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## Tire width for a wheel/rim size chart

**Rim width and tire width are two closely related sizes.** Flexible tire sidewalls allow a single tire size to be mounted on a rim of various widths.

Actually, there is an approved rim width range ([/wheels/what-is-the-measuring-rim-width](#)) for every tire size, **but on the other side, there is a tire width range for every rim size, specifically, rim width.**

There are four charts on this page:

- First chart: **Tire widths for the Rim Width and Tire Series Chart** shows tire widths (mm) adequate for a certain rim width (inch) and tire profile (i.e. Aspect Ratio or Series).
- Second chart: **Tire - Rim Width Equivalence Table** shows how wide tires can fit on a given rim width. It has the same purpose as the first one, but it's more of a subset. There are no tire profiles in this chart, only rim and tire widths. Someone may find it to be more practical.
- Other two chart groups: **Tire widths and Aspect ratios (series / profiles) Ordered by Tire Width or Tire Profile** are doing the same as first two charts, **but in a separate table for each rim width.** Inside a table the data is ordered by tire width or tire aspect ratio.

### Tire widths for the Rim Width and Tire Series (aspect ratios) chart

(Table cells contain Tire widths in mm; for e.g. 185, 195)

Tire Series (aspect ratio / tire profile)						
Rim Width (inch)	25	30,35,40	45	50,55	60,65,70	75,80
3.5	—	—	—	—	—	125, 135
4.0	—	—	—	—	135	145
4.5	—	—	—	—	145, 155	155, 165
5.0	—	—	—	155, 165	165, 175, 185	175, 185
5.5	—	—	165	175	185	195, 205
6.0	—	—	175, 185	185, 195	195, 205	215, 225
6.5	—	—	195	205	215, 225	235
7.0	—	195	205, 215	215, 225	235, 245	245, 255
7.5	—	205, 215	225	235, 245	255	265
8.0	—	225	235, 245	255	265, 275	—
8.5	—	235, 245	255	265, 275	285, 295	—
9.0	255	255	265, 275	285	305	—
9.5	—	255, 265, 275	285	295, 305	315	—
10.0	275	285	295	—	—	—
10.5	285, 295	295	305, 315	—	—	—
11.0	305	305, 315	—	345	—	—

Rim Width (inch)	25	30,35,40	45	50,55	60,65,70	75,80
11.5	315	325, 335	—	—	—	—
12.0	325, 335	335, 345	—	—	—	—
12.5	345	—	—	—	—	—
13.0	355	—	—	—	—	—

### Tire - Rim Width Equivalence Table

Some of our users asked us to post this Tire - Rim Width equivalence table too, for easier tire and rim size matching. **It shows how wide tires can fit on a given rim width**, just like the table above, but it's more of a subset. However, it is possible that some users may find this table to be more useful for practical purposes.

Rim width (inch)	Narrow tire width (mm)	Medium tire width (mm)	Wide tire width (mm)
5.0	155	165 - 175	185
5.5	165	175 - 185	195
6.0	175	185 - 195	205
6.5	185	195 - 205	215
7.0	195	205 - 215	225
7.5	215	225 - 235	245
8.0	225	235 - 245	255
8.5	245	255 - 265	275
9.0	255	265 - 275	285
9.5	275	285 - 295	305
10.0	285	295 - 305	315
10.5	295	305 - 315	325
11.0	315	325 - 335	345
11.5	325	335 - 345	355
12.0	335	345 - 355	365
12.5	345	355 - 365	375

When replacing a rim or a tire with a wider one you could ask a question in two different ways:

#### What rim widths fit to my tire? (e.g., 195/65 R15)

The answer would be: "Rim widths corresponding to the tire size 195/65 R15 are: 5.5, 6.0, 6.5 and 7.0 inches". The information related to other tire sizes can be found in [Wheel/Rim Size Calculator \(/tyre-wheel-calculators/wheel-rim-size-calculator\)](#) or [Rim Width Range and Measuring rim for Tire Size chart \(/charts/rim-width-range-and-measuring-rim-width-for-tire-size\)](#).

If you want to mount a wider or a narrower tire on the existing rim you could ask the question:

## What tire widths fit to my wheel/rim?

For example, appropriate tire widths for the 6" rim are from 175mm to 225mm. That's answer you can find in the charts below this text.

