

Designation: D 123 - 02

Standard Terminology Relating to Textiles¹

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1. Scope

- 1.1 This standard is the compilation of all terminology developed by Committee D-13 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 which has jurisdictional responsibility for every item is the first attribution noted after the definition. The standards in which the terms and definitions appear are 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 and subcommittee D13.92 on Terminology. See 1.2, 1.3, 1.4.
- 1.2 In addition to being a specialized dictionary, Terminology D 123 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 and respective definitions.
 - 1.4.2 Ready reference guide.
- 1.4.3 Annex A1 Generic names and definitions of manufactured fibers.
- 1.4.4 Annex A2 Classification of manufactured and natural fibers.
 - 1.4.5 Annex A3 Terms relating to the hand of fabrics.
 - 1.4.6 Annex A4 Terminology revision procedures.
 - 1.4.7 Annex A5 Industry accepted synonyms.
 - 1.4.8 Appendix X1 Other sources of textile terminology.

¹ This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.92 on Terminology.

2. Referenced Documents

- 2.1 ASTM Standards:
- D 2050 Terminology Relating to Zippers (D13.54)²
- D 3136 Terminology Relating to Care Labels for Textile and Leather Products Other Than Textile Floor Coverings and Upholstery (D13.62)²
- D 3888 Terminology Relating to Open-End Spinning (D13.58)²
- D 3990 Terminology Relating to Fabric Defects (D13.59)³
- D 4391 Terminology Relating to Burning Behavior of Textiles (D13.92)³
- D 4523 Terminology Relating to Leather-filled and Down-filled Products (D13.61)³
- D 4845 Terminology Relating to Wool (D13.13)³
- D 4848 Force, Deformation and Related Properties of Textiles (D13.57)³
- D 4850 Terminology Relating to Fabric and Related Terms (D13.59)³
- D 4920 Terminology Relating to Moisture in Textiles (D13.51)³
- D 4965 Terminology of Seams and Seam Finishes in Home Sewing (D13.53)³
- D 5038 Terminology of Textile Conservation (D13.53)³
- D 5219 Terminology Relating to Body Dimensions for Apparel Sizing (D13.55)³
- D 5253 Terminology of Writing Care Instructions and General Refurbishing Procedures for Textile Floor Coverings and Textile Upholstered Furniture (D13.62)³
- D 5497 Terminology Relating to Buttons (D13.54)³
- D 5646 Terminology of Basic Sewing Machine Stitches for Home Use (D13.53)³
- D 5684 Terminology Relating to Pile Floor Covering (D13.21)³

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] D 5332 **abrasion,** *n*—the wearing away of any part of a material by

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² Annual Book of ASTM Standards, Vol 07.01.

³ Annual Book of ASTM Standards, Vol 07.02.



rubbing against another surface. [D13.60] D 3884, D 3885, D 3886,

D 4157, D 4158, D 4685, D 4966

abrasion cycle, *n*—one complete movement across the surface of a material.

Discussion—The complete movement for an abrasion cycle is dependent on the action of the abrasion machine and the test method used. It may consist of one back-and-forth unidirectional movement or one circular movement, or a combination of both.

[D13.60]

D 3885

abrasion mark, *n*—an area damaged by friction. [D13.59] D 3990

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

[D13.51] D 4920

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] D 5352

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] D 5352

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] D 4772, D 4920

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] D 5427

acceptable quality level (AQL or p₁), 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 producer's risk. [D13.93] D 3777, D 4028, D 4271, D 4392

acceptance number (c), n—in acceptance sampling, the maximum number of nonconforming items in a sample that allows the conclusion that the lot conforms to the specification. [D13.93] D 3777, D 4271, D 4392

acceptance sampling, *n*—sampling done to provide specimens for acceptance testing. [D13.93] D 3777, D 4271,

acceptance testing, n—testing performed to decide if a material meets acceptance criteria. [D13.93]
 D 3777, D 4271,
 D 4392

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.)

[D13.93] D 2905,

D 2906, D 4697, D 4855

acid content, *n*—*offelt*, the number of milliequivalents of acid present per unit weight of felt, measured under prescribed conditions. [D13.13] D 461

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] D 5251
across shoulder, n—in body measurements, the distance from shoulder joint to shoulder joint across the back.

[D13.55] D 5219

acrylic fiber—See acrylic in Annex A1.

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

[D13.19] D 1871, D 1877, D 4393, D 4776, D 4777 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] D 5591

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]
 D D2229, D 4393, D 4776,

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] D 4920

afterflame, *n*—persistent flaming of a material after the ignition source has been removed. [D13.92] D 123

after-flame time, *n*—the length of time for which a material continues to flame after the ignition source has been removed. [D13.92] D 4372, D 4391

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] D 4391

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

[D13.92] D 123

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.

Discussion—Air permeability of fabric at a stated pressure differential between two surfaces of the fabric is generally expressed in SI units as $cm^3/s/cm^2$ and in inch-pound units as $ft^3/min/ft^2$ calculated in operating conditions. (See **permeability, porosity**) (D13.59) D 737

air-supported roof, *n*—a fabric roof-system that is properly secured and primarily supported and held in place by air pressure. [D13.59] D 4851

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] D 2692

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] D 1283

alpaca, n—the fleece and fiber produced by the alpaca, an animal of the genus Llama (Lama glama pacus).

