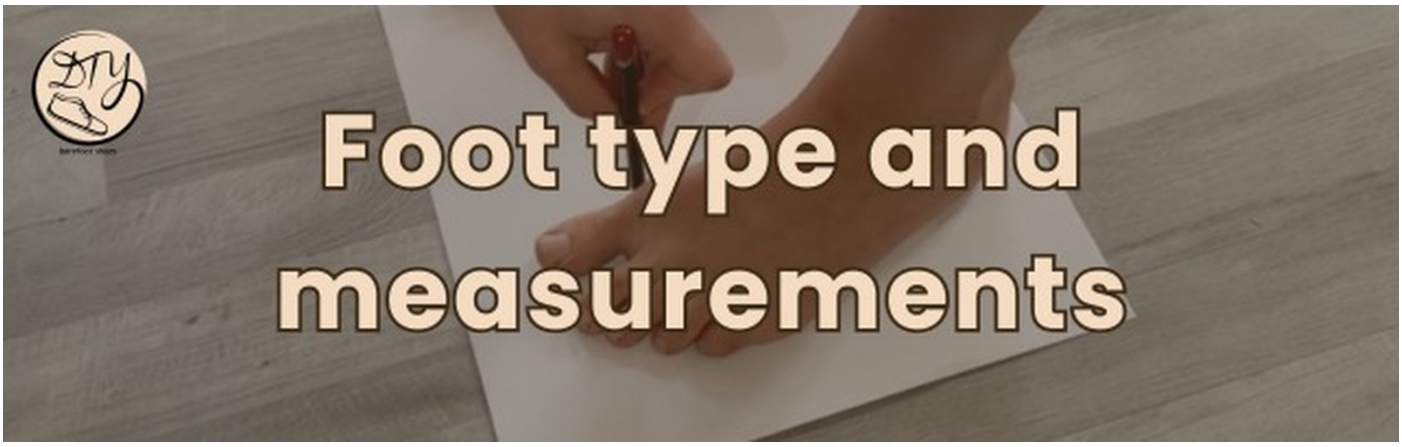


Knowing your feet better

Welcome to the practical guide to understanding your foot type and measuring your feet properly, so you can choose or sew barefoot shoes that fit you perfectly.

What you will need

- a few sheets of A4 paper
- a pencil and a pen
- a ruler
- a soft (tailor's) tape measure
- a straight wall and a hard floor
- the foot measurements worksheet (download it from the e-mail we sent you)



What is inside

Real length and width · 2
Width coefficient · 3
Ball girth · 4
Foot outline · 5
Instep measure · 6
Ankle measures · 7
Foot shape and toebox shape · 8
Your measures at a glance · 9

TIP Measure **both feet** and write every measure down in your worksheet: each foot may be different.

Real length and width

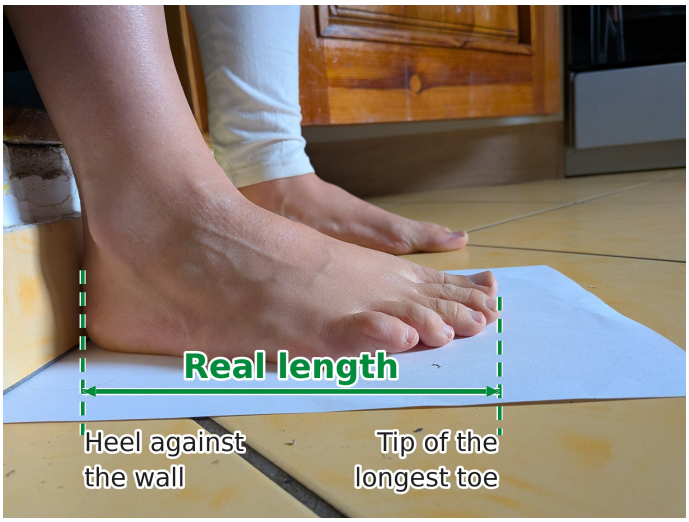
These measures help you choose the right lasts and buy ready-made barefoot shoes that will fit you well.

> **Real length** is the distance from the back of your heel to the tip of your longest toe. **Real width** is the distance between your outer and inner toe joints.

