n*—*in textiles,* (1) *worsted process*—a sliver in which the fibers have been parallelized, and usually combed; (2) manufactured fibers or tow to top process, a sliver obtained

- by drafting, along with breaking or cutting a multifilament tow. (See also wool top.) [D13.58] D4849
- **top**, *n*—*in wool*, a continuous untwisted strand of wool fibers from which the shorter fibers or noils have been removed by combing. [D13.13] D4845
- **top stop**, *n*—a part affixed between or immediately above the interlocking elements on either or both stringers, to prevent the slider from leaving the chain. [D13.54] D2050
- **topstitching,** *n*—a line of stitching that is visible on the face side of the finished product, usually stitched while having the face side of the material uppermost. [D13.54] D5646
- **torque,** *n*—a moment (of forces) which produces or tends to produce rotation or torsion. [D13.58] D4848
- **torsion resistance,** *n*—*in tire beadwire,* the number of turns of twist in a short length of wire that causes rupture.

  [D13.19] D6477
- **total clo,** *n*—the intrinsic clo plus the thermal resistance from the air boundary. [D13.51] D4920
- **total construction,** *n*—*of textured yarns*, the difference between the original length and the length after heat treatment. [D13.58] D4849
- total crotch length, *n*—in body measurements, the distance from the waist level at center front through the crotch to the waist level at center back. [D13.55] D5219
- total elongation (TE), *n*—of rope, the entire elongation at any given applied force. [D13.92] D123
- total mass, *n*—in pile yarn floor coverings, the mass of all matter in the mass per unit area expressed in grams per square metre (ounces per square yard) or in grams per linear metre (ounces per liner yard). [D13.21] D5684
- total vertical trunk length, *n*—in body measurements, the distance from the right shoulder line midway between the neck base and the shoulder joint, down the back through the crotch and over the projection of the right breast to the starting point.

  [D13.55] D5219
- **toughness,** *n*—the capacity of a material to absorb energy. (Compare **work-to-break, work-to-rupture.**) [D13.58] D4848
- **toughness at rupture,** *n*—toughness of a material to breaking or tearing apart. [D13.58] D4848
- **tow,** *n*—*in flax fibers*, a combination of fiber bundles and ultimate fibers that have a maximum length of 50 cm. [D13.17] D6798
- tow, n—in manufactured fibers, a twistless multifilament strand suitable for conversion into staple fibers or sliver, or for direct spinning into yarn.
   [D13.58] D4849
- **towel,** *n*—an absorbent textile product used for drying or wiping. [D13.63] D7023



- **trammage,** *n*—*in woven crepes*, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating *S* and *Z* twist.

  [D13.59] D3990
- **trash,** *n*—*in cotton*, undeveloped seed, motes, small bits of seed coat, or particles of leaf appearing as specks.

  [D13.11] D7139
- **trash,** *n*—*in flax fiber*, any non-fibrous material. [D13.17] D6798
- **trash,** *n*—*in testing cotton with the Trash Meter*, foreign matter having a distinct difference, as seen by a video camera, between light and dark color from that of cotton.

  [D13.11] D7139
- **Trash Meter,** *n*—an instrument which optically measures the amount of trash on the surface of a raw cotton sample as presented to the viewing window. [D13.11] D7139
- trash removal device, n—in open-end spinning machines, a system for removing impurities from the opened feed stock before the fibers are conveyed to the rotor.

  [D13.58] D3888
- **traveler,** *n*—a C-shaped metal piece that rides on the ring of a spinning frame and guides the twisted yarn onto a bobbin.

  [D13.58] D3888
- **tricomponent fiber,** *n*—a fiber consisting of three polymers which are chemically different, physically different, or any combination of such differences. [D13.58] D4849
- **trim,** *v*—*in home sewing*, to cut off a narrow strip, width or portion of a material, usually along a cut edge of a seam allowance.

  [D13.54] D5646
- **trims and findings,** *n*—*in textile manufacturing*, the generic term used to identify various component subassemblies, any of which can be used individually, or in combination, for the manufacturing of garments or other textile structures.

Discussion—These component subassemblies include, but are not limited to buttons, snaps, zippers, hook and loop (touch fasteners), patches, emblems, and insignias.

- **tristimulus filters,** *n*—in cotton fiber color testing with the Color Meter, optical filters used in conjunction with specific color lamps to obtain a response function approximating the tristimulus functions of the CIE Standard Observer for Source C. [D13.11] D7139
- true gage length, *n*—in tensile testing, a precise length between well-defined bench marks located on the specimen while under known tension in the unsupported portion between the holding clamps and free from contact with any snubbing surfaces or other sources which could result in nonuniform strain.

  [D13.58] D4849
- **true rise,** *n*—*in body measurements*, the vertical distance (plumb line) from the waist level at the side to the crotch.

  [D13.55] D5219
- **trunnions,** *n*—*in zippers*, the two pivots at the end of the pull that fit into the bail. [D13.54] D2050

**trunk length (total vertical girth),** *n*—the circumference taken from a point on the right shoulder midway between the neck base and the shoulder joint, down the back through the crotch and up over the prominence of the right chest/bust apex to the starting point, avoiding constriction at the crotch.

[D13.55] **D5219** 

- **tubing,** *n*—braided, knitted, or woven fabric of cylindrical form having a width of 4 in. or more (circumference of 8 in. or more). (See also **sleeving**.) **[D13.18] D7018**
- tuck, *n*—*in rope*, a free strand of the rope placed between the rope strands during splicing. [D13.92] D123
- **tucked seam,** *n*—*in home sewing*, a complex seam formed on the inside of the product with neither cut edge enclosed and having one visible line of topstitching on the face side and a visible free folded edge (tuck). (Compare **lapped seam.**)

  [D13.54] D5646
- **tucking defect,** *n*—*in knitted fabrics*, one or more unwanted tuck loops. [D13.59] D3990
- **tuft,** *n*—*in pile yarn floor coverings*, those cut or uncut loops which form part of the fabric face that are attached or bound to the backing fabric at binding sites [D13.21] D5684
- **tuft bind,** *n*—*in pile fabrics*, the force required to pull a tuft element from a pile yarn floor covering. [D13.21] D5684
- **tuft element,** *n*—*for pile yarn floor covering*, a segment of yarn bound to a backing fabric at a binding site with two portions (legs) of the yarn projecting above the backing fabric, one portion on each side of the binding site. [**D13.21**] **D5684**
- **tuft height,** *n*—*for pile yarn floor covering*, the length of a tuft leg. [D13.21] D5684
- **tuft leg,** *n*—*for pile yarn floor covering*, one of the two portions of a tuft element that projects above the backing fabric on the pile side of the floor covering. [D13.21]
- **tuft length,** *n*—*for pile yarn floor covering*, the length of a tuft element measured while extended in a straight line under zero tension. [D13.21] D5684
- **tufted fabric,** *n*—a fabric with a pile consisting of tufts or loops formed by inserting yarn into a previously prepared backing fabric. [D13.60] D4850
- **tufting,** *n*—*in upholstered furniture*, localized indentation of upholstered furniture surfaces and cushions, by the use of or appearance of buttons, providing an aesthetic treatment.

  [D13.63] D7023
- **turn point**, *n*—point where a contour makes a sudden change in direction. [D13.66] D6963
- **twelve-harness satin,** *n*—a weave similar to eight-harness satin except in warp-faced fabrics warp yarns show on the face of the fabric eleven out of twelve adjacent yarns and in filling-faced fabrics filling yarns show on the face eleven out of twelve adjacent yarns.

  [D13.18] D7018

- **twill braid,** *n*—*in rope*, a braided construction in which one strand of one direction of rotation about the axis passes over two strands of the opposite direction and it in turn passes under the next two strands of opposite direction.

  [D13.92] D123
- **twill weave,** *n*—a weave characterized by diagonal lines produced by a series of floats staggered in the warp direction, which are normally formed by the filling (a filling-faced twill). (See also **warp-faced twill**.) **[D13.60]**
- **twine,** n—(1) a term applied loosely to a variety of textile strands used for tying such articles as parcels, bundles, or bales.
  - (2) an aggregate of fibers or yarns compacted into a partially or completely balanced twisted structure of indefinite length, generally used for tying or binding. [D13.92]
    D123
- **twist,** *n*—the number of turns about the axis per unit of length in a yarn or other textile strand. [D13.58] D3888
- **twist,** *n*—*in textile strands*, the helical or spiral configurations induced by turning a strand about its longitudinal axis.

  [D13.58] D4849
- **twist balance,** *n*—*in glass fiber cord and sewing thread*, the relationship of primary and final twist to each other and to the cord size such that residual torsional effects are nullified.
  [D13.18] D7018
- **twist factor, TF,** *n*—the product obtained when the twist expressed in turns per centimetre is multiplied by the square root of the yarn number expressed in tex.

Twist factor (TF) = tpcm 
$$\times \sqrt{T}$$

where:

T = yarn number expressed in tex.

[D13.58] D4849

**twist multiplier,** *TM*, *n*—the quotient of the twist expressed in turns per inch and the square root of the yarn number in an indirect system.

Twist multiplier (TM) = 
$$tpi/\sqrt{N}$$

where:

N = yarn number in an indirect system, the cotton system unless otherwise specified.

[D13.58] D4849

- **twist take-up,** *n*—the change in length of a yarn or other textile strand caused by twisting, expressed as a percent of the original untwisted length. [D13.58] D4849
- **twisted or laid rope,** *n*—rope made from three or more strands which are laid or twisted together in a twist direction opposite to the twist direction in the strands.