[D13.13] D 2252

American grain count, n—a direct varn numbering system for

expressing linear density, equal to the mass in grains per 120 yards of sliver or roving. [D13.58] D 2260

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] D 4604

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] D 1447, D3817

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.
[D13.93] D 4854

anidex fiber—See anidex in Annex A1.

animal fiber, *n*—any natural protein-base fiber. [D13.13] D 1574, D4510

ankle, *n*—*in anatomy*, the joint between the foot and the lower leg. [D13.55] D 5219

ankle girth, *n*—*in body measurements*, the circumference of the leg over the greatest prominence of the ankle.

[D13.55] D 5219

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] D 5219

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]
D 2165
aramid fiber—See aramid in Annex A1.

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] D 4851

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] D 5219

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] D 5219

armpit, *n*—*in anatomy*, the hollow under the junction of the arm and the shoulder. [D13.55] D 5219

armscye, *n*—in garment construction, the opening in a garment for the attachment of a fitted sleeve. (Compare armhole.) [D13.55] D 5219

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] D 5219

assignable cause, *n*—a factor which contributes to variation and is feasible to detect and identify. **[D13.93] D 4467**

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] D 4920

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] D 578, D 579, D 580, D 581, D 3374, D 3656, D 4028, D 4029, D 4030, D 4389, D 4909, D 4912, D 4963

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] D 3936, D 5684

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] D 4852

attribute, *n*—a specific characteristic of a thing. (See **attribute data.**) [D13.93] D 4271

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

[D13.93] D 4271, D 4697, D 4854

automatic lock slider, *n*—*in zippers*, a slider that provides involuntary, positive locking action on the chain when the pull is released. [D13.54] D 2050

average, *n*—for a series of observations, the total divided by the number of observations. [D13.93] D 4853

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] D 2130, D 2252, D 3991,

azlon fiber—See azlon in Annex A1.

B-tuft, *n*—a two-pass process for aligning hooked fibers on the Fibroliner FL-101. [D13.11] D 5332

back breakpoint, *n*—in anatomy, the location on the back of the body where the arm separates from the body. [D13.55] D 5219

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 [D13.21] D 418, D 4852, D 5684

back side, n—in textile materials, the side of the material that faces inward in the completed object (Ant. face side).
[D13.53] D 4965

back waist length, n—in body measurements, the vertical distance along the spine from the cervicale to the waist.

[D13.55] D 5219

back width, n—in body measurements, the distance from back-breakpoint to back-breakpoint. [D13.55] D 5219
 backing, n—for pile yarn floor covering, all materials in a pile yarn floor covering other than pile yarn.

[D13.21] D 5251, D 5252, D 5684

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] D 2646, D 5684, D 5848

backing fabric, *n*—*in textile conservation*, a support textile fabric located behind the textile artifact.

[D13.53] D 5429

bagging, *n*—any fabric, of any fiber content, used to protect commodities during shipment and/or storage.

Discussion—The fabrics may be of the woven, knitted, or non-woven type, and are typically produced with cotton, jute, polyethylene, or polypropylene fibers. [D13.59] D 4850

bail, n—in zippers, a portion or portions of the slider to which the pull or pulls are attached. [D13.54] D 2050
bale (jute), n—a bag, sack, etc., containing packages of yarn.

[D13.16] D 541

barb, *n*—*in down*, the primary structure of plumage emanating from a quill point of a down cluster. [D13.61] D 4523

barb, *n*—*in feathers*, the primary structure of plumage emanating from the quill of a feather. [D13.61] D 4523

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] D 3990

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]

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. [D13.16] D 1233

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] D 5253

bath rug, *n*—a scatter rug used in the bathroom. [D13.62] D 5253

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] D 5433

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] D 5433

batting, *n*—a textile filling material consisting of a continuous web of fibers formed by carding, garnetting, air laying, or other means. [D13.61] D 4770

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] D 4770**

bead, *n*—*in a separate element zipper*, an enlarged section on inner edge of each tape to which interlockable elements are affixed. [D13.54] D 2050

bead, *n*—*in continuous element zippers*, an optional enlarged section of the tape located at the outer edge of the continuous interlockable elements and against which the slider flanges bear.

[D13.54] D 2050

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] D 2258

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] D 2258

bedcovering, *n*—a textile product used on a bed over the sheets for warmth or decoration. [D13.63] D 4721

bedspread, *n*—a type of bedcovering that is placed over the blankets and sheets for appearance and warmth.

[D13.63] D 4037, D 4721

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] D 76

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. [D13.60] D 1388 bias, n—in statistics, a constant or systematic error in test results. [D13.93] D 2905, D 2906, D 4697, D 4855

bicomponent fiber, *n*—a fiber consisting of two polymers which are chemically different, physically different, or both.

[D13.58] D 629, D 4466

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] D 5684, D 5848

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

$$P(r) = (n!/[r!(n-r)!]p^{r}q^{n-r}$$
(1)

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.

[D13.93] D 4686

birdseye, *n*—*in knitted fabrics*, an unintentional tuck stitch. [D13.59] D 3990

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] D 276

black felt, n—those classifications of felt manufactured to various shades of the color black. [D13.13] D 2475
 blanket, n—for bedding, an unquilted fabric covering designed primarily to provide thermal insulation.

[D13.63] D 4151, D 4721, D 5432

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] D 3136, D 5253,

blending plan, *n*—the instructions for mixing fibers during specimen preparation. [D13.11] D 5332

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.

