



Designation: D6240 – 98 (Reapproved 2006)

Standard Tables of Body Measurements for Men Sizes Thirty-Four to Sixty (34 to 60) Regular¹

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1. Scope

1.1 These standard tables cover the body measurements of men from size thirty-four to sixty. Although these are body measurements, they can be used in designing apparel for men in this size range when such factors as fabric type, ease of body movement, styling, and fit are taken into account.

1.2 The values stated in either acceptable metric units or in other 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.

1.3 *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:*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 Apparel Sizes](#)³

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions relating to body dimensions, refer to Terminology [D5219](#).

¹ These tables are 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.

³ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

3.1.2 For definitions of other textile terms used in these tables, refer to Terminology [D123](#).

4. Significance and Use

4.1 The use of the body measurement information in [Tables 1-4](#) will assist manufacturers in the development of patterns and garments that are consistent with the current anthropometric characteristics of the population of interest. These standard tables in turn should reduce or minimize consumer confusion and dissatisfaction related to apparel sizing. (Also refer to [ISO 3635](#).)

5. Apparatus

5.1 *Tape Measure*, (dimensionally stable and approximately 1.5 cm (1/2 in.) wide and graduated accurately in cm (1/16 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 Procedure:* [69d/astm-d6240-982006](#)

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.

6.1.2 Take measurements over basic undergarments normally worn.

6.1.3 Take all measurements except torso circumferences, height, and weight from the same side of the body for consistency.

6.2 *Body Measurements:*

6.2.1 *Body weight*—Weigh the subject.

6.2.2 *Chest*—Measure the circumference of the body parallel to the floor, under the arms, and over the fullest part of the chest.

6.2.3 *Waist*—Measure horizontally around the body at waist height.

6.2.4 *Seat (hip)*—Measure horizontally around the body at hip height.

6.2.5 *Head circumference*—Measure the circumference of the head above the ears.

