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Standard Terminology Relating to Body Dimensions for Apparel Sizing¹

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1. Scope

- 1.1 This standard is a compilation of terminology related to the body dimensions for necessary apparel sizing.
- 1.2 For definitions of other textile terms, refer to Terminology D 123.
- 1.3 The terms are listed in alphabetical order regardless of whether they are horizontal or vertical measurements.

2. Referenced Documents

2.1 *ASTM Standards:*

D 123 Terminology Relating to Textile Materials²

2.2 *ISO Standards:*³

ISO ~~3635~~ ~~1981~~ Size 3635 Size Designation of Clothes, Definitions and Body Measurement Procedures

ISO 8559 Garment Construction and Anthropometric Surveys—Body Dimensions

3. Terminology ~~abdominal extension, n—see front high-hip.~~

3.1 *Anatomy:*

acromion, *n*—~~in anatomy, that~~ that part of the shoulder blade located at the end of the spine, which articulates with the collarbone. (See also **shoulder joint**.)

across shoulder, *n*—~~in body measurements, the distance from shoulder joint to shoulder joint across the back.~~

ankle, *n*—~~in anatomy, the joint between the foot and the lower leg. (See Fig. 1.) (See Fig. 2.)~~

ankle girth, **ankle**, *n*—~~in body measurements, the circumference of the joint between the leg over foot and the greatest prominence of the ankle. lower leg. (See Fig. 1.)~~

ankle height, **armpit**, *n*—~~in body measurements, with the hollow under the subject standing barefoot, the distance from the center junction of the prominent outside ankle bone to arm and the floor. shoulder. (See Fig. 1.)~~

arm length, **back-break point**, *n*—~~in body measurements, with the arm bent at 90° and the clenched fist placed the location on the hip, the distance from the shoulder joint along the outside back of the body where the arm over separates from the elbow to the greatest prominence on the outside of the wrist. body. (See Fig. 2.)~~

armhole, **cervicale**, *n*—~~in garment construction, the area the prominent point of a garment through which the arm passes seventh or into which a sleeve is fitted. (Compare armseye.) lowest neck vertebra at the back of the body.~~

DISCUSSION—The **armhole** **cervicale** is ~~not necessarily identified by being more prominent when the same shape or location as head is bent forward; however, cervicale height measurements are made only when the armseye. head is erect. (See Fig. 2.)~~

armpit, **crotch**, *n*—~~in anatomy, the hollow under the body area adjacent to the junction vertex of the arm and included angle between the shoulder. legs. (See Fig. 1.)~~

armseye, **crown**, *n*—~~in garment construction, the opening in a garment for the attachment the top of a fitted sleeve. (Compare armhole.)~~

DISCUSSION—**Armseye** is a tailor's term for **armhole**. The opening follows a line passing over the shoulder joint, ~~front and back-break points and armpit area. head. (See Fig. 1.)~~

² Annual Book of ASTM Standards, Vol 07.01.

³ Available from American National Standards Institute, 11 West 42nd Street, 13th Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

