

Charley's Tip

How to size a Fan System

Greenhouse ventilation is based on a specific formula regardless of your plant types and climate zone. You may vary shading and misting to accommodate plant needs and your local climate.

The exhaust fan should change the air in the greenhouse in about 1½ minutes. Fan capacity is rated in Cubic Feet per Minute (CFM). For your correct fan size in CFM, calculate your greenhouse Volume:

Length x Width x Average Height = Volume.

(Average Height: From halfway up a roof rafter, measure straight down to the floor.)

Multiply the Volume by 0.75 for your fan CFM.

Now select a fan with a CFM rating near or greater than your calculation. ALL of our fans can be slowed with a fan speed control.

(Caution: A fan that is too small will provide very little cooling.)

Some shading will be required in warmer months, and misting or evaporative cooling may also be necessary.

TYPICAL GREENHOUSE CALCULATIONS

Size L x W x A.H.	= Volume	Fan CFM (V x 0.75)	Fan CFM Recommended
8' x 10' x 7.5'	= 600 cu. ft.	450	585
10' x 16' x 7.5'	= 1200 cu. ft.	900	975
12' x 24' x 8'	= 2304 cu. ft.	1,728	1,900

Frame opening should be square and 1/2" larger than fan or shutter size.

Order E3124 Fan Thermostat (no cord or w/cord) for automatic operation. Order E3131 Fan Speed Control (no cord) or E3137 (w/ cord) to enable seasonal adjustments.



Charley's Tip - Shutter Size

Determine shutter size by dividing your fan CFM by 250. This gives shutter size in square feet. Divide this figure by 2 if two shutters are to be used. (Two shutters are recommended for greenhouses over 100 sq. ft. or wider than 8 feet.) See website for our complete shutter line.