Determine your ETRTO wheel specification from measuring your bicycle wheel

The ETRTO wheel rim specification is often listed on a label on your wheel, this is usually in very small print. However, if you can do a couple of simple measurements from your wheel you should be able to determine what ETRTO wheel rim specification you have. Please see the diagram below that outlines the three major wheel rim dimensions i.e.

- The Bead Set Diameter (BSD)
- The inner rim width
- The outer rim width



The ETRTO number is the Bead Set Diameter (BSD) x the Inner rim width e.g. 559 x 19 or 622 x 19. If the ETRTO size matches it means the Gecko tyre will fit on your wheel rim.

But what if the ETRTO markings are not legible on the wheel or are not even there? All is not lost! If you have a tape measure, you can measure the rim to determine the ETRTO Bead Set Diameter (BSD) and the inner rim width.

The inner rim width is a simple measurement as outlined in the above diagram.

How to measure the wheel rim diameter to get you the Bead Set Diameter (BSD)

To determine the Bead Set Diameter (BSD) you can measure either the diameter or the circumference of the wheel rim

The wheel rim's diameter will generally be about 12mm larger than the ETRTO bead-seat diameter (BSD), depending on how high the rim flanges stick up above the bottom of the rim channel.

Lay your measuring tape or ruler across the rim from one side to the other. Get the largest measurement, between two points directly opposite one another. Slide one end of the tape back and forth along the rim until the measurement is largest.



The measured diameter of the rim shown is 530 mm. Therefore, the Bead Set Diameter (BSD) will be 530mm – 12mm i.e. 518mm.

- If the measured diameter was around 571mm then the BSD would be 559mm
- If the measured diameter was around 634mm then the BSD would be 622mm

If you are working with an empty rim i.e. no spokes, it is easiest to measure the diameter, but if you have a built-up wheel, the hub will get in the way of the tape measure, making it difficult to get an accurate measurement. Therefore, for a built-up wheel, it is easier to measure the rim's circumference. So, using Circumference = Diameter x π (where π is 3.14) then you can calculate back to the diameter in mm.