When replacing OE(original equipment) tire with a wider one, aftermarket tire, the width of rim should be taken into consideration because each rim width corresponds to only a few tire widths.

The charts presented below could help you to make the rational decision about the tire width you need for the given wheel/rim width.

But, please consider that the resulting tire list lacks certain tire sizes, so it should not be treated as complete. When we say tire size in this context(relation between tire width and rim width), we mean only on tire width(i.e., section width) and tire aspect ratio/series, there is no rim diameter. Tires presented in the list should not be all considered suitable for your car, because only a few of them or maybe, only one would satisfy a requirement that their overall diameter should be almost the same as your OE (original equipment) tire diameter. The data presented in the charts is only for the passenger car metric tires.

NOTICE: These charts do not represent complete or ultimate solution for this particular purpose, they are only a reference.

So, when you find tire sizes, i.e., tire width and series combinations that fit your wheels/rims, use our Tire Size Calculator (/tyre-wheel-calculators/tire-size-calculator-compare-tire-dimensions) to compare them with your OE Tire size to ensure that the selected tires circumferences or diameters do not deviate too much from the OE tire circumference or diameter. This is extremely important for many reasons.



The charts, as an addition to our tire4rim calculator, should be used along with our rim4tire calculator, which complement each other. If you choose a tire size in these charts or in the Tire size for rim size calculator (/tyre-wheel-calculators/tyre-size-for-rim-size-width-calculator), do one more check in the Wheel/Rim size calculator (/tyre-wheel-calculators/wheel-rim-size-calculator)(or in the chart: Rim width range and Measuring rim width for Tire Size (/charts/rim-width-range-and-measuring-rim-width-for-tire-size)) for the selected tire size, to double check if the selected tire size has your rim in **the acceptable rim width range (/wheels/what-is-the-measuring-rim-width)**.

**Find more relevant information below these charts.**

Can I mount a smaller tire width than the one presented in the chart as the smallest, for the specific rim width?

**Notes:** A Tire with higher profile(series) for the same tire width or the same profile for a wider tire width, has a higher tire sidewall, that means more comfortable ride. Wider tires create more traction on the road, resulting in reducing fuel economy.

**CLICK ON THE BUTTON "SHOW ME THE TABLES" TO SEE ADDITIONAL CHARTS:**

-  **TIRE WIDTHS AND ASPECT RATIOS FOR RIM WIDTH, ORDERED BY TIRE WIDTH AND**
-  **TIRE WIDTHS AND ASPECT RATIOS FOR RIM WIDTH, ORDERED BY ASPECT RATIO.**

Show me the Tables

**Disclaimer:**

Please note that these charts should be used only as a reference and they should be verified with tire/wheel manufacturers. They are for informative purposes only. The tyresizecalculator.com is not responsible for any errors that may arise with their usage.

## Which tire width to choose from the tire width range?

In the charts, every tire width and aspect ratio combination, listed below the certain rim width, could be mounted on the rim width, but the question is: which tire width is the best fit to the rim width?

The tire Measuring Rim Width (/wheels/what-is-the-measuring-rim-width), which stems from the tire size could help. You already have the tire width, the aspect ratio, the rim diameter you want to use, that is, you have the full tire size. if your rim width is closer to the measuring rim of selected tire, it's more likely that the chosen tire would fit your rim.

**Every tire size has its own Measuring Rim (/tyre-wheel-calculators/wheel-rim-size-calculator)** (check the Measuring Rim Width for a tire size by clicking the previous link). **In other words, the nominal tire size(imprinted on a tire sidewall) becomes the real tire size when fitted on the appropriate Measuring Rim.**

For the specific rim size and adequate tire dimensions try out our Tire size for rim size/width calculator (/tyre-wheel-calculators/tyre-size-for-rim-size-width-calculator) which tells you what tire sizes to pick for entered rim size(i.e., rim width).

Tire widths and tire series(i.e., aspect ratios / profiles) for a wheel / rim width chart

The charts in this article show what tire width and series combinations fit to the specific wheel / rim width i.e., they show the tire width range for the given rim width. E.g., for the 7" (inch) rim width, following tire widths can be fitted: from 195mm to 255mm.