[D13.53] D 5646

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.

[D13.54] D 2724, D 3135

- **block,** *n*—*in experimenting*, a group of units that is relatively homogeneous within itself, but may differ from other similar groups. [D13.93] D 4853
- **block,** *v*—to align warp and weft yarns at right angles, by some form of manipulation. [D13.53] D 5429
- 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] D 4028
- **blocking,** *n*—the measurement of the development of surface tack and the thermal softening point of the material.

 [D13.56] D 3690
- **blotch,** *n*—an irregularly shaped offcolored area. [D13.59] D 3990
- 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] D 5219
- body measurements, *n—in anthropometry*, a standardized distance between two specified points on the human anatomy. [D13.55] D 5219
- **body weight,** *n*—*in body measurements*, mass in kilograms (pounds). [D13.55] D 5219
- 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. [D13.54] D 2724, D 3135
- 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, coated fabric.)
 [D13.54] D 2724, D 3135
- **bonnet,** *n*—*in cleaning pile floor coverings*, an absorbent pad which can be mounted under a rotary shampoo machine.

 [D13.62] D 5253
- **book fold,** *n*—a fabric doubled selvage to selvage, then folded back and forth upon itself in predetermined lengths. (See also **shoe fold.**)
 - DISCUSSION—When the piece is completed, the fold-edges on each side are folded once more upon themselves so that the fold-edges are inside, forming a compact package as long as one half the width of the fabric.

 [D13.59] D 4850
- bottom assembly, n—the components of the lowermost part of a slide fastener which determine whether the slide fastener will be non-separable or separable. (See also non-separable zipper and separable zipper.) [D13.54] D 2050
- 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] D 2050
- **bound seam-finish,** *n*—a finish for the raw edges of a plain seam, in which another fabric encloses the raw edges of one or more seam allowances. (Compare **Hong Kong seam-finish.**)

 [D13.53] D 4965
- **boundary friction,** *n*—friction at low sliding speeds (0.02 m/min or less) where lubrication occurs under thin-film lubricant conditions. [D13.58] D 3412

- **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**.) **[D13.60] D 3882, D 3990**
- **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] D 581
- 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.
 [D13.59] D 4850
- **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. [D13.16] D 4268
- **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] D 1578
- **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]
- breaking force, *n*—the maximum force applied to a material carried to rupture. (Compare breaking point.. See breaking strength.) [D13.58] D 885, D 1578, D 2970, D 3217, D 3218, D 3822, D 4848, D 4975 D 5035
- **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] D 4848
- 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)
- breaking tenacity, *n*—the tenacity at the breaking force. [D13.58] D 885, D 1294, D 2101, D 2256, D 2524, D 2970, D 3217, D 3218, D 3822, D 4604, D 4848
- breaking toughness, *n*—the actual work per unit volume or per unit mass of material that is required to rupture the material. [D13.58] D 885, D 885M, D 3822
- **breakout pressure,** *n*—*for inflatable restraints*, the pressure level during deployment which ruptures the module cover. [D13.20] D 5428
- **bridge,** *n*—*in buttons*, the area between the holes partially covered by the sewing threads with dimensions varying upon design and end use. [D13.54] D 5497
- **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] D 2050
- **broken end,** *n*—*in woven fabrics*, a void in the warp direction due to yarn breakage. [D13.59] D 3990
- **broken filament,** *n*—*in multifilament yarn*, breaks in one or more filaments. [D13.58] D 3990
- broken pick, n—in woven fabrics, a discontinuity in the filling direction caused by a break or cut in the filling yarn.

 [D13.59] D 3990



bruise, *n*—*in fabrics*, an area that has been subjected to impact or pressure, which differs from the adjacent normal fabric. [D13.59] D 3990

brush, *n*—a hand-held cleaning tool consisting of a base into which bristles are inserted. [D13.62] D 5253

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] D 5253

restore the appearance of pile fabrics. [D13.62] D 5253 bulk density, *n*—apparent mass per unit volume. [D13.51] D 1518

bulk sample, n—in the sampling of bulk material, one or more portions which (I) 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.)

[D13.93] D 4271

bulk shrinkage, *n*—a measure of potential stretch and power of stretch yarns or a measure of bulk of textured-set yarns. [D13.58] D 4031

bunch, n—a defect in a 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. (See slug, slub.) [D13.58] D 2255

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] D 418

burlap, *n*—a coarse, heavy, plain weave fabric of coarse single bask fiber yarn. [D13.59] D 4850

burning behavior, *n*—all the changes that take place when materials or products are exposed to a specified ignition source. [D13.92] D 4391

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] D 4845**

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 [D13.59] D 3786, D 3787, D 3887

bursting strength, *n*—*in fabric*, the capacity of a material to withstand the ultimate bursting force required to rupture a fabric. [D13.59] D 3786, D 3787, D 3887

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] D 5219

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] D 5219

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. (See also sew-through flange button.)
 [D13.54] D 5171, D 5497

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.

