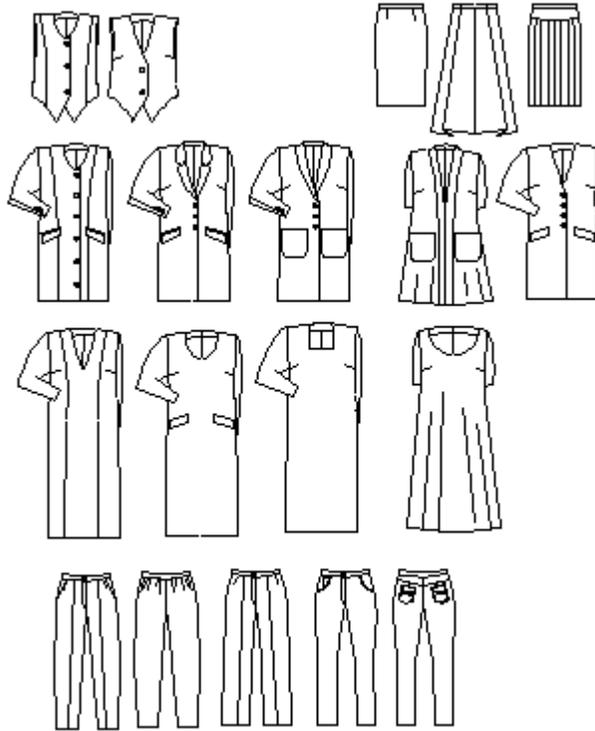# PatternMaker Software™
Women's Collection Vol. 2
Designer: Leena Lähteenmäki

TAKING YOUR MEASUREMENTS

For this Women's collection you will need the same measurements as for other PatternMaker macros. Use the standard measuring chart and instructions that are included with this macro package.

RUNNING A MACRO

When you first start the PatternMaker program, you will see a blank drawing area. To run the macros, select the MACRO command from the File menu, or click on the icon which has the word MAC. (Users of PatternMaker Basic should select OPEN from the File menu, or click the OPEN icon.)

A dialog box will ask you to select a file. Each macro is a separate file in your PatternMaker directory. The file names in this collection are:

- L2DRESS
- L2JACKET
- L2PANTS
- L2SKIRT
- L2VEST

Click on the name of the file, and then click "OK". It may take a few seconds for PatternMaker to load the macro.

You will now see a series of dialog boxes which ask questions and offer choices. To continue through the macro, use your mouse to click on one of the options. If you click "Cancel," or if you click "OK" without making a selection, the macro will abort and you will be returned to the drawing screen. Also, be aware that you cannot move backwards through the options. You may wish to write down which options you choose. Refer to the enclosed pages for a "map" of the macro options.

GARMENT NOTES

Note: We always recommend that you make a muslin to test the fit of any new garment.

Dresses:
- The dress offers three neckline styles: jewel, square or v-neck neckline options. If you want to use other collar styles, try using the jacket macro.

Jackets:
- The jacket macro can also be used as a dress, because you can type in any length. If you do this, and if you decide to make a dress without a front closure, you must remember to remove the button extension from the front and add the zipper to the center back seam.
- The jacket macro can also be used for a vest pattern, by leaving off the sleeves and cutting the hem as you desire. By doing this, you can use all the collars that are included with the jacket. However, only the vest macro includes facings for the sleeve openings.
- The straight jacket with bust dart can also be used for blouses. The jewel and convertible collar options would be most often used for blouses.

A-line jacket:
- There is a new measurement in the dialog box that asks for amount of flare at hem. This can be anything you wish; however, we recommend that you start with the default measurement of 6 in/15 cm. Also, a great amount of flare is not suitable for thick, heavy fabrics. Garments of light, thin fabrics can tolerate more flare.
- The length of this garment is restricted to hip level or longer. This kind of jacket does not look good if it is shorter.

Jackets and vests:
- If you want a lining for the jacket or vest, print the entire pattern twice. The center front piece is then used partially for the facing and partially for the lining.

