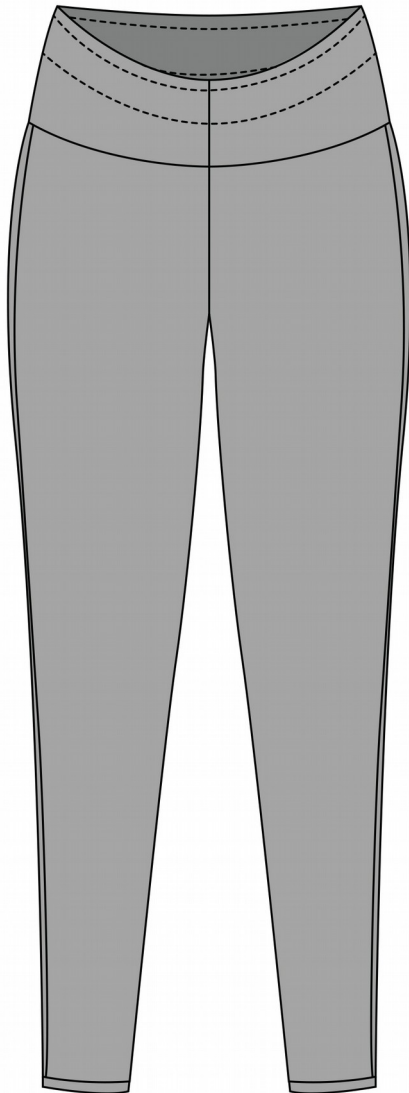
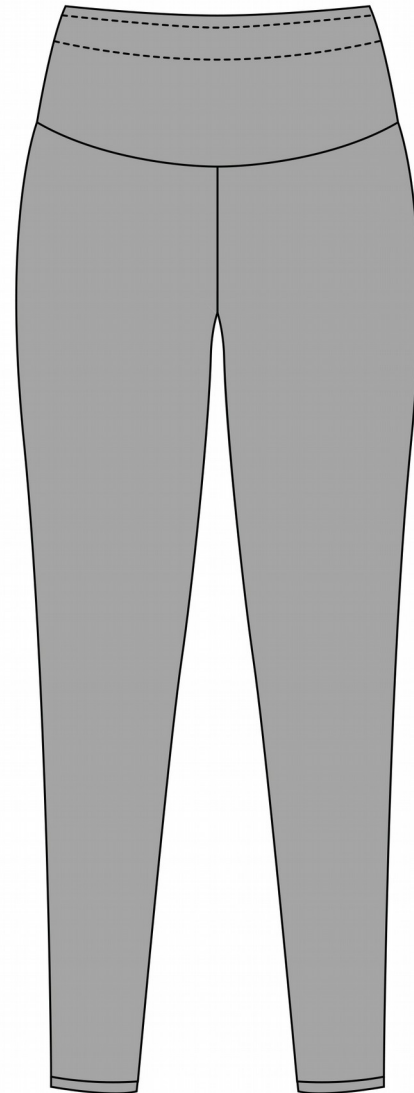


## LOW WASTE LEGGINGS

FRONT



BACK



This pattern is for tight fitting leggings, that would be great to make out of 100% merino wool jersey for layering during cold winter months. However, you do not have to make them out of wool. You might probably want to use other good stretch jerseys to create a sport version of them. The idea for this pattern was inspired by zero waste leggings by Gemma Lloyd's 2014 graduate collection "Elutheromania" featured in Zero Waste Fashion design book by Timo Rissanen and Holly McQuillan. To minimise the layers on the body I adapted the pattern. With my adaptations you will have small amount of fabric waste after you complete this project. If you want to aim for zero waste, you might want to use the original idea. I will discuss Gemma's way of cutting at the end of this document.

**SIZE RANGE:** This document does not have paper pattern as such. Instead, I give you instructions how to cut the fabric to create the leggings in your individual size. And it could be any size you need!

**FABRIC RECOMMENDATION:** Any good stretch jersey fabric 150-155cm wide. Width is important! Your fabric has to have good cross stretch and be not too stretchy on the straight grain. I used 100% merino wool jersey 200gsm from <https://thefabricstoreonline.com/>

**MEASUREMENTS YOU NEED TO TAKE:** Take the following measurement and fill the table below for your own size:

Hip Circumference (HC)

Upper Mid Hip Circumference (UC) – this is where your waist elastic would sit. It is circumference taken roughly 5-6cm lower than your waist line.