[D13.53] D 5645

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] D 1423

calf girth, n—in body measurements, the maximum circumference around the leg between the knee and ankle, parallel to the floor.
[D13.55] D 5219

calibrate, v—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] D 76, D 4697
calibration, n—the act or process of calibrating; the recorded

calibration, *n*—the act or process of calibrating; the recorded relationship resulting from calibrating. [D13.93] D 4697

calibration cotton standards, n—cotton samples taken from blended bulk source on which fiber properties have been determined under the International Calibration Cotton Standards Program.
 [D13.11] D 1448, D 3025, D 3818, D 4604

cam lock slider, n—in zippers, 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] D 2050

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] D 4372

capacity, n—for tensile testing machines, the maximum force for which the machine is designed. [D13.58] D 76

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] D 2118

carded wool, *n*—scoured wool which has been processed through a carding machine. [D13.13] D 1575

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] D 3136, D 3938, D 5253, D 5489

care label, *n*—in textiles, a label or other affixed instructions that report how a product should be refurbished [D13.62] D 3136, D 5253

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] D 3136, D 5253

care symbol, *n*—a pictorial symbol that gives directions for refurbishing a consumer textile product.

[D13.62] D 5489

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**.) [D13.56] D 3995, D 4232

carpet, *n*—all textile floor coverings not designated as rugs. [D13.21] D 5253, D 5684

- carpet module, *n*—textile floor covering sections usually having dimensions of less than 1 m². [D13.21] D 1335, D 5684
- 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] D 5253
- 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] D 581
- case, *n*—*in textiles*, a shipping unit, usually a carton, box, bale, or other container holding a number of yarn packages.

 [D13.58] D 2258
- 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] D 2816, D 2817
- cashmere coarse-hair, n—those coarse fibers in cashmere hair having widths greater than 30 μm.
 [D13.13]
 D 2816,
 D 2817
- 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] D 2816, D 2817
- **cashmere down,** *n*—those fibers in cashmere hair widths of 30 μm or less. [D13.13] D 2816, D 2817
- **cashmere hair,** *n*—the fibers produced by a form of goat (*Capra hircus*) indigenous to Asia and known as the cashmere goat. [D13.13] D 2816, D 2817
- **center back waist length,** *n*—*in body measurements*, the vertical distance along the spine from the cervicale to the waist.

 [D13.55] D 5219
- 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] D 5219
- cervicale, *n*—*in anatomy*, the prominent point of the seventh or lowest neck vertebra at the back of the body.

 [D13.55] D 5219
- 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] D 5219
- **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] D 5219
- 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] D 122,
 D 2692, D 4393
- **chain,** *n*—*in zippers*, the assemblage formed by interlocking several elements of two stringers. [D13.54] D 2050
- **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.

 [D13.93] D 3777

- chain thickness, *n*—*in zippers*, the measurement from front to back of the chain. [D13.54] D 2050
- **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] D 2050
- characteristic, n—a property of items in a sample or population which, when measured, counted, or otherwise observed, helps to distinguish between the items. [D13.93] D 2906, D 4271
- **charring,** *n*—the formation of carbonaceous residue as the result of pyrolysis or incomplete combustion. [D13.92] D 4391
- **chemical wash,** *n*—*in rug cleaning*, a specialized professional process used on oriental rugs. [D13.62] D 5253
- **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] D 5219
- **chlorine bleach**, *n*—a bleach that releases the hypochlorite ion in solution, for example, sodium hypochlorite.

 [D13.62] D 3136
- **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] D 578
- 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] D 885, D 3822, D 4848
- 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] D 4032
- **clamp,** n—that part of a testing machine used to grip the specimen by means of suitable jaws. [D13.58] D 76
- **clean-finish seam-finish,** n—a finish for the raw edges of the seam allowances of a plain seam, in which the raw seam allowance is folded under and edge stitched.

 [D13.53] D 4965
- 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] D 584,
 D 1060, D 1334
- **cleaning agent,** *n*—a chemical compound or formulation of several compounds which loosens, disperses, dissolves, or emulsies soil to facilitate removal by mechanical action. [D13.62] D 3136, D 4852, D 5253
- 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] D 3990
- **clo,** n—unit of thermal resistance equal to 0.155 Km 2 /W. [D13.51] D 1518
- **closed-face fabric,** *n*—a face or shell fabric of closed construction so that no open-face areas appear.

 [D13.54] D 3135
- **cloth,** *n*—any textile fabric, but especially one designed for apparel, domestic, or industrial use. (See also **fabric**.) [D13.59] D 4850

- **coarse end,** *n*—a larger than normal diameter warp end. (Compare **fine end.**) **[D13.59] D 3990**
- coarse pick, *n—in woven fabrics*, one or more picks of larger diameter than the normal filling yarn in the fabric. [D13.59] D 3990
- 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.
 [D13.56] D 3778
- **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**) [D13.59, D13.20] D 4850, D 4851, D 5446
- cockles, *n—in yarns*, irregular, thick, uneven lumps. [D13.58] D 2255, D3990
- 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] D 3108, D 3412
- **coefficient of length variation,** *n*—a measure of fiber length distribution. **[D13.11] D 1440, D 5332**
- 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 %).

 [D13.93] D 1440, D 2905
- 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] D 1425
- 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] D 2612, D 4120
- 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] D 3888
- 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] D 3990
- **color contrast,** *n*—*in textiles*, a general term for a visible color difference between two adjacent areas.
 - DISCUSSION—for the purpose of test methods D 3939 and D 5362, a color contrast is a visible color difference between a snag and the immediate surrounding area of the fabric that has no defects. Color contrasts often occur when printed fabrics are snagged.

