



Designation: D6860/D6860M – 19

Standard Tables of Body Measurements for Boys, Sizes 4H to 20H Husky¹

This standard is issued under the fixed designation D6860/D6860M; 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. These data were 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 Statistics³ and the 1977 Anthropometric Study of U.S. Infants and Children conducted by the University of Michigan⁴ and 2000 CDC Growth Charts for the United States⁵ and CDC Advance Data No. 361, Dated 7/5/2005. 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.⁶ for a visual reference and also attached in 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 for boys husky sizes. Although these are body measurements, they can be used as a baseline in designing apparel for husky boys in this size range when considering such factors as fabric type, ease for body movement, styling, and fit.

1.2 The maximum age for Boys Husky chart is 15 years old to size 20H.

1.3 The size table includes range of little boy sizes; these values are for husky boys and will be included in boy's regular and slim as well.

1.4 These tables list body measurements for the complete range of Boys Husky sizing. Husky subjects are the same

stature (height), with fuller body, and higher body weight than regular subjects as illustrated by measurement charts in Tables **D6458**.

1.5 The values stated in either inch-pound units or SI 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**

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

³ Available from the 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 Alvanon, Inc., 145 W 30th Street, Suite 1000, New York, NY 10001.

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.



D5219 Terminology Relating to Body Dimensions for Apparel Sizing

D6458 Tables of Body Measurements for Boys, Sizes 8 to 14 Slim and 8 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**.

4. Significance and Use

4.1 The use of the body measurement information in **Tables 1 and 2** 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 husky boy 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. 1-3**).

5. Apparatus

5.1 *Tape Measure*, dimensionally stable, double coated and approximately ½ in. [1.5 cm] wide and graduated accurately in centimeters or inches.