Knee Circumference (KC)

Ankle Circumference (AC)

Measurement	Measurement halved	Ease	Seam allowance
HC	HC:2	-	2cm
KC	KC:2	-	1cm
AC	AC:2	4cm	2cm
UC	UC:2	-	-

#### MATERIALS:

1. This pattern uses the fabric on the cross grain. Therefore the length of the fabric you need should be calculated individually with the following formulae:

*Your Hip Circumference divided by 2 + 2cm seam allowance + 30% of the half of your hip Circumference.* For example, if your hip circumference is 106cm the calculations will be the following:

$$106:2+2+0.3 \times (106:2) = 53+2+0.3 \times 53 = 55+15.9 = 70.9$$

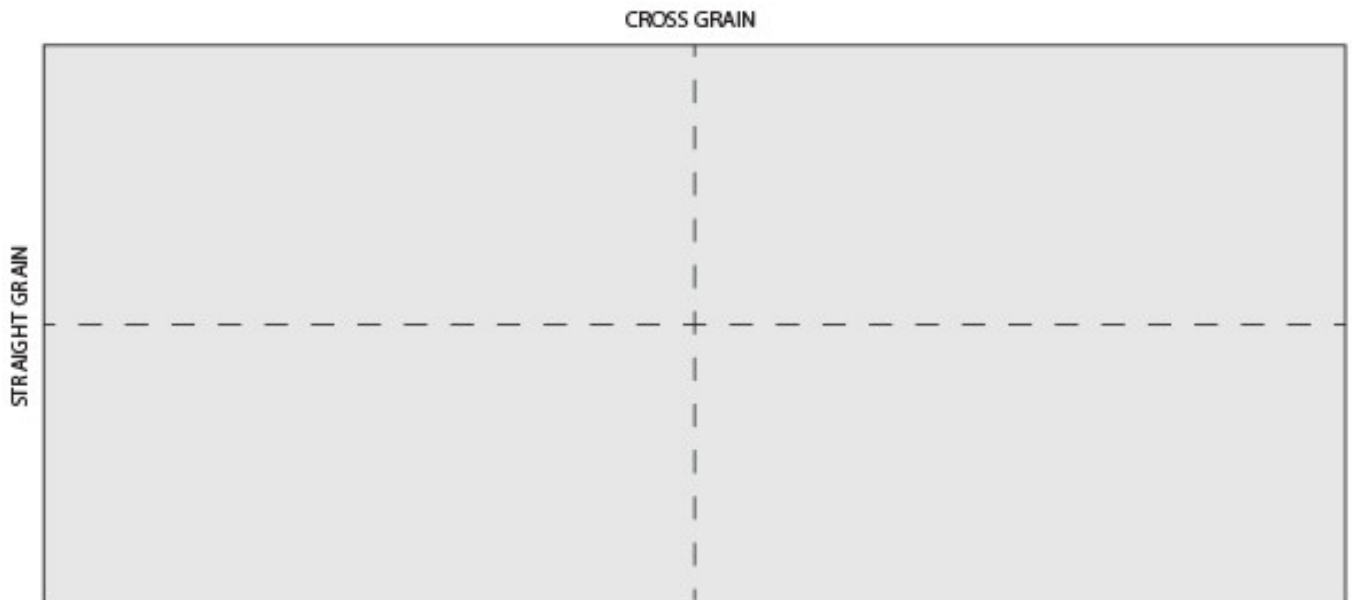
To round that up you will need 71cm of fabric to create leggings if your hips are 106cm in circumference.