 [D13.59] D 3939, D 5362
- 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] D 1684
- 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] D 4604

- **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] D 4604
- **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] D 2253
- color stability, n—in coated glass textiles, the ability of the applied coating to resist fading from exposure to sunlight and water.
 [D13.18] D 4909
- color staining, n—the undesired pickup of color by a fabric:
 (1) 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] D 3990
- **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] D 1770, D 4845
- 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] D 204
- 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] D 4604

- **combing,** *n*—*in flax*, the processing of two so as to produce tops or sliver which have the staple length and width suitable for use in the worsted spinning system. [D13.17]
- **combing wool,** *n*—wool that is strong and strictly of combing length, that is, 2 in. (50 mm) or more. **[D13.13] D 4845**
- **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]

D 1230, D 4391

- 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] D 4391
- **comforter**, *n*—a bedcovering assembly, consisting of an insulating filler secured between two layers of fabric, used primarily to reduce heat loss. **[D13.63] D 4721**, **D 4769**
- 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.



[D13.58] D 1907, D 2494, D 3887, D 4920

- 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] D 2720
- **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] D 2720
- 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] D 3136
- **commercial mass**, *n*—billed mass as determined by a generally accepted method or as agreed upon between the purchaser and supplier. [D13.58] D 2494, D 2720, D 3887
- 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] D 2118, D 4920
- 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] D 1907, D 1909, D 2494, D 2654, D 3887, D 4920
- complex seam, *n*—a seam made in two or more steps. (Ant. plain seam.) [D13.53] D 4965
- **component**, *n*—as used with textile fiber polymers, a polymer with distinguishable properties. [D13.58] D 4466
- components, *n*—for pile yarn floor covering, the individual yarn or fabric elements into which a pile yarn floor covering an be separated mandates at [D13.21] D 5684, D 5793
- **component of variance,** *n*—a part of a total variance identified with a specified source of variability. **[D13.93] D 4392, D 4854**
- components, *n*—for pile yarn floor covering, the individual yarn or fabric elements into which a pile yarn floor covering can be dissected. [D13.21] D 418, D 5684
- **compression molded button,** *n*—a button or button blank which is produced by compression molding.

 [D13.54] D 5497
- **compression molding,** *n*—the method of molding a material already in a confined cavity by applying pressure and usually heat. [D13.54] D 5497
- **condition,** *v*—to bring a material to moisture equilibrium with a specified atmosphere. **[D13.51] D 4920**
- 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] D 2258
- **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.

 [D13.93] D 4855

- **confidence level,** *n*—the stated proportion of times the confidence interval is expected to include the population parameter. [D13.93] D 2906, D 4855
- **confidence limits,** *n*—the two statistics that define the ends of a confidence interval. [D13.93] D 4855
- connecting ring, *n*—in zippers, a device shaped like the letter "D" used to secure a pull, having more than one component in its design, to the bail of the slider. [D13.54] D 2050
- **conservation,** *n*—the examination, preservation, and restoration of cultural objects with minimal sacrifice of their aesthetic and historic integrity. [D13.53] D 5038
- conservator, n—a person whose activity involves the science, technology, and documentation associated with the conservation of cultural objects.
 [D13.53] D 5038
- constant-rate-of-extension type tensile testing machine (*CRE*), *n* a testing machine in which the rate of increase of specimen length is uniform with time. [D13.21] D 1294, D 1335, D 1682, D 2524, D 3936, D 5034, D 5035, D 5684
- 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.). [D13.58] D 76, D 1294, D 1682, D 2524, D 5034, D 5035
- 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] D 76, D 1294, D 1682, D 2524, D 5035
- 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] D 76, D 1294, D 1682, D 2524, D 3787, D 5034, D 5035
- **constructional units,** *n*—*in pile floor covering*, the needles, pitch, rows, shot, etc. into which the warp and filling yarns are commonly grouped. [D13.58] D 418
- consumer care, *n*—of consumer textile products, cleaning and maintenance procedures as customarily undertaken by the ultimate user. [D13.62] D 3136, D 5253
- consumer textile product, n—a textile product intended to satisfy human wants and needs. [D13.62] D 3136, D 5489
- consumer's risk (β), n— the probability of accepting a lot when the process average is at the limiting quality level. [D13.93] D 3777, D 4271
- **container,** *n*—a receptacle designed to hold a material, or to give integrity to the material. **[D13.58] D 3333**
- **continuous element,** *n*—a configured element formed continuously along a length of monofilament. [D13.54] D 2050
- **continuous element zipper,** *n*—*in zippers*, a zipper 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. (Compare separate element zipper.) [D13.54] D 2050

continuous filament yarn, *n*—a yarn made of filaments that extend substantially throughout the length of the yarn. [D13.18] D 578, D 579, D 580, D 581, D 4029, D 4389

continuous variate, *n*—a variate that is a measurement based on a scale that is assumed to be continuous. [D13.93]

D 4271

contract furniture, *n*—furniture manufactured for use in non-household applications. [D13.56] D 4771

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] D 4604

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.
 [D13.53] D 3181

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

D 5432

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]
 D 885, D 4776,

cord, *n*—*in zippers*, a strand of multiple yarns for use in forming a bead. [D13.54] D 2050

cord, n—of glass fiber, a strand made by combining multiple ends of filament strands, including cabled yarns, primarily for structural application.
[D13.18] D 4030

cord twist, n—the amount of twist in a cord made from two or more single or plied yarns. [D13.19] D 885, D 2970

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.
[D13.59] D 4685, D 4850

core, n—in sampling fiber packages, the portion of wool or other fiber obtained using a sampling tube. [D13.13]
D 1060

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

[D13.19] D 2969, D 4845

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] D 204

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. [D13.16] D 4268

cortex, *n*—in mammalian hair fibers, the principal body of the fiber made up of elongated cells. [D13.13] D 4510

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] D 1445

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] D 4604

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] D 1059, D 2260** *cotton fiber*—See Table A2.4 in Annex A2.

cotton maturity, n—the degree of fiber wall development.