Pants and Skirts:
- Both these macros have the option of raising the front of the waistline by 3 cm in order to accommodate a protruding tummy. When you check the fit of your sample garment, determine whether or not you need this adjustment. If not, you should choose "normal" in the "Waistline Cut" dialog box.
- See notes below about pockets.

Necklines:
- Deep v-neck and jewel neckines can often sag or gap when you sit or bend. This is especially true with thinner fabrics. If you choose this kind of neckline for a dress, the excess fabric at the neck opening should be eased. Easestich along the garment seam line and cut the facing slightly smaller. Another alternative is to sew a band of transparent elastic into the seam.

Pockets and facings:
- If you use pockets in the pants macro, the hip corner of the front piece should be cut away along the pocket mouth line. The pocket piece should be printed in two copies (one for the pocket back piece and one for the pocket lining piece), and the hip corner should be cut away from the pocket lining piece.

SEWING THE GARMENTS

Sewing instructions for this collection are not available at this time. If you are unfamiliar with the necessary techniques for sewing these garments, you may wish to refer to additional sewing reference material.

You can also find general sewing tips by visiting Leena's website at: http://www.leenas.com

For the latest product release notices, as well as contact with other PatternMaker users and additional helpful information, please be sure to join our PatternMaker User's Group e-mail discussion list. To join, visit our web site at: `www.patternmaker.com` and scroll down to the bottom of the first page.

PatternMaker Software
Measuring for Women's Macros

1. neck circumference
2. bust circumference
3. waist circumference
4. abdomen circumference
5. hip circumference
6. bust span
7. bust height
8. waist height
9. back length
10. back width
11. shoulder
12. waist-abdomen
13. waist-hip
14. biceps
15. wrist circumference
16. overarm
17. outside seam
18. crotch depth

Measure bust height (7) and waist height (8) around neck (double) and divide by 2.
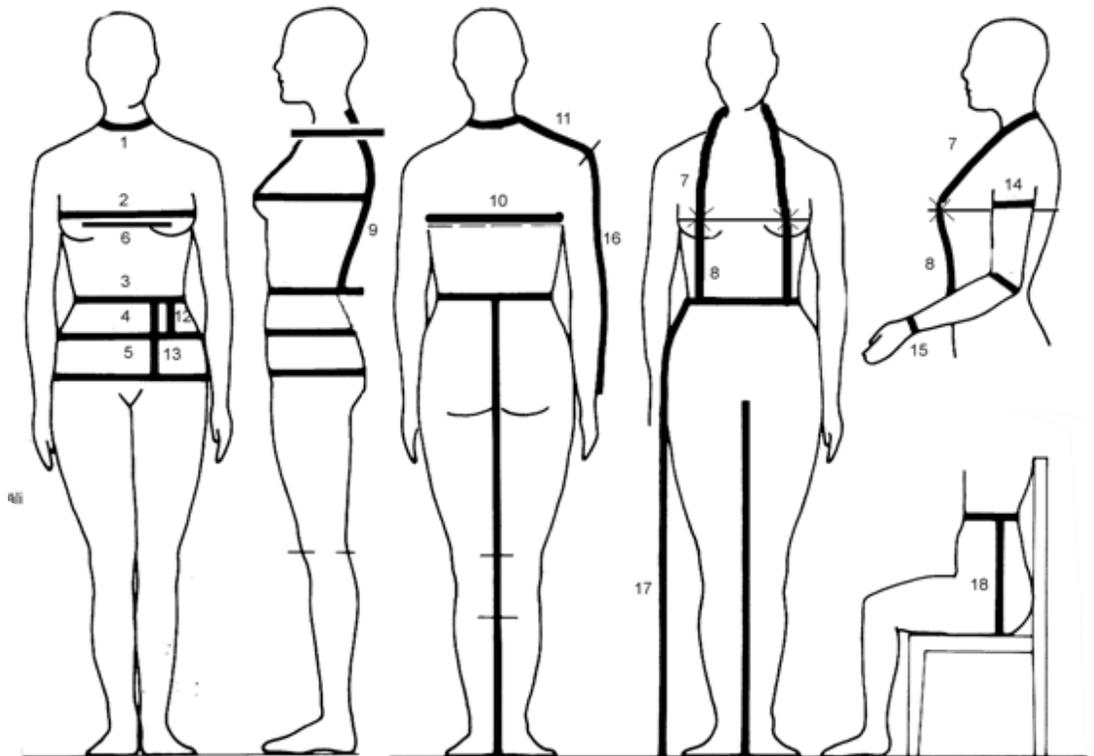
Following are the instructions on how to measure for PatternMaker women's macros.