**If your hip circumference is bigger than 118cm add another 20cm to your fabric length!**

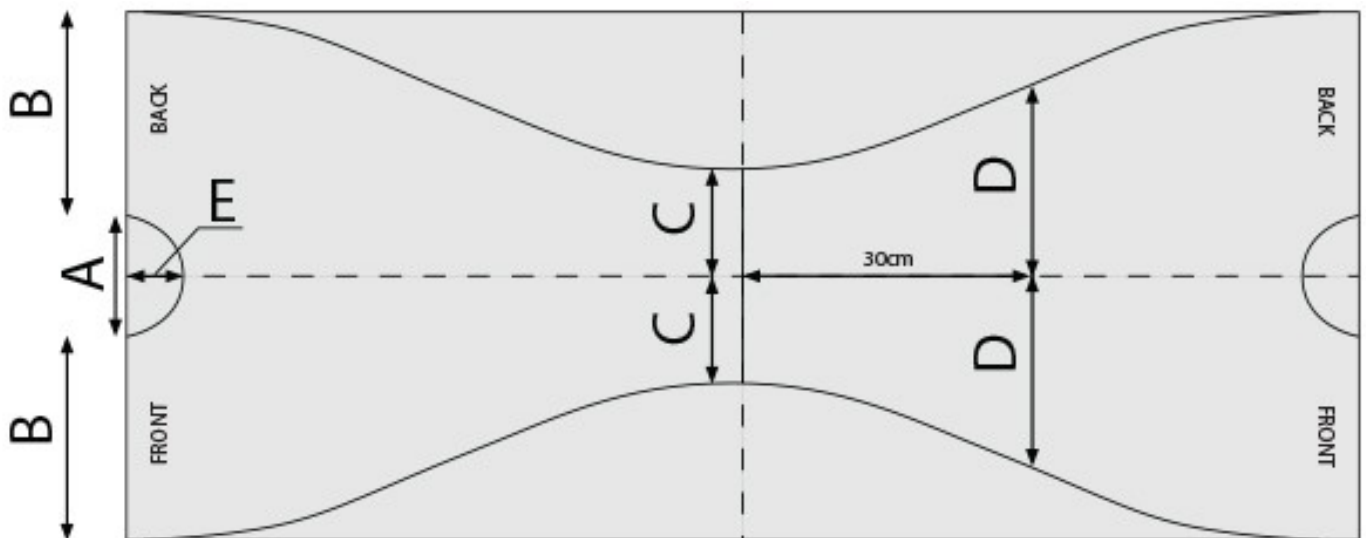
2. 5cm wide waist elastic. You need to fit your elastic 5-6cm below the waist line. Because various elastics have different stretch I cannot give you exact measurement here. Measure what you feel comfortable with.
3. 100% cotton or silk all purpose sewing thread of matching colour. You will need 4 bobbins of the thread to use it for over-locker. You might also want to go for all purpose polyester thread of matching colour – the choice is yours
4. Ball point machine needle size 80/12
5. Water soluble fabric marker. This is special marker to use instead of tailor's chalk on stretchy fabrics. It should wash off with water easily.
6. Over-locker

