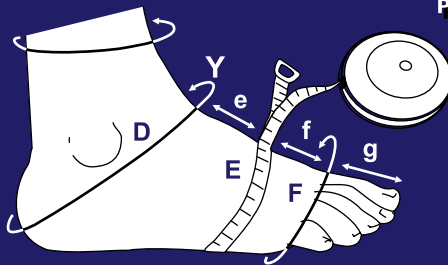


MEASURING FOR CUSTOM-MADE PRESSURE GARMENTS

THE TORSO



Pressure Garments • Custom & Ready-Made



Revised January 2008

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20080121_A

#31 Sleeved Vest

Requested features:

1. color: Royal Blue
2. bilateral breast inserts for comfort
3. bilateral expansion panels
4. front zipper with hook & loop tab to keep the zipper from opening at the top
5. of the neck will be scooped 1.5" below the sternal notch
6. waist hook & loop tabs to allow the upper torso garment to be attached to the lower torso garment (K and k are provided to overlap the garments)
7. Silon-TEX with velfoam padding, illustrated with detailed measurements on the *Sketch Pad*
8. Close-knit fabric, lighter and more open than the default Regular material, see page 11

For adult female patients, circumference C is taken immediately below the breasts (don't forget to also measure the torso circumference over the breasts). For male patients and for children, circumference C is taken about halfway between the axillae and the waist (circumferences B and D).

TORSO MEASUREMENT CHART

Patient Doe, Jane
 Last Name First Name
 Bio-Concepts Use Only
 Date 10/8/07 Age 38 Sex F
 Garment color C07
 Insert breast - bilateral
 Lining Silon-TEX see sketch pad
 Zipper: Front or Back Hook & loop zipper stop tab
 Regular neck
 Scoop neck: Distance below sternal notch 1.4
 Turtle neck: 3/4" 1" 1 1/2" 2" 2 1/2"
 Expansion panel: Left side Right side (default expansion panel location is lateral)
 Soft armpit panels (N/C) Waist hook & loop tabs to attach to pants (N/C)

Refer to the Bio-Concepts Measuring Manual for detailed procedures, additional instructions, and example measuring charts.

Additional instructions or comments:
Close-knit Material
add velfoam padding to back see sketch pad

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PLEASE DO NOT WRITE IN MARGINS

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CIRCLE ITEMS ORDERED

Bio-Concepts Use Only:

F =

For a Vest (Items 30A, 31)

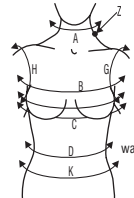
required: A, B, C, D, G, H, b, c, d
 for adult female: brassiere cup size
 torso circumference over breasts
 optional: K, k (see illustrations below)

For a Body Brief or Suit (Items 24, 25, 26, 27, 28, 29)

required: All, except K and k
 for adult female: brassiere cup size
 torso circumference over breasts
 optional: None

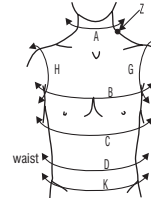
For other torso garments refer to the Measuring Manual

CIRCUMFERENCES Adult Female Torso



For adult females C is directly below the breasts. Don't forget to take an additional circumference of the torso over the breasts.

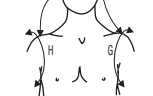
CIRCUMFERENCES Male & Child Torso



For adult males and children, C is halfway between D and B.

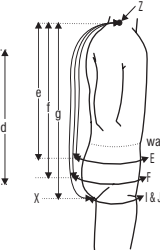
HOW TO MEASURE CIRCUMFERENCES G & H

Acromial Process



Measure H & G with arm down and place the measuring tape distal (away) from the acromion.

ADDITIONAL DISTANCES & CIRCUMFERENCES Body Briefs & Body Suits Only



E and F are evenly spaced between the waist and the gluteal fold.

A	13.4
B	33.5
C	29.2+
D	30.0
E	
F	
G	
GL	14.2
H	15.2+
I	
J	
K	35.0
b	7.4
c	14.0
d	18.0
e	
f	
g	
k	2.4

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See page 15 for an explanation of the shorthand measurement notation system.

Torso Chart -- NEW PATIENT EXAMPLE

MEASURING THE TORSO

For a Vest (Items 30A, 31)

required: A, B, C, D, G, H, b, c, d

for adult female: brassiere cup size
torso circumference over breasts

optional: K, k

For a Body Brief or Suit (Items 24, 25, 26, 27, 28, 29)

required: All, except K and k

for adult female: brassiere cup size
torso circumference over breasts

optional: None

Procedure for a Vest

- Measure the circumferences **B, C, D, G,** and **H.** Include **K** only if you want the bottom of the garment to extend below the waist. Otherwise **K** is not needed.
- Using a ballpoint pen, make a mark on the front of the patient at the location of each circumference.
- Follow the instructions on page 30 to take measurements **b-d.** If you included **K,** then also measure the distance from **D** down to the **K** circumference. This is **k.**
- Use the **Upper Extremity Chart** for vests and body suits with attached arms.