  [D13.92] D123
- **two-front button,** *n*—a button in which the face and back shape are identical. [D13.54] D2050

- Type I apparel—apparel designed for general heavy work; it may be subjected to breaking and tearing stresses indoors or out. [D13.61] D7022
- Type II apparel—apparel designed for light work or leisure activities; it will not be expected to undergo severe physical stresses. [D13.61] D7022
- **typp,** *n*—an obsolete indirect yarn numbering system equal to the number of 1000-yd lengths per pound. [D13.58] D4849
- ultimate fiber, *n*—in flax, an individual bast fiber. [D13.17] D6798
- **unbonded batting,** *n*—a textile filling material which is neither needle-punched, resin bonded, or thermal bonded. (See also **needle-punched batting, resin bonded batting,** and **thermal bonded batting.**) [D13.61] D7022
- underarm length, *n*—in body measurements, with the arm down, the distance from the armpit to the inner wrist bone.

  [D13.55] D5219
- **under-bust girth (missy special case),** *n*—the horizontal circumference around the torso under the arms and bust. [D13.55] D5219
- underlay, n—a resilient layer of material placed under rugs or carpets to increase comfort and improve service life of the carpet.
   [D13.21] D5684
- under-retting, *n*—*in flax*, indicates that decomposition is insufficient to allow fiber bundles to be easily removed from the non-fibrous parts of the stem. [D13.17] D6798
- **underwear,** *n*—clothing worn next to the skin under outer clothes. [D13.61] D7022
- uneven dyeing, *n*—cloth which shows variations in shade due either to incorrect dyeing methods or faulty materials.

  [D13.59] D3990
- unevenness, *n*—in textiles, variation in the linear density of a continuous strand or of a portion of a strand. (See also coefficient of variation unevenness, mean deviation unevenness.)

  [D13.58] D4849
- uniformity index, n—in cotton length testing with the Fibrograph, the ratio between the two span lengths expressed as a percentage of the longer length.

  [D13.11] D7139
- uniformity ratio, n—in cotton length testing with the Fibrograph, the ratio between two span lengths expressed as a percentage of the longer length.
  [D13.11] D7139
- unit length of instrument,  $L_c$ , n—in textile unevenness testing, the length of strand being measured between the sensing elements at any moment. [D13.58] D4849
- **universal micronaire calibration cotton standards,** *n*—cottons produced by USDA and designated as Au (high micronaire) or Gu (low micronaire) with established values for micronaire for the purpose of calibrating and verifying



- cotton classification instruments for micronaire.

  [D13.11] D7139
- unsupported needled felt, *n*—a needled felt that is composed entirely of fibers physically interlocked and reoriented with, and of themselves without an interlay, scrim, or foundation of knitted, stitched, bonded, or extruded structure.

  [D13.13] D4845
- untreated, *n*—a descriptive term for glass fiber yarns having no applied chemicals or coatings, other than the minimal lubricant or binder used to control intra-fiber abrasion.

  [D13.18] D7018
- **upholstered furniture,** *n*—furniture covered with such materials as textiles or leather, and generally with padding or cushions, or both. [D13.63] D7023
- **upholstery cleaning instructions,** *n*—any of the various letter codes supplied by the fabric manufacturer to provide acceptable cleaning methods. [D13.62] D5253
- **upholstery fabric,** *n*—the exterior fabric covering applied to a furniture unit. [D13.63] D7023
- **upper-arm girth,** *n—in body measurements*, the maximum circumference of the arm usually midway between the elbow and the shoulder joint. [D13.55] D5219
- upper-arm length, n—in body measurements, with the arm bent, the distance from the shoulder joint along the outside of the arm to the prominence of the elbow.

  [D13.55] D5219
- upper-back width, *n*—the horizontal distance across the back at the mid-point between the top of the shoulder joint and the back break-point level, taken with the arms down.

  [D13.55] D5219
- **upper-chest girth,** *n*—the horizontal circumference around the torso, taken under the arms and above the fullest part of the chest/bust including the lower portion of the shoulder blades.

  [D13.55] D5219
- upper-half-mean length, *n*—in fiber length testing of cotton, the mean length by number, of the longer one half of the fibers by weight. [D13.11] D7139
- upper-front chest width, n—the horizontal distance across the front of the chest at the mid-point between the top of the shoulder joint and the front break-point level, taken with the arms down.
   [D13.55] D5219
- upper quartile length, *n*—in testing of cotton fibers, that length which is exceeded by 25 % of the fibers, by weight, in the test specimen. [D13.11] D7139
- **USDA benchmark reference cotton standard (benchmark cotton),** *n*—bale of cotton maintained by USDA that serves as a reference for establishing calibration cotton standards, designated as short weak/long strong reference standards.

  [D13.11] D7139
- **use-surface,** *n*—*for pile yarn floor covering*, that part of a textile floor covering directly exposed to traffic. [D13.21]

- **vacuum,** *v*—to clean using an electrically powered machine to create suction in order to remove loose, particulate soil and lint. [D13.63] D7023
- **vacuum clean,** *vt*—to remove loose particulate soil, lint, and embedded soil by suction using an electrically powered machine. [D13.62] D5253
- vacuum plated button, *n*—a button that is flash metal coated in vacuum chambers and subsequently colored to simulate other metal finishes. [D13.54] D2050
- validation curve, *n*—a set of points that represent the original curve in the exporting CAD system with curve tolerance of the original curve. [D13.66] D6963
- **value setting,** *n*—the event of establishing values on candidate bales for use as calibration cotton standards using multiple laboratories and multiple instruments. [D13.11] D7139
- value setting group, *n*—the group of cottons consisting of candidate bales, benchmark cottons and ringer cottons used in a value setting. [D13.11] D7139
- **value setting subgroup,** *n*—the subdivided samples taken from the value setting group used for multiple laboratory testing in a value setting. [D13.11] D7139
- vane, n—in feathers, the section that consists of a solid, stiff collection of barbs, as distinguished from the section near the quill point that has soft, fluffy barbs. [D13.61]
  D7022
- vegetable matter, n—in wool top, the pieces of burrs, seeds, shive, leaves, twigs, and grasses which have escaped removal in processing, also foreign vegetable fibers such as hemp, sisal, etc., if present.
  [D13.13] D4845
- **vegetable matter base,** *n*—*in raw wool*, oven-dried scoured burrs, seeds, twigs, leaves, and grasses, free of mineral matter and alcohol-extractable matter. [D13.13] D4845
- vegetable matter present, n—in raw wool, the weight of vegetable matter base present in the raw wool, adjusted to a moisture content of 12 %, an alcohol-extractives content of 1.5 %, and a mineral matter content of 0.5 %.

  [D13.13] D4845
- velveteen, n—a woven fabric in twill or plain weave made with a short closely packed filling pile in imitation of velvet.
   [D13.60] D4850
- **vinyl-coated glass yarn,** *n*—glass continuous filament yarn, coated with a pigment and plasticized vinyl chloride resin.

  [D13.18] D7018
- virgin wool, n—as defined in the Wool Products Labeling Act, "the terms 'virgin' or 'new' as descriptive of a wool product, or any fiber or part thereof, shall not be used when the product or part so described is not composed wholly of new or virgin fiber which has never been reclaimed from any spun, woven, knitted, felted, braided, bonded, or otherwise manufactured or used product." [D13.13] D4845
- visible waste, *n*—in cotton testing, foreign matter deposited in the waste boxes of the machine during the test.

  [D13.11] D7139



- vocational career apparel, n—career apparel which is generally subject to abusive wear and for which durability is a more important attribute than appearance. (See also career apparel and dress career apparel)
   [D13.61]
- **volatiles,** *n*—materials readily vaporizable at relatively low temperatures. [D13.51] D4920
- vulcanization, n—an irreversible process, usually accomplished through the application of heat, during which a rubber compound through a change in its chemical structure (for example, crosslinking) becomes less plastic and more resistant to swelling by organic liquids while elastic properties are conferred, improved, or extended over a greater range of temperatures.
   [D13.19] D6477
- waist, *n*—*in anatomy*, the part of the body at the location between the lowest rib and hip identified by bending the body to the side. [D13.55] D5219
- waist girth, n—in body measurements, the circumference of the waist immediately below the lowest rib. [D13.55]
  D5219
- waist height, n—the distance from the waist level to the hip girth level along the side of the body (contour) then vertically to the floor, taken with subject standing and without shoes.

  [D13.55] D5219
- waist height (infant special case), *n*—the straight distance from the waist level to the soles of the feet along the side of the body, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg.

  [D13.55] D5219
- waist to hip/seat height, n—the distance from the waist level to the hip girth level, taken along the side of the torso (contour). [D13.55] D5219
- waist to hip/seat height (infant special case), *n*—the straight distance from the waist level to the hip girth level, taken along the side of the torso with subject lying down flat with legs extended. [D13.55] D5219
- waist to knee height, n—the vertical distance from the waist level to a point level with the midpoint of the back of the knee (or crease), taken along the side of the torso. [D13.55]
- waist to knee height (infant special case), *n*—the straight distance from the waist level to a point level with the midpoint of the back of the knee (or crease), taken along the side of the torso with subject lying down flat with legs extended.