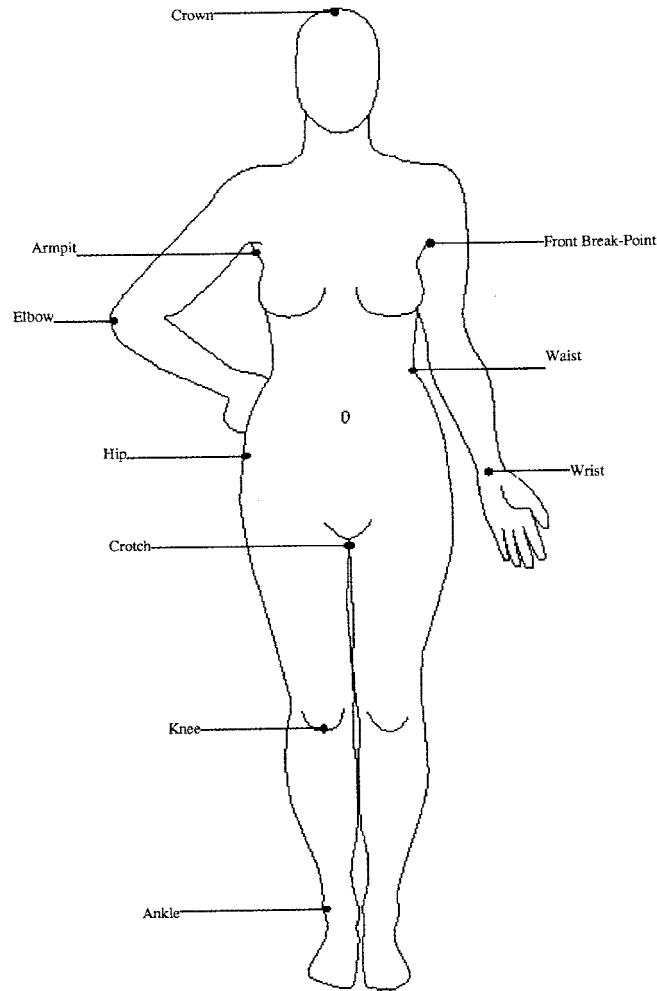


FIG. 1

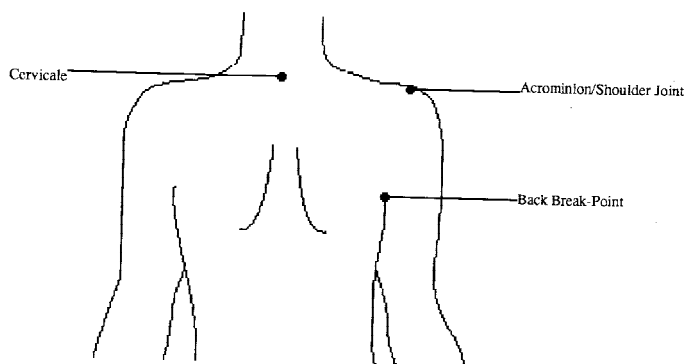


FIG. 2

armeye circumference, elbow, *n*—*in body measurements*, with the arm hanging down, the distance from the shoulder—the joint through that articulates between the front-break point, the armpit, the back-break point, upper arm and to the starting point: lower arm. (See Fig.-2.-1.)

back-breakfront-break point, *n*—*in anatomy*, the—the location on the back front of the body where the arm separates from the body. (See Fig. 1.)

back width, hip, *n*—*in body measurements*, the distance from back-break point to back-break point. (Syn. *cross back width*.)—the laterally projecting region formed by the lateral parts of the pelvis and the upper part of the femur together with the flesh covering them. (See Fig.-3.-1.)

body dimension, knee, n—*in garment construction*, a body measurement which can be used to build a sizing system or to select an appropriately sized garment.—the joint between the lower and upper leg. (See also **sizing system**.) (Fig. 1.)

body measurements, shoulder joint, n—*in anthropometry*, a standardized distance between two specified points on—the juncture of the human anatomy—collarbone and the shoulder blade.

DISCUSSION—Body measurements generally are based on standardized values from statistical studies—The outer end of the collarbone or clavicle pivots against the acromion which in turn pivots against the humerus or upper arm bone in the arm. These bones form the shoulder girdle. (See also **acromions**.) (See Fig. 2.)

body weight, waist, n—*in—the part of the body measurements*, mass in kilograms (pounds)—at the location between the lowest rib and hip identified by bending the body to the side. (See Fig. 1.)

wrist, n—the joint that articulates between the end of the lower arm and the hand. (See Fig. 1.)

3.2 *Anthropometry:*

body measurements, n—a standardized distance between two specified points on the human anatomy.

DISCUSSION—The term, weight, is used in reference to organisms and to objects used to apply a force—Body measurements generally are based on tension. In each case, the “weight” has a mass.

bust—see **bust girth**, standardized values from statistical studies of large populations.

3.3 *Body Measurements:*

bust girth, across back shoulder, n—*in body measurements*, the circumference of—the horizontal distance across the body over back from the fullest part top of the breasts and parallel one shoulder joint to the floor. (Syn. **bust, full-bust girth**.) (Compare **upper chest girth, under bust girth**) (See Fig. 4 top of the other shoulder joint, taken with the arms down. (See Fig. 5.)

bust point to bust point, across front shoulder width, n—*in body measurements*, the—the horizontal distance across the front from the apex top of one breast shoulder joint to the apex top of the other shoulder joint, taken with the arms down. (See Fig. 5 3.)

ankle girth, n—the maximum horizontal circumference of the ankle, taken over the greatest prominence of the anklebones. (See Fig. 3.)

