



Standard Practice for Selection of Zippers for Care-Labeled Apparel and Household Furnishings¹

This standard is issued under the fixed designation D 3692; 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 practice provides guidelines to the manufacturer for the selection of zippers to be used in garments and household furnishings that have care labels. The use of this practice will facilitate the selection of a zipper compatible with the end-item requirements. In the absence of complete knowledge of end-item characteristics, it is not possible to stipulate specific universal characteristics for a care label. Therefore following initial selection, the chosen zipper should be tested in a prototype item to confirm its suitability. Zipper properties to be considered are those that may, following refurbishing, be the ones likely to adversely affect the continued use and enjoyment of the item in which the zipper is installed.

1.2 The product characteristics evaluated by this practice are shrinkage, colorfastness, and ironing deformation.

NOTE 1—Test methods of interest include Test Method D 2052, Test Method for Colorfastness of Zippers to Dry Cleaning,² Test Method D 2053, Test Method for Colorfastness of Zippers to Light, Test Method D 2054, Test Method for Colorfastness of Zipper Tapes to Crocking, Test Method D 2057, Test Method for Colorfastness of Zippers to Laundering, and Method D 2060, Method for Measuring Zipper Dimensions.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textiles²

D 2050 Terminology Relating to Zippers²

D 3136 Terminology for Permanent Care Labels for Consumer Textile and Leather Products Other Than Carpets and Upholstery²

3. Terminology

3.1 Definitions:

¹ This practice is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.54 on Subassemblies. This practice was developed in cooperation with the Slide Fastener Association, Inc.

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² *Annual Book of ASTM Standards*, Vol 07.01.

3.1.1 *differential shrinkage, n*—in zippers, the difference in longitudinal dimensional change between the zipper tape and the fabric to which the zipper is attached.

3.1.2 *shrinkage, n*—a decrease in one or more dimensions of an object or material.

3.1.2.1 *Discussion*—In zippers, usually only length shrinkage is measured.

3.1.3 For definitions of other zipper terms used in this practice, refer to Terminology D 2050. For definitions of terms relating to care labeling, refer to Terminology D 3136. For definitions of other textile terms, refer to Terminology D 123.

4. Significance and Use

4.1 This practice is useful for the selection of zippers that will be compatible with items to be care labeled.

4.2 This practice is useful as a guide for the selection of test methods to evaluate zipper properties that are relevant to care-labeled items.

5. General

5.1 It is advisable that zippers be closed when items in which they are installed are being laundered or dry cleaned.

6. Shrinkage

6.1 Excessive differential shrinkage between the zipper and the material into which it is installed can impair item appearance and the functioning of the zipper. To avoid problems, zippers need to have compatible but not necessarily equal shrinkage to that of the fabric. The acceptable shrinkage differential may vary depending upon fabric weight and item construction. The fabric weight, method of zipper installation, and zipper shrinkage should be considered in determining how much shrinkage differential is acceptable.

6.2 Zipper shrinkage compatibility cannot be specified in absolute terms, therefore, it is essential that a preliminary mock-up representing the planned zipper installation be constructed and subjected to the proposed care refurbishing procedure to determine the zipper shrinkage compatibility.

6.3 The following guidelines should prove helpful by minimizing problems in the selecting of a compatible zipper based on shrinkage.

6.3.1 *Lightweight Materials*—Lightweight materials require zippers having the most compatible shrinkage. For materials up to 0.27 kg/m² (8 oz/yd²), a differential shrinkage between