  [D13.55] D5219
- wale, *n*—*in knitted fabrics*, a column of successive loops in the length direction of the fabric. [D13.60] D4850
- wale, *n*—*in woven fabrics*, one of a series of raised portions or ribs lying warpwise in the fabric. [D13.60] D4850
- wall and top material, *n*—any pliable planar structure used as a nonbase surface in camping tentage including roofs, sides, windows, screens, doors, awnings, flies, and canopies.

  [D13.92] D4391

- warp, n—(1) the yarn running lengthwise in a woven fabric (2) a group of yarns in long lengths and approximately parallel, put on beams or warp reels for further textile processing including weaving, knitting, twisting, dyeing, etc. [D13.60] D4850
- warp elongation and tension, *n*—stretch or tension measured in the warp direction of the fabric. [D13.60] D4850
- warp-faced twill, *n*—a twill weave in which the warp yarns produce the diagonal effect. (See also twill weave and filling faced twill.) [D13.60] D4850
- warp streak, *n—in woven fabric*, a narrow band running lengthwise and characterized by apparent differences in color from adjoining ends. [D13.59] D3990
- warp tests, *n*—in fabric testing, tests in which the warp yarns are torn. [D13.60] D4850
- warp-to-filling seam, n—a sewn seam in which the warp yarns are perpendicular to the sewn seam on one side of the seam and parallel to the seam on the opposite side of that seam.

  [D13.60] D4850
- warp-to-warp seam, *n*—a sewn seam in which the yarns in the warp direction on both sides of the seam are perpendicular to the seam. [D13.60] D4850
- wash-and-wear, *adj*—a generic term applied to fabrics or garments which satisfactorily retain a neat appearance after repeated wearing and suitable home laundering with little or no pressing or ironing. (Compare durable-press.) [D13.60]

  D4850
- washboard, *n*—*in hosiery*, a ridgy effect caused by uneven tension between feeds on the knitting machine. [D13.59]
- water, n—the chemical compound  $H_2O$ . [D13.51] D4920
- water content, *n*—the specific measure of the total amount of water (free plus bound) in a test specimen expressed as a percentage of the mass of the moist material.

  [D13.11] D7139
- water regain, *n*—the specific measure of the total amount of water (free plus bound) in a test specimen expressed as a percentage of the mass of the water-free material.

  [D13.11] D7139
- water repellency, *n*—*in textiles*, the ability of a fabric to resist wetting. [D13.61] D7022
- water resistance, *n*—*in textiles*, the ability of a fabric to resist wetting and penetration by water, usually because of the application of a coating or finish. [D13.61] D7022
- water retained, *n*—*in textiles*, the amount of water absorbed by the fibers, adsorbed on the surface of the fibers, and held within the voids of the fabric after immersion, measured under specified conditions. [D13.13] D4845
- water retention, n—the moisture remaining in and on a material after a specified mechanical treatment.

  [D13.58] D4849

- waterfowl feathers, *n*—feathers from ducks or geese, or both. [D13.61] D7022
- waxy device, *n*—a container of wax, positioned between a delivery roll and take-up package that coats the yarn, typically those being produced for knitting.

  [D13.58] D3888
- wavy cloth, *n*—a cloth that will not lie flat on a cutting table. (Compare **tight pick**.) [D13.59] D3990
- wavy face, *n*—a surface condition characterized by a considerable variation in yarn diameter. [D13.59] D3990
- webbing, *n*—in textiles, a stout narrow fabric with a mass per unit area of at least 0.5 kg/m<sup>2</sup> (0.1 lb/ft<sup>2</sup>) for each 25.4 mm (1 in.) of width. (Compare **narrow fabric, ribbon**, and **tape**.) [D13.18] D7018
- weftless fabric, *n*—as used in tire building, a sheet of parallel cords surrounded by uncured rubber compound.

  [D13.19] D6477
- weigh, v—to determine the mass of a material. [D13.58]
- weight, *n*—in textile testing, an object, having a known mass, used in such procedures as weighing, calibrating, and applying a force. [D13.58] D4848
- weight, *n*—the force exerted on a body by gravity. (See also mass and force.) [D13.92] D123
- weight, *n*—in warp knitting, the number of tex (yards per pound) of finished fabric. [D13.60] D4850
- weight, *n*—as used with fabrics, mass per unit area. [D13.60]
- well, *n*—*in buttons*, a recess in center of sew-through flange button that gives aesthetics and identifies the face side.

  [D13.54] D2050
- welt seam, *n*—in home sewing, a complex seam formed on the inside of the product with one trimmed cut edge enclosed and one stitching line visible on the face side.

  [D13.54] D5646
- welted seam, *n*—in upholstered furniture, seam sewn with a strip of covered cord between the two fabric pieces, joined so that the welting shows on the exterior of the furniture unit.

  [D13.63] D7023
- welting, n—in upholstered furniture, a cord covered by strips of exterior fabric, used in welted seams of upholstery covering. [D13.63] D7023
- wet, *adj*—the state of a yarn which has been exposed to excessive moisture. [D13.19] D6477
- white wool, *n*—wool having shade variations from true white to creamy white but free of pigmented, dyed, or otherwise colored wools. [D13.13] D4845
- wickproof, adj—in tire fabric, tire cord fabric, tire cord, or yarn, a term used to describe a fabric or yarn that shows no air wicking by this prescribed test. [D13.19] D6477

- wide elastic fabric, n—an elastic fabric that is at least 150 mm (6 in.) in width. (Compare narrow elastic fabric.)

  [D13.60] D4850
- width, *n*—of flat knit fabrics, the perpendicular distance between the selvages when the fabric is under zero tension and free of folds or wrinkles. [D13.60] D4850
- width, *n*—of circular knit fabrics, twice the perpendicular distance between the enclosed edges of a flattened tube of fabric that is under zero tension and free of folds or wrinkles.

  [D13.60] D4850
  - d-surface fabric, the dimension included
- width, *n*—of a raised-surface fabric, the dimension included within the outer limits of the nap or pile, but excluding the selvages, or as otherwise agreed upon by the purchaser and supplier. [D13.60] D4850
- width, *n*—of a fabric, the distance from the outer edge of one selvage to the outer edge of the other selvage, measured perpendicular to the selvages while the fabric is held under zero tension and is free of folds and wrinkles.

  [D13.60] D4850
- width, n—of a fabric woven on a shuttleless loom, the distance from the outer warp on one side to the outer warp on the other side, measured perpendicular to the warp yarns while the fabric is held under zero tension and is free of folds and wrinkles.

  [D13.60] D4850
- widthwise direction, *n*—*in textiles*, the direction in a machine-made fabric perpendicular to the warp. [D13.21] D5684
- wildness, *n*—an obsolete term previously used to describe a number of cord properties including flare, straightness, and residual torsion. [D13.19] D6477
- winding system, *n*—in open-end spinning machines, a device which forms the yarn package. [D13.58] D3888
- windows, *n*—the openings in pin-lock and cam-lock sliders through which the locking pin and cams, respectively, may extend. [D13.54] D2050
- wipe, *v*—in upholstery cleaning, to clean coated upholstery fabrics with a sponge or cloth wetted with a mild detergent, soap solution, or coated fabric cleaner formulated for the purpose. [D13.62] D5253
- wires per unit length, n—for woven pile yarn floor covering, the number of binding sites per unit of floor covering length; wires in the widthwise direction being the usual means of forming the pile.

  [D13.21] D5684
- wool, n—used in the generic sense in these tolerances, the fiber from the fleece of the sheep or lamb, the hair of the Angora or Cashmere goat, rabbit hair, and the so-called specialty fibers from the hair of the camel, alpaca, llama, and vicuna.

  [D13.58] D4849
- wool, *n*—the fibrous covering of the sheep, *Ovis* species.

  [D13.13] D4845
- **wool**, *n*—as defined in the Wool Products Labeling Act of 1939, "the fiber from the fleece of the sheep or lamb, or hair of the



- Angora goat or Cashmere goat (and may include the so-called specialty fibers from the hair of the camel, alpaca, llama, and vicuna) which has never been reclaimed from any woven or felted wool product."

  [D13.13] D4845
- wool base, n—oven-dried scoured wool free of alcohol-extractable matter, mineral matter, vegetable matter, and all impurities.
   [D13.13] D4845
- wool content, *n*—the quantity of new and recycled wool, as defined in the Wool Products Labeling Act, which is determined by chemical analysis. [D13.13] D4845
- wool felt, n—a felt composed wholly of any one or a combination of new or recycled wool fibers.

  [D13.13] D4845
- woolen run—an indirect yarn numbering system in the woolen system, equal to the number of 1600-yd lengths per pound.
  (Compare woolen cut, worsted count.) [D13.13] D4845
- woolen-spun, *adj*—of, or pertaining to, material produced by the woolen system of yarn spinning as distinct from materials made by the worsted system of spinning. (Compare worsted-spun.) [D13.58] D4849
- woolen system, *n*—a spinning system employing a minimum of drafting and producing yarns of low-bulk density.

  [D13.58] D4849
- woolen yarn, *n*—yarn spun from wool fibers which have been carded but not combed or gilled. [D13.13] D4845
- work, *n*—the energy expended in displacing a body; mathematically, force times distance. [D13.58] D4848
- working cotton standard, *n*—a reference standard developed primarily for use within a specific laboratory. (See **precision**.) [D13.11] D7139
- working elongation (WE), *n*—of rope, elongation which is immediately recoverable when tension is removed from the rope. [D13.92] D123
- work recovery, *n*—the percent of recoverable work to the total work required to strain a fiber a specified amount under specified conditions. [D13.58] D4848
- work-to-break, *n*—the total energy required to rupture a specimen to the breaking force during a tensile test. [D13.58]
- work-to-rupture, *n*—the energy expended to tear apart a material. (See work-to-break. Compare toughness.)

