Aircraft Tire Dimensions

The following information provides a description of aircraft tire dimensions. The dimensions of the tires used on Boeing’s commercial airplanes are found in Section 7 – Pavement Data of each airplane model’s “Airplane Characteristics for Airport Planning” document available at [www.boeing.com/airports](http://www.boeing.com/airports).

The following are examples of various tire dimensions:

**Older Tire Dimensions**
- 44 x 16 Type VII (DC-8-55 main gear tire)
- 44.5 x 16.5-18 Type VII (DC-8-62 main gear tire)

**Newer Tire Dimensions**
- H54 x 21.0 - 24 (MD-11 main gear tire)
- 52 X 21 R 22, 36 PR (777-300ER main gear tire)
- H44.5 x 16.5 – 21, 28 PR (737-800 main gear tire)

The following tire (H44.5 x 16.5 - 21 28 PR) is used as an example to explain the dimensions. The “H” identifies that the tire is designed for a higher percent deflection. The “44.5” represents the tire diameter in inches. The “16.5” represents the tire width in inches. The “-” refers to a bias ply tire, or if replaced by a “R,” then identifies that the tire is a radial tire. The “21” represents the rim diameter. Finally, the “28 PR” represents the ply rating of the tire. If the tire designation is in metric, then the tire diameter and tire width are in millimeters and the rim diameter is in inches.

![Side View](image1)

![Looking Forward](image2)

Note:
Some older tires were designated as either Type III or Type VII. The Type III tires were mainly used by piston-prop type aircraft with the attribute of low pressure for cushioning and flotation. Type VII tires were early generation tires designed for jet aircraft with higher load capacity.