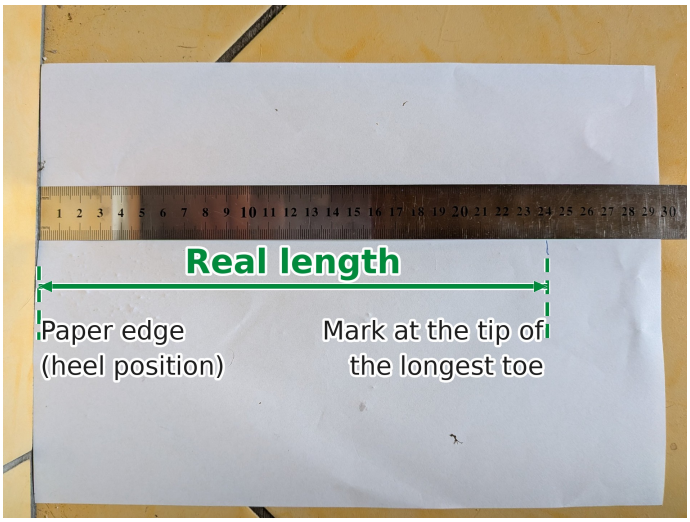
It can be measured:

- against a wall (shown below)
- with a foot gauge (e.g. plus 12 mm, used in barefoot shops)
- in the box (the same way as against a wall)

Measuring foot length against a wall



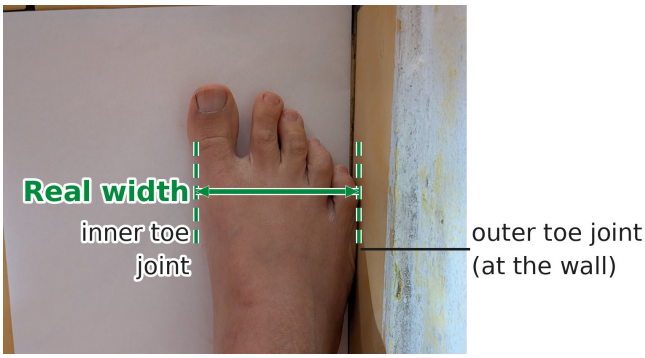
A Heel against the wall, paper under the foot.



B Step off and measure from the paper edge to your mark.

1. Put a sheet of paper on the floor and place your heel on it, against the wall. Mark the tip of your longest toe on the paper.
2. Step off and measure the distance between the end of the paper (at the wall) and the mark. This is your **real length**.

Measuring foot width against a wall



Outer toe joint against the wall.

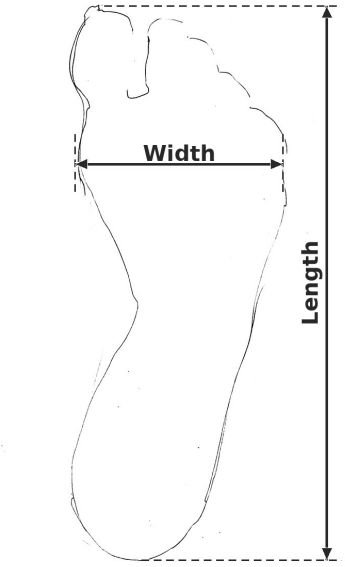
1. Place your outer toe joint on a sheet of paper, against the wall, and mark your inner toe joint on the paper.
2. Step off and measure the distance between the end of the paper (at the wall) and the mark. This is your **real width**.

Width coefficient

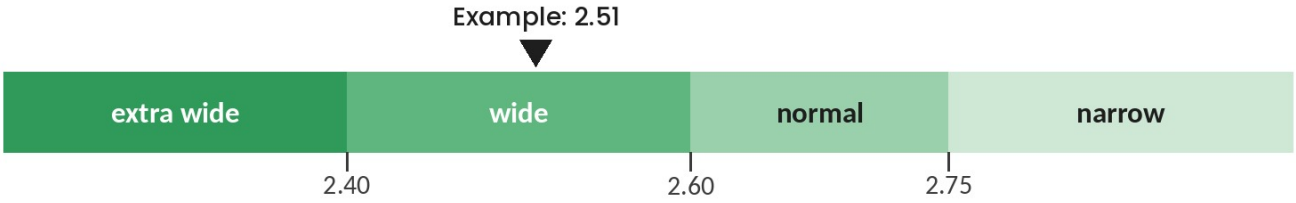
The width coefficient helps you determine the width of your feet. Each foot may be different.