  [D13.58] D4848
- worsted count, *n*—an indirect yarn numbering system in the worsted system equal to the number of 560-yd lengths per pound. (*Syn*. English worsted count. Compare woolen run.)

  [D13.58] D4849
- worsted-spun, *adj*—of, or pertaining to, materials produced by the worsted system of yarn spinning as distinct from materials made by the woolen system of spinning.

  [D13.13] D4845

- worsted system, *n*—a spinning system adapted to fibers 50 to 225 mm (2 to 9 in.) in length. [D13.58] D4849
- worsted yarn, *n*—yarn spun from wool fibers which have been carded, and either gilled or combed, or both.

  [D13.13] D4845
- woven fabric, *n*—a structure produced when at least two sets of strands are interlaced, usually at right angles to each other, according to a predetermined pattern of interlacing, and such that at least one set is parallel to the axis along the lengthwise direction of the fabric. [D13.60] D4850
- wrap angle, *n*—in yarn friction testing, the cumulative angular contact of the test specimen against the friction-inducing device, expressed in radians. [D13.58] D4849
- wrapper fibers, *n*—in rotor-spun yarns, fiber entanglements created during yarn formation that surround the circumference of the yarn cross section in random sequence but are not part of the twist helix. [D13.58] D3888
- wrap-in, n—in vinyl-coated glass yarns, a method of completing a package after a break by wrapping the two ends together on the package without splicing or tying a knot.

  [D13.18] D7018
- wrinkle, n—an objectionable crease, generally short and irregular in shape. [D13.59] D3990
- wrinkle recovery, *n*—that property of a fabric which enables it to recover from folding deformations. [D13.60] D4850
- wrinkle resistance, *n*—that property of a fabric which enables it to resist the formation of wrinkles when subjected to a folding deformation. [D13.59] D4850
- wrist, *n*—*in anatomy*, the joint which articulates between the end of the lower arm and the hand. [D13.55] D5219
- wrist girth, *n*—in body measurements, the circumference over the prominence of the inner and the outer forearm bones.

  [D13.55] D5219
- wrong draw, *n*—*in woven fabric*, one or more incorrectly drawn warp ends in the harness or reed. [D13.59] D3990
- **yarn,** *n*—a generic term for a continuous strand of textile fibers, filaments, or material in a form suitable for knitting, weaving, or otherwise intertwining to form a textile fabric.

  [D13.58] D4849
- **yarn appearance,** *n*—the visual effect obtained by viewing a sample of yarn wound with a designated traverse on a black board of designated size. [D13.58] D4849
- yarn break, *n—in sewn seams*, a mode of failure evidenced by yarns rupturing at the seam or at any other area in the test specimen. (Syn. yarn burst and yarn tear) [D13.60] D4850
- yarn clearer, *n*—an optical or capacitive sensor that monitors for yarn defects which can activate a break in the yarn being produced so that the undesirable defect can be removed.

  [D13.58] D3888

- yarn crimp, *n*—*in fabric*, the undulations or waviness in a yarn due to interactions with other yarns. [D13.60] D4850
- **yarn distortion**, *n*—*in woven fabrics*, a condition in which the symmetrical surface appearance of a fabric is altered by the shifting or sliding of warp or filling yarns. [D13.60]

D4850

- yarn fault, *n*—in textile strands, a change in thickness sufficient without magnification. [D13.58] D4849
- **yarn fault count,** *n*—the number of yarn faults per specified length of product. [D13.58] D4849
- yarn jobber, n—an organization that obtains yarn from a yarn producer, and is then responsible to have any additional and necessary processes completed to make the technically engineered strand useful to manufacture a yarn-based textile product.
   [D13.92]
- yarn number, n—a measure of the linear density of a yarn, expressed as "mass per unit length," or "length per unit mass," depending upon the yarn numbering system used. (Syn. yarn count.) (See yarn numbering system.)
  [D13.58] D4849
- yarn number jute, *n*—mass per unit length of a yarn measured as the number of pounds per 13 167 m (14 400 yd), and expressed as pounds per spyndle. [D13.92] D123
- yarn numbering system, *n*—a system expresses the size of a yarn as a relationship between its length and associated mass. (See also **direct yarn numbering system** and **indirect yarn numbering system**.) [D13.58] D4849
- yarn package, *n*—tubes, cones, and cheeses from which yarn can be unwound easily for use in weaving, knitting, or other processes. [D13.58] D3888
- yarn package, *n*—a length or parallel lengths of yarn in a form suitable for handling, storing, or shipping.

  [D13.58] D4849
- **yarn producer,** *n*—a manufacturer that transforms raw material inputs into a technically engineered strand of continuous length to form a structure which can then be further processed and used in textile manufacturing.

DISCUSSION-

- (1) Continuous filament yarn producers input various chemical compounds which are transformed into filaments of infinite length having various deniers.
- (2) Short staple yarn producers input staple from natural fibers having a fixed range of length (40-65 mm), or inputs from manufactured fibers that have been cut to a similar fixed range of length. Fixed length fibers can be processed into sliver and then drawn and twisted.
- (3) Long staple fixed length spun yarn producers can input cut staple manufactured fiber typically having a fixed long staple length range (70-100 mm) that can be processed into rovings and then drawn and twisted.
- (4) Variegated length long staple fibers yarn producers can use either variegated length long natural fibers, such as wool, or manufactured fibers that have been processed into varie-

- gated length long staple fiber (typically having a variegated length from 100-250 mm) by stretch breaking continuous filament tow. Variegated length long staple fiber is then processed by pin drafting and twisting.
- **yarn severance,** *n*—a numerical value expressed on a percentage basis from this test that is used as an index of the degree of cutting of fabric yarns by the sewing machine needle in making sewn seams.

  [D13.54] D7722
- **yarn slippage,** *n*—a mode of failure of fabrics when sewn using a standard seam. [D13.54] D7722
- yarn streak, *n*—for inflatable restraint fabrics, discoloration of an individual yarn that does not affect adjacent yarns.

  [D13.20] D6799
- yarn take-up, *n*—*in fabric*, the additional length of yarn used to make a given length of fabric. [D13.60] D4850
- **yield,** *n*—*in knitted fabrics*, the number of finished square meters per kilogram (square yards per pound) of greige fabric. [D13.60] D4850
- **yield,** *n*—of wool, the percentage of a designated commercial composition obtained by processing a lot of raw wool. [D13.13] D4845
- yield, n—in raw wool, the combined weight of clean wool fiber present and vegetable matter present, as a percentage of the raw wool weight.[D13.13] D4845
- yield point, *n*—in a *stress strain curve*, the point beyond which work is not completely recoverable and permanent deformation takes place. [D13.58] D4848
- **yield strength,** *n*—the stress at which a material exhibits a specified limiting deviation from the proportionality of a stree strain. [D13.19] D6477
- Young's modulus, *n*—in a stress-strain curve for an elastic material, the ratio of change in stress to change in strain within the elastic region of the material. [D13.58] D4848
- **zephyr yarn,** *n*—a variety of soft worsted yarn characterized by a low twist and spun from wool which is as fine or finer in average diameter than U.S. Standard 64's grade tops.

  [D13.13] D4845
- **zigzagged seam-finish,** *n*—*in home sewing*, a seam finish in which machine zigzag stitching is placed 3 to 6 mm (½ to ½ in.) from each of the cut edges of the seam allowances. (Compare **edge-stitched seam-finish.**) **[D13.54] D5646**
- zipper, *n*—a closure device consisting of interlockable elements each attached to one of the opposing edges of two tapes and a movable part called a "slider" that spans the interlockable elements. When the slider is moved in one direction it causes the elements on one tape to interlock with the elements on the other tape, and when moved in the opposite direction causes the elements to disengage. The term zipper and slide fastener are used interchangeably. (Compare continuous element zipper and separate-element zipper.)

  [D13.54] D2050

#### **ANNEXES**

(Mandatory Information)

#### A1. TERMS RELATING TO THE HAND OF FABRICS

Refer to Table A1.1 below.

TABLE A1.1 Terms Relating to the Hand of Fabrics<sup>A</sup>

Physical Property	Explanatory Phrase	Terms to Be Used in Describing Range of Corresponding Component of Hand
Flexibility	ease of bending	pliable (high) to stiff (low).
Compressibility	ease of squeezing	soft (high) to hard (low).
Extensibility	ease of stretching	stretchy (high) to nonstretchy (low).
Resilience	ability to recover from deformation	springy (high) to limp (low). Resilience may be flexural, compressional, extensional, or torsional.
Density	mass per unit volume (based on measurement of thickness <sup>B</sup> and fabric weight)	compact (high) to open (low).
Surface contour	divergence of the surface from planeness	rough (high) to smooth (low).
Surface friction	resistance to slipping offered by the surface	harsh (high) to slippery (low).
Thermal character	apparent difference in temperature of the fabric and the skin of the observer touching it	cool (high) to warm (low).

<sup>&</sup>lt;sup>A</sup> Methods of test for evaluating properties relating to the hand of fabrics were published as information by Committee D13 on Textiles, the latest publication being in 1965 Book of ASTM Standards, Part 24.

