



Designation: D8522 – 23

Standard Tables of Body Measurements for Big Girls Regular Figure Type, Size Range 7 – 20¹

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INTRODUCTION

This body measurement table was developed from evaluation of data currently used in apparel industry.

These tables were developed from data published by the Centers for Disease Control, Current USA industry, Studies, Scans and documentation from Alvanon Inc. This standard takes into consideration Girl's figures at a standard height relative to the CDC percentiles nearing 50 %. All sudden shifts of proportion have been eliminated so as to reflect the gradual growth and development of the child. Major evaluation was done, reviewing the incremental growth at different major body points has been addressed and defined, identifying increase and decrease at different rates in specific areas: **bust/chest, waist, high hip and seat/ hip**. Additionally to better serve the industry, incremental movement between sizes was reviewed ensuring smooth transition between sizes. To verify the proposed body measurements, a three-dimensional Avatar in each size was created in the big girl's regular size range 7-20) by Alvanon Inc. for a visual reference and also attached in the documentation.

1. Scope

1.1 These tables list body measurements of big girl's figure Type Regular sizes 7 through 20. 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 These tables list body measurements for the complete range of big girl's regular sizing.

1.3 The values stated in either acceptable SI units or inch units shall be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other, without combining values in any way.

1.4 *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.*

1.5 *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:*²

[D123 Terminology Relating to Textiles](#)

[D5219 Terminology Relating to Body Dimensions for Apparel Sizing](#)

2.2 *ISO Standard:*

[ISO 3635 Size Designation of Clothes, Definitions, and Body Measurement Procedures](#)²

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions relating to body dimensions, refer to Terminology [D123](#).

3.1.2 For definitions of other textile terms used in this standard, refer to Terminology [D5219](#).

4. Significance and Use

4.1 The use of the body measurement information in Tables 1–2 will assist manufacturers in developing patterns and

¹ This test method is under the jurisdiction of ASTM Committee [D13](#) on Textiles and is the direct responsibility of Subcommittee [D13.55](#) on Body Measurement for Apparel Sizing.

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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.

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 girls' sizes on certain measures, were created by Alvanon, Inc. and included in this standard to assist manufacturers in visualizing the posture, shape, and proportions generated by the measurements charts in the accompanying Tables. (See Figs. 1–4.)

5. Apparatus

5.1 *Tape Measure*, (dimensionally stable and approximately 1.5 cm (½ in.) wide and graduated accurately in cm (⅛ in.)).

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 General:

6.1.1 For all vertical and most horizontal measurements, subject is to be standing erect without shoes and with feet approximately 15 cm (6 in.) apart. (for Infant special cases) For all vertical and most horizontal measurements, subject is to be lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg.

6.1.2 Take measurements over regular undergarments normally worn.

6.1.3 Take all measurements from the same side of the body for consistency.

6.1.4 Refer to Terminology **D5219** for the location of all points to be measured.

6.1.5 *Body Measurements*—Refer to Terminology **D5219** for definitions of body measurements.

