This document is not an ASTM standard and is intended only to provide the user of an ASTM standard an indication of what changes have been made to the previous version. Because it may not be technically possible to adequately depict all changes accurately, ASTM recommends that users consult prior editions as appropriate. In all cases only the current version of the standard as published by ASTM is to be considered the official document.



Designation:D4850-03a (Reapproved 2007)

Standard Terminology Relating to Fabric Designation: D 4850 – 08

Standard Terminology Relating to Fabrics and Fabric Test Methods

This standard is issued under the fixed designation D 4850; 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 (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This terminology covers definitions of technical terms used in the industry related to textile fabrics. Terms that are generally understood or adequately defined in other readily available sources are not included. Other terminology standards that have terms related to textile fabrics are shown in 2.1

2. Referenced Documents

- 2.1 ASTM Standards:
- D 737 Test Method for Air Permeability of Textile Fabrics
- D 1117 Guide for Evaluating Nonwoven Fabrics
- D 1336 Test Method for Distortion of Yarn in Woven Fabrics
- D 1388 Test Method for Stiffness of Fabrics
- D 1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum Type (Elmendorf) Apparatus
- D 1775 Test Method for Tension and Elongation of Wide Elastic Fabrics²
- D 1777 Test Method for Thickness of Textile Materials
- D 2261 Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)
- D 2594 Test Method for Stretch Properties of Knitted Fabrics Having Low Power
- D 2646 Test Methods for Backing Fabric Characteristics of Pile Yarn Floor Coverings
- D 2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics 9d-a762-b5ee9aaaaeb7/astm-d4850-08
- D 3107 Test Methods for Stretch Properties of Fabrics Woven from Stretch Yarns
- D 3511 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Brush Pilling Tester
- D 3512 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Random Tumble Pilling Tester
- D 3514 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Elastomeric Pad
- D 3773 Test Methods for Length of Woven Fabric
- D 3774 Test Method for Width of Textile Fabric
- D 3775 Test Method for Warp (End) and Filling (Pick) Count of Woven Fabrics
- D 3776 Test Methods for Mass Per Unit Area (Weight) of Fabric
- D 3786 Test Method for Bursting Strength of Textile FabricsDiaphragm Bursting Strength Tester Method
- D 3787 Test Method for Bursting Strength of TextilesConstant-Rate-of-Traverse (CRT) Ball Burst Test
- D 3789 Practice for Labeling Cans of Consumer Spray Paint⁰
- D 3882 Test Method for Bow and Skew in Woven and Knitted Fabrics
- D 3883 Test Methods for Yarn Crimp and Yarn Take-up in Woven Fabrics
- D 3884 Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)
- D 3885 Test Method for Abrasion Resistance of Textile Fabrics (Flexing and Abrasion Method)

¹ This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.59 on Fabric Test Methods, General. Current edition approved July 1, 2007.2008. Published August 2007.2008. Originally approved in 1989. Last previous edition approved in 20032007 as D 4850 - 03a(2007).

² Withdrawn.

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States.

D 4850 – 08

- D 3886 Test Method for Abrasion Resistance of Textile Fabrics (Inflated Diaphragm Apparatus)
- D 3887 Specification for Tolerances for Knitted Fabrics
- D 3939 Test Method for Snagging Resistance of Fabrics (Mace)
- D 3990 Terminology Relating to Fabric Defects
- D 4032 Test Method for Stiffness of Fabric by the Circular Bend Procedure

D 4033 Test Method for Resistance to Yarn Slippage at the Sewn Seam in Upholstery Fabrics (Dynamic Fatigue Method) (Discontinued 2001)

