



Designation: D6192/D6192M – 19 (Reapproved 2023)

Standard Tables of Body Measurements for Girls, Sizes 2 to 20 (Reg & Slim) and Girls Plus¹

This standard is issued under the fixed designation D6192/D6192M; 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.

INTRODUCTION

These tables were developed from data published by the U.S. Department of Commerce. This data was based on original research conducted by the U.S. Department of Agriculture² in the 1930s. This standard takes into consideration children's growth patterns reflected in the 1980 charts for the National Center for Health Statistics,³ the 1977 Anthropometric Study of U.S. Infants and Children conducted by the University of Michigan,⁴ 2000 CDC Growth Charts for the United States,⁵ and CDC Advance Data No. 361, dated 7/7/2005.⁶ All sudden shifts of proportion have been eliminated so as to reflect the gradual growth and development of the child. To verify the proposed body measurements, a three-dimensional Avatar was created in the size range by Alvanon Inc. for a visual reference and also attached to the documentation. Terminology **D5219** data was removed and references to the standard were made to avoid duplicity and ease management of standard.

1. Scope

1.1 These tables list body measurements of girl's sizes. Although these are body measurements, they can be used as a baseline in designing apparel for girls in this size range when considering such factors as fabric type, ease for body movement, styling, and fit.

1.2 The maximum age for the Girl's chart is 12½ years old to the size 20.

¹ These tables are under the jurisdiction of ASTM Committee **D13** on Textiles and are the direct responsibility of Subcommittee **D13.55** on Body Measurement for Apparel Sizing.

Current edition approved June 1, 2023. Published June 2023. Originally approved in 1997. Last previous edition approved in 2019 as D6192 – 19. DOI: 10.1520/D6192_D6192M-19R23.

² U.S. Department of Commerce, *Voluntary Product Standard: Body Measurements for the Sizing of Girls' Apparel*, NIST Publication No. PS 54-172, Washington DC.

³ Available from National Center for Health Statistics (NCHS), a division of Centers for Disease Control & Prevention (CDC), 1600 Clifton Rd., Atlanta, GA 30333, <http://www.cdc.gov>.

⁴ Snyder, Lawrence, *Anthropometry of Infants, Children, and Youth to Age 18*, University of Michigan, May 1977.

⁵ 2000 CDC Growth Charts for the United States: Methods and Development, National Center for Health Statistics, Vital Health Stat 11 (246), 2002.

⁶ CDC Advance Data from U.S. Department of Health and Human Services, Vital and Health Statics Number 361, 2005 *Anthropometric Reference Data for Children and Adults: U.S. Population, 1999-2002*.

1.3 The size table includes the range of toddler sizes, (2,3,4) BG=Boy, Girl. These values are for both girl's & boy's and will be included in the boy's standard as well. Kids (5,6) BG=Boy, Girl.

1.4 These tables list body measurements for the complete range of Girls sizing, Regular, Slim, Plus. Slim subjects are of same stature (height), with a slimmer body, and lower body weight than regular subjects as illustrated by the measurement charts. Plus subjects are the same stature (height), with fuller body, and higher body weight than regular subjects as illustrated by measurement charts in Tables **D6458/D6458M**.

1.5 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.6 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the*

Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:⁷

D123 Terminology Relating to Textiles

D5219 Terminology Relating to Body Dimensions for Apparel Sizing

D6458/D6458M Tables of Body Measurements for Boys, Sizes 4 to 20 Slim and 2 to 20 Regular

2.2 ISO Standard:⁸

ISO 3635 Size Designation of Clothes, Definitions, and Body Measurement Procedures

3. Terminology

3.1 Definitions:

3.1.1 For definitions relating to body dimensions, refer to Terminology **D5219**.

3.1.2 For definitions of other textile terms used in this standard, refer to Terminology **D123**.

⁷ 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.

⁸ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

4. Significance and Use

4.1 The use of the body measurement information in **Tables 1-6** will assist manufacturers in developing patterns and garments that are consistent with the current anthropometric characteristics of the population of interest. This practice should, in turn, reduce or minimize consumer confusion and dissatisfaction related to apparel sizing. (Also refer to ISO 3635 Size Designation Procedures.)

4.2 Three-dimensional avatars depicting each of the children's sizes were created by Alvanon, Inc. and included in this standard to assist manufacturers in visualizing the posture, shape, and proportions generated by the measurement charts in the accompanying Tables. (See **Figs. 1-15**.)

5. Apparatus

5.1 *Tape Measure*, dimensionally stable, double coated and approximately 1½-in. [5 cm] wide and graduated accurately in inches or centimeters.

5.2 *Plastic Goniometer*, to measure the radian (degree) of shoulder slope.

5.3 *Scale*, standard, calibrated, body weight type.

5.4 *Metal Ruler*.

6. Procedure

6.1 For body dimensions, refer to Terminology **D5219**.

7. Keywords

7.1 apparel; body measurements; garment sizes; girls Regular, Slim, Plus; table