Using This Chart

These figures are averages. Discretion must be used when evaluating a given environment.

Except as indicated, all categories are a no visible smoke, no visible dust producing area. Figures may be increased or decreased, depending on actual area usage.

The Formula

$$\frac{\text{Cubic feet of area}}{\text{CFM* of unit}} \times \frac{\text{number of air changes per hour}}{60}$$

ELECTRO BREEZE rates nominal CFM of the following units:

CM-2000	2000 CFM
CM-3500	3500 CFM
WU-550	550 CFM
WU-300	300 CFM

Example #1

A bingo hall, smoking allowed, area of	60' x 120' x 12'
Total cubic feet (60 x 120 x 12)	86,400
Chart Multiplier	25
Total volume of air per hour	2,160,000
3500 CFM unit x 60	210,000
2,160,000 ÷ 210,000 =	10

10 units of 3500 CFM are required to service this area.

Example #2

A common area of a rest home, no smoking, area 20' x 30' x 8'

Total cubic feet (20 x 30 x 8)	4,800
Chart Multiplier	8
4,800 x 8 =	38,400
550 CFM x 60	33,000

1 unit of 550 CFM is required to service this area

Example #3

A common area of a rest home, smoking, area 20' x 30' x 8'

Total cubic feet	4,800
Chart Multiplier (Meeting Hall) (Smoking places room in different category)	25
4,800 x 25	120,000
750 CFM x 60	45,000
120,000 ÷ 45,000	3

It is imperative that an area or room being considered be properly categorized. There is a considerable difference between Example #2 and Example #3.

This scenario increase the number of air changes per hour but, in the actual case, this may be reversed. Take the example of a Bingo Hall becoming designated as "NO SMOKING". This would move the Bingo Hall from its heavy category down to a meeting hall category which represents a considerable saving to the customer.