- D 4034 Test Method for Resistance to Yarn Slippage at the Sewn Seam in Woven Upholstery Fabrics (Discontinued 2001)
- D 4157 Test Method for Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder Method)
- D 4158 Guide for Abrasion Resistance of Textile Fabrics (Uniform Abrasion)
- D 4390 Practice for the Evaluation of the Performance of Terry Bathroom Products for Home Use⁰
- D 4772 Test Method for Surface Water Absorption of Terry Fabrics (Water Flow)
- D 4350 Test Method for Corrosivity Index of Plastics and Fillers
- D 4685 Test Method for Pile Fabric Abrasion
- D 4848 Terminology Related to Force, Deformation and Related Properties of Textiles
- D 4850 Terminology Relating to Fabrics and Fabric Test Methods
- D 4851 Test Methods for Coated and Laminated Fabrics for Architectural Use
- D 4964 Test Method for Tension and Elongation of Elastic Fabrics (Constant-Rate-of-Extension Type Tensile Testing Machine)
- D 4966 Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)
- D 4970 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Martindale Tester
- D 5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- D 5035 Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
- D 5103 Test Method for Length and Length Distribution of Manufactured Staple Fibers (Single-Fiber Test)
- D 5278 Test Method for Elongation of Narrow Elastic Fabrics (Static-Load Testing)
- D 5362 Test Method for Snagging Resistance of Fabrics (Bean Bag)
- D 5378 Performance Specification for Woven and Knitted Shower Curtains for Institutional and Household Use
- D 5426 Practices for Visual Inspection and Grading of Fabrics Used for Inflatable Restraints
- D 5430 Test Methods for Visually Inspecting and Grading Fabrics
- D 5446 Practice for Determining Physical Properties of Fabrics, Yarns, and Sewing Thread Used in Inflatable Restraints
- D 5587 Test Method for Tearing Strength of Fabrics by Trapezoid Procedure
- D 5684 Terminology Relating to Pile Floor Coverings
- D 5793 Test Method for Binding Sites per Unit Length or Width of Pile Yarn Floor Coverings

D 6207Test Method for Dimensional Stability of Fabrics to Changes in Humidity and Temperature<u>Test Method for</u> Dimensional Stability of Fabrics to Changes in Humidity and Temperature

D 6614 Test Method for Stretch Properties of Textile Fabrics CRE Method

D 6797 Test Method for Bursting Strength of Fabrics Constant-Rate-of-Extension (CRE) Ball Burst Test

3. Terminology

3.1 *Definitions:*

abrasion, *n*—the wearing away of any part of a material by rubbing against another surface. 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. D 3885

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 ft³/min/ft² calculated in operating conditions. (See **permeability, porosity**.) **D 737**

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

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.) D 4851

bagging, *n*—any material, such as fabric or other suitable material used to protect commodities during shipment and/or storage.

DISCUSSION—Fabrics may be of the woven, knitted, or non-woven type, and are typically produced with cotton, jute, polyethylene, or polypropylene fibers. **D** 4850

∰ D 4850 – 08

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. **D 1388**

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.

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. **D 2724**

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.) D 2724

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. **D 4850**

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.) D 3882, D 3990 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. D 4850 **broken end**, *n*—*in woven fabrics*, a void in the warp direction due to yarn breakage. D 3990 burlap, n-a coarse, heavy, plain weave fabric of yarns, such as bast or cotton fiber yarn. D 4850 **bursting strength**, *n*—the force or pressure required to rupture a textile by distending it with a force, applied at right angles to the plane of the fabric, under specified conditions. DISCUSSION—The angle of application of force, and the area of the fabric upon which the force is applied varies continuously as the fabric stretches when it is tested as directed in this method. D 6797 **bursting strength**, *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. D 3786, D 3787, D 3887 circular bend, *n*—simultaneous, multidirectional deformation of a fabric in which one face of a flat specimen becomes concave

and the other becomes convex. **D** 4032

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**.) **D 4850, D 4851, D 5446**

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. D 3939, D 5362

constant-rate-of-extension tensile testing machine (CRE), n—a testing machine in which the rate of increase of the specimen	
length is uniform with time.	D 6797
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.).	D 3787
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.	D 4685, D 4850
count, <i>n</i> — <i>in woven fabric</i> , 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.	D 3775
count, <i>n</i> —in knitted fabrics, the number (counted units) of wale loops and course loops per 25 mm (1 in.).	D 3787
course, <i>n</i> —in knitted fabrics, a row of successive loops in the width direction of the fabric.	D 2594
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.	
	13.54] D 2724
crease retention, <i>n</i> —that property of a fabric which enables it to maintain an inserted crease.	D 4850
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.	D 5430
cut, <i>n</i> —as applied to woven fabric, a length approximately 60 yard in the greige.	D 4850
	D 5035

cut strip test, n— in fabric testing, a strip test in which the specimen is cut to the specified testing width. **D** 5035

defect, *n*—*in inspection and grading*, 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 D 5430 grading by hand may be required.