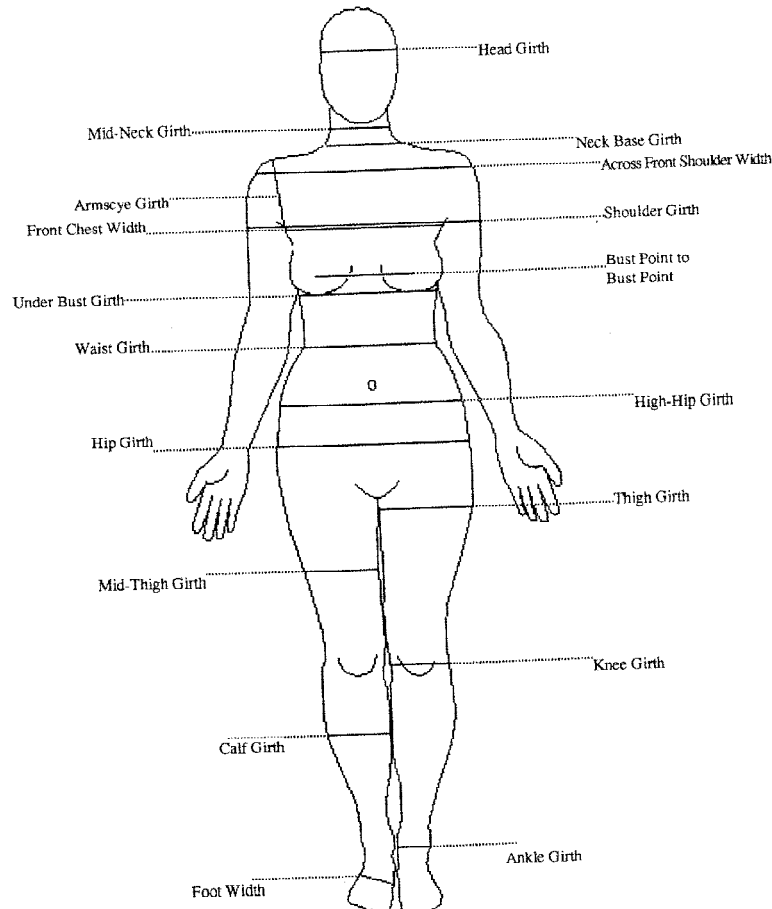


FIG. 3

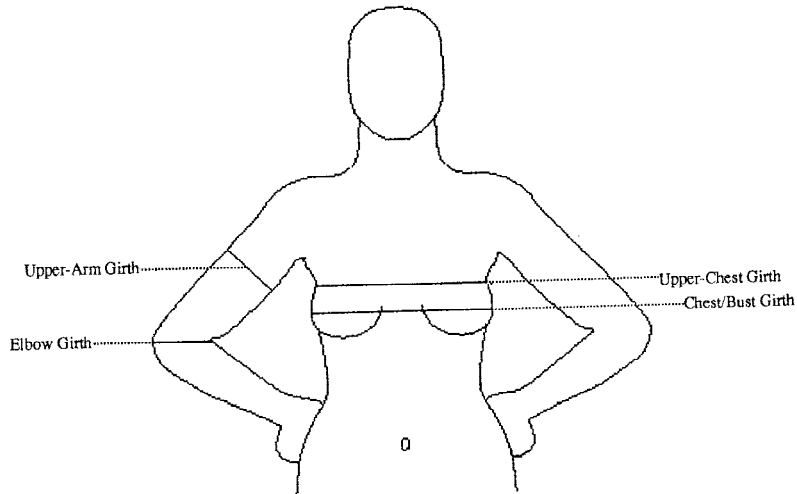


FIG. 4

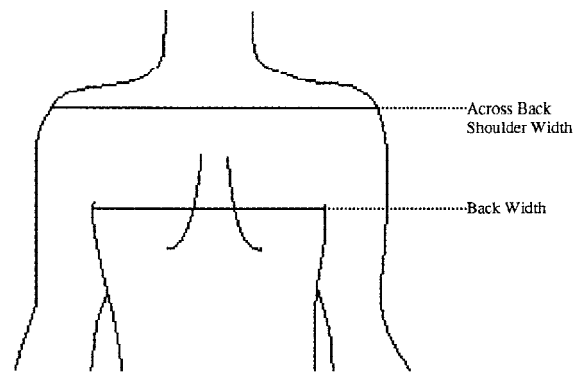


FIG. 5

ankle height, *n*—the vertical distance from the prominence of the outer ankle bone to the floor, taken with subject standing and without shoes. (See Fig. 6.)

ankle height (infant special case), *n*—the straight distance from the prominence of the outer ankle bone to the soles of the feet, taken with subject lying down flat with legs extended and the foot positioned at 1.57 rad (90°) to the leg.

arm length, *n*—the distance from the top of the shoulder joint along the outside of the arm over the elbow to the prominent wrist bone, taken with the arm bent (1.57 rad or 90°) and the hand placed on the hip. (See Fig. 7.)

armscye girth, *n*—the circumference taken from the shoulder joint through the front break-point, the armpit, the back break-point and to the starting point, taken with the arms down. (See Fig. 3.)

back width, *n*—the horizontal distance across the back from back break-point to back break-point over the shoulder blades, taken with the arms down. (See Fig. 5.)

body weight, *n*—the weight as measured on a calibrated scale taken with the subject in undergarments.

bust point to bust point, *n*—the horizontal distance from bust apex to bust apex, taken with the arms down. (See Fig. 3.)

calf girth, *n*—*in body measurements*, the—the maximum horizontal circumference around of the lower leg, taken between the knee and ankle, parallel to the floor. (See Fig. 3.)

center back waist length, *n*—*in body measurements*, the vertical—the distance along the spine from the cervicale to the center back waist level, taken along the spine (contour). (See Fig. 8.)

center front waist length, *n*—*in body measurements*, the vertical—the distance from the neck baseline at the center front neck base line to the center front waist level (contour). (See Fig. 6.)

cervicale height, *n*—*in anatomy*, the prominent point of—the vertical distance from the seventh or lowest neck vertebra at the back of the body.

