

Calculating Optimum Wing Loading By Rick Gutierrez

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So what is wing loading anyway?

Wing Loading is the calculation or ratio of weight per squared foot of your parachute.

Why is it important to have the correct wing loading?

Simple; too little weight and the plane will be extremely sensitive to wind. Too heavy and you may not be able to fly "safely at least".

In order to calculate the proper wing loading you must have the following information:

- Wing Size in Squared Feet
- Vehicle Weight
 - Include fluids
 - Accessories
- Pilot and Passenger

Per APCO recommendations, proper Wing Loading for an APCO parachute is about 1.2 to 1.5 pounds per square foot.

How to calculate:

Machine Total Weight + Occupants Weight

Wing Size S.F

For Example:

Legend (300 Lbs) + Pilot (180) + Passenger (200)

APCO 550

680

----- = 1.23

550

So is the maximum recommended payload of my wing?

Take the Square Feet of your Chute and Multiply by 1.5

For example: 550 S.F x 1.5 = 825 Lbs

Note: The above numbers are a recommendation and you should consult your parachute manufacturer for more information.