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; husky boys; tables

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



TABLE 1 Boys Husky Sizes 4H – 20H Body Measurements, Inch-Pound Units

Size Number	4H	5H	6H	7H	8H	10H	12H	14H	16H	18H	20H
Body weight (mean), lb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Body weight (range), lb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girth Measurements, in.	4H	5H	6H	7H	8H	10H	12H	14H	16H	18H	20H
Head girth	20 ⁵ / ₈	21	21 ¹ / ₄	21 ³ / ₈	21 ¹ / ₂	21 ³ / ₄	22	22 ¹ / ₄	22 ¹ / ₂	22 ³ / ₄	23
Neck base girth	10 ³ / ₄	11 ³ / ₈	11 ³ / ₄	12 ⁷ / ₈	13 ¹ / ₄	13 ³ / ₈	14	14 ¹ / ₂	15	15 ¹ / ₂	16
Mid-neck girth	9 ⁵ / ₈	10 ¹ / ₈	10 ³ / ₈	11 ⁵ / ₈	12	12 ³ / ₈	12 ³ / ₄	13 ¹ / ₈	13 ¹ / ₂	14	14 ¹ / ₂
Shoulder girth	26 ³ / ₈	27 ³ / ₄	28 ³ / ₄	30	30 ⁷ / ₈	32 ¹ / ₂	34 ¹ / ₈	35 ⁷ / ₈	37 ⁵ / ₈	39 ¹ / ₂	41 ¹ / ₄
Upper chest/bust girth	23 ¹ / ₂	24 ¹ / ₂	25 ¹ / ₂	26 ¹ / ₂	28	29 ¹ / ₂	30 ¹ / ₂	32 ¹ / ₂	34	35 ¹ / ₂	37
Chest/bust girth	23 ¹ / ₂	24 ³ / ₈	25 ¹ / ₄	26 ¹ / ₈	27 ¹ / ₄	28 ³ / ₄	29 ³ / ₄	31 ⁵ / ₈	33	34 ¹ / ₄	35 ⁵ / ₈
Under chest/bust girth	23 ³ / ₄	24 ³ / ₄	25 ⁷ / ₈	27	28 ¹ / ₄	29 ⁷ / ₈	31 ¹ / ₄	33 ¹ / ₈	34 ¹ / ₂	36 ¹ / ₈	37 ⁵ / ₈
Waist girth	24 ¹ / ₂	25 ¹ / ₂	26	26 ³ / ₄	27 ¹ / ₂	29	30 ¹ / ₂	32	33 ¹ / ₂	35	36 ¹ / ₂
Preferred waist girth	24 ¹ / ₄	25 ¹ / ₄	25 ⁵ / ₈	26 ¹ / ₄	27 ¹ / ₄	28 ¹ / ₂	29 ⁷ / ₈	31 ⁵ / ₈	32 ⁵ / ₈	34 ¹ / ₄	35 ³ / ₄
High-hip girth	24 ³ / ₄	25 ¹ / ₂	25 ⁷ / ₈	26 ¹ / ₂	27 ³ / ₈	29	29 ⁷ / ₈	31 ⁵ / ₈	33 ¹ / ₂	35	36 ³ / ₈
Hip/seat girth	25 ¹ / ₂	26 ¹ / ₂	27 ³ / ₄	28 ³ / ₄	30	31 ¹ / ₂	33	34 ¹ / ₂	36	37 ¹ / ₂	39
Thigh girth	14 ¹ / ₈	14 ⁷ / ₈	15 ⁷ / ₈	17 ¹ / ₂	18 ¹ / ₄	19	19 ³ / ₄	20 ³ / ₈	21 ¹ / ₄	22 ¹ / ₄	23
Mid-thigh girth	13	13 ¹ / ₂	14	15 ¹ / ₂	16 ¹ / ₈	16 ³ / ₄	17 ³ / ₈	17 ⁷ / ₈	18 ³ / ₄	20	20 ³ / ₄
Knee girth	9 ¹ / ₄	10	10 ⁵ / ₈	10 ³ / ₄	11 ¹ / ₄	11 ³ / ₄	12 ³ / ₈	13	13 ⁵ / ₈	14 ¹ / ₄	14 ⁷ / ₈
Calf girth	8 ⁵ / ₈	9 ¹ / ₄	9 ⁷ / ₈	11 ¹ / ₈	11 ¹ / ₂	12	12 ⁵ / ₈	13 ¹ / ₄	13 ⁷ / ₈	14 ¹ / ₂	15 ¹ / ₈
Ankle girth	6 ³ / ₄	7 ¹ / ₈	7 ⁵ / ₈	8 ¹ / ₈	8 ¹ / ₂	8 ³ / ₄	9 ¹ / ₈	9 ¹ / ₂	9 ⁷ / ₈	10 ¹ / ₈	10 ⁵ / ₈
Armscye girth	9 ⁷ / ₈	10 ¹ / ₂	11 ¹ / ₄	11 ³ / ₄	12 ¹ / ₄	13	13 ¹ / ₄	13 ³ / ₄	14 ¹ / ₂	15 ¹ / ₂	16 ¹ / ₂