Discussion—The cervicale is identified by being more prominent when to the head is bent forward; however, cervicale floor, taken with subject standing and without shoes. (See Fig. 8.)

cervicale height measurements are made only when the head is erect.

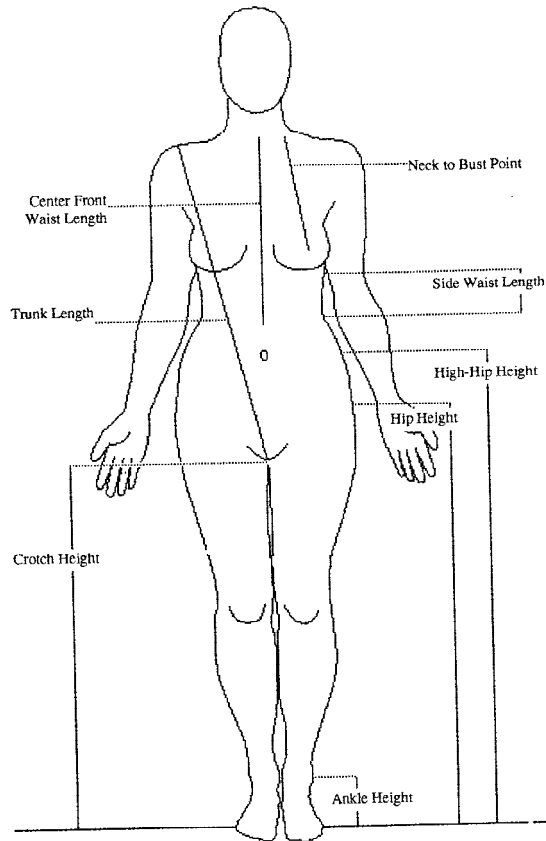


FIG. 6

cervicale to bust point, (infant special case), *n*—*in body measurements*, the—the straight distance from the cervicale around to the base soles of the neck and feet, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the bust point. leg.

cervicale to wrist, knee height, *n*—*in body measurements*, with the arm bent, the—the vertical distance from the cervicale to a point level with the shoulder joint, along the outside midpoint of the arm, over the elbow to the greater prominence on the outside back of the wrist.

cross-back width—see **back width.**

cross-chest width; knee (or crease). (See Fig. 8.)

cervicale to knee height (infant special case), *n*—*in body measurements*, the—the straight distance from front-break point the cervicale to front-break point. (See Fig. 5.) a point level with the midpoint of the back of the knee (or crease), taken with subject lying down flat with legs extended.

cervicale to wrist length, *n*—*in anatomy*, the body area adjacent to—the distance from the cervicale over the top of the included angle between shoulder joint, along the outside of the arm, over the elbow to the prominent wrist bone, taken with the arm bent 1.57 rad (90°) and the hand placed on the hip. (See Fig. 2.)

crotch depth—see **true rise.**

crotch height—see **inside-leg length. 9.)**

crown, chest/bust girth, *n*—the horizontal circumference around the body, taken under the arms and across the fullest part of the chest/bust apex including the lower portion of the shoulder blades. (See Fig. 1-4.)

drop; crotch height, *n*—*in body measurements*,—the vertical distance from the midpoint of the crotch to the floor, taken with the subject standing and without shoes. (See Fig. 6.)

crotch height (infant special case), the difference between—the straight distance from the midpoint of the crotch to the soles of the feet, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the waist girth. leg.

elbow, crotch length (total), *n*—*in anatomy*, the joint which articulates between—the distance from waist level at the upper arm center front, through the crotch and to the lower arm—waist level at the center back, avoiding constriction at the crotch. (See Fig. 10.)

elbow girth, *n*—*in body measurements*, with—the maximum circumference of the arm bent at 90° and elbow, taken over the clenched fist placed on the hip, the circumference outer prominence of the elbow bone with the arm bent 1.57 rad (90°). (See Fig. 2-4.)