[D13.11] D 1442, D 2480, D 3817, D 3818

cotton system, *n*—a spinning system adapted to fibers less than 65 mm (2.5 in.) in length. **[D13.58] D 2645**

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]

D 2495

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

[D13.17]

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] D 3775

count, *n*—*in knitted fabrics*, the number (counted units) of wale loops and course loops per 25 mm (1 in.). [D13.59] D 3787

course, *n*—*in knitted fabrics*, a row of successive loops in the width direction of the fabric. [D13.59] D 2594

cover, n—in yarns, the outside layer of fibers that form the surface of a yarn. [D13.58] D 2255

covered yarn, *n*—a compound structure which contains distinguishable inner and outer fibrous elements which can be different. [D13.58] D 204

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

[D13.59] D 3990

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.

[D13.54] D 2724, D 3135

craftsman, *n*—an artisan who is skilled in creating new cultural objects. [D13.53] D 5038

crash towel, *n*—a plain weave nonterry product with hems or selvages which has a rough texture caused by uneven yarns. [D13.63] D 5433

CRE—abbreviation for constant-rate-of-extension.

[D13.58] D 1775

crease, *n*—a fabric defect evidenced by a break, line, or mark in a fabric generally caused by a sharp fold.

[D13.59] D 3990

crease mark, *n*—a visible deformation left in a fabric after a crease has been incompletely removed during fabric processing. [D13.59] D 3990

crease retention, *n*—that property of a fabric which enables it to maintain an inserted crease. **[D13.59] D 4850**

crimp, *n*—as applied to a continuous-element zipper, the predetermined formation of the monofilament cross-section at the point where the continuous element is interlocked.

[D13.54] D 2050

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.

Discussion—Crimp has many characteristics, among which are its amplitude, frequency, index, and type. In test method D 3937, crimp is characterized by a change in the directional rotation of a line tangent to the fiber as the point of tangent progresses along the fiber. Two changes in rotation constitutes one unit of crimp.

[D 13.58] D 3937

crimp contraction, *n*—an indicator of crimp capacity or a characterization of a yarn's ability to contract under tension.

[D13.58] D 4031

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] D 4031

crimp frequency, n—in manufactured staple fibers, the number of crimps or waves per unit length of extended or straightened fiber. [D13.58] D 3937

crimp index, *n*—an indirect measure of the amplitude of the crimp. **[D13.58] D 3937**

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] D 4031

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. [D13.59] D 5430

critical difference, n—the observed difference between two test results, which should be considered significant at the specified probability level. [D13.93] D 2906

CRL—abbreviation for constant-rate-of-loading. [D13.58]
D 0076, D 1775

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] D 3990

cross-chest width, n—in body measurements, the distance from front break-point to front break-point. [D13.55]

D 5219

cross-dye effect, *n*—variation in dye pick-up between yarns or fibers, resulting from their inherent dye affinities.

[D13.59] D 3990

cross-machine direction, CD, *n*—the direction in the plane of the fabric perpendicular to the direction of manufacture.

crotch, *n*—*in anatomy*, the body area adjacent to the vertex of the included angle between the legs. [D13.55] D 5219

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] D 579, D 4029

crown, *n*—*in anatomy*, the top of the head. [D13.55] D 5219

crowsfeet, *n*—*in fabrics*, fine wrinkles of varying degree of intensity, size, and shape. [D13.59] D 3990

crush, n—in pile yarn floor coverings, loss of tuft definition due to entaglement and compression of pile fibers.

[D13.21] D 5684, D 6119

crushed feathers, *n*—feathers and feather fiber resulting from curling, crushing, or chopping feathers without removing the quill. [D13.61] D 4523

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.

[D13.53] D 5038

curing, n—see the preferred term vulcanization.
 curled selvage, n—self-descriptive. [D13.59] D 3990
 cushion, n—for inflatable restraints, the inflatable fabric envelope portion of a module. [D13.20] D 5426,
 D 5428, D 5645

cut, n—in asbestos and glass yarns, the number of 100-yd lengths of yarn per pound; an indirect yarn numbering system.
[D13.58] D 1059, D 2260

cut, *n*—*in wool yarns*, the number of 300-yd lengths of yarn per pound; an indirect yarn numbering system. [D13.58] D 1059, D 2260

cut, *n*—as applied to woven fabric, a length approximately 60 yard in the greige. [D13.59] D 4850

cut-off, *n*—*in zippers*, the measurement of a separate element from the head side to the pocket side of the legs.

[D13.54] D 2050

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] D 1335, D 5684

cut selvage, n—cuts or breaks that occur in the selvage only. [D13.59] D 3990

cut strip test, n—in fabric testing, a strip test in which the specimen is cut to the specified testing width.