Circumference Measurements

A Circumference of neck at mid-point.

B Circumference of the torso at the axillae.

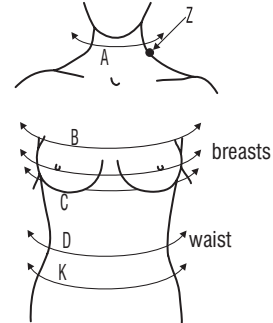
C Torso circumference:
ADULT FEMALES - Directly below breasts.
MALES & CHILDREN - Halfway between circumferences **B** and **D.**

D Circumference at waist (the waist is defined as the level at which the patient wears pants, panties, briefs, or skirts). If the garment will include the lower torso, make a mark on the patient where this measurement is taken just above one of the buttocks. This is needed in order to continue measuring circumferences of the lower torso, see page 31.

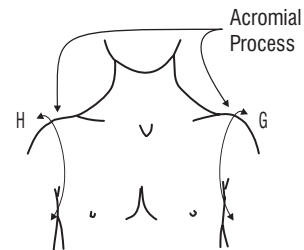
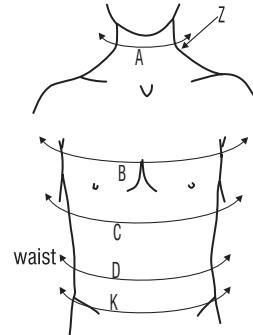
G-H Axilla circumference taken distal to acromion. Measure with arms down. Tape should be positioned so that it almost is falling off.

K Circumference below waist (only if it is necessary to extend the vest to below the waist).

ADULT FEMALE
TORSO MEASUREMENTS
Circumference "C"
directly below breasts



MALE & CHILD TORSO
MEASUREMENTS
Circumference "C" is
halfway between
"B" and the waist



Surface Measurements

Point Z is located at the base of the neck at the top of the bulge of the trapezius. Make a mark to locate **Point Z**. The surface measurements discussed below, **b**, **c**, and **d** must be taken from **Point Z**. Measurements **a** through **d** (and the optional **k**) are critical for proper fit of garment. Surface measurements are taken from **Point Z** at the base of neck at top of shoulder, to the corresponding circumference marks (**A** through **D**, and the optional **K**).

- b** Distance from **Point Z** to circumference **B**.
- c** Distance from **Point Z** to circumference **C**.
- d** Distance from **Point Z** to circumference **D** (waist).
- k** Optional -- distance from waist circumference **D** to **K**. Extending a vest to below the waist would only be desired if it is intended to overlap with a leotard or brief, otherwise it will roll up to the waist.

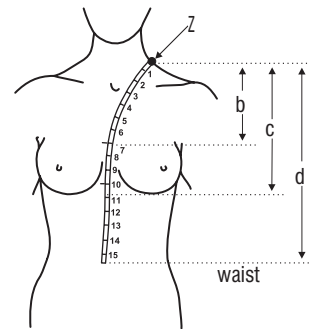
Adult Females

- Brassiere cup size.
- Chest circumference over nipples.

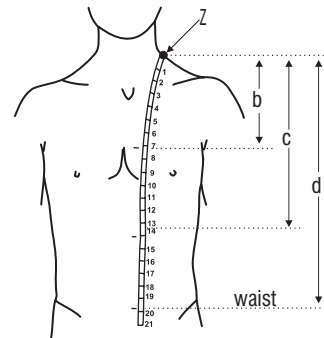
Mastectomy Patient

If the patient presents with no breasts or one breast due to mastectomy, determine whether a prosthetic device will be worn. If the garment will be worn under or without a prosthetic breast, measure the patient according to the male/child procedure described above and indicate on the **Torso Measuring Chart** that the breasts are missing due to mastectomy in the "Additional Instructions." If only one breast is absent, measure according to the adult female measurement procedure described above and be sure to indicate which breast is missing in the "Additional Instructions" on the **Torso Measuring Chart**.