### A2. INDUSTRY ACCEPTED SYNONYMS

- A2.1 Industry accepted synonyms will be included in D123 following a term with a definition. An industry accepted synonym is listed and enclosed by parentheses.
- A2.1.1 This industry accepted synonym will be listed in Terminology D123 with a cross reference notation which refers directly to the defined term. (See Examples 1 and 2)
- A2.1.2 Synonyms do not show a jurisdiction notation or a list of standards in which it may appear. (See Examples 1 and 2)
- A2.1.3 Synonyms are not listed in Section 4, the Ready Reference, in which the jurisdiction is noted. If the synonym has been defined, it will appear in Section 4, Ready reference. (See Example 3)
- A2.1.4 Synonyms are under the jurisdiction of the subcommittee which determines they synonymity to a specific term.
- A2.1.5 The following examples illustrate how synonyms will be included:

## Example 1

**back width,** *n*—*in body measurements*, the distance from back-breakpoint to back- breakpoint. (Syn. *cross back width* ) [D13.55] D5219

cross back width - See back width.

## Example 2

**bail**, *n*—*in zippers*, a portion or portions of the slider to which the pull or pulls are attached (Syn. *lug* ) [D13.54] D2050 *lug*—See **bail**.

### Example 3

**bunch**, *n*—defect in yarn characterized by a segment not over 6 mm (1/4 in) in length that shows an abrupt increase in diameter caused by more fibers matted in this particular place.(Syn. *slub*, *slug\**) [D13.58] D2255

\*slug cannot be used as a synonym because it is under the jurisdiction of a different subcommittee — D13.59 (See Example 4)

**slub**, *n*,— an abruptly thickened place in a yarn (Syn. *lump*, *piecing\**, *slough-off\**, *slug*) [D13.58] D2255\*, D3990

*lump*—**See** back width.

\*piecing, \*slough-off, and \*slug cannot be used a synonyms for slub, because the jurisdiction of these terms is controlled by another subcommittee (See Example 4)

## Example 4

**slug**, *n*—*in raw silk*, a thickened place several times the diameter of the yarn, 3 mm (½ in. or over in length (Syn. *piecing*, *slough-off*) [D13.59] D3990

**piecing**, n—a thick place in a spun yarn caused by poor splicing. [D13.59] D3990

**slough-off,** *n*—*in woven fabrics,* defect caused by several coils of yarn slipping off the filling bobbin simultaneously and being woven into the fabric in a group. [D13.59] D3990

<sup>&</sup>lt;sup>B</sup> Measurements of thickness and weight are made as directed in the procedures described in the ASTM test methods for specific fabrics.

### A3. TERMINOLOGY TAKEN FROM D13 STANDARDS THAT HAVE BEEN WITHDRAWN

## A3.1 Terminology for Conducting Wear Tests on Textiles

**block**, *v*—to align warp and weft yarns at right angles, by some form of manipulation.

**end-use**, *n*—in wear testing, the use for which a textile is intended.

**evaluation period**, *n*—the period of time an item is used before being evaluated on the specific performance properties.

**examination**, n—an analysis of (1) he materials, structure, embellishments, and condition of a cultural object, and (2) he impact of these factors along with documentary characteristics on the treatment, display, and storage of the object.

**face side**, *n*—*in textile materials*, the side of the material that is outward in the completed object. (Ant. **back side**.)

**hardness**, *n—in water*, dissolved salts of calcium, magnesium, and other cations that destroy the action of soap; expressed as parts per million (ppm) or grains per gallon (gr/gal) of calcium carbonate. (Compare **softness**.)

**hard water**, *n*—*in textile conservation*, water having a concentration of more than 60 ppm (3.5 gr/gal) hardness calculated as calcium carbonate.

**performance property**, *n*—*in wear testing*, any chemical or physical property of a fiber, yarn, or fabric that is evaluated during the wear-refurbishing cycles.

**rating**, *n*—a quantitative or qualitative scale for evaluation of a specific property.

**restoration**, n—action directed towards returning the condition of an object to its original state.

**wear level**, *n*—the number of wear refurbishing cycles to which an item has been subjected.

**wear-refurbishing cycle**, *n*—*for a specific wear testing program*, one complete series of events that may be terminated by laundering or dry cleaning.

**wear-service conditions**, *n*—the specific conditions under which a textile is used (for example, at school, at work, at leisure, or at home).

**wear test**, *n*—a test in which textiles are subjected to wear-service conditions and evaluated for performance.

## A3.2 Terminology Relating to Textile Statistics

acceptable quality level (AQL or pl), n—in acceptance sampling, the maximum fraction of nonconforming items at which the process average can be considered satisfactory: the process average at which the risk of rejection is called the producers risk.

acceptance number (C), n—in acceptance sampling, the maximum number of nonconforming itmes in a sample that allows the conclusion that the lot conforms to the specification.

acceptance sampling, n—sampling done to provide specimens for acceptance testing.

acceptance sampling lot—See lot.

**acceptance testing**, *n*—testing performed to decide if a material meets acceptance criteria.

acceptance reference value, n—a value that serves as an agreed-upon reference for comparison, and which is derived as: (1) a theoretical or established value, based on scientific principles, (2) an assigned value, based on experimental work

of some national or international organization such as the U.S. National Bureau of Standards, or (3) a consensus value, based on collaborative experimental work under the auspices of a scientific or engineering group.

**accuracy**, *n*—of a test method, the degree of agreement between the true value of the property being tested (or an accepted standard value) and the average of many observations made according to the test method, preferably by many observers. (See also **bias** and **precision**.)

analysis of variance (ANOVA), n—a procedure for dividing the total variation of a set of data into two or more parts, one of which estimates the error due to selecting and testing specimens and the other part(s) possible sources of additional variation.

**assignable cause**, *n*—a factor which contributes to variation and is feasible to detect and identify.

**attribute**, *n*—a specific characteristic of a thing. (See **attribute data**.)

**attribute data**, *n*—observed values or determinations indicate the presence or absence of specific characteristics.

Discussion—The alternate conditions reported for an attribute are frequently described by such pairs of terms as "success" and "failure", "good" and "bad", "pass" and "fail", "go" and "acceptable" and "unacceptable". A discrete variate is the result of the reduction of two or more attributes to a count of the number of successes or the number of failures or both.

**average**, *n*—*for a series of observations*, the total divided by the number of observations.

**bias**, *n*—*in statistics*, a constant or systematic error in test results.

Discussion—Bias can exist between the true value and a test result obtained from one method; between test results from two methods; or between two test results obtained from a single method, for example, between operators or between laboratories.

**binomial distribution**, *n*—the frequency distribution which has the probability function:

$$P(r) = (n ! / \lceil r!(n-r)! \rceil p^r q^{n-r}$$

where:

P(r) = probability of obtaining exactly r "successes" in n independent trials,

p = probability, constant from trial to trial, of obtaining a "success" in a single trial, and

q = 1 - p.

**block**, *n*—*in experimenting*, a group of units that is relatively homogeneous within itself, but may differ from other similar groups.

**bulk sample**, n—in the sampling of bulk material, one or more portions which (1) are taken from material that does not consist of separately identifiable units and (2) can be identified after sampling as separate or composited units. (Compare to **discrete sample**, **lot sample**.)

**calibrate**, *v*—to determine a characteristic of a measuring instrument or tool and mark it at one or more places corresponding to exact values on an established standard scale, such as capacity or weight.

**calibration**, n—the act or process of calibrating; the recorded relationship resulting from calibrating.

**chain sampling**, *n*—in acceptance sampling, a sampling plan for which the decision to accept or reject a lot is based in part on the results of inspection of the lot and in part on the results of inspection of the immediately preceding lots.

**chance causes**, *n*—factors, generally numerous and individually of relatively small importance, which contribute to variation, but which are not feasible to detect or identify. (Syn. *random causes*.)

**characteristic**, *n*—a property of items in a sample or population which, when measured, counted, or otherwise observed, helps to distinguish between the items.

**coefficient of variation, CV**, *n*—a measure of the dispersion of observed values equal to the standard deviation for the values divided by the average of the values; may be expressed as a percentage of the average (CV %).

**component of variance**, n—a part of a total variance identified with a specified source of variability.

**confidence interval**, *n*—an interval estimate of a population parameter computed so that the statement "the population parameter lies in this interval" will be true, on the average, in a stated proportion of the times such statements are made.

**confidence level**, *n*—the stated proportion of times the confidence interval is expected to include the population parameter.

Discussion—Statisticians generally accept that, in the absence of special considerations, 0.95 or 95 % is a realistic confidence level. If the consequences of incorrectly estimating the confidence interval would be very grave, then a higher confidence level might be considered. If the consequences of incorrectly estimating the confidence interval are of less than usual concern, then a lower confidence level might be considered.

**confidence limits**, *n*—the two statistics that define the ends of a confidence interval.

**conformance**, *n*—*in test methods*, agreement with the properties of a sample, or lot, with specification requirements.

**consignment**, n—all the material of a specific type and quality delivered to one customer against a single shipping order

**consumer's risk**  $(\beta)$ , n—the probability of accepting a lot when the process average is at the limiting quality level.

**continuous variate**, *n*—a variate that is a measurement based on a scale that is assumed to be continuous.

**critical difference**, *n*—the observed difference between two test results, which should be considered significant at the specified probability level.