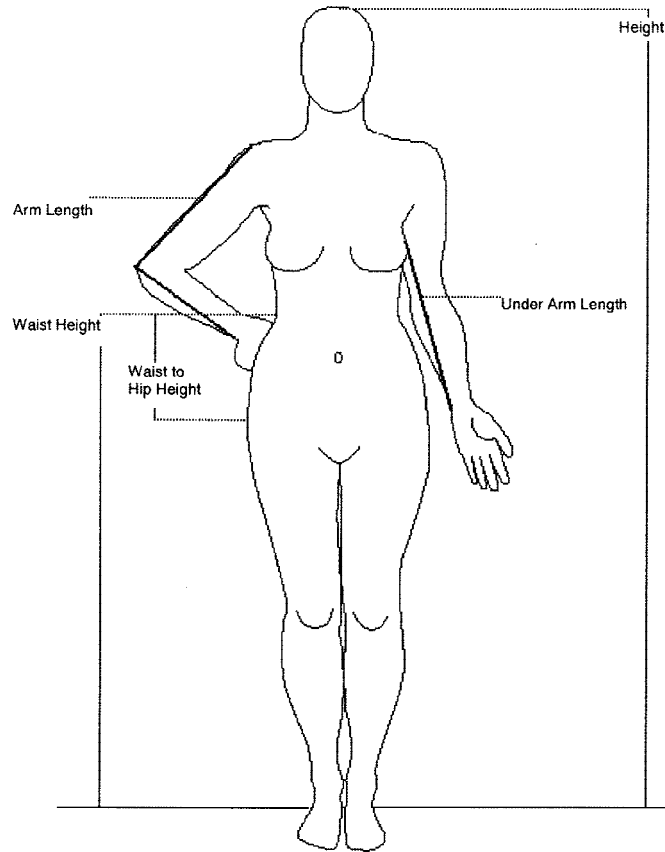


FIG. 7

foot length, n—*in body measurements*, with the subject standing barefoot, the straight distance from the most prominent part of the heel where it touched back of the floor heel to the end prominence of the longest toe, taken with the foot on a flat surface without shoes (use stable, flat ruler). (See Fig. 6)-11.)

foot width, n—*in body measurements*, with the subject standing barefoot, the straight distance from the one side of the foot to the other side at the widest part, taken with the bottom subject standing and without shoes (use stable, flat ruler). (See Fig. 3.)

front-break point, front chest width, n—*in anatomy*, the location on the horizontal distance across the front of the body where the arm separates chest from the body.

full-bust girth—see **bust girth**, front break-point, taken with the arms down. (See Fig. 3.)

front high-hip, hand girth, n—*in body measurements*, the distance from one imaginary side seam to the maximum circumference of the other imaginary side seam at hand around the high-hip level. (Syn. **abdominal extension**.)

head circumference—see **head girth**, knuckles excluding the thumb, taken with the fingers together. (See Fig. 12.)

head girth, hand length, n—*in body measurements*, the maximum circumference the straight distance from the prominence of the head above longest finger to the ears.

Discussion—In inner wrist bone, taken across the industry, palm of the term head circumference is preferred, hand with fingers together and palm flat (use a stable, flat ruler). (See Fig. 12.)

heel-ankle circumference, hand width, n—*in body measurements*, with the maximum width across the subject standing barefoot, the distance around the foot from the point where the back palm of the heel contacts hand excluding the floor thumb, taken with fingers together and over the juncture of the foot and leg at the front of the ankle and back to the starting point, palm flat (use a stable, flat ruler). (See Fig. 12.)

head and neck length, n—the distance from the crown of the head to the cervicale (contour), taken with the head erect and the neck unbent. (See Fig. 9.)

head and neck length (infant special case), n—the distance from the crown of the head to the cervicale (contour), taken with the head erect and the neck unbent, with subject lying down flat with legs extended.

head girth, n—the maximum horizontal circumference of the head above the ears. (See Fig. 3.)

height, n—*in body measurements*, the vertical distance from the crown of a standing the head to the floor, taken with subject standing and without shoes. (See Fig. 7.)