Upper-arm girth	7	7 ³ / ₈	7 ¹ / ₂	7 ⁷ / ₈	8	8 ³ / ₄	9 ³ / ₄	10 ¹ / ₂	11 ¹ / ₄	12	12 ³ / ₄
Elbow girth	7 ¹ / ₂	7 ⁵ / ₈	7 ⁵ / ₈	7 ³ / ₄	7 ⁷ / ₈	8 ¹ / ₈	8 ¹ / ₂	8 ⁷ / ₈	9 ¹ / ₄	9 ⁵ / ₈	10
Forearm girth	7 ³ / ₄	8	8	7 ⁵ / ₈	7 ³ / ₄	8 ¹ / ₈	8 ⁵ / ₈	9 ¹ / ₈	9 ³ / ₈	9 ³ / ₄	10 ¹ / ₄
Wrist girth	5 ¹ / ₄	5 ³ / ₈	5 ³ / ₈	5 ¹ / ₂	5 ⁵ / ₈	5 ³ / ₄	6	6 ¹ / ₄	6 ¹ / ₂	6 ³ / ₄	7
Hand girth	6 ¹ / ₄	6 ⁵ / ₈	6 ¹ / ₂	6 ³ / ₄	7 ¹ / ₈	7 ¹ / ₂	8	8 ³ / ₈	8 ⁵ / ₈	9 ¹ / ₄	9 ¹ / ₄
Trunk length (total vertical girth)	39 ³ / ₄	41 ⁷ / ₈	43 ⁵ / ₈	45	46 ¹ / ₂	50 ⁵ / ₈	53	56	57 ³ / ₄	60 ³ / ₄	64 ¹ / ₈
Vertical Measurements, in.	4H	5H	6H	7H	8H	10H	12H	14H	16H	18H	20H
Height	41	44	46 ¹ / ₂	49	51 ¹ / ₂	55	58	61	63	65 ¹ / ₂	68
Head and neck length	7 ¹ / ₄	7 ³ / ₄	7 ³ / ₄	7 ³ / ₄	7 ³ / ₄	8	8 ¹ / ₈	8 ³ / ₈	8 ¹ / ₂	8 ⁵ / ₈	8 ⁷ / ₈
Scye depth	3 ³ / ₈	4 ¹ / ₄	4 ¹ / ₂	4 ⁵ / ₈	4 ⁷ / ₈	5 ¹ / ₄	5 ¹ / ₂	5 ⁵ / ₈	5 ⁷ / ₈	6 ¹ / ₈	6 ³ / ₈
Cervicale height	33 ³ / ₄	36 ¹ / ₄	38 ³ / ₄	41 ¹ / ₄	43 ³ / ₄	47	49 ⁷ / ₈	52 ⁵ / ₈	54 ¹ / ₂	56 ⁷ / ₈	59 ¹ / ₈
Cervicale to crotch height	16 ³ / ₄	17 ³ / ₄	18 ¹ / ₂	19 ¹ / ₈	19 ³ / ₄	21 ³ / ₄	22 ⁷ / ₈	24 ¹ / ₈	24 ³ / ₄	26 ¹ / ₈	27 ³ / ₄
Cervicale to knee height	23 ⁵ / ₈	25 ¹ / ₈	26 ⁷ / ₈	27 ⁵ / ₈	29 ¹ / ₂	31 ³ / ₄	33 ¹ / ₄	35 ⁵ / ₈	36 ⁵ / ₈	38	39 ¹ / ₂
Waist to hip/seat height	4 ¹ / ₂	4 ⁵ / ₈	5	5 ¹ / ₄	5 ¹ / ₂	6	6 ¹ / ₈	6 ⁵ / ₈	6 ³ / ₄	7	7 ¹ / ₈
Waist to knee height	13 ⁵ / ₈	14 ³ / ₄	15 ³ / ₈	16 ³ / ₈	17 ³ / ₄	19	19 ³ / ₄	21 ¹ / ₈	22 ¹ / ₄	22 ³ / ₄	23 ¹ / ₂
Waist height	23 ⁷ / ₈	25 ⁷ / ₈	27 ⁷ / ₈	30	32	34 ¹ / ₄	36 ³ / ₈	38 ⁵ / ₈	40 ¹ / ₄	41 ¹ / ₂	42 ⁷ / ₈
Front preferred waist height	21 ⁵ / ₈	23 ¹ / ₂	25 ³ / ₈	27 ¹ / ₈	29 ³ / ₈	31 ³ / ₈	33 ¹ / ₂	35 ¹ / ₂	37	38 ¹ / ₈	39 ³ / ₈
Back preferred waist height	22 ³ / ₄	24 ⁵ / ₈	26 ⁵ / ₈	28 ¹ / ₂	30 ⁵ / ₈	32 ³ / ₄	34 ⁷ / ₈	36 ⁷ / ₈	38 ¹ / ₂	39 ³ / ₄	41
High-hip height	21 ⁵ / ₈	23 ³ / ₈	25 ³ / ₈	27	29 ¹ / ₄	31 ¹ / ₄	33 ³ / ₈	35 ¹ / ₄	36 ⁷ / ₈	38	39 ¹ / ₄
Hip/seat height	19 ³ / ₈	21	22 ⁷ / ₈	24 ³ / ₄	26 ¹ / ₂	28 ¹ / ₄	30 ³ / ₈	32	33 ¹ / ₂	34 ¹ / ₂	35 ³ / ₄
Crotch height	17	18 ¹ / ₂	20 ¹ / ₄	22 ¹ / ₈	24	25 ¹ / ₄	27 ¹ / ₈	28 ¹ / ₂	29 ³ / ₄	30 ⁵ / ₈	31 ³ / ₈
Rise height	6 ³ / ₄	7 ³ / ₈	7 ³ / ₄	7 ⁷ / ₈	8	9	9 ¹ / ₄	10 ¹ / ₈	10 ³ / ₈	10 ⁷ / ₈	11 ³ / ₈