**degrees of freedom**, *n*—*for a set*, the number of values that can be assigned arbitrarily and still get the same value for each of one or more statistics calculated from the set of data.

**dependent variable**, n —a variable that may respond to a change in another variable. (Syn.  $response\ variable$ ; see also **independent variable**.)

**determination process**, *n*—the act of carrying out the series of operations specified in the test method whereby a single value is obtained. (Syn. **determination**.)

**determination tolerance**, *n*—as specified in a test method, the exactness with which a determination value is to be calculated and recorded.

**determination value**, *n*—the numerical quantity calculated by means of the test method equation from the measurement values obtained as directed in a test method. (Syn. **determination**; see also **observation**.)

**discrete sample**, *n*—one or more units taken from a material that consists of separately identifiable units. (Compare to **bulk sample**.)

**discrete variate**, *n*—a variate that is a measurement based on a scale that has a limited or infinite number of steps; such as a count, a rating scale, or a ratio of successes to total observations.

**duplicate**, *n*—in experimenting or testing, one of two or more runs with the same specified experimental or test conditions but with each experimental or test condition not being established independently of all previous runs. (Compare **replicate**.)

**duplicate**, *vt*—*in experimenting or testing*, to repeat a run so as to produce a duplicate. (Compare **replicate**.)

error of the first kind,  $\alpha$ , n—in a statistical test, the rejection of a statistical hypothesis when it is true.

**error of the second kind,**  $\beta$ , n—in a statistical test, the acceptance of a statistical hypothesis when it is false.

**experimental error**, *n*—variability attributable only to a test method itself.

**factor**, *n*—*in experimenting*, a condition or circumstance that is being investigated to determine if it has an effect upon the result of testing the property of interest.

**frequency distribution**, n—of a sample, a table giving for each value of a discrete variate, or for each group of values of a continuous variate, the corresponding number of observations.

**frequency distribution**, *n*—of a population, a function that, for a specific type of distribution, gives for each value of a random discrete variate, or each group of values of a random continuous variate, the corresponding probability of occurrence

**F-test**, n—a test of statistical significance based on the use of George W. Snedecor's F-distribution and used to compare two sample variances or a sample variance and a hypothetical value

**function**, *n*—a mathematical expression describing the relation between variables; an expression having a definite value, or values, when special values are assigned to other quantities, called the arguments, or independent variables of the function.

**histogram**, n—a graphical representation of a frequency distribution characterized by (1) values or groups of values of a property plotted on one axis and (2) columns perpendicular to that axis with areas proportional to the count of the frequency with which each value or group of values occurs.

**independent variable**, n—an assigned variable associated with a dependent variable so that when the value of the

assigned variable is changed the dependent variable may also change. (Syn. *predictor variable*; see also **dependent variable**.)

**item**, n—(1) an object or quantity of material on which a set of observations can be made; (2) an observed value or test result obtained from an object or quantity of material.

**interaction**, *n*—the condition that exists among factors when a test result obtained at one level of a factor is dependent on the level of one or more additional factors.

**interference**, *n*—*in testing*, an effect due to the presence of a constituent or characteristic that influences the measurement of another constituent or characteristic.

**interlaboratory testing**, n—the evaluating of a test method in more than one laboratory by analyzing data obtained from one or more materials that are as homogeneous as practical.

**laboratory sample**, n—a portion of material taken to represent the lot sample, or the original material, and used in the laboratory as a source of test specimens.

**laboratory sampling unit**, n—a portion of material taken to represent one of the lot sampling units or the original material and used in the laboratory as a source of test specimens.

least difference of practical importance,  $\delta$ , n—the smallest difference based on engineering judgment deemed to be of practical importance when considering whether a significant difference exists between two statistics or between a statistic and a hypothetical value.

**limiting quality level** (LQL or p<sub>2</sub>), *n*—in acceptance sampling, the fraction of nonconfoming items at which the process average can be considered barely tolerable; the process average at which the risk of acceptance is called the **consumer's risk**.

**lot sampling unit**, n—a portion of material taken to represent a lot and used as a source of laboratory sampling units or test specimens, or both. (See **primary sampling unit**.)

**lot tolerance fraction defective**, *n*—the process average at which quality is considered barely tolerable; the process average at which the risk of acceptance is called the consumer's risk.

**maintain**, *vt*—to monitor the usage of test methods and to take remedial steps when necessary.

**mathematical model**, *n*—*in statistics*, an equation or set of equations that describes a system.

**mean square**, *n*—*in analysis of variance*, a contraction of the expression "mean of the squared deviations from the appropriate average(s)" where the divisor of each sum of squares is the appropriate degrees of freedom.

**measurement process**, *n*—the act of quantifying a property or dimension. (Syn. **measurement**)

**measurement tolerance**, *n*—as specified in a test method, the exactness with which a measurement is to be made and recorded.

**measurement tolerance propagation equation**, n—the mathematical formula, derived from the test method equation, which shows the dependence of the determination tolerance on the measurement tolerances. (Syn. **propagation equation**.)

**measurement value**, *n*—the numerical result of quantifying a particular property or dimension. (Syn. **measurement**)

**median**, *n*—*for a series of observations*, after arranging them in order of magnitude, the value that falls in the middle when the number of observations is odd or the arithmetic mean of the two middle observations when the number of observations is even.

**mode**, *n*—the value of the variable for which the relative frequency in a series of observations reaches a local maximum.

**moving range**, *n*—the difference without regard to sign between two successive observations.

**nonconforming**, *adj*—a description of a unit or a group of units that does not meet the unit or group tolerance.

**nonconforming item**, n—an item that does not satisfy the requirements of the applicable specification.

**nonconformity**, n—an occurrence of failing to satisfy the requirements of the applicable specification; a condition that results in a nonconforming item.

**nonparametric**, *adj*—a term referring to a statistical technique that does not assume the nature of the underlying frequency distribution is known.

**normal distribution**, n—the distribution that has the probability function:

$$f(x) = (1/\sigma)(2\pi)^{1/2} \exp[-(x-3)^2 / 2 9^2]$$
  
$$f \sim x! \ 5 \ 1/s! \ 2p! \exp[2 \ 2\mu! \ 2/2s_2/2s_2\#]$$

where:

x = random variate,

 $\mu$  = mean of the distribution, and

s = standard deviation of the distribution.

(Syn. Gaussian distribution, law of error)

**observation**, n—(1) the process of determining the presence or absence of attributes or making measurements of a variable, (2) a result of the process of determining the presence or absence of an attribute or making a measurement of a variable. (Compare **measurement value**, **determination value**, and **test result**.)

**observed value**, *n*—the particular value of a characteristic determined as a result of a test or measurement.

operating characteristic curve (OC-curve), *n*—in acceptance sampling, the curve which has as its abscissa a hypothesized lot average, and which has as its ordinate the probability of accepting the lot, when the plan is used. (See also Type A operating characteristic curve and Type B operating characteristic curve.)

**parameter**, *n*—*in statistics*, a variable that describes a characteristic of a population or mathematical model.

**parametric**, *adj*—a term referring to a statistical technique that assumes the nature of the underlying frequency distribution is known.

**participant**, *n*—*in wear testing*, any individual that uses a test or control textile during a wear test.

**percentage point**, *n*—difference of 1 % of a base quantity. *Discussion*—A phrase such as "a difference of X%" is ambiguous when referring to a difference in percentages. For example, a change in the moisture regain of a material from 5 % to 7 % could be reported as an increase of 40 % of the initial moisture regain or as an increase of two percentage points. The latter wording is recommended.

**population**, *n*—the totality of items or units of material under consideration.

**Poisson distribution**, *n*—the distribution which has its probability function:

$$P(r) = e^{-\mu} \mu^r / r!$$

where:

P(r) = probability of obtaining exactly r occurrences of an event in one unit, such as a unit of time or area,

 $\mu$  = both mean and variance of distribution, and

e = base of natural logarithms.

**practice**, *n*—a definitive procedure for performing one or more specific operations or functions that does not produce a test result.

Discussion—A practice is not a down-graded test method. Examples of practices include procedures for conducting interlaboratory testing programs or other statistical procedures; for writing statements on sampling or precision and bias; and for selection, preparation, application, inspection, necessary precautions for use or disposal, installation, maintenance, and operation of testing equipment.

**precision**, *n*—the degree of agreement within a set of observations or test results obtained as directed in a method.

Discussion—The term "precision" delimited in various ways, is used to describe different aspects of precision. This usage was chosen in preference to the use of "repeatability" and "reproducibility" which have been assigned conflicting meanings by various authors and standardizing bodies.

**precision**, *n*—*under conditions of between laboratory precision*, the multi-laboratory, single sample, single-operator apparatus-day (within-laboratory) precision of a method; the precision of a set of statistically independent test results all of which are obtained by testing the same sample of material and each of which is obtained in a different laboratory by one operator using one apparatus to obtain the same number of observations by testing randomly drawn specimens over the shortest practical time interval.

**precision**, *n*—*under conditions of within-laboratory precision with multiple operators*, the multi-operator, single-laboratory-sample, single-apparatus-day (within operator) precision of a method; the precision of a set of statistically independent test results all obtained in one laboratory using a single sample of material and with each test result obtained by a different operator, with each operator using one apparatus to obtain the same number of observations by testing randomly drawn specimens over the shortest practical time interval.

