



Designation: D 2050 – 07

Standard Terminology Relating to Subassemblies¹

This standard is issued under the fixed designation D 2050; 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 all terminology pertaining to items that are considered subassemblies in the manufacture of textile products except seams and stitches. Textile joining structures (seams and stitches) are discussed in detail in Practice D 6193

1.2 The principle parts of slide fasteners defined in this terminology are illustrated in Figs. 1-10. These figures are descriptive only and are not intended to be restrictive as to design.

2. Referenced Documents

2.1 *ASTM Standards:*²

D 2061 Test Methods for Strength Tests for Zippers

D 6193 Practice for Stitches and Seams

3. Terminology

automatic lock slider, *n*—a slider that provides involuntary, positive locking action on the chain when the pull is released restricting the movement of the slider to open the chain unless a stress is applied through the stringers that exceeds the locking capacity of the slider. See Test Methods D 2061

bail, *n*—a portion or portions of the slider to which the pull or pulls are attached. (*Syn. lug.*)

bead, *n*—in a individual element slide fastener, an enlarged section on the inner edge of each tape formed by the cord and weft yarns of the tape used to attach the cord to the tape. The interlockable elements are affixed to the bead on an individual element slider fastener.

bead, *n*—in a continuous element woven type slide fastener, a section of the tape where a cord and/or selected warp yarns are woven in place by the weft yarns of the tape to form a

bead. The continuous element is secured to the tape by the bead simultaneously with the bead formation.

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

bottom assembly, *n*—the components of the lowermost part of a slide fastener that determines whether the slide fastener will be non-separable or separable. (See also “non-separable” slide fastener and “separable” slide fastener.)

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 when opening the chain. (See Fig. 1.)

bridge top stop, *n*—a part affixed immediately above the chain, holding the tops of two stringers together and preventing the slider from leaving the chain when closing the chain. See Fig. 2.)

cam lock slider, *n*—a slider that incorporates a curled projection or projections on the pull that extends through a window or windows to effect a locking action by pressing against the interlocking elements when the cam lock slider is in the locked position.

chain, *n*—the portion of a slide fastener, without its components (top stops, bottom stops, slider, separating parts, etc.), that is formed by alternately interlocking the elements of one stringer with the elements of an opposing stringer.

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

chain thickness, *n*—the measurement from front to back of the chain. On a continuous element fastener (CEF) the measurement includes the tape and sewing threads on a sewn type fastener or the tape and yarns for securing the element to the tape on a woven type fastener if these parts extend beyond the element.

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.

connecting ring, *n*—a device used to secure a pull, having

¹ This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.54 on Subassemblies. These definitions were developed in cooperation with the American Fastener and Closure Assn. Inc.

Current edition approved Dec. 1, 2007. Published January 2008. Originally approved in 1961. Last previous edition approved in 2004 as D 2050 – 04

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

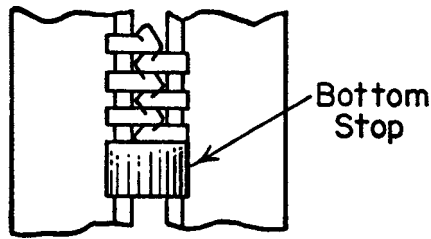


FIG. 1 Bottom Stop

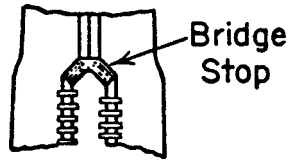


FIG. 2 Bridge Stop



FIG. 3 Top Stop

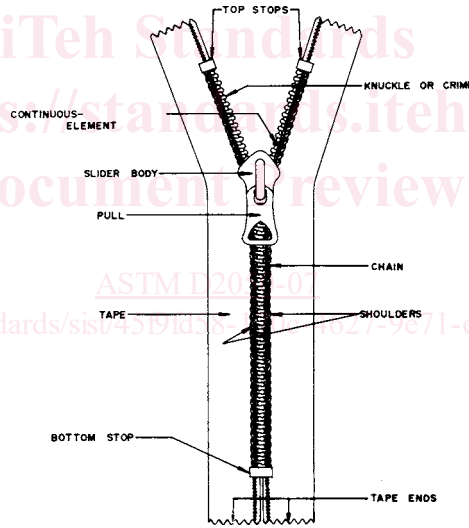


FIG. 4 Principle Parts of Slide Fasteners—Continuous Element Slide Fastener

more than one component in its design, to the bail of the slider. The connecting ring may be of various shapes.