7. Keywords

7.1 apparel; Big Girls Regular; body measurements; garment sizes; tables

TABLE 1 Big Girls Regular Sizes 7-20 Body Measurements, Inch-Pound Units

Girls table maximum age based at 12 ½ Years								
Size	7	8	10	12	14	16	18	20
Body Weight (Mean), lb	55	65	75	90	105	115	125	135
Body Weight (Range), lb	52-58	61-68	71-87	85-95	99-110	109-120	118-131	128-142
Girth Measurements, in.	7	8	10	12	14	16	18	20
Head Girth	20 ½	20 ⅞	21 ⅜	21 ¾	21 ¾	21 ⅞	21 ⅞	22
Neck Base Girth	12 ¼	12 ⅝	13	13 ⅝	13 ¾	14 ⅛	14 ½	14 ⅞
Mid-Neck Girth	10 ¾	11 ⅛	11 ¾	12 ¼	12 ⅝	13	13 ⅝	13 ¾
Shoulder Girth	30 ¾	32 ¼	34	35	36	37	38	39
Upper-Chest Girth	25 ⅞	27 ⅞	29 ⅝	31 ⅛	32 ⅞	34	35 ¼	36 ½
Chest-Bust Girth	25	27	29 ½	31 ½	33 ¼	35	36 ½	38
Upper-Chest/Bust Girth	24	25 ½	27 ½	28 ½	30 ⅛	31 ¾	33 ⅛	34 ½
Waist Girth	22 ¾	24	25 ½	26 ¾	28 ⅝	30 ½	32 ⅛	33 ¾
Preferred Waist Girth	23 ⅞	25	26 ¾	27 ⅝	29 ½	31 ⅝	33 ⅝	34 ⅞
High-Hip Girth	25 ⅛	26 ½	28 ¾	30 ⅝	32 ¼	34 ⅛	35 ¾	37 ⅜
Hip/Seat Girth	26 ¼	28	31	33	34 ⅞	36 ¾	38 ⅝	40
Thigh Girth	15 ¾	16 ¾	18 ¾	19 ½	20 ⅝	21 ¾	22 ⅝	23 ½
Mid-Thigh Girth	14 ⅝	15 ⅝	17	18 ⅛	18 ⅞	19 ⅝	20 ⅝	21
Knee Girth	10 ⅛	10 ⅞	12	12 ⅞	13 ¼	13 ⅝	14	14 ⅝
Calf Girth	9 ⅝	10 ⅛	11 ¼	12 ⅛	12 ½	12 ⅞	13 ¼	13 ⅝
Ankle Girth	7 ⅝	7 ½	7 ⅞	7 ⅞	8 ⅛	8 ⅝	8 ⅝	8 ⅞
Armhole Girth	12 ⅛	12 ½	13	13 ⅝	13 ½	13 ¾	14 ⅛	14 ½
Upper-Arm Girth	7 ⅞	8 ¼	9	9 ¾	10 ¼	10 ¾	11 ¼	11 ¾
Elbow Girth	7 ⅝	7 ⅞	8 ½	9 ¼	9 ½	9 ¾	10	10 ¼
Forearm Girth	7	7 ¼	8	8 ⅝	9	9 ⅝	9 ¾	10 ⅛
Wrist Girth	5 ½	5 ⅝	5 ¾	6	6 ⅛	6 ¼	6 ⅝	6 ½
Hand Girth	7	7 ⅝	7 ¾	7 ⅞	8	8 ⅛	8 ¼	8 ⅝
Trunk Length (total vertical girth)	44 ¾	46 ¾	50 ⅝	53 ⅝	55 ½	57 ¼	58 ¾	59 ⅞
Vertical Measurements, in.	7	8	10	12	14	16	18	20
Height, in.	50	52	57	59 ½	61	62 ½	63 ¼	63 ½
Head and Neck Height	20 ½	8 ⅝	8 ⅝	8 ¾	8 ¾	8 ⅞	9	9
Scye Depth	3 ⅞	4	4 ⅛	6 ¼	6 ½	6 ¾	6 ⅞	7
Cervicale Height	41 ¾	43 ⅝	48 ⅝	50 ¾	52 ¼	53 ½	54 ¼	54 ½
Cervicale to Crotch Height	19 ⅛	20	21 ⅞	23	23 ¾	24 ½	25	25 ¼
Cervicale to Knee Height	27 ⅞	29	31 ¾	33 ¼	34 ¼	35 ⅛	35 ¾	36 ⅛
