

$Q(v) = \text{Fan Flow Rate}$
 $Q(\text{fan}) = Q(v) \cdot C(s)$
 $C(s) = \text{System Coefficient}$

Building Science Corporation Joseph Lstiburek 38

Table 4.1
System Coefficient based on system type¹

System Type	Distributed	Not Distributed
Balanced	1.0	1.25
Not Balanced	1.25	1.5

¹ Where there is whole-building air mixing of at least 70% recirculation turnover each hour, the system coefficient may be reduced by 0.25.

Building Science Corporation Joseph Lstiburek 39

BSC 01-2013
Ventilation for New Low-Rise Residential Building
2,000 ft²
3 bedrooms

20 cfm + 30 cfm = 50 cfm

Mixed, Distributed, Balanced (MDB)
37.5 cfm

Not Mixed, Not Distributed, Not Balanced
75 cfm

Building Science Corporation Joseph Lstiburek 40

House
2,000 ft²
3 bedrooms
8 ft. ceiling
Volume: 16,000 ft³

Ventilation Rates			
	.35 ach	93 cfm	
	.30 ach	80 cfm	
	.25 ach	67 cfm	
	.20 ach	53 cfm	
	.15 ach	40 cfm	
			62 - 73
			5 cfm/person 20 cfm
			10 cfm/person 40 cfm
			62 - 89
			15 cfm/person 60 cfm
			.35 ach 90 cfm
			62.2 - 2010 7.5 cfm/person 50 cfm
			+ 0.01
			62.2 - 2013 7.5 cfm/person 90 cfm
			+ 0.03
			BSC 01 - 2013 7.5 cfm/person 37 cfm
			+ 0.01 (MDB) 75 cfm

Building Science Corporation Joseph Lstiburek 41