Real length ÷ real width = width coefficient

Width coefficient	Foot width
over 2.75	**narrow**
2.60 – 2.75	**normal**
2.40 – 2.59	**wide**
under 2.40	**extra wide**



The table is indicative.



wider foot — width coefficient — narrower foot

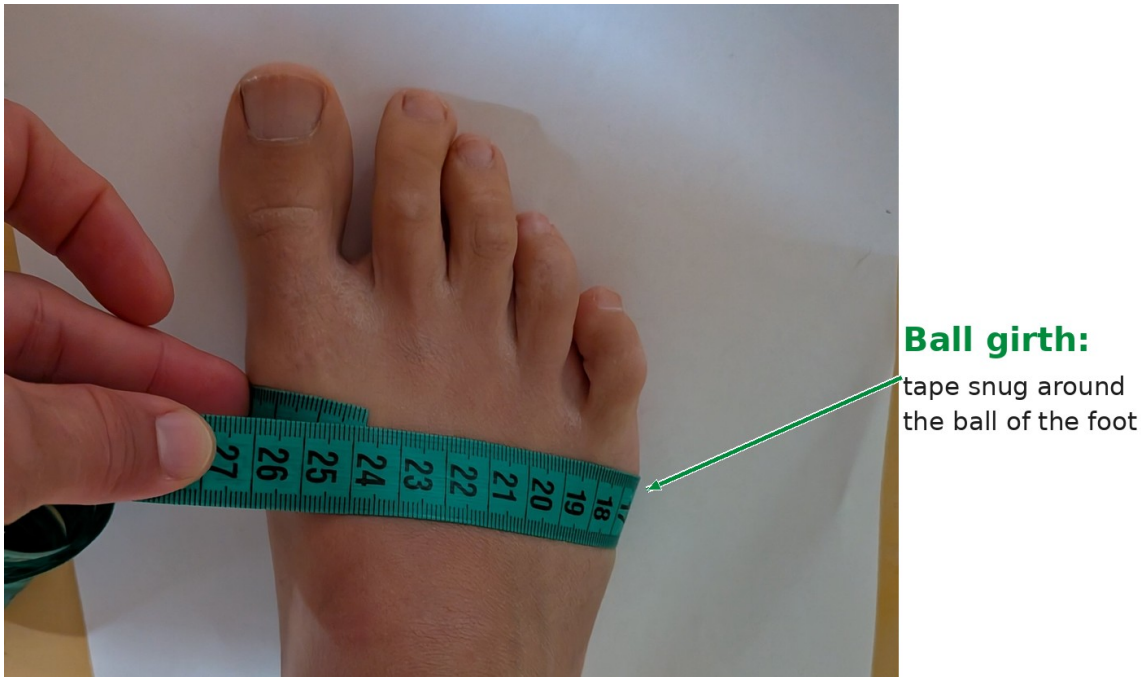
The marker shows the example below. The higher the coefficient, the narrower the foot.

EXAMPLE Real length 241 mm ÷ real width 96 mm = 2.51, which is a **wide** foot.

TASK Measure the real length and real width of **both** your feet, work out the width coefficient and write the measures down in your worksheet. In the future, when you choose your barefoot shoes, you will know what width to choose: normal, narrow, wide or extra wide.

Ball girth

Ball girth is the distance around the ball of your foot. It helps you choose the right lasts, and it is one of the most essential last measures.



Tape snug around the ball of the foot, at the metatarsal joints.

How to measure

1. Wrap the tape measure around your **metatarsal joints** (the joints at the base of your toes) and slightly tighten it.
2. Read the number and write it down in your worksheet.

There are two types of ball girth, measured differently on the foot and on the last:

- **straight** – measured on lasts around the widest part
- **angled** – measured around the toe joints

> **BEWARE** When choosing ballerina lasts, you need their ball girth approx. 1 cm smaller than yours, so they don't turn out too wide.

Foot outline

When designing shoes without lasts, start by outlining your feet.



Trace close to the foot, keeping the pen upright the whole way round.

How do you trace your feet correctly so that your shoes fit perfectly? We have instructional videos available that will guide you step by step.