Don't try to take the measurements yourself. Ask someone else to take them. Stand straight but relaxed when you are being measured. You will receive the best results if the measurements are taken over underwear.

Place 1-inch wide elastic bands around your waist and hip. Search carefully for the correct places of these elastic bands. Keep these elastic bands on their places during the whole measuring process. Hip elastic is fastened on the level where hip circumference is maximum. Examine whether it is on your buttocks (7-8 inches/18-20 cm below the waist) or on top of your thighs (10-12 inches/25-30 cm below the waist). Measurements are taken from the bottoms of the bands.

Except for pants' cuff circumference and skirt/dress length, all measurements are body measurements. DO NOT ADD ANY EASE to the measurements. The program does it for you.

DO NOT TIGHTEN MEASURING TAPE.
Please, refer to the picture related to this measuring form.

BE ESPECIALLY CAREFUL WHEN TAKING THE **MEASUREMENTS WRITTEN IN CAPITAL LETTERS**.
They are crucial for good fitting patterns. After having taken all the measurements, take these important measurements once again.

You can use either centimeters or inches. Give inches in fractions.

PatternMaker Software
Women's Measuring Chart

Name: _____ **Date:** _____

1	Neck Circumference: Measure around lowest part of neck, at the base	
2	Bust Circumference: Marked with elastic. Measure around the fullest part of the bust, keeping the tape high at the back	
3	Waist Circumference: Measure waist at the elastic tape	
4	Abdomen Circumference: Measured on the level where abdomen circumference is maximum	
5	Hip Circumference: Measured over the largest part of your bottom/thighs (at elastic)	
6	Bust Span: Horizontal distance between bust apexes (also called bust bridge). Measured along bust elastic.	
7	Bust Height: Measure from center of back neck over shoulder to apex of one breast	
8	**WAIST HEIGHT:** Measure from center of back neck over shoulder to breast apex and from there vertically to lower edge of waist elastic. To be sure to get right measurements, take this and bust height as a link around neck (=double) and divide the result by 2 (see picture).	
9	**BACK LENGTH:** Measure from center of back neck to lower edge of waist elastic	
10	**BACK WIDTH:** hang your arms relaxed on your sides. The measurement is taken horizontally between shoulder blades (i.e. from sleeve seam to sleeve seam), from and to the point where your arm meets your body (but not to armpit) about 4" (10 cms) from neck downwards.	
11	Shoulder length: Measure from neck to shoulder tip. Shoulder tip is found when you raise your arm to horizontal position and feel where there is hollow/pit between shoulder and arm bones. Hold your arm horizontal, if necessary, to find this point.	
12	Waist-Abdomen: Measure vertically from lower edge of waist elastic to lower edge of abdomen elastic. Measure at front center.	
13	Waist-Hip: Measure vertically from lower edge of waist elastic to lower edge of hip elastic. Measure at the side.	
14	Biceps circumference: Measure at widest point of upper arm.	
15	Wrist circumference: Measure over wrist bone	
16	Overarm: Arm length from shoulder tip (as described above) to wrist. Bend arm slightly and measure over outside of elbow.	
17	Outside seam: Measure from waist over the outside curvature of the hip to the desired cuff length.	
18	**CROTCH DEPTH:** Sit on *unpadded* bench or chair. Measure vertically from waist elastic to chair level on both sides, and use the longer measurement. Measure in a straight line, not along the outside hip curve. (Crotch depth can also be measured from a pair of old, well fitting pants.) Crotch depth is the difference between outside and inside length of pants.	
	Desired cuff circumference, not ankle circumference	
	Desired jacket length from waist elastic to hem	
	Desired skirt /dress length from waist elastic to hem	