**precision**, *n*—*under conditions of single-operator precision*, the single-operator-laboratory-sample-apparatus-day precision of a method; the precision of a set of statistically independent observations all obtained as directed in the method and obtained over the shortest practical time interval in one laboratory by a single operator using one apparatus and randomly drawn specimens from one sample of the materiaì being tested.

*predictor variable*, *n*—see the more generally used term **independent variable**.

**primary sampling unit**, n—the sampling unit containing all of the sources of variability which should he considered in acceptance testing; the sampling unit taken in the stage of selection in any procedure for sampling a lot or shipment.

**probability function**, n—of a discrete variate, the mathematical expression which gives the probability that a variate will take a particular value.

**probability function**, n—of a continuous variate, the mathematical expression whose definite integral gives the probability that a variate will take a value within the two limits of integration.

**probability level**, *n*—a general term that reflects the stated proportion of times an event is likely to occur. (Compare to *confidence level* and *significance level*.)

**process average**, *n*—for the items produced, the true and unknown level of (1) the fraction of nunconforming items or (2) a characteristic of the items as determined by a test method.

**producers risk**  $(\alpha)$ , n—the probability of rejecting a lot when the process average is at the acceptable quality level or AQL.

**production lot**, *n*—that part of one manufacturers production made from the same nominal raw material under essentially the same conditions and designed to meet the same specifications.

propagation equation, n—Synonym of measurement tolerance propagation equation.

**random cause**, *n*— one of many factors which contribute to variation but which are not feasible to detect and identify since they are random in origin and usually small in effect.

**randomized block experiment**, n—a kind of experiment which compares the averages of k different treatments that appear in random order in each of b blocks.

**random sampling**, n—the process of selecting units for a sample of size n in such a manner that all combinations of n units under consideration have an equal or ascertainable chance of being selected as the sample. (Syn. *simple random sampling* and *sampling at random*.)

**random variation**, *n*—a difference in observed values that is the result only of chance causes. (Syn. *chance variation*.)

**rejection number**, *n*—in acceptance sampling, the minimum number of nonconforming items in a sample that requires the conclusion that the lot does not conform to specification.

**replicate**, *n*—*in experimenting or testing*, one of two or more runs with the same specified experimental or test conditions and with each experimental or test condition being established independently of all previous runs. (Compare **duplicate**.)

**replicate**, *v*—in experimenting or testing, to repeat a run so as to produce a replicate. (Compare **duplicate**.)

*response variable*, *n*—see the more generally used term **dependent variable**.

**ruggedness test**, n—an experiment in which environmental or test conditions are deliberately varied to evaluate the effect of such variations.

**run**, *n*—*in experimenting or testing*, a single performance or determination using one of a combination of experimental or test conditions.

**sample**, n—(1) a portion of a lot of material which is taken for testing or for record purposes; (2) a group of specimens used, or observations made, which provide information that can be used for making statistical interferences about the

population(s) from which they were drawn. (See also **lot sample**, **laboratory sample**, and **specimen**.)

**sampling plan**, *n*—a procedure for obtaining a sample.

**sampling plan result**, *n*—the number obtained for use in judging the acceptability of a lot when applying a sampling plan.

**sampling unit**, *n*—an identifiable, discrete unit or subunit of material that could be taken as part of a sample.

Discussion—Since there are two or more stages in most sampling schemes, the sampling units in each stgae must be clearly identified to avoid confusion. The number of stages in sampling schemes is not limited, but may be as few or as many as required by the nature of the material being sampled. There are frequently three stages of sampling (1) taking primary sampling units from a lot of material as a lot sample, (2) taking laboratory samples from each of the primary sampling units in the lot sample, and (3) taking test specimens from each of the units in the laboratory sample.

**sensitivity criterion**, *n*—a quantitative measure of the relative merit of two test methods, that combines the estimated variance of each method with the ability of the method to measure differences in the property of interest.

**sensitivity ratio, SR**, *n*—in comparing two test methods, the ratio of the sensitivities of the test methods with the large sensitivity in the numerator.

**significance level,**  $(\alpha)$ , n—stated upper limit for the probability of a decision being made that a hypotheses about the value of a parameter is false when in fact it is true.

**single sampling**, n—in acceptance sampling, a sampling plan for which the decision to accept or reject a lot is based on a single sample.

**specification**, *n*—a precise statement of a set of requirements to be satisfied by a material, product, system, or service that indicates the procedures for determining whether each of the requirements is satisfied.

**specimen**, n—a specific portion of a material or laboratory sample upon which a test is performed or which is taken for that purpose. (Syn. **test specimen**)

**standard deviation, s**, *n*—of a sample, a measure of the dispersion of variates observed in a sample expressed as the positive square root of the sample variance.

state of statistical control, n—a condition in which a process, a measurement process is subject only to random variation.

**statistic**, n—a quantity that is calculated from observations on a sample and that estimates a parameter of a sampled population.

**sum of squares**, *n*—in analysis of variance, a contraction of the expression "sum of the squared deviations from the appropriate average(s)" where the average(s) of interest may be the average(s) of a specific subset(s) of data or of the entire set of data.

**systematic sampling**, n—the process of selecting units in a sample in accordance with a specific order or location in time or space, or both.

**test**, n—(1) a single observation made on one (test) specimen; (2) a series of observations of which the average, or some

other function, is considered a significant result for a sample. (See also **test result**.)

**test method**, n—a definitive procedure for the identification, measurement, and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result.

**test method equation**, n—the mathematical formula specified in a test method, whereby the determination value is calculated from measurement values.

**test method tolerances**, *n*—as specified in a test rnethod, the measurement tolerances, the determination tolerance, and the test result tolerance.

**test result**, n—a value obtained by applying a test method, expressed either as a single determination or a specified combination of a number of determinations.

**test result tolerance**, *n*—as specfied in a test method, the exactness with which a test result is to be recorded and reported.

test specimen—See specimen.

**tolerances**, *n*—*in mathematics*, prescribed limits of variation for specified properties of a particular material based on observed values obtained by specified test methods and on samples that are representative of the material.

**tolerance terms**, *n*—the individual members of a measurement tolerance propagation equation in which each member contains only one test method tolerance.

**transformation**, n—the change from one set of variables, x, to another set, x', by the use of a function, x' = f(x).

**treatment combination**, *n*—*in experimenting*, one set of experimental conditions.

**t-test**, *n*—a test of statistical significance based on the use of Student's *t*-distribution and used to compare two sample averages or a sample average and a hypothetical value.

**Type A operating characteristic curve**, *n*—an operating characteristic curve which describes the operation of a sampling plan where the size of the lot being sampled is taken into consideration.

**Type B operating characteristic curve**, *n*—an operating characteristic curve which describes the operation of a sampling plan where items are drawn at random from a theoretically infinite process.

**variable**, *n*—a quantity to which any of the values in a given set may be assigned. (See **parameter** and **variate**.)

**variables data**, *n*—measurements which vary and may take any of a specified set of numerical values.

**variance,**  $s^2$ , n—of a sample, a measure of the dispersion of variates observed in a sample expressed as a function of the squared deviations from the sample average.

**variance**,  $\sigma^2$ , n—of population, a measure of the dispersion of members of the population expressed as a function of the sum of the squared deviations from the population mean.

**variate**, *n*—a measured value that includes a random error of measurement; a variable with which a probability distribution is associated. (See also **variable** and **attribute data**.)

**verification**, *n*—the act or process of verifying.

**verify**, *v*—*specific-in textile testing*, to determine whether a previously calibrated instrument, standard solution, or other standard is still properly calibrated.

**verify**, *v*—*general*, to establish that an operation has been completed correctly.

# A3.3 Terminology Relating to Textile Conservancy

**backing fabric**, *n*—*in textile conservation*, a support textile fabric located behind the textile artifact.

**control undercover garment**, *n*—a garment having a known history, the performance of which in a specific end-use has been established previously, and which is used as a standard of comparison.

**craftsman**, *n*—an artisan who is skilled in creating new cultural objects.

**cultural object**, *n*—any man-made or modified natural article that reflects the beliefs, social forms, and material traits of racial, social, religious, or other specific groups.

**conservation**, *n*—all actions aimed at safeguarding objects of cultural and natural heritage for the future.

*Discussion*—The purpose of conservation, through preventive care, documentation, treatment, and research, is to retain significant qualities of the object with the least possible intervention.

**conservator**, *n*—an individual whose training, knowledge, ability and experience allow them to undertake the preservation of objects of cultural and natural heritage.

*Discussion*—A conservator does not create new cultural objects.

**cultural object**, *n*—any man-made or modified natural article that reflects the beliefs, social forms, and material traits of racial, social, religious, or other specific groups.

**craftsman**, *n*—an artisan who is skilled in creating new cultural objects.

**delicate pretreatment procedure**, *n—in textile conservation*, the washing, rinsing, drying, and pressing actions followed when fabrics are of certain yarn and fabric constructions or fiber contents, such as lightweight or sheer fabrics, fine yarns, silks, or wools. (Compare **sturdy pretreatment procedure**.)

**documentary characteristic**, *n*—any historic, stylistic, iconographic, technological, intellectual, aesthetic, or religious data pertaining to an object under consideration for conservation.

**documentation**, *n*—the record of information (historic, stylistic, iconographic, technological, intellectual, aesthetic, scientific, or spiritual) about any object of cultural or natural heritage.

Discussion—Documentation includes, but is not limited to, records of analysis and treatment of an object in writing, photographs, drawings, videotape and other technological and physical data. Documentation is a requirement of any plan for care and treatment of an object, as well as a record of conservation activities.