## CUTTING INSTRUCTIONS

1. Spread your fabric wrong side of fabric facing up. Divide your fabric spread halfway lengthwise and width wise first.



2. Mark the following points and draw curved lines as shown on the diagram below.



Where

$A = 30\% \text{ of } HC:2$

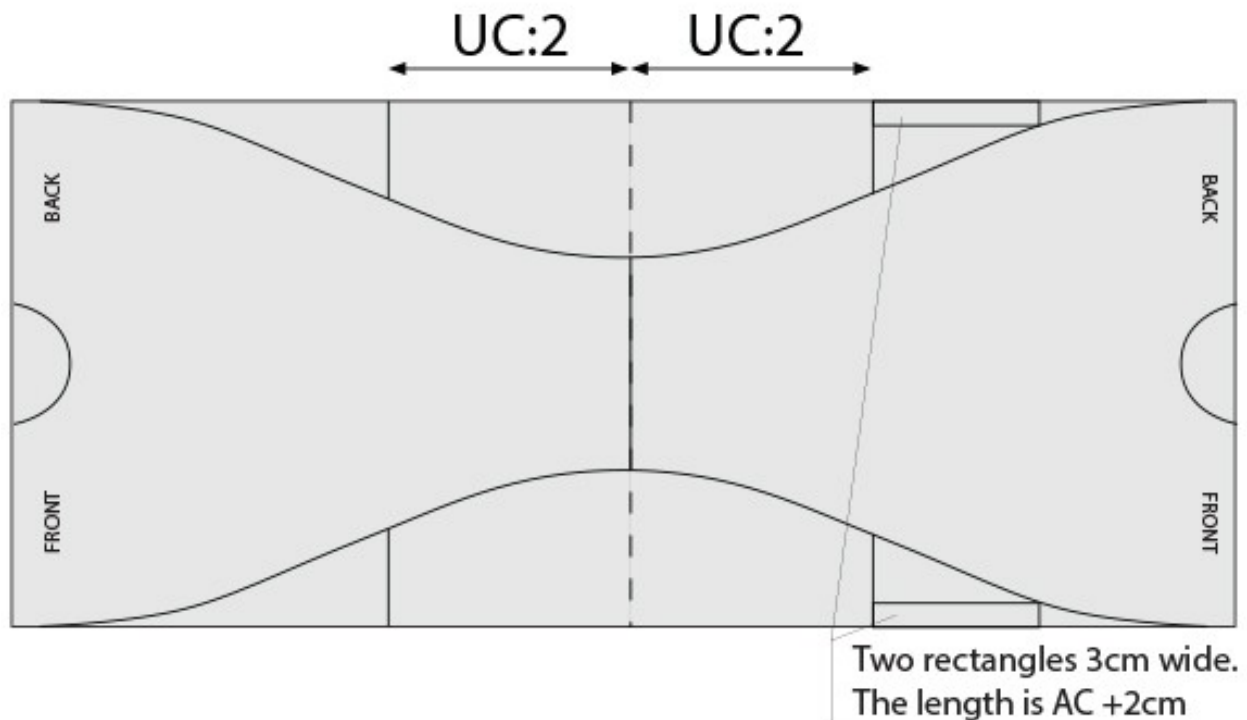
$B = HC:2 + 1\text{cm}$

$C = AC:2 + 2\text{cm} + 1\text{cm}$

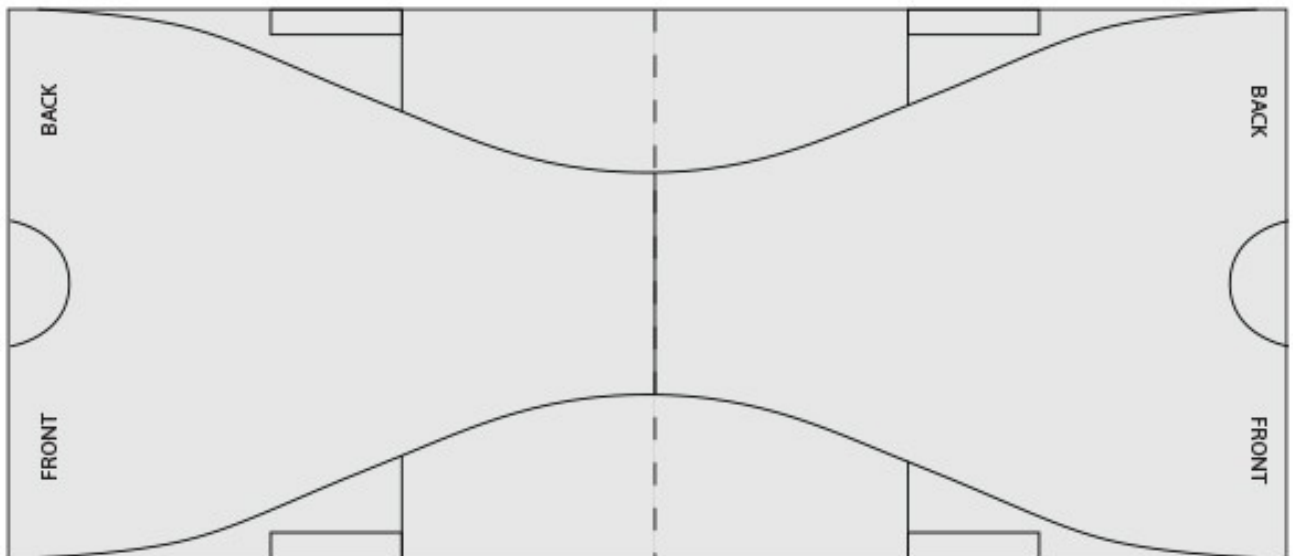
$D = KC:2 + 0.5\text{cm}$

$E = 60\% \text{ of } A$

