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Standard Terminology Relating to Zippers¹

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INTRODUCTION

~~These definitions cover~~

¹ This terminology is under the jurisdiction of ASTM Committee D-13 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.

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1. Scope

1.1 ~~This terminology covers special terms or special meanings used in the zipper industry. When any of the definitions in this standard are moved to another standard, limit the field of application of the definition by inserting the delimiting phrase “in zippers,” after the dash at the beginning of the definition.~~

~~The industry.~~

1.2 ~~The principle parts of zippers defined in this terminology are illustrated in Figs. 1-9. These illustrations figures are descriptive only and are not intended to be restrictive as to design.~~

2. Terminology

automatic lock slider, *n*—a slider that provides involuntary, positive locking action on the chain when the pull is released.

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

bead, *n*—*in a separate element zipper*, an enlarged section on the inner edge of each tape to which interlockable elements are affixed.

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.

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**.)

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. (See Fig. 1-→ 1.)

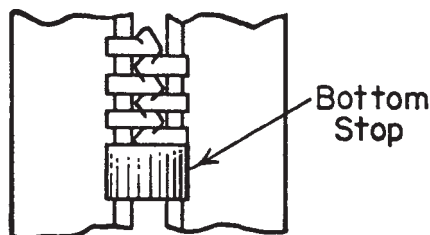


FIG. 1 Bottom Stop

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. (See Fig. 2-→ 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.

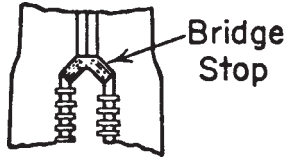


FIG. 2 Bridge Stop

chain, n—the assemblage formed by interlocking several elements of two stringers.

chain thickness, n—the measurement from front to back of the chain.

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 shaped like the letter “D” used to secure a pull, having more than one component in its design, to the bail of the slider.

continuous element, n—a configured element formed continuously along a length of monofilament. (Compare **separate element**.)

continuous element zipper, n—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. (See Fig. 3.) (Compare **separate element zipper**.)

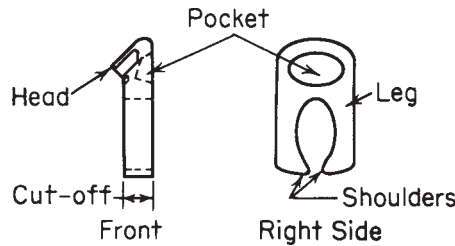
cord, n—a strand of multiple yarns for use in forming a bead.

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.

cut-off, n—the measurement of a separate element from the 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 **separate element**.) (See Fig. 4.)



NOTE 1—Elements are of many designs but the nomenclature is generally the same for all types.

FIG. 4 Element

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

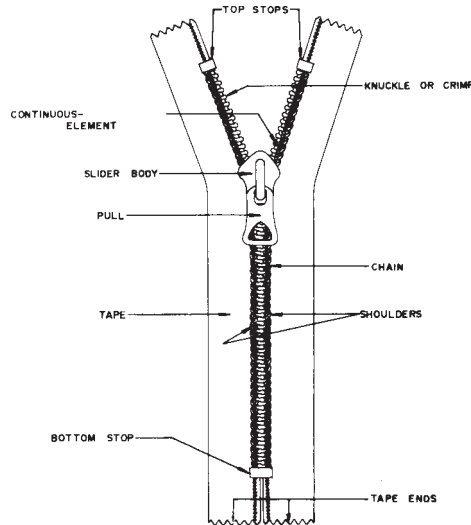


FIG. 3 Principle Parts of Zippers—Continuous Element Zipper

fixed retainer, n—a device permanently attached to the retainer 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 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.

flange lock slider, n—a slider with notches in the flanges of the slider that block the shoulders of the elements when the stringers above the slider are pulled apart, thus preventing further separation of the chain.

flanges, n—the edges of the slider formed to contain the chain.

head, n—the portion of an element that engages the pocket.

knuckle—See preferred term **crimp**.

legs, n—the two portions of a separate element that affix the element to the bead.

lug—See preferred term **bail**.

mouth, n—the opening in a slider that receives the chain.

mouth width, n—the measurement between the slider flanges at the point where they bear against the shoulders of the interlocked elements or at the outermost edges of the bead if the bead extends beyond the elements.

movable retainer, n—a movable or sliding device performing a similar function to that of the fixed retainer, the purpose being to permit separation of the two stringers from the bottom, without the necessity of opening the zipper from the top. (See Fig. 6.)