continuous element, *n*—a configured element formed continuously from a length of monofilament into the shape of a spiral (or coil), serpentine or other configuration. The continuous element contains heads formed along its length at the crimp for the purpose of interlocking. The side of the continuous element opposite the crimp is the shoulder and bears the slider flanges during opening and closing of the elements. (Compare **separate element**.)

continuous element slide fastener, *n*—CEF, a slide fastener consisting of two continuously formed elements, each attached to one of the opposing edges of two tapes, which are engaged and disengaged by the movement of a slider. The

CEF fastener can be a sewn type or a woven type construction. (See Fig. 3.) (Compare **individual element slide fastener**.)

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

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

cut-off, *n*—the measurement of an individual element from the

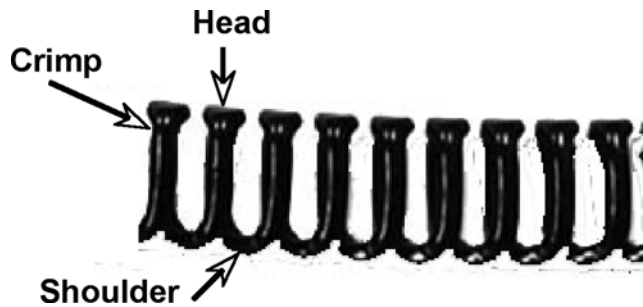


FIG. 5 Element (one side of element on sewn type CE fastener)

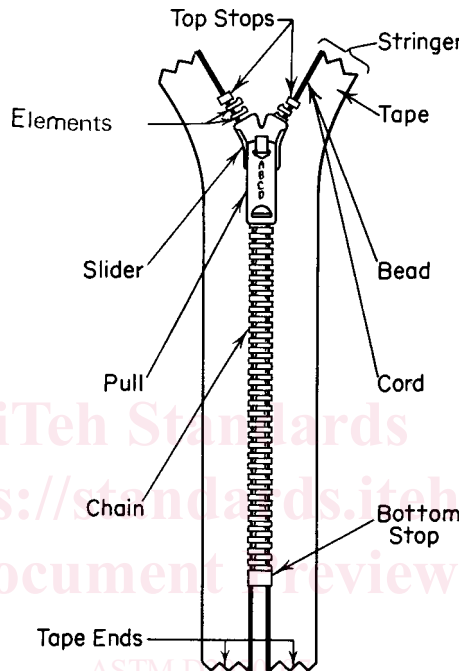


FIG. 6 Principal Parts of Slide Fasteners—Individual Element
Slide Fasteners

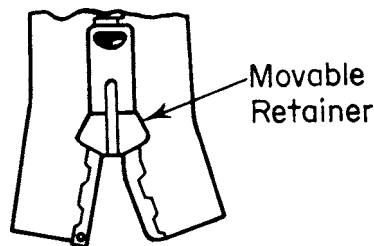


FIG. 7 Movable Retainer

head side to the pocket side of the legs.

diamond, *n*—the wedge-shaped portion of a slider between the throats.

element, *n*—a device designed for interlocking, capable of being affixed along the edge of a tape. (Compare **continuous element** and **individual element**.) (See Fig. 4.)

exposed tape width, *n*—the part of the tape extending beyond the shoulders of the interlocking elements to the outer tape edge.

fixed retainer, *n*—a device permanently attached to the re-

tainer pin at the bottom of one stringer. (See Fig. 5.)

DISCUSSION—The fixed retainer has an opening shaped to fit the separable pin. In order to close the chain, the separable pin is passed through the slider body and then inserted into this opening. The fixed retainer holds or retains the two stringers in alignment for interlocking. The fixed retainer is sometime referred to as the “box”.

flange lock slider, *n*—a slider with notches in the flanges of the slider that block the shoulders of the elements when the