3. Continue marking your fabric.



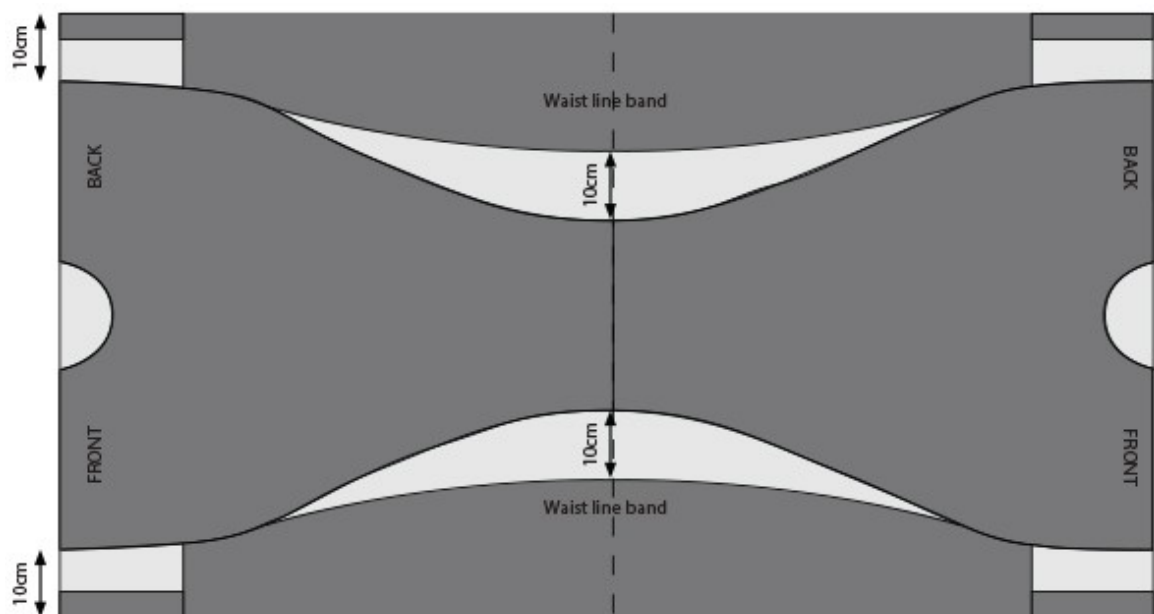
If you can't fit two rectangles with the length of your  $AC + 2cm$  in the areas marked you will need to do 4 rectangles instead with the length  $AC : 2 + 1cm$ . See below.



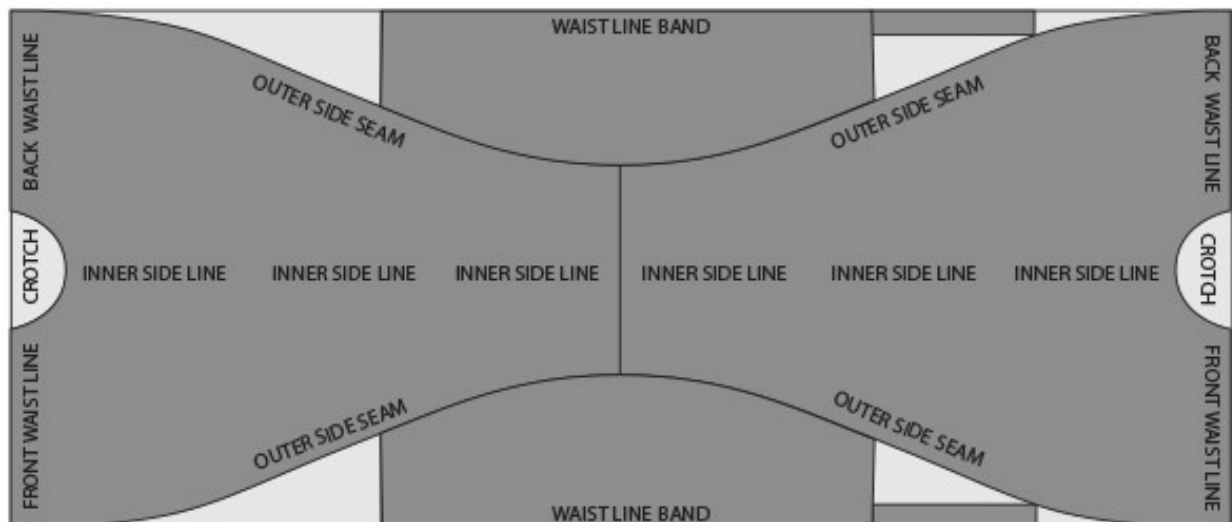
If your hip circumference requires the waist band to be larger you might not have enough fabric to create bottom cuff pieces at all. This is ok. Skip that step, you can simply do a plain stitched hem.