TABLE 1 New ASTM Men's Measurement Table

| | Small (34-37) | | | Medium (38-41) | | | Large (42-45) | | | X-Large (46-49) | | | | | |
|-----------------------------------|----------------------------|--------|--------|----------------|--------|--------|---------------|--------|--------|-----------------|--------|--------|--------|--------|--------|
| Weight (Approximate kilograms) | 58.06 | 59.42 | 62.60 | 65.77 | 69.40 | 74.84 | 81.65 | 83.92 | 88.45 | 90.72 | 95.26 | 97.52 | 104.33 | 106.60 | 111.13 |
| | Girth Measurements (cm) | | | | | | | | | | | | | | |
| Sizes | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Chest | 86.36 | 88.90 | 91.44 | 93.98 | 96.52 | 99.06 | 101.60 | 104.14 | 106.68 | 109.22 | 111.76 | 114.30 | 116.84 | 119.38 | 121.92 |
| Waist | 71.12 | 73.66 | 76.20 | 78.74 | 81.28 | 83.82 | 86.36 | 88.90 | 91.44 | 93.98 | 96.52 | 99.70 | 102.87 | 106.05 | 109.22 |
| Seat (hip) | 86.36 | 88.90 | 91.44 | 93.98 | 96.52 | 99.06 | 101.60 | 104.14 | 106.68 | 109.22 | 111.76 | 114.30 | 116.84 | 119.38 | 121.92 |
| Head circumference | 54.93 | 55.40 | 55.88 | 56.36 | 56.83 | 57.31 | 57.79 | 58.26 | 58.74 | 59.21 | 59.69 | 60.17 | 60.64 | 61.12 | 61.60 |
| Neck base | 35.56 | 36.20 | 36.83 | 37.47 | 38.10 | 38.74 | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 | 43.82 | 44.45 |
| Shoulder circumference | 101.60 | 104.14 | 106.68 | 109.22 | 111.76 | 114.30 | 116.84 | 119.38 | 121.92 | 124.46 | 127.00 | 129.54 | 132.08 | 134.62 | 137.16 |
| Armscye | 41.59 | 42.55 | 43.18 | 44.13 | 45.09 | 46.04 | 46.99 | 47.94 | 48.90 | 49.85 | 50.80 | 51.75 | 52.71 | 53.66 | 54.61 |
| Upper arm | 29.21 | 29.85 | 30.48 | 31.12 | 32.39 | 33.02 | 33.66 | 34.93 | 34.29 | 34.93 | 35.56 | 36.20 | 36.83 | 37.47 | 38.10 |
| Elbow | 27.62 | 28.10 | 28.58 | 29.05 | 29.53 | 30.00 | 30.48 | 30.96 | 31.43 | 31.91 | 32.39 | 32.86 | 33.34 | 33.81 | 34.29 |
| Wrist | 17.15 | 17.46 | 17.78 | 18.10 | 18.42 | 18.73 | 19.05 | 19.37 | 19.69 | 20.00 | 20.32 | 20.64 | 20.96 | 21.27 | 21.59 |
| Thigh | 52.71 | 54.29 | 55.88 | 57.47 | 59.06 | 60.64 | 62.23 | 63.82 | 65.41 | 66.99 | 68.58 | 70.17 | 71.76 | 73.34 | 74.93 |
| Knee | 36.83 | 37.47 | 38.10 | 38.74 | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 | 43.82 | 44.45 | 45.09 | 45.72 |
| Calf | 34.29 | 34.93 | 35.56 | 36.20 | 36.83 | 37.47 | 38.10 | 38.74 | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 |
| Ankle | 21.59 | 22.23 | 22.86 | 23.50 | 24.13 | 24.77 | 25.40 | 26.04 | 26.67 | 27.31 | 27.94 | 28.58 | 29.21 | 29.85 | 30.48 |
| Trunk (total trunk, torso) | 150.50 | 153.35 | 156.21 | 158.75 | 161.29 | 163.83 | 166.37 | 168.12 | 169.86 | 171.61 | 173.36 | 174.94 | 176.69 | 178.44 | 180.02 |
| Total crotch | 62.23 | 63.82 | 65.41 | 66.99 | 68.58 | 69.85 | 71.12 | 72.39 | 73.66 | 74.93 | 76.20 | 77.47 | 78.74 | 80.01 | 81.28 |
| | Vertical Measurements (cm) | | | | | | | | | | | | | | |