Video 1: Outlining the feet

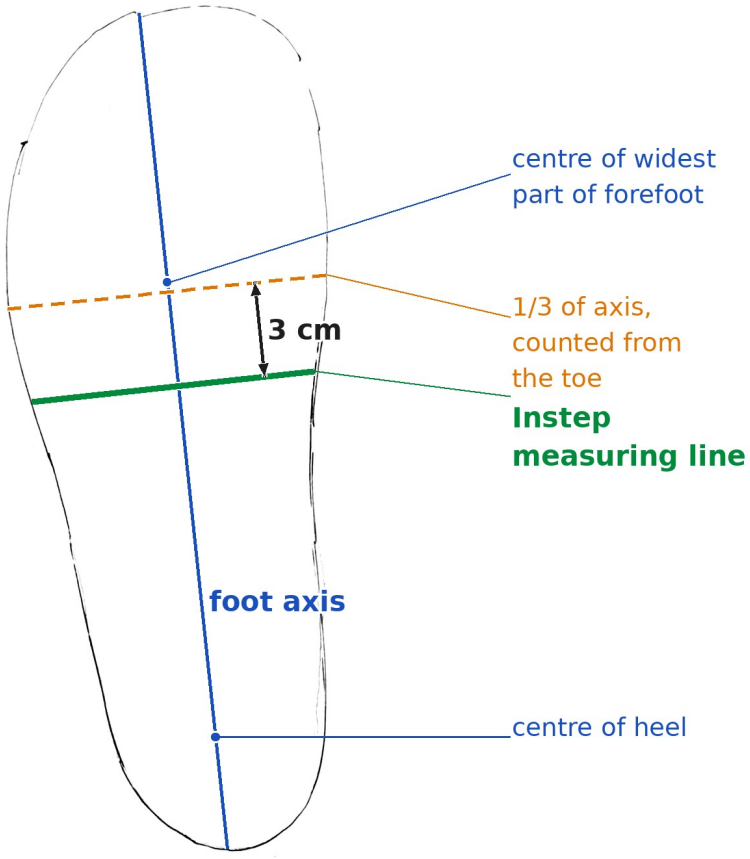
Video 2: Self-outlining the feet

Video 3: Adjusting the contour of the feet

> When sewing shoes without lasts, you make your custom pattern according to your adjusted outline. No need for ready patterns: you can make your own pattern that will fit your feet.

Instep measure

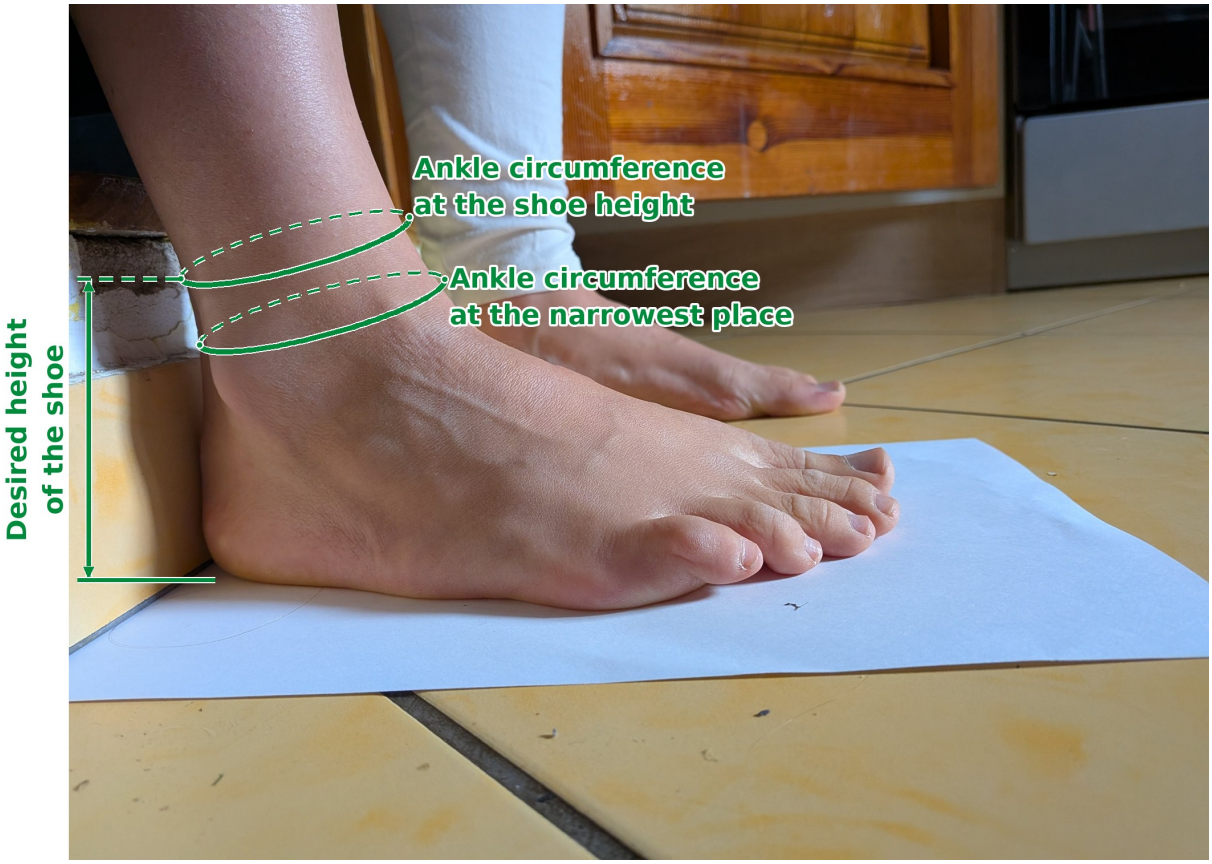
When sewing shoes without lasts, use the instep measure instead of the ball girth.