4. If your hip circumference is larger than 118cm your layout will look like the diagram below. YOU SHOULD NEVERTHELESS FOLLOW THE SAME INSTRUCTIONS LISTED ABOVE AND USE THE SAME FORMULAE TO CALCULATE YOUR LAYOUT. But because you have extra 10 cm each side you might need to shorten your waist line band by around 10cm or less at the bottom (see diagram below). I recommend though that you DO NOT CUT OFF THE 10CM AT THE BOTTOM, but try to baste the waist band and see how much lower you need it to be. We all have individual unique shapes and what is comfortable for one might not work for another, Therefore I am not giving you universal fit all instructions here. Make it personal!

You might have enough fabric at waist line band sides to cut bottom cuffs or you might not have enough. This is ok. You might also be able to cut the cuffs from extra fabric pieces just below the waist line band if you have any extra there.



5. Now you can go ahead and cut your fabric along the marked lines. You should have the following pattern pieces:
- Two of the leggings body pieces
  - Two waist line band pieces
  - Two (or four, or none) bottom cuff pieces

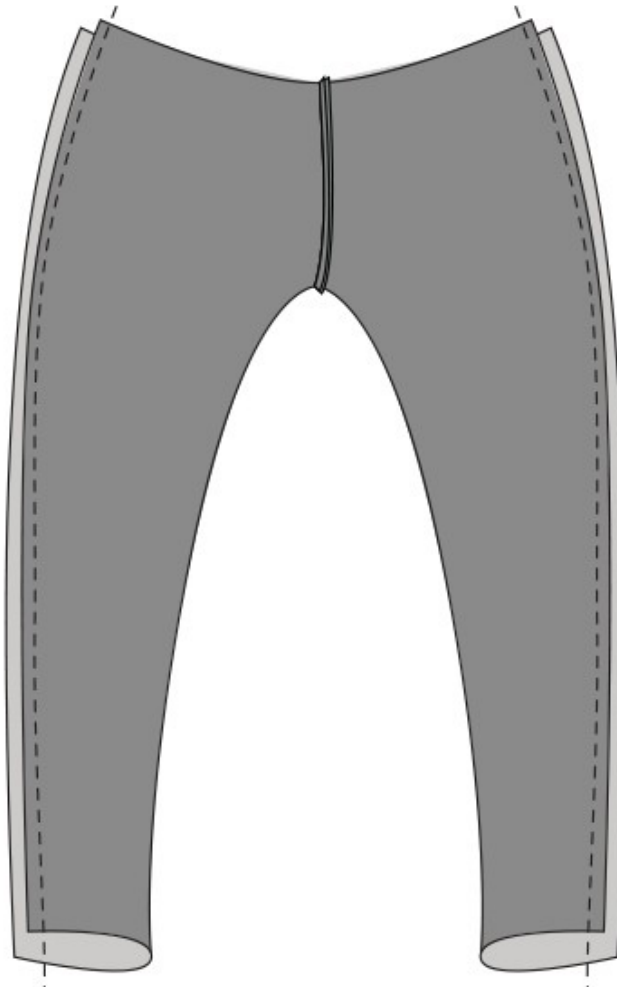


## SEWING INSTRUCTIONS.

Wrong side of fabric

Right side of fabric

1. Take two leggings body pieces. Place them with the right side of fabric facing. Pin the crotch seam and stitch 1cm from the edge. It will be very challenging to create a really straight seam as you need to stretch the fabric as you stitch. To assist with that I recommend drawing a line 1cm from the edge with water soluble fabric marker. When you stitch try to stitch over the line you have just drawn. It is important to remember that you have to stretch your fabric as much as possible when you stitch to create flexible seams. I normally do two lines of stitching at the crotch seam one on top of the other to create stronger seam.
2. Once the crotch seam is connected open the leggings in such a way that you have the waist line at the top and side seams facing sides. See image below. Pin and stitch side seams. Draw a line with the marker 1cm from the edge to assist with stitching. Do double line of stitching here too. You need strong side seams.