| Sizes | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Stature | 172.09 | 173.04 | 173.99 | 175.42 | 176.21 | 177.32 | 178.44 | 178.91 | 179.55 | 180.02 | 180.66 | 180.98 | 181.29 | 181.61 | 181.77 |
| Cervicale height | 148.27 | 149.07 | 149.86 | 151.13 | 151.77 | 152.72 | 153.67 | 154.15 | 154.62 | 155.10 | 155.58 | 155.89 | 158.21 | 156.37 | 156.53 |
| Head height, including neck | 23.81 | 23.97 | 24.13 | 24.29 | 24.45 | 24.61 | 24.77 | 24.77 | 24.92 | 24.92 | 25.08 | 25.08 | 25.08 | 25.24 | 25.24 |
| Waist height | 106.05 | 106.36 | 106.68 | 107.63 | 107.95 | 108.59 | 109.22 | 109.54 | 109.86 | 110.17 | 110.49 | 110.81 | 110.97 | 110.97 | 111.13 |
| Armscye depth | 12.54 | 12.70 | 12.86 | 13.02 | 13.49 | 13.81 | 13.97 | 14.29 | 14.45 | 14.76 | 14.92 | 40.64 | 15.40 | 15.56 | 15.88 |
| Arm inseam | 48.26 | 48.26 | 48.26 | 47.94 | 47.94 | 47.63 | 47.63 | 47.31 | 47.31 | 46.99 | 46.99 | 46.67 | 46.67 | 46.36 | 48.36 |
| Crotch height (inseam) | 81.92 | 81.92 | 81.92 | 82.23 | 82.23 | 82.23 | 82.55 | 82.55 | 82.55 | 82.55 | 82.55 | 82.55 | 82.39 | 81.76 | 81.60 |
| Knee height | 44.45 | 44.45 | 45.09 | 45.09 | 45.72 | 45.72 | 46.36 | 46.36 | 46.36 | 46.36 | 46.67 | 46.67 | 46.99 | 46.99 | 46.99 |
| Ankle height | 5.40 | 5.40 | 5.72 | 5.72 | 6.03 | 6.03 | 6.35 | 6.35 | 6.35 | 6.35 | 6.67 | 6.67 | 6.67 | 6.83 | 6.83 |
| Waist length (cervicale to waist) | 42.23 | 42.70 | 43.18 | 43.50 | 43.82 | 44.13 | 44.45 | 44.61 | 44.77 | 44.93 | 45.09 | 45.09 | 45.24 | 45.40 | 45.40 |
| True rise | 24.13 | 24.45 | 24.77 | 25.40 | 25.72 | 26.35 | 26.87 | 26.99 | 27.31 | 27.62 | 27.94 | 28.26 | 28.58 | 29.21 | 29.53 |
| | Width and Length (cm) | | | | | | | | | | | | | | |
| Sizes | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| Across shoulder (point to point) | 41.91 | 42.23 | 42.55 | 42.86 | 43.18 | 43.82 | 44.45 | 45.09 | 45.72 | 46.36 | 46.99 | 47.63 | 48.26 | 48.90 | 49.53 |
| Across chest 4 in. down | 38.10 | 38.74 | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 | 43.82 | 44.45 | 45.09 | 45.72 | 46.36 | 46.99 |
| Across back 5 in. down | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 | 43.82 | 44.45 | 45.09 | 45.72 | 46.36 | 46.99 | 47.63 | 48.26 |
| Shoulder slope (degrees) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Cervicale to wrist | 81.29 | 81.60 | 81.92 | 82.71 | 83.50 | 84.30 | 85.09 | 85.41 | 85.88 | 86.36 | 86.68 | 87.15 | 87.63 | 87.95 | 88.58 |
| Hand and foot width | 8.26 | 8.57 | 8.89 | 9.21 | 9.53 | 9.84 | 10.16 | 10.48 | 10.48 | 10.48 | 10.48 | 10.80 | 10.80 | 10.80 | 10.80 |
| Hand length | 18.10 | 18.10 | 18.42 | 18.42 | 18.42 | 18.42 | 19.05 | 19.05 | 19.05 | 19.05 | 19.69 | 19.69 | 19.69 | 19.69 | 20.32 |
| Foot length | 21.59 | 22.86 | 22.86 | 24.13 | 25.40 | 25.40 | 26.67 | 26.67 | 28.67 | 26.67 | 27.94 | 27.94 | 27.94 | 27.94 | 29.21 |