ADULT FEMALE
TORSO MEASUREMENTS
Circumference C
directly below breasts



MALE & CHILD TORSO
MEASUREMENTS
Circumference C is
halfway between
"B" and the waist



Procedure for a Body Brief or Body Suit

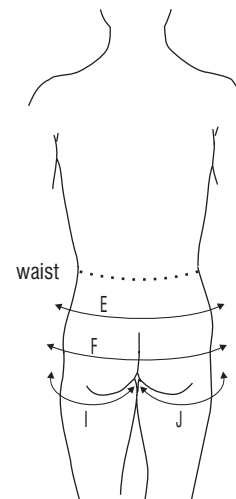
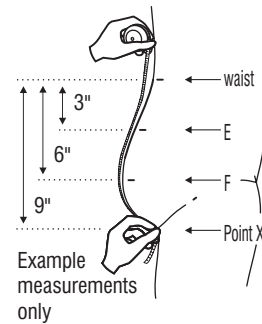
Take all of the upper torso measurements discussed on pages 29-30 (except measurements **K** and **k** which are only needed for **Sleeved** and **Sleeveless Vests** that are intended to extend to below the waist).

NOTE: The measurements described below are only needed if the garment will incorporate the lower torso. For Sleeved and Sleeveless Vests, these measurements are not needed.

Circumference Measurements

Lower torso circumferences, **E** and **F**, are evenly spaced between the waist and **Point X**, the fold of the buttocks. Measure the distance between the waist and **Point X** and divide that by three. For example, if the distance between the waist and **Point X** is 9 inches, then make a mark on the buttock 3 inches below the waist and measure circumference **E**. Then measure 6 inches below the waist, make a mark on the buttock and measure circumference **F**. The spacing between **E** and **F** does not have to be exact, for example, if the distance from the waist to **Point X** is 10 inches, then take circumference **E**, 3 1/2 inches below the waist and circumference **F**, 7 inches below the waist.

- E** Circumference of the lower torso approximately one-third of the distance between the waist and **Point X**. Make a mark on one of the buttocks where the measurement was taken.
- F** Circumference of the lower torso approximately two-thirds of the distance between the waist and **Point X**. Make a mark on one of the buttocks where the measurement was taken.
- I-J** Circumferences of the tops of the legs.



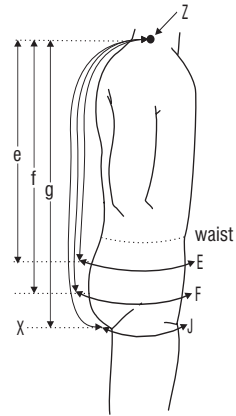
Surface Measurements

You already located **Point Z** (p. 30). The measurements discussed below, **e**, **f**, and **g** must be taken from **Point Z**. Measurements **e**, **f**, and **g** are critical for proper fit of garment.

- e** Distance from **Point Z** to circumference **E**.
- f** Distance from **Point Z** to circumference **F**.
- g** Distance from **Point Z** to **Point X** (fold of the buttocks).

Infants

If the patient will be wearing the garment over a diaper, take the lower torso measurements over the diaper.



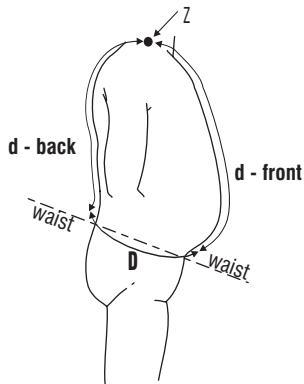
The Obese Patient and Small Children

The obese patient and very young children from infancy to approximately three years of age may present with a large belly. Unless some compensation is made for this feature in the measurements, the vest may be too long in the back and too short in the front.

As shown to the right, simply take two **d** measurements, one in the front and one in the back and write both measurements on the **Torso Measurement Chart** in the box provided for **d**. It is not necessary to label or explain the two measurements, the difference between the two lengths will be used to make the vest longer in the front than in the back.

Example measurements for a vest showing the procedure for recording a longer front than back.

b	74
c	14°
d	22 ⁶ /18°
e	

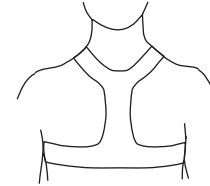


Sternal Strap

30B Sternal Strap is intended to apply pressure to the sternal region of the chest. It is especially useful in applying Silon-TEX to troublesome post-sternotomy scars. It is not intended to apply pressure to the any other part of the torso including the shoulders or lateral torso. Silon-TEX lining along the sternum may be configured as a pocket for the insertion of foam or orthoplasty.

Required Measurements

Same as for a **30A Sleeveless Vest** (p. 29-30).