Waist to Hip/Seat Height	5 ⅝	5 ⅝	6 ¼	6 ⅝	6 ⅝	6 ⅝	6 ¾	6 ¾
Waist to Knee Height	16 ⅝	17 ⅝	19	19 ⅞	20 ⅝	20 ¾	21 ⅛	21 ¼
Waist Height	30 ¼	32 ⅛	35 ⅝	37 ¼	38 ¼	39 ⅛	39 ⅝	39 ¾
Front Preferred Waist Height	28 ⅝	30 ⅝	33 ½	35 ¼	36 ¼	37 ⅛	37 ¾	37 ⅞
Back Preferred Waist Height	29 ⅝	31 ½	34 ⅞	36 ⅝	37 ¾	38 ⅝	39 ⅝	39 ¼
High-Hip Height	28	29 ⅝	32 ⅝	34 ⅛	35 ⅛	36	36 ½	36 ⅝
High/Seat Height	25	26 ½	29 ⅝	30 ⅝	31 ⅝	32 ½	32 ⅞	33
Crotch Height	22 ½	23 ¾	26 ½	27 ¾	28 ⅝	29	29 ¼	29 ¼
Rise Height	7 ¾	8 ⅝	9 ⅛	9 ½	9 ⅞	10 ⅛	10 ⅝	10 ½
Knee Height	13 ⅞	14 ¾	16 ⅝	17 ½	18	18 ⅝	18 ½	18 ½
Ankle Height	2 ⅝	2 ¾	2 ⅞	3	3	3 ⅛	3 ⅛	3 ⅛
Length Measurements, in.	7	8	10	12	14	16	18	20
Center Front Waist Length	10 ⅛	10 ⅝	11 ⅝	12 ½	12 ⅞	13 ⅝	13 ⅝	13 ¾
Center Back Waist Length	11 ⅝	11 ⅞	13	13 ⅞	14 ⅝	14 ⅞	15 ⅛	15 ¼
Crotch Length (total)	19 ⅝	21	22 ¾	23 ¾	24 ⅝	25 ⅝	26 ⅛	26 ⅞
Shoulder Length	3 ¾	3 ⅞	4 ¼	4 ½	4 ½	4 ½	4 ⅝	4 ⅝
Shoulder Slope	23 ⅝	20 ⅝	18 ¼	19	19 ⅛	19 ⅝	19 ⅝	19 ⅞
Shoulder Drop	1 ½	1 ½	1 ½	1 ½	1 ½	1 ⅝	1 ⅝	1 ⅝
Across Front Shoulder Width	11 ½	12	12 ⅞	13 ⅝	13 ⅝	14	14 ¼	14 ½
Across Back Shoulder Width	12 ⅝	12 ⅞	13 ½	14	14 ⅝	14 ⅝	14 ⅞	15 ⅛
Upper Front Chest Width	10	10 ½	11	11 ½	12	12 ⅝	12 ¾	13 ⅛
Upper Back Width	11 ¼	11 ¾	12 ⅝	13	13 ½	13 ⅞	14 ¼	14 ⅝
Front Chest Width	10 ⅛	10 ¾	11 ⅝	12 ⅝	12 ⅞	13 ¼	13 ½	13 ⅞
Back Width	10 ¾	11 ⅝	12 ⅛	12 ⅞	13 ⅝	13 ⅞	14 ⅝	14 ⅞
Chest/Bust Point to Bust Point	5 ⅝	5 ⅝	6	6 ⅝	6 ¾	7 ⅛	7 ⅝	7 ⅝
Neck to Chest/Bust Point	7 ¼	7 ⅝	7 ⅞	8 ¼	8 ⅝	9	9 ⅝	9 ⅝
Chest/Bust Point to Bust Point (Halter)	19 ⅝	20 ⅛	21 ⅝	22 ½	23 ⅝	24 ⅝	25 ½	26 ¼
Cervicale to Wrist Length	23 ½	24 ⅝	26 ⅝	27 ½	28 ⅛	28 ¾	29 ⅝	30
Side Waist Length	5 ¾	5 ¾	6 ⅝	7 ⅝	7 ½	7 ¾	7 ⅞	7 ⅞
Shoulder and Arm Length	21 ¼	22	23 ⅞	24 ⅞	25 ½	26	26 ⅝	27
Arm Length	17 ½	18	19 ⅝	20 ½	21	21 ½	22	22 ⅝
Underarm Length	12 ⅞	13 ⅛	14 ½	15 ½	15 ⅞	16 ⅛	16 ⅝	16 ½
Hand Length	5 ¼	5 ½	6 ⅛	6 ⅝	6 ¾	6 ⅞	7	7 ⅛
Hand Width	4	4 ¼	4 ⅝	4 ½	4 ⅝	4 ⅝	4 ¾	4 ⅞
Foot Length	7 ⅝	8	8 ⅝	9 ¼	9 ⅝	9 ½	9 ⅝	9 ¾
Foot Width	3	3 ⅛	3 ¼	3 ½	3 ⅝	3 ¾	3 ⅞	4