[D13.60] D 5035

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]

D 4510

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] D 4268

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] D 5253

damaged feathers, *n*—feathers that have been broken, damaged by insects, by mildew or rot, or otherwise materially injured. [D13.61] D 4523

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] D 4391

dead cotton, n—a small nep of cotton fibers which is gathered on the surgface of the fabric and which is different in color from the surrounding fabric [D13.59] D 3990

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] D 3990

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] D 5426

defect, in inspection and grading, *n*—the departure or non-conformance of some characteristic from its intended level or state.

Discussion—In inspection and grading the characteristic is usually a visual one. However, defects such as heat damage or poorly finished textiles grading by hand may be required. [D13.59] D 5430

deformation, *n*—a change in shape of a material caused by forces of compression, shear, tension, or torsion. **[D13.57] D 4848**

decorticating, *n*—*in flax*, the process of mechanically separating fiber bundles from straw. **[D13.17]**

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.

[D13.93] D 4853, D 4854, D 4855

delamination strength, *n*—the tensile force required to separate the component layers under specified force.

[D13.21] D 3936, D 5684

delayed deformation, *n*—deformation which is time-dependent and exhibited by material subject to a continuing force. [D13.58] D 4848

delicate or gentle cycle, *n*—a cycle in which agitation is slow and time is reduced. [D13.63] D 3993

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.)

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] D 1059, D 2260

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.
[D13.59] D 4850

density, n—mass per unit volume. [D13.51] D 276

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] D 418

deployment, *n*—*for inflatable restraints*, the sequence of events related to the activation of a module. [D13.20]

D 5428

de-seeding, *n*—*in flax*, the process of removing seeds and seed-holding structures from plants. [D13.17]

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] D 4920

detergent, n—in textile product care, a cleaning agent con-

taining one or more surfactants as the active ingredient(s).

[D13.62] D 3136

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. (See also observation.) [D13.93] D 2905, D 4271, D 4854

dew point, *n*—the temperature below which condensation of water vapor begins to take place when the atmosphere is cooled. [D13.51] D 2654, D 4920

diamond, *n*—*in zippers*, the wedge-shaped portion of a slider between the throats. [D13.54] D 2050

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] D 1464

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] D 3692 **dimensional change,** *n*—a generic term for changes in length or width of a specimen subjected to specified conditions.

Discussion—Dimensional change is usually expressed as a percent of the original dimension of the specimen. When a dimension increases it is often referred to as growth. When a dimension decreases it is often referred to as shrinkage.

[D13.59] D 1117, D 2646

dimensional change, *n*—in pressing and finishing of garments, the change in dimensions of a fabric caused by pressing and finishing during garment manufacture.

[D13.56] D 3562, D 3779, D 3781, D 3782, D 3995, D 4119, D 4154

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] D 461

dimensional stability, n—the ability of a material to retain its length and width dimensions under specified conditions.

Discussion—The dimensions are length and width and the specified conditions are those of cycled humidity and temperature.

[D13.59] D 6207

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] D 885, D 2910

dip pick-up, *n*—*in glass cords*, the amount of dip solids present as supplied. [D13.19] D 2970

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] D 885

direct cabling technology, *n*—a single-step manufacturing system that produces a twist-balanced cabled yarn (2 fold) from twistless single yarns.

Discussion—Direct cabling of yarn is carried out in a one-step twisting operation as compared to conventional cabling of yarn that is carried out in multiple twist operations. [D13.59] D 1423

direct yarn numbering system, *n*—a system that expresses the linear density of yarn in mass per unit length.



Discussion—The preferred units of measurements for the direct varn measuring system are grams and meters. Tex (weight in grams for 1000 metres) and Denier (weight in grams for 9000 metres) are recommended to show linear density in the direct numbering system. These can be calculated by dividing the mass of a yarn by its length. Conversion factors to convert between direct and indirect numbering systems can be found in Standard Tables D2260. [D13.58]

D 1059, D 1907, D 2260

direction of lay, n—the helical disposition of the components of a strand or cord [D13.19] D 2969

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.

Discussion—The fabric may be pulled in both directions in many [D13.59] D 4034 cases.

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] D 1422, D 1423

discrete sample, n—one or more units taken from a material that consists of separately identifiable units. (Compare to bulk sample.) [D13.93] D 4271

discrete variate, n—a variate that is a measurement based on a scale that has a limited or finite number of steps; such as a count, a rating scale, or a ratio of successes to total [D13.93] D 4271 observations.

distortion, n—in fabrics, a general term for a visible defect in the texture of a fabric.

Discussion—For the purpose of test methods D 3939 and D 5362, Snags are composed of different combinations of protrusions and distortions. A distortion is characterized by a group of fibers, yarn, or a yarn segment that is displaced from its normal pattern so that there is a visible change in the texture of the fabric; however, the displaced group of fibers, yarn, or yarn segment does not extend above the fabric surface. Distortions include conditions where (1) tension on a snagged varn has changed the size of some loops within a knitted fabric and the result is a pucker on the surface of the fabric, and (2) tension on a snagged yarn has caused a yarn to break off within a woven fabric and the result is a change in the texture where the yarn used to be.