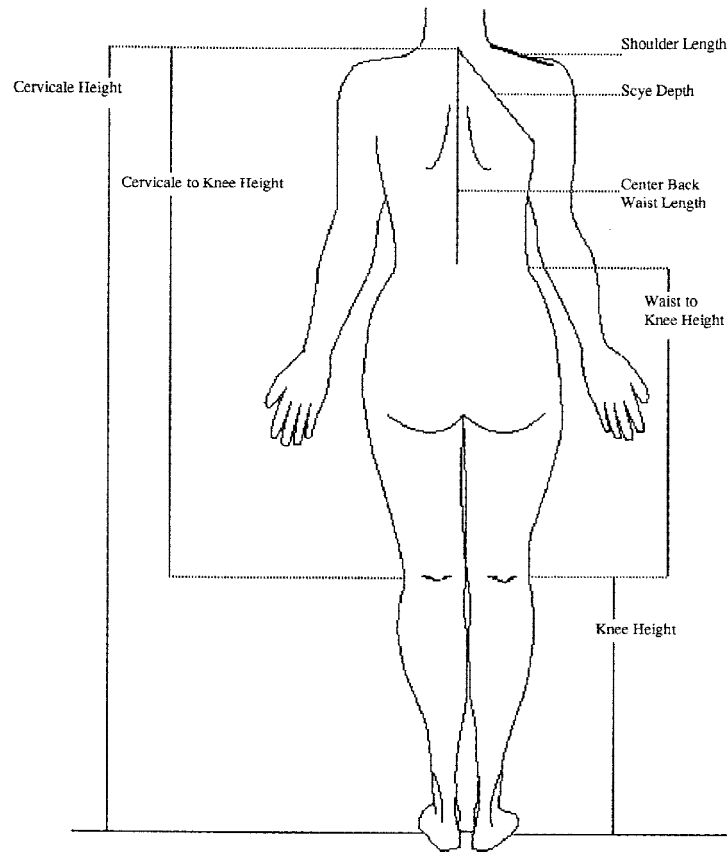


FIG. 8

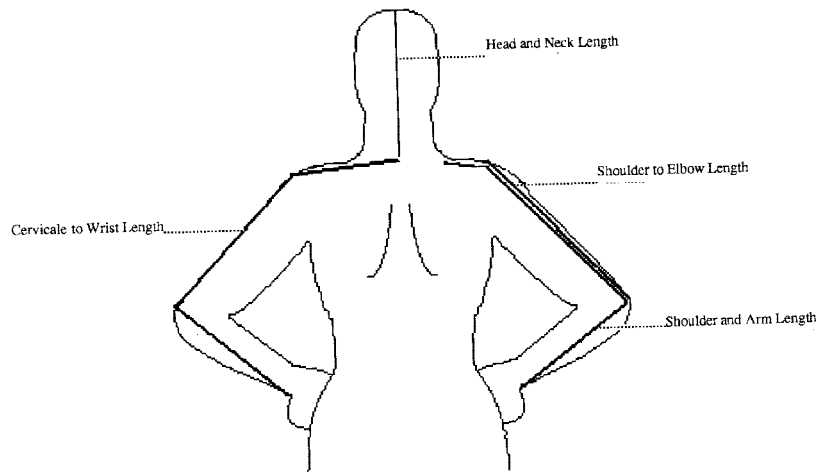


FIG. 9

height (infant special case), n—the straight distance from the top of the head to the soles of the feet. (Syn. **stature**)

DISCUSSION—For persons unable to stand, height is measured feet, taken while they are subject is lying down.

high-bust girth—see **chest girth**. down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg.

high-hip girth, n—*in body measurements*, the—the maximum horizontal circumference of around the body, taken at a point high hip level approximately 7.5 cm (3 in:ches) below the waist and parallel to level including the floor. (Compare **hip girth**.) abdominal extension. (See Fig. 3.)

high-hip height, n—*in anatomy*, the laterally projecting region formed by—the distance from the lateral parts of high-hip girth level to the pelvis and hip girth level along the upper part side of the femur together body (contour) then vertically to the floor.

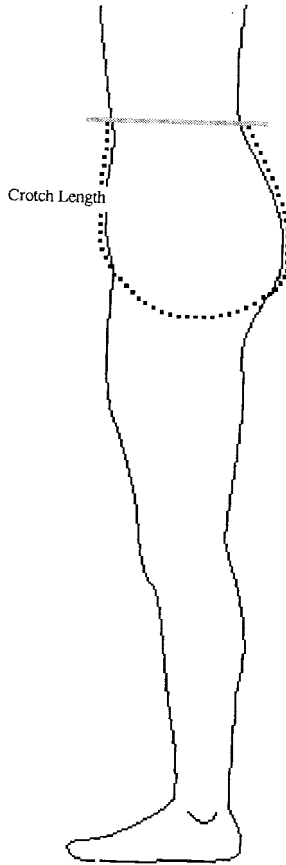


FIG. 10

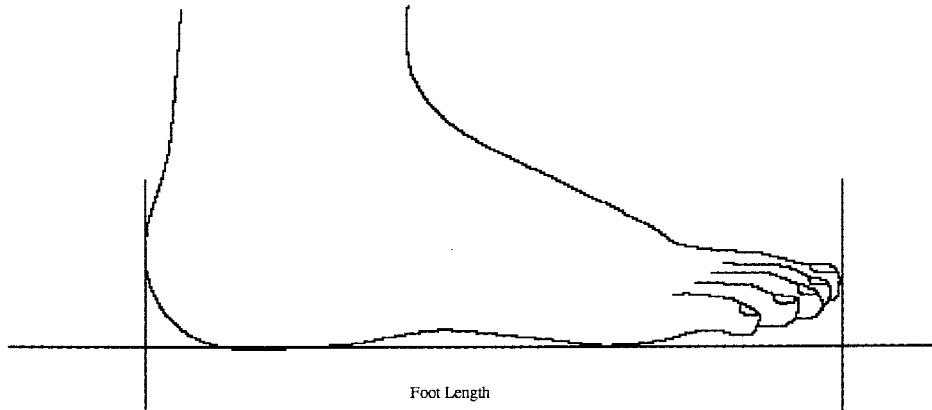


FIG. 11

taken with the flesh covering them. subject standing and without shoes. (See Fig. 1.) 6.)

