

# Standard Terminology Relating to Fabric Defects<sup>1</sup>

This standard is issued under the fixed designation D3990; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

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

### 1. Scope

1.1 This terminology covers defects in both woven and knit fabrics. Descriptions of the defects, illustrations, and related material are given under the most frequently used terms; synonym(s) are listed in parentheses and cross referenced.

### 2. Referenced Documents

2.1 ASTM Standards: D1776 Practice for Conditioning and Testing Textiles

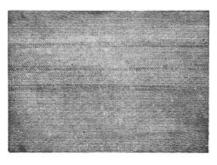
#### 3. Terminology

3.1 Definitions:

**abrasion mark,** *n*—an area damaged by friction. (*Syn.* chafe mark)

apron mark—See decating mark. baggy cloth—See wavy cloth. baggy selvage—See slack selvage. balling up—See fuzz ball.

- **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 streak, mixed filling**)
  - DISCUSSION—The term "barré" is sometimes used as a synonym for "warp streaks" in warp knit and woven fabrics. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.



Barré

*beaded selvage*—See **loopy selvage**. *bias*—See **skew**.

birdseye, n-in knitted fabrics, an unintentional tuck stitch.

blanket mark—See sanforizing mark.

- **blotch**, *n*—an offcolored area of any shape caused by grease or oil. (*Syn.* **oil spot**)
- **bow**, *n*—a fabric condition resulting when filling yarns or knitting courses are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric. (See also **double bow**)

bow, double—See double bow.

box mark—See shuttle mark.

*break-out*—See smash.

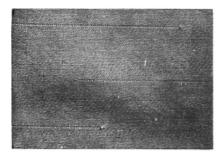
- **broken end,** *n*—*in woven fabrics*, a void in the warp direction due to yarn breakage.
- **broken filament**, *n—in multifilament yarn*, breaks in one or more filaments. (*Syn.* strip back, skin back)

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.59 on Fabric Test Methods, General.

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# D3990 – 12 (2016)

**broken pick**, *n*— *in woven fabrics*, a discontinuity in the filling direction caused by a break or cut in the filling yarn.



Broken Pick

broken selvage-See cut selvage.

**bruise**, *n*—*in fabrics*, an area that has been subjected to impact or pressure, that differs from the adjacent normal fabric. (*Syn.* **pressure mark.**)

#### bunch—See slug.

#### chafe mark—See abrasion mark.

- **clip mark,** *n*—a visual 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.*)
- coarse end, n—a larger than normal diameter warp end. (Syn. heavy end) (Compare fine end) coarse filling—See coarse pick.
- **coarse pick,** *n in woven fabrics*, one or more picks of larger diameter than the normal filling yarn in the fabric. (*Syn.* thick filling)
- cockles, *n*—*in yarns*, irregular thick, uneven, lumps.
- **color bleeding,** *n*—the loss of color from a dyed fabric when immersed in water, dry-cleaning solvent, or similar liquid medium, with consequent coloring of the liquid medium. (Compare **color staining.**)
- **color staining**, *n*—the undesired pickup of color by a fabric: (1) when immersed in water, dry-cleaning 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**, **color bleeding**)

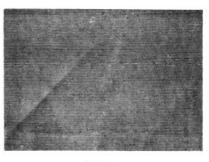
### corded selvage—See loopy selvage.

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



Crack Marks

- **crease**, *n*—a fabric defect evidenced by a break, line, or mark generally caused by a sharp fold. (*Syn.* mill wrinkle)
- **crease mark,** *n*—a visible deformation left in a fabric after a crease has been incompletely removed during fabric processing.
- **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**)



Crease

**crowsfeet**, *n*—*in fabrics*, fine wrinkles of varying degrees of intensity, size, and shape.

Discussion-Crowsfeet may occur during wet processing and on finished goods after folding.

#### curl-See kink.

**curled selvage**, *n*—self-descriptive. (*Syn.* rolled selvage, turned-over edge)

## cut pick—See broken pick.

**cut selvage**, *n*—cuts or breaks that occur in the selvage only. (*Syn.* broken selvage, damaged selvage)

### damaged selvage-See cut selvage.

**dead cotton,** *n*—a small nep of cotton fibers which is gathered on the surface of the fabric and which is different in color from the surrounding fabric.

# D3990 – 12 (2016)

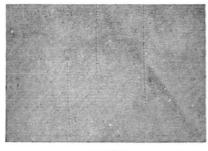
- **decating mark,** *n*—a crease mark or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam. (*Syn.* apron mark, leader mark)
- **doctor streak,** *n*—*in printed cloth*, a wavy white or colored streak in the warp direction of printed cloth caused by a defective doctor blade.
- **double bow,** *n*—two fabric bows, arcing in the same direction, as in a flattened *M* or *W* depending on the viewing angle. (See also **bow**) (Compare **double reverse bow**)

DISCUSSION—In tubular knits, there may be differential bowing between the top and bottom of the tube.

- **double hooked bow,** *n*—one hooked bow at each side of the fabric that arc in opposite directions. (See also **hooked bow**)
- **double pick**, *n in woven fabrics*, two picks wrongly placed in the same shed. (See also **mispick**) (Compare **jerk-in** )
- **double reverse bow,** *n*—two fabric bows arcing in opposite directions. (See also **bow** and **double hooked bow**) (Compare **double bow**)
- **draw-back**, *n*—a weave distortion characterized by tight and slack places in the same warp yarn. (*Syn.* hitch-back)
- dropped stitch, *n*—in knitted fabrics, an unknitted stitch.

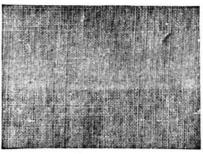
#### dye spot-See dyestain.

- **dyestain**, *n*—an area of unintended discoloration due to uneven absorption of a colorant.
- **dye streak**, *n*—an unintended irregular stripe in a fabric due to uneven absorption of a colorant.
- end out, *n*—a void caused by a missing warp yarn. (Syn. missing end)



End Out

- **filling band,** *n in woven fabrics*, a visual defect across the width due to a change occurring in the yarn for a large number of picks. (Compare **filling bar**)
- **filling bar,** *n in woven fabrics*, a visual defect across the width which contains a limited number of picks of different appearance than normal. (Compare **filling band**)



Filling Bar

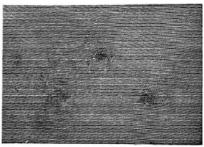
filling run-out—See broken pick.

fine end, *n*.—a smaller than normal diameter warp end. (*Syn*. light end, thin end) (Compare **coarse end**)

fine filling—See thin filling.

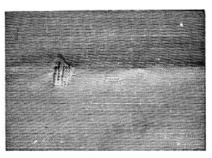
fine pick—See thin filling.

**finger mark**, *n*—an irregular spot showing variation in picks per inch for a limited width.



Finger Mark

- **finishing bar,** *n*—an uneven appearance across the entire fabric width.
- **float**, *n*—*in woven fabrics*, that portion of a warp or filling yarn that extends unbound over two or more warp or filling yarns; *in knitted fabrics*, that portion of a yarn that is not knitted into loops.



Float

#### D4850

DISCUSSION—If intentionally introduced, floats are a constructional characteristic of knit or woven fabrics. If unintentionally present, they are considered to be defects.