Example outline: the foot axis (blue), 1/3 of the axis counted from the toe (orange) and the instep measuring line, 3 cm further toward the heel (green).

1. Define the **foot axis**: the line connecting the centre of the widest part of the forefoot (toebox) and the centre of the heel.
2. Starting from the toe end of the axis, find 1/3 of its length, then move 3 cm further toward the heel. Draw a **perpendicular line** there.
3. Stand in the outline of your foot and, at the level of this perpendicular line, **measure the width of the instep** from the floor on one side to the floor on the other side, with a tape measure placed tightly to the foot.

Ankle measures for ankle lace-up shoes



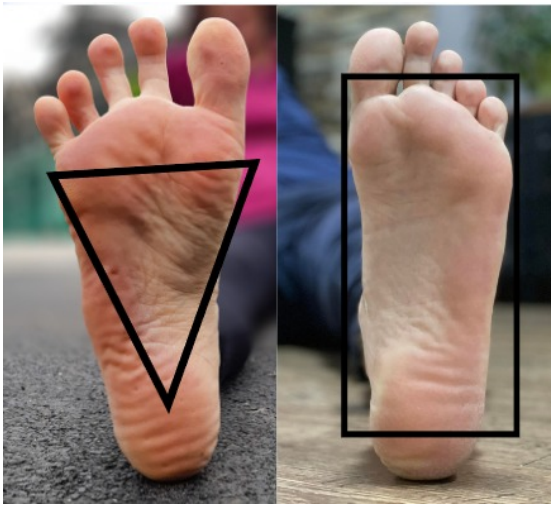
To shape your shoe pattern, made according to your foot outline, you need to know:

- the desired height of the shoe,
- the ankle circumference at this height,
- and the ankle circumference at the narrowest place of your ankle.

TIP For snug, higher boots, we recommend you to wrap a paper tape around your calf and cut it in half. Add 5 mm for the stitching. Don't forget about the zipper or tongue slot.

Foot shape

Helps you choose the right shape of barefoot shoes or lasts.



Fin ('V') shape *Straight shape*

Shape	Heel	Forefoot
Fin ('V')	narrow	average to wide
	average to wide	medium to wide
Straight	narrow	narrow
	average	narrow to medium

Toebox shape

Helps you choose the right shape of the toebox. Look at your bare foot from above and find the drawing that is closest to your toes.



Your measures at a glance

Measure	It helps you	Page
Real length and width	choose the right lasts and buy ready-made barefoot shoes	2–3
Width coefficient	find out whether your feet are narrow, normal, wide or extra wide	3
Ball girth	choose the right lasts	4
Foot outline	design shoes without lasts and make your own pattern	5
Instep measure	sew shoes without lasts (instead of ball girth)	6
Ankle measures	shape the pattern of ankle lace-up shoes	7
Foot shape, toebox shape	choose the right shape of barefoot shoes or lasts	8

The next step

Would you like to have custom shoes that really fit you? You can make them yourself with our online courses.

We offer **online courses for beginners and intermediate shoemakers**, you can choose from. With our courses, you can learn to sew your shoes by hand using a few hand tools or make professional lasted shoes.






Start making custom barefoot shoes today: [see our course offer at diybarefootshoes.com/workshops]

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