Important things to be taken into consideration when measuring

The most important measurements are the ones written in on the measuring chart in **BOLD CAPITAL LETTERS**: waist height, back length, back width, and pants' crotch depth.

If one of these four measurements is wrong, the result may be a distorted pattern and it is difficult to figure what measurement is wrong. If some other measurement is wrong, you get either a too-tight or a too-loose garment and you can easily see what measurement to correct and to what direction.
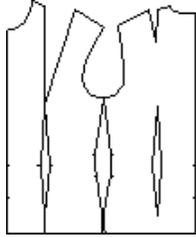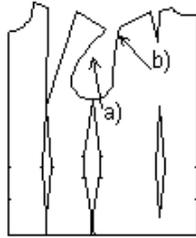

Figure 3: normal sloper
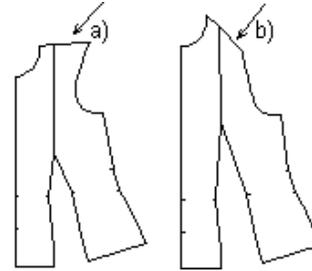
Figure 2: back width wrong

Figure 1: waist height/back length wrong

Normally the pattern for basic sloper is more or less like Figure 1. Front and back shoulders slope downwards to shoulder tip. Armscyes curve inward. Back armscye can be rather straight but should never bulge outward.

If the pattern is like in Figure 2 -- i.e. front armscye curves strongly inward (a) and back armscye bulges outward (b), back width has been measured wrong and is too much. Measure back width anew.

Please note that this measuring error causes the garment to be too loose at back and too tight at front. Therefore the situation cannot be corrected by only reducing width of back piece. The pattern must be redrawn using the correct back width measurement.

If waist height in relation to back length is wrong (refer to Figure 3), the result is either a shoulder that slopes to wrong direction (a) or a shoulder which is too steep (b). If you measure waist height as instructed in PatternMaker measuring instructions i.e. double around back neck and divide the result by 2, there seldom is any error in waist height. Therefore the error usually is in back length.

If shoulder slopes in wrong direction (a), back length is too much and if shoulder is too steep (b), back length is too little. Change back length 2-3 cm in the needed direction and see if it is enough to correct the situation. If it looks good, you see to which point at neck back length has to be measured to be OK.

If the subject stands in a very upright, military position with bust out and abdomen in, also waist height may be too much. Please make sure that the subject stands in a relaxed position when she is being measured.

In some cases a steep shoulder may be due to the subject's body shape. This is the case if the subject has a very prominent bust. And conversely, if a subject has a very flat bust and/or a very round back, the shoulder can be rather straight.

Thus, there are cases, where the patterns are all right even if they look "odd". When the patterns are drawn according to a person's own measurements, they should not be compared with patterns drawn according to "normal" or "average" measurements. If you are not sure of the measurements taken, you have a very good and simple way to check them: sew a muslin with the basic bodice patterns. If it fits on the subject, you can be sure that all other garments sewn with PatternMaker macros will fit well.

If you get an error message:

```
value out of range in line …
coord (32,33,sqrt(op*op-oke*oke),-oke);
```

it means the measuring error is so drastic that the program is unable to draw the patterns at all. Front shoulder does not meet armscye line. Then either back length is too little or waist height too much. It may also be that shoulder length has some influence: shoulder length may be too short.

Also, in some other cases there may be reason for checking shoulder length measurement. If shoulder is too short, there will be a corner inward where front and back shoulder meet at shoulder tip and vice versa.