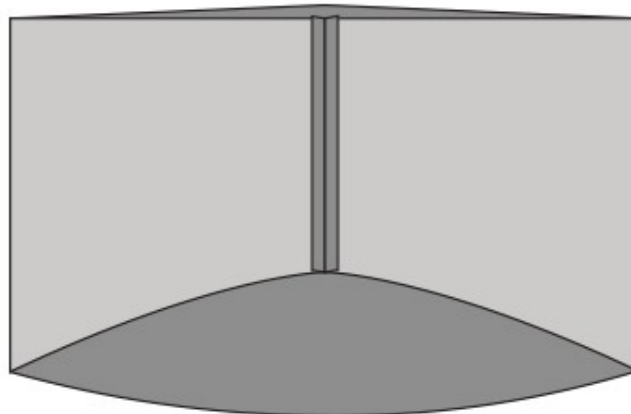


3. Overlock crotch and side seams.
4. Iron side seams towards the back (any side could become the back at this point as the leggings parts are cut symmetrical. Iron crotch seam towards one side.
5. If you have no bottom cuff pieces simply overlock the hem edge, turn 1cm of the hem inside and top stitch in place. You might want to use 2mm twin needle for that.. If you have cuffs follow the instructions. Take two (or four) of the bottom cuff pieces.



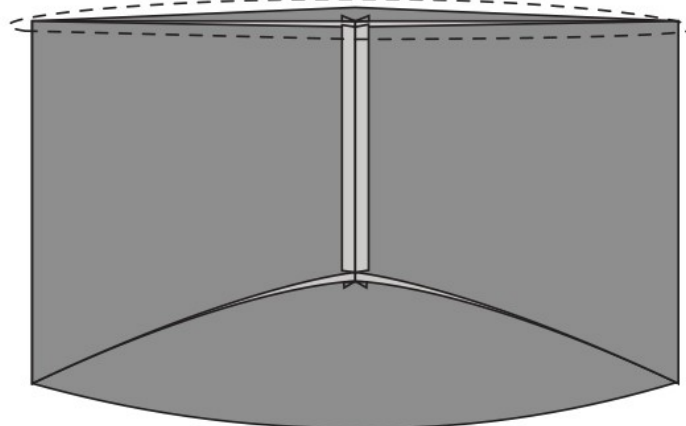
If you have four, connect them to have two pairs. If you have two connect them into a circle at the side seam.

6. Press the seams open. Fold width-wise so that the side seams are hidden inside.
7. Pin to the bottom of the leggings and stitch stretching the seam. Overlock the seam. Press the seam upwards.
8. Take one waist line band piece. Fold in half with the right side of fabric facing. Pin. Connect front seam stretching it as much as possible as you stitch and press the seam open. See diagram below. Finish the second part of the waist band the same



way.

9. Fold one waist line band inside of the other with the right sides of fabric facing. Pin the top seam. Draw a line with fabric marker to assist you with stitching and stitch 1cm from the edge. Do a double line of stitching here.



10. Turn inside out. Press.
11. Connect your waist elastic into a circle.
12. Insert it into the top of your waist line band. Pin in place stretching the elastic if necessary. Baste with two lines of basting – one 1cm from the top edge and the second line 4cm from the top edge. Stretch as you baste as much as you can. Basting is necessary to distribute the fabric evenly around the elastic. If you find basting too challenging, pin instead with the pins being 3-4cm apart. Draw two lines with fabric marker instead of basting. Stitch elastic in place along your basting or marker lines. Press.
13. Attach the waist line band to the leggings. Place the band over the leggings with the right sides of fabric facing. Align waist band front seam with the leggings front seam. Pin in place distributing excess fabric evenly. Draw a line with the marker 1cm from the edge and stitch with two lines of stitching. Overlock the edge and press the seam downwards.
14. Congratulations! Your leggings are ready! Do you feel it is quite an achievement? Please share your results with me by tagging me on social media and using [#vixlowwasteleggings](#) hashtag! I would love to see what you have created! :)

**INSTAGRAM** [@victoriakonash](https://www.instagram.com/victoriakonash)  
**FACEBOOK** [@vixecodesigns](https://www.facebook.com/vixecodesigns)  
<https://t.me/vixecodesigns>

P.S. Because I give all my patterns for FREE I do not always have someone to proof read and check my patterns for any minor drawbacks. So if you come across any or just see room for improvement, please don't hesitate to contact me at [vixecodesigns@pm.me](mailto:vixecodesigns@pm.me)



### MAKING IT ZERO WASTE.

If you feel up for a challenge, you can try to recreate the original design. Have a look at the scan from Zero Waste Fashion book to see how to make it zero waste. You do not cut the edges from the waist line band but instead overlap them at the front. Use the crotch cut-offs to create a small pocket at the back of the waist band. This option is great if you are making sports leggings!