Knee height	10 ¹ / ₈	11 ¹ / ₈	11 ⁷ / ₈	13 ⁵ / ₈	14 ¹ / ₄	15 ¹ / ₄	16 ⁵ / ₈	17 ¹ / ₄	17 ⁷ / ₈	18 ⁷ / ₈	19 ³ / ₈
Ankle height	2 ¹ / ₄	2 ³ / ₈	2 ³ / ₄	2 ⁷ / ₈	3 ¹ / ₈	3 ¹ / ₄	3 ¹ / ₂	3 ¹ / ₂	3 ¹ / ₂	3 ¹ / ₂	3 ¹ / ₂
Width and Length Measurements, in.	4H	5H	6H	7H	8H	10H	12H	14H	16H	18H	20H
Center front waist length	9 ⁵ / ₈	9 ³ / ₄	10 ¹ / ₈	10 ³ / ₈	10 ³ / ₄	11 ³ / ₄	12 ¹ / ₂	13	13 ¹ / ₄	14 ¹ / ₄	15 ¹ / ₄
Center back waist length	10 ¹ / ₄	10 ³ / ₄	11 ¹ / ₄	11 ⁵ / ₈	12	13 ³ / ₈	13 ⁷ / ₈	14 ¹ / ₂	14 ³ / ₄	15 ³ / ₄	16 ³ / ₄
Side waist length	5 ⁵ / ₈	5 ¹ / ₂	5 ¹ / ₂	5 ⁵ / ₈	5 ³ / ₄	6 ³ / ₈	6 ⁷ / ₈	7 ¹ / ₈	7 ¹ / ₄	7 ⁷ / ₈	8 ¹ / ₄
Crotch length	17 ³ / ₄	18 ⁷ / ₈	20	20 ⁵ / ₈	21 ¹ / ₄	23 ³ / ₈	24 ¹ / ₄	25 ⁷ / ₈	27	28	29 ¹ / ₈
Shoulder length	3 ¹ / ₈	3 ¹ / ₄	3 ³ / ₈	3 ¹ / ₂	3 ⁵ / ₈	3 ⁷ / ₈	4 ¹ / ₈	4 ³ / ₈	4 ⁵ / ₈	4 ⁷ / ₈	5
Shoulder slope	21.00°	21.00°	22.00°	22.00°	22.00°	22.00°	21.88°	22.00°	22.00°	22.00°	22.13°
Shoulder drop	1 ¹ / ₈	1 ¹ / ₄	1 ³ / ₈	1 ¹ / ₂	1 ¹ / ₂	1 ⁵ / ₈	1 ³ / ₄	1 ³ / ₄	1 ⁷ / ₈	1 ⁷ / ₈	2
Across front shoulder width	10 ¹ / ₈	10 ¹ / ₂	11 ¹ / ₈	12	12 ³ / ₈	13	13 ³ / ₈	14 ¹ / ₄	14 ⁵ / ₈	15 ¹ / ₈	15 ⁵ / ₈
Across back shoulder width	10 ¹ / ₈	10 ³ / ₄	11	11 ⁷ / ₈	12 ³ / ₈	12 ⁷ / ₈	13 ¹ / ₂	14 ¹ / ₈	14 ³ / ₄	15 ³ / ₈	16
Upper front chest width	8 ⁷ / ₈	9 ¹ / ₄	9 ⁵ / ₈	10 ¹ / ₈	10 ³ / ₈	11	11 ⁵ / ₈	12 ¹ / ₄	12 ³ / ₄	13 ¹ / ₈	13 ³ / ₈
Upper back width	9 ⁵ / ₈	10 ¹ / ₈	10 ³ / ₈	11 ¹ / ₈	11 ³ / ₈	12 ¹ / ₈	12 ³ / ₄	13 ³ / ₈	14	14 ¹ / ₂	15
Front chest width	9 ¹ / ₂	9 ⁷ / ₈	10 ³ / ₈	10 ⁵ / ₈	11	11 ³ / ₄	12 ³ / ₈	13 ¹ / ₈	13 ³ / ₈	13 ⁷ / ₈	14 ¹ / ₄
Back width	9 ¹ / ₄	9 ³ / ₄	10 ¹ / ₈	10 ⁷ / ₈	11 ¹ / ₄	12	12 ⁵ / ₈	13 ¹ / ₄	13 ³ / ₄	14 ¹ / ₄	14 ³ / ₄
Chest/bust point to chest/bust point	5	5 ¹ / ₄	5 ³ / ₈	5 ⁵ / ₈	5 ⁷ / ₈	6 ³ / ₈	6 ¹ / ₂	6 ⁷ / ₈	7 ¹ / ₄	7 ⁵ / ₈	7 ⁷ / ₈
Neck to chest/bust point	5 ⁷ / ₈	6 ¹ / ₄	6 ³ / ₄	7	7 ¹ / ₂	8 ¹ / ₈	8 ¹ / ₂	9 ¹ / ₈	9 ³ / ₈	9 ⁵ / ₈	9 ⁷ / ₈
Chest/cust point to chest/bust point (halter)	16 ³ / ₈	17 ³ / ₈	18 ³ / ₈	19	20 ⁷ / ₈	22	23 ¹ / ₈	24 ¹ / ₂	25 ¹ / ₈	26	26 ³ / ₄
Cervicale to wrist length	20 ¹ / ₈	21 ¹ / ₈	21 ³ / ₄	22 ¹ / ₂	22 ⁷ / ₈	25	26 ¹ / ₄	27 ⁷ / ₈	28 ³ / ₄	30 ³ / ₈	31 ¹ / ₄
Shoulder and arm length	18 ¹ / ₄	19 ¹ / ₈	19 ³ / ₄	20 ¹ / ₄	20 ¹ / ₂	22 ¹ / ₂	23 ³ / ₈ </				