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. D 1117, D 2646

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. D 6207

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. D 4850

direction of slippage, n - at the seam, the 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 cases.

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 yarn 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 D 3939, D 5362 the yarn used to be.

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. D 3882, D 3990

double hooked bow, n—one hooked bow at each side of the fabric that arc in opposite directions. (See also hooked bow.) D 3882. D 3990

double reverse bow, n-two fabric bows arcing in opposite directions. (See also bow. Compare double bow.) D 3882 double-stroke, n— in flex and abrasion testing, an abrasion cycle that consists of one forward and one backward motion. D 3885

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 D 4850 duck.)

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.)

D 4850 DISCUSSION—The use of the term **permanent-press**, *adj*, as a substitute for **durable-press** is not recommended.

elastic fabric, *n*—a fabric made from an elastomer either alone or in combination with other textiles.

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.

D 1775, D 4850, D 4964 Elastic fabrics may be manufactured by weaving, braiding, knitting, or other processes.

elastic tape, *n*—a tape containing rubber or other elastomers to permit rubber-like stretch in at least one direction. D 4850 elastic webbing, n—a webbing containing rubber or other elastomers to permit rubber-like stretch in at least one direction.

D 4850 end, *n*—*in woven fabric*, an individual warp yarn (single or ply) or cord. D 3775 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 D 3775 fabric, *n*—in textiles, planar structure consisting of yarns or fibers. D 6797 **fabric**, *n*—*in textiles*, a planar structure consisting of yarns or fibers. D 737, D 1388, D 1424, D 3787 D 4850, D 5587 fabric growth, n—the difference between the original length of a specimen and its length after the application of a specified

tension for a prescribed time and the subsequent removal of the tension.

Discussion—Fabric growth is usually expressed as a percentage of the length of the specimen prior to loading. (see also permanent deformation) D 6614

fabric growth, *n*—the increase in the original length of a specimen after the application of a specified force for a prescribed time and the subsequent removal of the tension.

Discussion—Fabric growth usually is expressed as a percentage of the length of the specimen prior to application of the force. (See also permanent

D 4034

🌮 D 4850 – 08

deformation.)

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. D 4851

fabric stretch, *n*—the increase in length of a specimen of fabric resulting from a tension applied under specified conditions.

D 6614 DISCUSSION—Fabric stretch is usually expressed as a percentage of the length of the specimen prior to loading.

fabric stretch, *n*—the increase in length of a specimen of fabric resulting from a force applied under specified conditions.

DISCUSSION—The difference is usually expressed as a percentage of the initial length of the fabric specimen. Fabric stretch differs from fabric elongation in that the latter (up to the point of rupture) reflects the instantaneously existing amount of stretch under a constantly increasing tension D 2594, D 3107 force.

fatiguing force, *n*— in testing sewn seams, the force that is repeatedly applied to a test specimen. D 4033 filler, n-in testing sewn seams nonfibrous material, such as insoluble clays or gypsum, together with starches, gums, and so forth,

added to a fabric to increase its weight or to modify the appearance or handle of the fabric. (Syn . back-sizing.) (Compare sizing.) D 4850

filling, *n*—*in woven fabric*, an individual yarn running from selvage to selvage at right angles to the warp in a woven fabric. D 3775

filling elongation and tension, *n*— stretch or tension measured at right angles to the warp direction of the fabric. D 1775 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.)

filling tests, *n*— in fabric testing, tests in which the filling yarns are torn.