DISCUSSION—This device is not removable from the bottom of the zipper.

nonseparable zipper, n—a zipper having two stringers that are permanently attached to each other at one or both ends. (See Fig. 7.) (Compare **separable zipper**→.)

pin lock slider, n—a slider that incorporates a projection on the pull that fits between adjacent interlocking elements of a zipper when a pin lock slider is in the locked position.

pin, retainer—See **retainer pin**.

pin, separable— See **separable pin**.

pocket, n—the cavity of an element designed to receive the head.

pull, n—a part connected to a zipper slider by which the slider is operated.

QD—abbreviation for quick disassembly zipper. (See **releasing stop**.)

QR—abbreviation for quick release zipper. (See **releasing stop**.)

ratchet lock slider, n—a slider with a locking mechanism that permits the slider to slip along the chain upon application of a predetermined force so as to prevent damage that would impair either the service or use of either the slider or chain.

releasing slider, n—a slider with a mechanical means for loosening the slider on the chain.

releasing stop, n—a device attached at or near the top of the stringer on the separable pin side which limits the travel of the slider at the open end of the chain under normal closing operations. (See Fig. 8.)

DISCUSSION—The slider may be forced beyond the releasing stop when added force is exerted towards the top of the zipper. Releasing stops are used on “quick release” or “quick disassembly” zippers.

retainer, fixed—See **fixed retainer**.

retainer, movable— See **movable retainer**.

retainer pin, n—a tube-like element, similar to the separable pin, attached over the bead at the bottom end of the stringer opposite to the separable pin and that is designed to hold the fixed retainer in position.

scoop—Deprecated term, see **element**.

separable pin, n—a tube-like element attached over the bead at the bottom end of one stringer.

separable zipper, n—a zipper fitted with special components at the bottom of the chain, so as to permit complete disengagement and then reengagement of the two stringers. (See Fig. 5.) (Compare **nonseparable zipper**.)

separate element zipper, n—a zipper consisting of two series of separately formed elements, each attached to one of the opposing edges of two tapes, which are engaged and disengaged by the movement of a slider. (See Fig. 7.) (Compare **continuous element zipper**.)