**examination**, *n*—the analysis of the material, structure, and condition of an object of cultural or natural heritage to enable the formation of an appropriate method of preventive care and treatment.

**objects of cultural heritage**, *n*—any items taken from nature, or modified or created by humankind that are significant for cultural interpretation and scientific research.

**objects of natural heritage**, *n*—any items taken from nature, modified or unmodified, that are significant for the interpretation of the natural environment, or that are significant for cultural and scientific research.

**preservation**, *n*—action taken to retard or prevent deterioration of or damage to objects of cultural and natural heritage.

*Discussion*—Preservation includes handling, treating, and controlling the environment of a cultural object.

**restoration**, *n*—all actions taken to modify the existing materials or structure of an object of cultural and natural history to represent a known earlier state.

Discussion —The aim of restoration is to preserve and reveal the aesthetic, historic or scientific value of an object. Restoration is based on respect for the remaining original material and clear evidence of the earlier state.

**sturdy pretreatment procedure**, *n—in textile conservation*, the washing, rinsing, drying, and ironing actions followed when backing fabrics are medium to heavy weight. (Compare **delicate pre-treatment procedure**.)

## A4. TERMINOLOGY RELATING TO LEATHER

A4.1 The terminology related to leather is under the jurisdiction of Committee D31 on Leather. The inclusion of these terms in this standard was approved by Committee D31. These terms are included for use as a glossary to identify items that, potentially, can be incorporated in the manufacturing of textile products.

**buckskin**—leather from deer and elk skins, used for shoes, gloves, and clothing. Only the outer cut of the skin from which the surface grain has been removed may be correctly defined as "genuine buckskin." Leather finished from the split or undercut of deerskin must be described as "split buckskin."

**chamois leather**—a soft, pliable absorbent leather which is recognized in this country and abroad as being made from the inner side of a sheepskin, known technically as flesher, from which the outer or grain side has been split prior to tanning.

**garment leather**—a name covering material for leather coats, jackets, hats, and breeches made most commonly from sheep, cabretta, pig, or goat skins, cattle, or horse hides.

**glove leather**—term covering two distinct classes: (1) the leather used for dress gloves, including those for street, riding, and sports wear. Tanned predominately from hair sheep, wool sheep, and lamb skins and to a lesser degree from deer, pig,



goat, and kid skins, and (2) the leather used for utilitarian or work gloves and made of a variety of hides and skins, of which the most important are horsehides, cattlehide splits and bellies, pigskins, and cowhides.

**hat leather**—usually sheepskin or calfskin for sweatbands of hats. The grain splits of sheepskin are vegetable-tanned for this purpose.

**leather**—a general term for hide or skin that still retains its original fibrous structure more or less intact, and that has been treated so as to be imputrescible even after treatment with water. The hair or wool may or may not have been removed. Certain skins, similarly treated or dressed, and without the hair removed, are termed "fur." No product may be described as leather if its manufacture involves breaking down the original skin structure into fibers, powder or other fragments by chemical or mechanical methods, or both, and reconstituting these fragments into sheets or other forms.

**nap finish**—a process in which the natural grain layer of the leather is removed and the outer surface of the leather is then given a napped finish. (See also **suede finish**.)

**patent leather**—Any leather with a finish system that produces a high gloss with great depth and clarity. Usually obtained by one or more applications of a high solids coating, but is also made by film lamination.

**pigskin**—leather made from the skin of pigs or hogs. In the glove leather trade, the term pigskin includes peccary and carpincho.

rawhide—cattlehide that has been dehaired, limed, often stuffed with oil or grease, and has sometimes undergone other preparation, but has not been tanned. It is used principally for mechanical purposes, such as belt lacings, loom pickers, gaskets, pinions, gears, and for hand luggage, shoe laces, snowshoes, etc.

**suede finish**—a finish produced by running the surface of leather on a carborundum or emery wheel to separate the fibres in order to give the leather a nap. The grain side of the leather may be suede-finished, but the process is most often applied to the flesh surface. The term "suede" is applied to chrome or alum-tanned leather, while "ooze" is applied to vegetable-tanned suede. The term "suede" when used alone refers to leather only. *The term denotes a finish, not a type of leather.* 

**upholstery leather**—a general term for leathers processed for use in furniture, airplanes, buses, and automobiles. The staple raw material in this country consists of spready cattlehides, split at least once and in many cases two or three times. The top or grain cuts go into the higher grades and the splits into the lower grades.

#### A5. TERMINOLOGY REVISION PROCEDURES

A5.1 Revisions of Definitions—When the concept of a term, namely a definition, is already published in Committee D13 standards, its definition may be revised through one of the following procedures:

# A5.1.1 One Subcommittee Involved—

A definition may be revised in the normal course of revising the standard. A revised definition may be inserted into a new standard, or a revision of an existing standard of that subcommittee, provided the ballot of the proposed standard is accompanied by a cover memorandum or note on the ballot including the following statement:

"Approval of this ballot will constitute approval to substitute the proposed definition for '\_\_\_\_\_' which is under the jurisdiction of this subcommittee into D \_\_\_\_Terminology related to \_\_\_\_ and to editorially place it into Terminology D123."

# A5.1.2 Two or More Subcommittees Involved—

If the term in question is defined in the standards of two or more subcommittees, a definition may be revised as follows: If the technical subcommittee does not have jurisdiction for the term it shall submit the proposed new or revised definition to the chairman of the terminology subcommittee who will compare it with existing definitions to determine whether it is an improvement (broader in scope, less wordy, more precise, etc.) over the existing definition(s). If it is not an improvement, the chairman of the terminology subcommittee will recommend to the technical subcommittee that it use the existing definition, but add its own point-of-view in a Discussion

following the definition. If the new definition appears to be an improvement, the chairman of the terminology subcommittee shall recommend the revised definition to the chairman of the subcommittee having jurisdiction and make a request that the subcommittee having jurisdiction initiate a ballot to change the definition. The SC chairman must cite all of the (technical) standards under the jurisdiction in which the term is used when initiating this ballot. A rationale and commentary for making the changes needs to accompany the ballot. After this new definition has been agreed upon by the subcommittee, the approved change is submitted to the Main Committee ballot as revision to the standards cited and include the statement noted below:

"Approval of this ballot will constitute approval to substitute the proposed definition for '\_\_\_\_' which is under the jurisdiction of this subcommittee, into the following standards and to editorially place it into D\_\_\_ Terminology Related to \_\_\_\_and into Terminology D123."

A5.1.3 The chairman of the terminology subcommittee may also (1) initiate improvements in definitions, (2) initiate ballots to resolve redundancies, and (3) resolve redundancies through editorial changes by coordinating such changes with the chairmen of the technical subcommittee(s) involved, the ASTM staff Committee Editor, and the ASTM Editorial Review Committee.\*

\*Editorial changes to eliminate redundant definitions will not result in a year change to the standard whereas substantive changes will result in a year change. A5.1.3.1 When it's been discovered that a subcommittee has jurisdiction of redundant definitions, the chairman of the terminology subcommittee will request that the subcommittee chairman determine which term is the "preferred" term by the subcommittee. The subcommittee chairman will be asked to initiate a concurrent subcommittee and main committee ballot to remove the redundant definition. This ballot action will be accompanied with a cover letter which explains the ballot action and the results which will occur.

A sample letter could be as follows: To All Voters:

\* SCB discovered that redundant definitions exist for the

term "\_\_\_\_", which is under the jurisdiction of SC\_\_\_\_.

\* List term definitions, and indication of "preferred" or

\* List term definitions, and indication of "preferred" or "redundant."

\* Approval of this ballot will constitute approval to eliminate the redundant definition(s), also under the jurisdiction of SC .

\* Approval of this ballot further constitutes approval to editorially remove redundant definitions from both Terminology D\_\_\_\_ and Terminology D123.

Editorial changes to eliminate redundant definitions will not result in a year change to the standard whereas substantive changes will result in a year change.

## **APPENDIX**

## (Nonmandatory Information)

### X1. OTHER SOURCES OF TEXTILE TERMINOLOGY

## X1.1 Non-consensus Recognized Terminologies

Stanley Backer and Emery I. Valko, "Thesaurus of Textile Terms," MIT Press, Cambridge, 1966.

W. L. Carmichael, George E. Linton, Isaac Price," Calloway Textile Dictionary," Calloway Mills, 1947.

"Glossary of Textile Terms," Textile Yarn Association of America ca. 1974.

Dictionary of Fiber's Textile Terminology, Hoechst-Celanese Corporation, 1990.

George E. Linton, "The Modern Apparel and Textile Dictionary," Textile Book Service, Plainfield, NJ, 1973.

Lloyd R. Whittington, "Whittington's Dictionary of Plastics," Technomic Publishing Co., Stamford, CT, 1968.

Phyllis G. Tortora and Robert S. Merkel, "Fairchild's Dictionary of Textiles," Fairchild Publishing Co., New York, 1996.

# X1.2 Consensus Standards

"Textile Terms and Definitions," Ninth Edition, Textile Institute, Manchester, 1991.

#### X1.3 US Govt. Standards and Publications

"Glossary of Knitting Imperfections," Military Standard 1491, Department of Defense, Washington, DC, 1971.

"Code of Federal Regulations," Title 16 U.S. Government Printing Office, Washington, DC 1977.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/