hip girth, *n*—*in body measurements*, the the maximum horizontal circumference of around the body at the level of maximum prominence of the buttocks. hip height. (See Figs. 1 and 4.) Fig. 3.)

inside-leg length, hip height, *n*—*in body measurements*, the the vertical distance from the crotch hip girth level to the floor along the side of the feet. (Syn. **crotch height**.) body, taken with subject standing and without shoes. (See Fig. 2.)

knee, 6.)

hip height (infant special case), *n*—*in anatomy*, the the straight distance from the hip girth level to the soles of the feet along the side of the body, taken with subject lying down flat with legs extended and upper leg. (See Fig. 1.) foot positioned at 1.57 rad (90°) to the leg.

knee girth, *n*—*in body measurements*, with the leg straight, the the maximum horizontal circumference of the knee, taken over the knee cap and parallel to kneecap with the floor. leg straight. (See Fig. 3.)

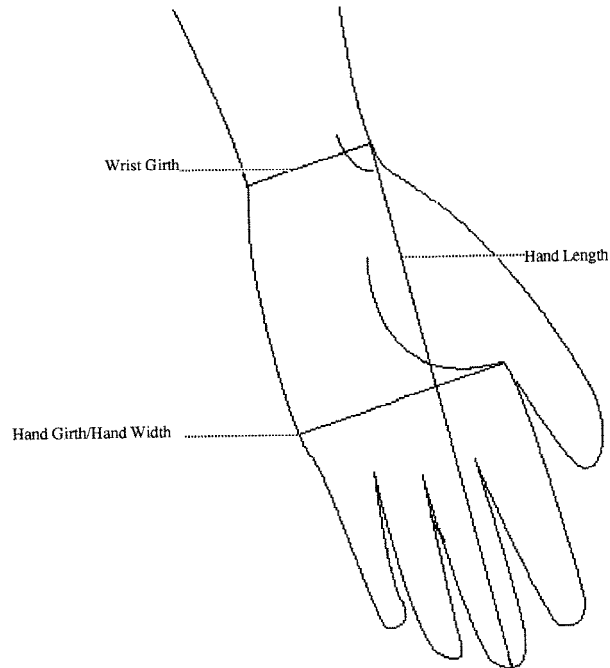


FIG. 12

knee height, *n*—the vertical distance from the midpoint of the back of the knee (or crease) to the floor, taken with subject standing and without shoes. (See Fig. 8.)

knee height (infant special case), *n*—the straight distance from the midpoint (or crease) of the knee to the soles of the feet, taken with subject lying down flat with legs extended and the foot positioned at 1.57 rad (90°) to the leg.

mid-neck girth, *n*—*in body measurements*, the horizontal circumference of the neck, taken approximately 25 mm (1 in.) above the neck base. (Compare **neck base girth**.) level. (See Fig. 3.)

mid-thigh girth, *n*—*in body measurements*, the maximum horizontal circumference of the upper leg, taken midway between the hip girth level and the midpoint (or crease) of the knee. (See Fig. 1-3.)

neck base girth, *n*—*in body measurements*, the circumference of the neck, taken over the cervicale at the back and at the top of the collarbone at the front. (See Fig. 3.)

outside-leg length, neck to bust point, *n*—*in body measurements*, the distance from the side waist to the soles of the feet, following neck base to the curve of bust apex (contour), taken with the body arms down. (See Fig. 6.)

scye depth, *n*—*in body measurements*, the vertical distance from the cervicale to the back break-point level, taken with the armpit arms down. (See Fig. 7-8.)

shoulder circumference, and arm length, *n*—*in body measurements*, with arms down at sides, the maximum distance around from the shoulders at side of the top neck base across the shoulder joint and along the outside of the arm over the elbow to the prominent wrist bone, taken with the arm bent 1.57 rad (90°) and the hand placed on the hip. (See Fig. 9.)

shoulder joint, girth, *n*—*in anatomy*, the juncture of the horizontal circumference around the collarbone and shoulders, taken at the shoulder blade. (See also **acromion**.)