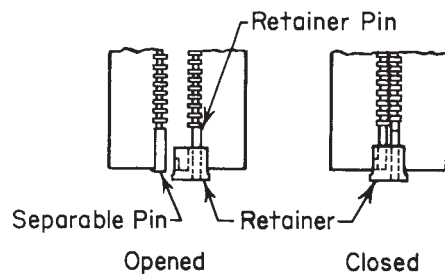


FIG. 5 Separating Parts

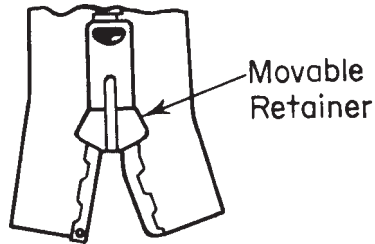


FIG. 6 Movable Retainer

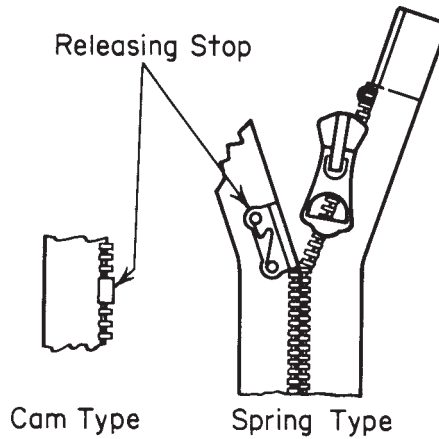


FIG. 8 Releasing Stops

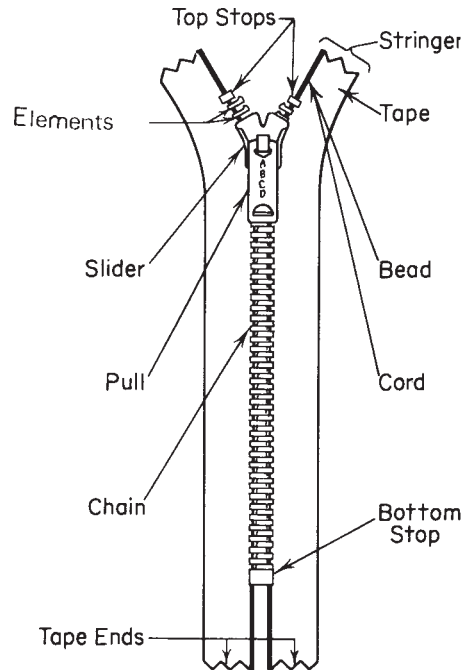


FIG. 7 Principal Parts of Zippers—Separate Element Zipper

- shoulder, n**—the bearing surface of an interlocking element by which the chain is contained inside the flanges of the slider.
- slider, n**—the part that opens a zipper when it is moved in one direction and closes the zipper when it is moved in the opposite direction. (See Fig. 9.)
- slider, automatic lock*— See **automatic lock slider**.
- slider, cam lock*—See **cam lock slider**.
- slider, flange lock*— See **flange lock slider**.
- slider, pin lock*—See **pin lock slider**.
- slider, ratchet lock*— See **ratchet lock slider**.

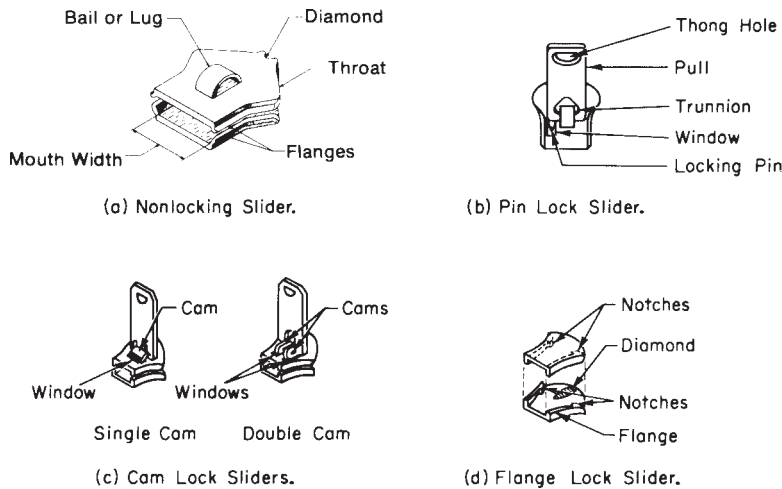


FIG. 9 Sliders

slider, releasing— See **releasing slider**.

stop, n—the device at the top and bottom of the chain or stringer that prevents the slider from leaving the chain.

stop, bottom—See **bottom stop**.

stop, bridge top—See **bridge top stop**.

stop, releasing—See **releasing stop**.

stop, top—See **top stop**.

stringer, n—the tape, bead, and element assembly that constitutes one side of a chain.

tape, n—a strip of material along one edge of which the bead and elements are attached.

tape ends, n—the tape extending beyond the stops at either or both ends of the stringers.

tape width, exposed— See **exposed tape width**.

thong hole, n—the opening at the end of a pull.

thread, element attaching— Deprecated term.

throats, n—the two openings in a slider that receive the stringers.

top stop, n—a part affixed between or immediately above the interlocking elements on either or both stringers, to prevent the slider from leaving the chain. (See Fig. 10.)

trunnions, n—the two pivots at the end of the pull that fit into the bail.

windows, n—the openings in pin-lock and cam-lock sliders through which the locking pin and cams, respectively, may extend.

zipper, n—a slide fastener consisting of interlockable elements each attached to one of the opposing edges of two tapes and a movable part called a “slider” that spans the interlockable elements, which when moved in one direction causes the elements on one tape to interlock with the elements on the other tape, and when moved in the opposite direction causes the elements to disengage. (Compare **continuous element zipper** and **separate element zipper**.)



FIG. 10 Top Stop

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