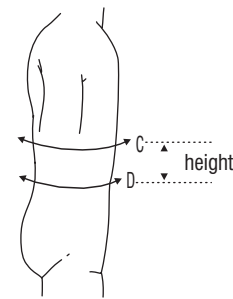
30A Sternal Strap

Belly Band

A **34B Belly Band** is useful for applying pressure to the abdomen below the rib cage. The default closure is an anterior zipper. Hook & loop closure may be requested as an alternative.

Required Measurements

Measure the circumference at the desired bottom of the garment and write it in the blank provided for **D**, in the **Torso Measurement Chart**. Measure the circumference at the desired top of the garment and write it in the blank for **C**. Write the desired height of the garment in "Additional Instructions". A **Belly Band** may be higher in the front than the back.



34B Belly Band

Common Options for Torso Garments

Neckline

- Regular Neckline should be at the sternal notch.
- Scoop Neckline is dropped to below the sternal notch, from 1/2 to 3 or more inches. You specify the depth.
- Turtleneck A band is attached to the neckline in order to raise a collar from 3/4 inch to 2 1/2 inches high. You specify height.

NOTE: Pressure on the torso is achieved by stretching the garment across the body. A deep neckline may result in less pressure across the upper torso.



Regular Neck



1.0 inch Scoop Neck

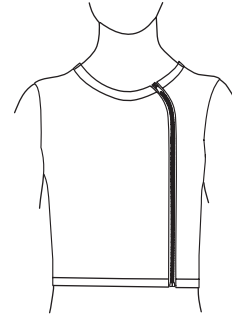


1 1/2 inch Turtleneck

Zippers

Torso garments, such as vests, body briefs, and suits come with a zipper as a standard feature. Zippers are anterior by default for all torso garments. Many torso garment orders for toddlers and infants request a posterior zipper. Zippers for upper and lower extremities attached to torso garments would be considered optional features and should be specified on the **Upper Extremity Chart** or the **Lower Extremity Chart**, as appropriate.

Zippers on the torso, whether anterior or posterior, may be offset several inches in order to avoid a sensitive area. In “Additional Instructions” specify which side to move the zipper to and how much. For example, “Offset zipper three inches left”.



Torso zipper offset to left 3 inches

Hook & Loop Zipper Stop Tab

Torso garment zippers may occasionally come open on some patients. To prevent this we can install a hook and loop tab across the zipper to hold it together.

Hook & Eye

Torso garment zippers may be very difficult to close for those with little or no hand or finger strength. You may consider requesting two or three hook & eye latches (the same hook & eye used to close a brassiere), for example, one at the bottom, one at the middle, and one at the top of a vest zipper to assist these patients. The hook & eye latches are installed inside the zipper bands so the patient can close the bottom hook & eye, then negotiate the zipper, then close the middle hook & eye, and then zip up to that level, and so on. Although most commonly requested for torso garment zippers, hook & eye closures are technically feasible for any zipper.

Waist Hook & Loop Tabs

Patients wearing a vest together with a brief or leotard may experience discomfort when they bend and the two garments separate. We can design the garments to overlap and we would incorporate hook & loop patches to allow the two garments to be joined. The default configuration is to place the loop piece on the inside of the vest, and the hook piece on the outside of the brief or leotard.

Expansion Panels

A panel of Insert Material (page 11), 1 - 3 inches wide, may be installed along the lateral side of a torso garment, from the bottom of the garment to the axilla. If the garment has sleeves, the expansion panel could be made continuous from the bottom of the garment to the end of the sleeve. Expansion panels may be used to allow for growth in the pediatric patient and minor fluctuations in patient measurements

Inserts

The default breast style is to construct a breast cup out of the regular material of the garment using the chest circumferences and brassiere cup size provided, however, breast panels may alternatively be constructed out of our stretchy soft Insert Material (page 11). Breast inserts are frequently requested for adult female patients. Sleeves that come with **Sleeved Vests**, **Sleeved Body Briefs**, and **Sleeved Body Suits** may have inserts in the anterior elbow crease to prevent bunching of the garment material.

Underarm Gussets

Some patients may experience discomfort and skin breakdown from the material rubbing in the axillae. A gusset is a wedge of Insert Material incorporated into the axilla. If an expansion panel has been requested, the gusset may be incorporated into the expansion panel.

Linings

Some patients find the neck band of a torso garment irritating. This may be alleviated by lining the neck band with Lining Material (page 11). We call this, "drapelining", because the lining material is draped around the band. Similarly, zipper bands and arm holes of sleeveless torso garments may be drapelined to reduce rubbing.

Linings may be incorporated in torso garments in order to reduce the discomfort from rubbing. For a sleeved garment, axilla linings may be added.