[D13.59] D 3939, D 5362

distortion, *n*—in textile battings, defects such as holes, lumps, or thin areas caused by movement of fibers. [D13.61] D 4770

doctor streak, *n*—*in printed cloth*, a wavy white or colored streak in the warp direction of printed cloth caused by a [D13.59] D 3990 defective doctor blade.

documentary characteristic, n—any historic, stylistic, iconographic, technological, intellectual, aesthetic, or religious data pertaining to an object under consideration for conservation. [D13.53] D 5038

documentation, n—the record of information (historic, stylistic, iconographic, technological, intellectual, aesthetic, scientific, or spiritual) about any object of cultural or natural heritage. [D13.53] D 5038

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] D 3888 **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)

Discussion—In tubular knits, there may be defferential bowing between the top and the bottom of the tube. [D13.60] D 3882, D 3990

double braid, *n*—*in rope*, a braided construction consisting of two hollow braided ropes, one inside the other. [D13.16] D 4268

double hooked bow, n—one hooked bow at each side of the fabric that are in opposite directions. (See also **hooked bow**) [D13.60] D 3882, D 3990

double pick, *n*—in woven fabrics, two picks wrongly placed in the same shed. (See also mispick. Compare jerk-in.) [D13.59] D 3990

double reverse bow, n—two fabric bows arcing in opposite directions. (See also bow. Compare double bow.) [D13.60] D 3882

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. [D13.53] D 4965

double-stroke, *n*—in flex and abrasion testing, an abrasion cycle that forward and one backward motion. [D13.60] D 3885

double welt seam, n—a complex seam formed on the inside of the object, with one trimmed raw seam edge enclosed and two rows of stitching visible on the face side. (Compare welt [D13.53] D 4965

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 [D13.61] D 4523

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] D 4523

down, nestling, n—a down not fully developed with a sheath and with soft barbs emanating from the sheath. [D13.61] D 4523

draw-back, n—a weave distortion characterized by tight and slack places in the same warp yarn. [D13.59] D 3990

draw ratio (DR), n—the relation of the final length per unit mass to original length per unit mass of a material resulting [D13.58] D 3218, D 5344 from drawing.

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] D 5344

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

[D13.58] D 3218, D 5344

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, vocational career apparel) [D13.56] D 3995, D 4232

- **dress glove,** *n*—a covering for the hand, often extending part way up the arm, worn primarily for formal or dress occasions. [D13.56] D 4115
- 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. [D13.56] D 3477, D 4231
- 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. [D13.56] D 3477, D 4231
- **drop,** *n*—*in body measurements*, the difference between the chest girth and the waist girth. [D13.55] D 5219
- **drop**, *n*—that part of a bedcovering that hangs perpendicular to the floor. [D13.63] D 4721
- **dropped stitch,** *n*—*in knitted fabrics*, an unknitted stitch. [D13.59] D 3990
- 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]
 D 5253
- **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] D 5253
- **dry solvent,** *n*—any organic solvent used to dissolve another material. (See **solvent**). [D13.62] D 5253
- drycleanable button, *n*—a button that can be solvent-cleaned without damage such as dissolving or loss of finish. (See dry-cleaning, finish). [D13.54] D 5497
- drycleaning, n—in the care of textiles, the cleaning of consumer textiel products with organic solvents such as petroleum solvent or perchloroethylene. [D13.62] D 3136, D 3938
- **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**) [D13.59] D 4850
- **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.**) [D13.93] D 4853
- **duplicate,** *vt*—*in experimenting or testing*, to repeat a run so as to produce a duplicate. (Compare **replicate.**) [D13.93] D 4853
- **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**.)
 - Discussion—The use of the term permanent-press, adj, as a substitute for durable-press is not recommended. [D13.59] D 4850
- **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 gather drop to the floor. [D13.63] D 4721
- **dye streak,** *n*—an unintended stripe in a fabric due to uneven absorption of a colorant. [D13.59] D 3990
- **dyestain,** *n*—an area of discoloration due to uneven absorption of a colorant. [D13.59] D 3990

- edge-stitched seam-finish, *n*—a finish for the raw edges of a plain seam, in which machine stitching is placed close to the raw edge of each seam allowance. (Compare zigzagged seam-finish.)

 [D13.53] D 4965
- 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] D 76, D 1775
- 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] D 1577
- 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] D 76, D 4849
- 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] D 1518
- 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] D 579, D 4029
- **elastic fabric,** *n*—a fabric made from an elastomer either alone or in combination with other textiles. (See also **elastomeric yarn**.)

Discussion—At room temperature an elastic fabric will stretch under tension and will return quickly and forcibly to substantially its original dimensions and shape when tension is removed.

Elastic fabrics may be manufactured by weaving, braiding, knitting, or other processes. [D13.59] D 1775, D 4850, D 4964, [D13.58] D 4850

- elastic limit, n—the greatest stress that can be applied to a material without permanent deformation (Compare yield point) [D13.58] D 4848
- elastic tape, *n*—a tape containing rubber or other elastomers to permit rubber-like stretch in at least one direction.

 [D13.59] D 4850
- **elastic webbing,** *n*—a webbing containing rubber or other elastomers to permit rubber-like stretch in at least one direction. [D13.59] D 4850
- **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] D 4848
- 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]
- **elbow**, *n*—*in anatomy*, the joint which articulates between the upper arm and the lower arm. [D13.55] D 5219
- 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] D 5219
- electroplated button, *n*—plastic buttons which have been made conductive by chemical treatment followed by the electroplating of metallic coatings. [D13.54] D 5497