

## Whole House Fan Cooling and Ventilation Air Exchange

Home Size		QC 1500 series		QC 2250 series		QC 4500 series	
Square feet	Cubic Feet	CFM	Air exchanges per hr.	CFM	Air exchanges per hr.	CFM	Air exchanges per hr.
2,000	16,000	1500	5.63	2250	8.44	4500	16.88
2,500	20,000	1500	4.50	2250	6.75	4500	13.50
3,000	24,000	1500	3.75	2250	5.63	4500	11.25
3,500	28,000	1500	3.21	2250	4.82	4500	9.64
4,000	32,000	1500	2.81	2250	4.22	4500	8.44
4,500	36,000	1500	2.50	2250	3.75	4500	7.50
5,000	40,000	1500	2.25	2250	3.38	4500	6.75

**EXAMPLE:** 1 - QC1500 and 1 - QC4500 installed in a 2,000 sq. ft. home = 6,000 CFM. This would give you the "BETTER" 22.5 air exchanges per hour.

## Whole House Fan Cooling and Ventilation Sizing

Cooling Properties	CFM Recommendation	Square Foot Size of Structure							
		1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
<b>POOR</b>	1 CFM per square foot (NOT RECOMMENDED)	CFM Req. 1,500	CFM Req. 2,000	CFM Req. 2,500	CFM Req. 3,000	CFM Req. 3,500	CFM Req. 4,000	CFM Req. 4,500	CFM Req. 5,000
<b>GOOD</b>	2 CFM per square foot (Normally has enough attic venting)	CFM Req. 3,000	CFM Req. 4,000	CFM Req. 5,000	CFM Req. 6,000	CFM Req. 7,000	CFM Req. 8,000	CFM Req. 9,000	CFM Req. 10,000
<b>BETTER</b>	3 CFM per square foot (May have enough attic venting)	CFM Req. 4,500	CFM Req. 6,000	CFM Req. 7,500	CFM Req. 9,000	CFM Req. 10,500	CFM Req. 12,000	CFM Req. 13,500	CFM Req. 15,000
<b>BEST</b>	4 CFM per square foot (Additional attic venting required)	CFM Req. 6,000	CFM Req. 8,000	CFM Req. 10,000	CFM Req. 12,000	CFM Req. 14,000	CFM Req. 16,000	CFM Req. 18,000	CFM Req. 20,000

## QuietCool Whole House Fan Quantity Recommendation

Cooling Properties	CFM per Square Feet (Air exchanges per hour)	QuietCool Fan Quantity Recommendation by Square Foot Size of Structure							
		1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
<b>POOR</b>	(NOT RECOMMENDED) 1 CFM per square foot (7.5 air exchanges per hour)	1 QC1500's	1 QC2250	2 QC1500's	2 QC1500's	1 QC1500 and 1 QC2250	3 QC1500's or 1 QC4500	3 QC1500's or 1 QC4500	2 QC1500's and 1 QC2250
<b>GOOD</b>	2 CFM per square foot (15 air exchanges per hour)	2 QC1500's	3 QC1500's or 1 QC4500	2 QC1500's and 1 QC2250	4 QC1500's or 1 QC1500 & 1 QC4500	5 QC1500's or 2 QC1500 & 1 QC4500	6 QC1500's or 3 QC1500 & 1 QC4500	6 QC1500's or 3 QC1500 & 1 QC4500	7 QC1500's or 4 QC1500 & 1 QC4500
<b>BETTER</b>	3 CFM per square foot (22.5 air exchanges per hour)	3 QC1500's	4 QC1500's	5 QC1500's or 2 QC1500's & 1 QC4500	6 QC1500's or 3 QC1500's & 1 QC4500	4 QC1500's and 1 QC4500	5 QC1500's and 1 QC4500	6 QC1500's and 1 QC4500's	7 QC1500's and 1 QC 4500
<b>BEST</b>	4 CFM per square foot (30 air exchanges per hour)	4 QC1500's	3 QC1500's and 1 QC4500	4 QC1500's and 1 QC4500	5 QC1500's and 1 QC4500	5 QC1500's and 1 QC2250 and 1 QC4500	5 QC1500's and 2 QC4500's	6 QC1500's and 2 QC4500's	7 QC1500's and 2 QC4500's

\*Whole house fan air exchange chart based on 8' ceilings in traditional homes.

Cathedral ceiling - add approximately 25% more to square footage.

Formula = CFM / Home Cubic Feet x 60 (minutes per hour).

rev.4.22.09