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TABLE 2 New ASTM Men's Measurement Table

| | XXL - 2XL (50-53) | | | | XXXL - 3XL (54-57) | | | | XXXXL - 4XL (58-60) | | | |
|-----------------------------------|----------------------------|--------|--------|--------|--------------------|--------|--------|--------|---------------------|--------|--------|--------|
| Weight (Approximate kilograms) | 113.40 | 117.94 | 122.47 | 127.01 | 136.08 | 142.88 | 145.15 | 149.69 | 156.49 | 158.76 | 163.30 | 167.83 |
| | Girth Measurements (cm) | | | | | | | | | | | |
| Sizes | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Chest | 124.46 | 127.00 | 129.54 | 132.08 | 134.62 | 137.16 | 139.70 | 142.24 | 144.78 | 147.32 | 149.86 | 152.40 |
| Waist | 112.40 | 115.57 | 118.75 | 121.92 | 125.73 | 129.54 | 133.35 | 137.16 | 142.24 | 147.32 | 152.40 | 157.48 |
| Seat (hip) | 124.46 | 127.00 | 129.54 | 132.08 | 134.62 | 137.16 | 139.70 | 142.24 | 144.78 | 147.32 | 149.88 | 152.40 |
| Head circumference | 62.07 | 62.55 | 63.02 | 63.50 | 63.98 | 64.45 | 64.93 | 65.41 | 65.88 | 66.36 | 66.83 | 67.31 |
| Neck base | 45.09 | 45.72 | 46.36 | 46.99 | 47.63 | 48.26 | 48.90 | 49.53 | 50.17 | 50.80 | 51.44 | 52.07 |
| Shoulder circumference | 139.70 | 142.24 | 144.78 | 147.32 | 149.86 | 152.40 | 154.94 | 157.48 | 160.02 | 162.56 | 165.10 | |
| Armhole | 52.86 | 53.66 | 54.45 | 55.25 | 56.04 | 56.83 | 57.47 | 58.42 | 59.21 | 60.01 | 60.80 | 61.60 |
| Upper arm | 38.74 | 39.37 | 40.01 | 40.64 | 41.28 | 41.91 | 42.55 | 43.18 | 43.82 | 44.45 | 45.09 | 45.72 |
| Elbow | 34.77 | 35.24 | 35.72 | 36.20 | 36.67 | 37.15 | 37.62 | 38.10 | 38.58 | 39.05 | 39.53 | 40.01 |
| Wrist | 21.91 | 22.23 | 22.54 | 22.86 | 23.18 | 23.50 | 23.81 | 24.13 | 24.45 | 24.77 | 25.08 | 25.40 |
| Thigh | 76.52 | 78.11 | 79.69 | 81.28 | 82.87 | 84.46 | 86.04 | 87.83 | 89.22 | 90.81 | 92.39 | 93.98 |
| Knee | 46.36 | 46.99 | 47.63 | 48.26 | 48.90 | 49.53 | 50.17 | 50.80 | 51.44 | 52.07 | 52.71 | 53.34 |
| Calf | 43.82 | 44.45 | 45.09 | 45.72 | 46.36 | 46.99 | 47.63 | 48.26 | 48.90 | 49.53 | 50.17 | 50.80 |
| Ankle | 31.12 | 31.75 | 32.39 | 33.02 | 33.66 | 34.29 | 34.93 | 35.56 | 36.20 | 36.83 | 37.47 | 38.10 |
| Trunk (total trunk, torso) | 181.45 | 182.09 | 185.26 | 186.69 | 188.75 | 190.82 | 192.88 | 194.95 | 195.74 | 199.71 | 202.09 | 204.47 |
| Total crotch | 82.55 | 83.82 | 85.09 | 86.38 | 87.63 | 88.90 | 90.17 | 91.44 | 93.03 | 94.62 | 86.20 | 97.79 |
| | Vertical Measurements (cm) | | | | | | | | | | | |
| Sizes | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stature | 181.93 | 182.25 | 182.50 | 182.88 | 183.52 | 183.99 | 184.47 | 184.94 | 185.42 | 185.90 | 186.37 | 186.69 |
| Cervicale height | 156.69 | 156.85 | 157.16 | 157.48 | 157.96 | 158.43 | 158.75 | 159.23 | 159.54 | 160.02 | 160.34 | 160.66 |
| Head height, including neck | 25.24 | 25.40 | 25.40 | 25.40 | 25.56 | 25.56 | 25.72 | 25.72 | 25.88 | 25.88 | 26.04 | 26.04 |
| Waist height | 111.13 | 111.28 | 111.44 | 111.76 | 112.08 | 112.40 | 112.71 | 113.03 | 113.35 | 113.67 | 113.98 | 114.14 |
| Armhole depth | 16.03 | 16.35 | 18.51 | 16.83 | 17.15 | 17.30 | 17.62 | 17.78 | 18.10 | 18.42 | 18.57 | 18.73 |
| Arm inseam | 46.04 | 46.04 | 46.04 | 46.04 | 45.72 | 45.72 | 45.72 | 45.40 | 45.40 | 45.40 | 45.09 | 45.09 |
| Crotch height (inseam) | 80.96 | 80.80 | 80.65 | 80.65 | 80.65 | 80.33 | 80.33 | 80.01 | 79.69 | 79.69 | 79.38 | 79.06 |
| Knee height | 47.63 | 47.63 | 47.63 | 47.63 | 48.26 | 48.26 | 48.26 | 48.28 | 48.90 | 48.90 | 48.90 | 48.90 |
| Ankle height | 6.99 | 6.99 | 6.99 | 6.99 | 7.30 | 7.30 | 7.30 | 7.30 | 7.62 | 7.62 | 7.62 | 7.62 |
| Waist length (cervicale to waist) | 45.58 | 45.58 | 45.72 | 45.72 | 45.88 | 46.04 | 46.04 | 46.20 | 46.20 | 46.36 | 46.36 | 46.51 |
| True rise | 30.16 | 30.48 | 30.80 | 31.12 | 31.43 | 32.07 | 32.39 | 33.02 | 33.66 | 33.97 | 34.61 | 34.93 |
| | Width and Length (cm) | | | | | | | | | | | |
| Sizes | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Across shoulder (point to point) | 50.17 | 50.80 | 51.44 | 52.07 | 52.55 | 53.02 | 53.50 | 53.98 | 54.45 | 54.93 | 55.40 | 55.88 |
| Across chest 4 in. down | 47.83 | 48.26 | 48.90 | 49.53 | 50.17 | 50.80 | 51.44 | 52.07 | 52.71 | 53.34 | 53.98 | 54.61 |
| Across back 5 in. down | 48.90 | 49.53 | 50.17 | 50.80 | 51.44 | 52.07 | 52.71 | 53.34 | 53.98 | 55.88 | 57.79 | 57.15 |
| Shoulder slope degrees | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Cervicale to wrist | 89.22 | 89.54 | 90.01 | 90.49 | 90.96 | 91.44 | 91.92 | 92.39 | 92.87 | 93.35 | 93.82 | 94.30 |
| Hand and foot width | 11.11 | 11.11 | 11.11 | 11.11 | 11.43 | 11.43 | 12.07 | 12.07 | 12.70 | 12.70 | 12.70 | 12.70 |
| Hand length | 20.32 | 20.32 | 20.32 | 20.96 | 20.96 | 20.96 | 20.96 | 21.59 | 21.59 | 21.59 | 21.59 | 21.59 |
| Foot length | 29.21 | 29.21 | 29.21 | 30.48 | 30.48 | 30.48 | 30.48 | 31.75 | 31.75 | 31.75 | 33.02 | 33.02 |



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