In the charts, beside each tire width, there is one more tire dimension: a tire series. The tire series is the ratio between the tire section height(i.e., tire sidewall height) and the tire section width (i.e., tire width). Series = tire sidewall height / tire width.

If two tires have the same tire width, but different series: the first has 50, the second has 30, that means that the second tire has the smaller tire sidewall height(lower profile) in relation to the first, so rims will be closer to the road.

The tire width, the rim width and the tire series are closely related sizes when we talk about the tire to rim fitment. The reason for this is that for almost every tire series there is a different rim width/tire width ratio(specified by the tire associations). The ratio is used for determining the Measuring Rim for the tire. In other words, a lower aspect ratio means that you could use a wider rim for the same nominal tire width.

Important notes about tire to rim fitment

**Actual tire dimensions depend on a rim on which a tire is mounted.** The nominal tire size is imprinted on the tire sidewall, but the tire gets its real dimensions(i.e., real tire size) only when mounted on the rim. That's the reason why a Measuring Rim exists for every tire size (/wheels/what-is-the-measuring-rim-width).

Next important info is that the tire width changes for about 5mm (2/10") for every 0.5" (inches) change in the rim width, in the Approved Rim Width Range for the tire (/tyre-wheel-calculators/wheel-rim-size-calculator).

Suppose you have the tire size 195/65 R15 on the 6" (inch) rim width (6"x15"). If you changed the rim to 7"x15", according to the previous rule, when you mount the tire 195/65 R15 on that rim, the real tire width would be 195mm + (2 x 5mm) = 205 mm.

The type of rim, that tire is designed for, is also important.

All these things could affect the overall tire diameter(or circumference), which is important to stay in the permissible limit, during the process of tire replacement.

These charts are only for the passenger car metric tires.

The charts are a compilation of data from year books of renowned tire manufacturers, and it might not be in accordance with the newest data, so please, always check the data from these charts with tire manufacturers or tire specialists!

Minimum and maximum tire size for the rim width

Looking at one chart row, for one rim width, treated as a measuring rim width(MRW), there are various tire widths in columns, designated as aspect ratio(i.e., tire series / profile). In the row, as series rises, the tire width rises also. So, we may say there are the minimum and the maximum tire width for one rim width, but only in the context of the tire series.

If we took only one cell in the row, which contains one tire width, for e.g., the one with the minimum tire width(TW) for observed rim width(RW), **could we say that this is the minimum tire width that can be mounted on the rim width? No.** The cell contains the real tire width for the rim width, the one which is equal to the nominal tire width/size(imprinted on the tire sidewall), the one we get when the tire with that nominal tire width is mounted on the rim with the rim width.

**This doesn't mean we can't mount a smaller tire width than the one showed in the chart as the smallest for the same rim width. How so?** For e.g., the row with 9" rim width lists as the smallest tire width, 255mm for AR: 25,30,35 and 40. **Is it possible to mount smaller tire width than 255 on that rim? Yes.**

**In our Wheel/Rim Size Calculator-Shows acceptable rim width range for the tyre size (/tyre-wheel-calculators/wheel-rim-size-calculator), enter tire size 245/40 R 18, you'll get approved rim width range(ARWR): 8" – 9.5" and measuring rim width of 8.5", which means you can mount that tire size(with 245mm tire width) on 9" wide rim, because it's in the ARWR for that tire size.** But, measuring rim width(MRW) for that tire size is 8.5", and we were talking about mounting the tire on the rim width of 9".

**A tire gets its final size after being mounted on a rim. Every rim width increase of 0.5" as a result has tire width increase of 5mm or 2/10", when the tire is mounted. Every tire size has a measuring rim width and an approved rim width range.**

Hence, when we mount the nominal tire size(imprinted on the tire sidewall) 245/40 R 18, which has MRW equal to 8.5", on the rim width of 9", the real tire size, specifically, real tire width would be 250mm, not 245mm, because the rim on which the tire is mounted is 0.5" greater than the tire MRW.

Related articles:

- See other Tire/Wheel charts (/charts).
- Check out Tire/Wheel calculators. (/tyre-wheel-calculators)
- Find out more about Tires (/tyres) and Wheels (/wheels).
- Do you know What is a measuring rim (/wheels/what-is-the-measuring-rim-width)?

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