DISCUSSION—The outer end of front break-point level with the collarbone or clavicle pivots against the acromion which in turn pivots against the humerus or upper arm bone in the arm. These bones form the shoulder girdle. arms down. (See Fig. 3.)

shoulder length, *n*—*in body measurements*, the distance from the side of the neck base to the armseye line at top of the shoulder joint, taken with the arm down. (See Fig. 3-8.)

shoulder slope, *n*—*in body measurements*, the angle formed when the slant the degree of difference between the shoulder line deviates from slant and the horizontal line that originates at the side neck base. (See Fig. 3-) base, taken with a goniometer positioned on the shoulder and moved until the baseline is parallel to the floor.

sitting spread, shoulder to elbow length, *n*—*in body measurements*, with the distance from the subject seated on a rigid flat surface and top of the thighs together, shoulder joint along the distance around outside of the hips (diagonally) from arm to the prominent point where the back of the buttocks contacts elbow, taken with the sitting surface arm bent 1.57 rad (90°) and over the widest part of hand placed on the hips. (See Fig. 8-9.)

sizing system, side waist length, *n*—*in garment construction*, a method the distance from the mid-underarm point of designating garment sizes.

stature—see **height**. the armseye to the waist level, taken along the side of the body (contour). (See Fig. 6.)

thigh girth, *n*—*in body measurements*, the—the maximum horizontal circumference of the upper leg, taken close to the crotch. (Compare **mid-thigh girth**.) (See Fig. 1.) 3.)

total crotch length, true rise, *n*—*in body measurements*, the—the vertical distance from the waist level at center front through the crotch side of the body to the waist level at center back. (See Fig. 9.) flat surface, taken with subject sitting on hard, flat surface (crotch depth).

total vertical trunk length, trunk length (total vertical), *n*—*in body measurements*, the distance—the circumference taken from a point on the right shoulder line midway between the neck base and the shoulder joint, down the back through the crotch and up over the projection prominence of the right breast chest/bust apex to the starting point, avoiding constriction at the crotch. (See Fig. 2.) 6.)

true rise, *n*—*in body measurements*, the vertical distance (plumb line) from the waist level at the side to the crotch. (Syn. **crotch depth**.)

underarm length, *n*—*in body measurements*, with arm hanging down, the—the distance from the mid-underarm point of the armscye to the inner wrist bone, taken with the arm down. (See Fig. 7.)

under-bust girth (missy special case), *n*—*in body measurements*, the—the horizontal circumference of around the body under the breasts arms and parallel to the floor. bust. (See Fig. 4.)

upper-arm girth, *n*—*in body measurements*, the—the maximum circumference of the arm usually arm, taken midway between the elbow and the shoulder joints with the arm bent 1.57 rad (90°). (See Fig. 4.)

upper-arm length, upper-chest girth, *n*—*in body measurements*, with—the horizontal circumference around the arm bent, body, taken under the distance from arms and above the shoulder joint along the outside fullest part of the arm to chest/bust including the prominence lower portion of the elbow. shoulder blades. (See Fig. 4.)

upperchestwaist girth, *n*—*in body measurements*, the—the minimum horizontal circumference of around the body over the shoulder blades, under the arms and across the upper chest. (Syn. **high-bust girth**.) (Compare **bust girth**.) at waist height. (See Fig. 4.) 3.)

waist height, *n*—*in anatomy*, the part of—the distance from the body at waist level to the location between the lowest rib and hip identified by bending girth level along the side of the body (contour) then vertically to the floor, taken with subject standing and without shoes. (See Fig. 7.)

waist height (infant special case), *n*—the straight distance from the waist level to the soles of the feet along the side of the body, taken with subject lying down flat with legs extended and foot positioned at 1.57 rad (90°) to the leg.

waist girth, to hip height, *n*—*in body measurements*, the circumference of—the distance from the waist immediately below level to the lowest rib; hip girth level, taken along the side of the body (contour). (See Fig. 4.) 7.)

waist to hip height (infant special case), *n*—the straight distance from the waist level to the hip girth level, taken along the side of the body with subject lying down flat with legs extended.

waist to knee height, *n*—*in anatomy*, the joint which articulates between—the vertical distance from the waist level to a point level with the midpoint of the lower arm and back of the knee (or crease), taken along the side of the body. (See Fig. 2.) 7.)

waist to knee height (infant special case), *n*—the straight distance from the waist level to a point level with the midpoint of the back of the knee (or crease), taken along the side of the body with subject lying down flat with legs extended.

wrist girth, *n*—*in body measurements*, the—the maximum circumference over the prominence of the wrist, taken over the inner and the outer forearm prominence of the wrist bones. (See Fig. 12.)

3.4 Garment Construction:

armhole, *n*—the area of a garment through which the arm passes or into which a sleeve is fitted.

DISCUSSION—The armhole is not necessarily the same shape or location as the armscye.

armscye, *n*—the opening in a garment for the attachment of a fitted sleeve.

DISCUSSION—Armscye is a tailor's term for armhole. The opening follows a line passing over the shoulder joint, front- and back-break points and armpit area.

body dimension, *n*—a body measurement that can be used to build a sizing system or to select an appropriately sized garment.

sizing system, *n*—a method of designating garment sizes.

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