- 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. D 4033
- 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). D 3887
- finished yield, *n* in knitted fabrics, the number of finished square metres per kilogram (square yards per pound) of finished fabric. D 3887

flagging, *n*—*in sewn seams*, a mode of failure evidenced by slippage of one or more yarns entirely out of the original seam. D 4033

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.) D 4850

D 3885, D 4850 **flexibility**, *n*—that property of a material to endure repeated flexing, bending, or bowing without rupture. flexural rigidity, n— general—resistance to bending; specific— work per unit width which is required to bend a fabric to unit radius of curvature. D 1388

float, *n*—*in woven fabric*, the portion of a warp or filling yarn that extends unbound over two or more filling or warp yarns. D 4850

foam tear, n—a condition wherein the foam portion of a laminated fabric ruptures prior to the failure of the bond. D 2724 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. D 1775

fused fabric, n—a type of bonded fabric made by adhering a fusible fabric to another fabric, such as for use in an interlining. D 2724

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. D 2724

gage, *n*—*in knitted fabrics*, a measure of fineness expressing the number of needles per unit of width (across the wales). D 4850

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. D 4850

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. D 4850

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. D 4850

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.

DISCUSSION—For example, if the specimen width is 100 mm (4.0 in.) and the width of the jaw faces 25 mm (1.0 in.), the specimen is gripped in the clamp with approximately 37.5 mm (1.5 in.) of fabric protruding from each side of the jaws. D 4850, D 5034

grade, *n*—*in warp knitting*, a term used to indicate the defect index evaluation of fabric determined by the number of defects per

D 4850

D 1424

∰ D 4850 – 08

unit, for example per pound, per linear yard, or per square yard.

grade, v-to assign a numerical value based on number, size, and severity of defects seen during a visual inspection. D 5430

growth, n—of textiles, the difference between the original length of a specimen and its length after the application of a specified force for a prescribed time, and the subsequent removal of the force. (See also permanent deformation and dimensional change.) D 2594, D 3107

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.)D 3882

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.

DISCUSSION—A fabric woven from impregnated yarns, but not impregnated after weaving, is not an impregnated fabric. D 4850

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. **D 5430**

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. D 2724

jacket, n—a textile, woven or felted into tubular or sleeve form, ready for covering and shrinking on a machine roll. **D 4850 knitted fabric**, n—a structure produced by interlooping one or more ends of yarn or comparable material. **D 3786**, **D 3787**,

D 3789, D 3882, D 3887, D 4850, D 5378

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.
D 4850

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. (

D 2724

D 2724

<u>laminated fabric, n</u>— 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.
D 4851

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.
D 3773, D 3887

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.
D 1424

lisle, *n*—a fine high-twisted and hard-twisted thread, at least two-ply, used especially for hosiery.

DISCUSSION—Lisle refers also to knit goods used in gloves or hose made from lisle thread (first made in Lisle, France). Threads have been made with cotton or wool. For hosiery, a minimum twist for a given count is specified by the Federal Trade Commission. **D** 4850

loop tension, n— in elastic material testing, the total tension at any specified extension that is exerted on a specimen in a loop formation.
D 4964

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.

low-power stretch, *n*—that property of a fabric whereby it exhibits high fabric stretch and good recovery from low tension. D 2594

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. **D 5430**

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. **D 2261**

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. **D 5430**

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.

DISCUSSION—The slit modification reduces the fabric assistance inherent in the grab test procedure to a practical minimum. D 4850, D 5034

narrow elastic fabric, *n*—an elastic fabric that is less than 150 mm, (6 in.), in width. (Compare wide elastic fabric.) D 1775, D 4848, D 5278, D 4964

narrow fabric, n-a fabric not exceeding 300 mm (12 in.) in width.

DISCUSSION—The category of narrow fabrics includes tapes, ribbons, and webbings. Narrow fabrics can be produced from any fiber, including elastomers, by weaving, braiding, knitting, or other methods. They can also be made by cutting or slitting wider fabrics into narrow strips. The term "narrow fabric" is incorrectly applied in the trade to fabrics which are narrower than the normal width for a specific fabric type. For example, woolens

D 4350, D 4850