

# School District Criteria

1. Administrative, media, classrooms, cafeteria, multipurpose rm, gym & auditorium-76°F / 50% RH
  2. Kitchen-85°F
  3. Locker rooms - 85°F
  4. Kiln rooms - 110°F
  5. Total air conditioned area - \_\_\_\_\_ square feet.
- b. Outdoor Condition
1. 91°FDB / 80° FWB
4. WINTER DESIGN CONDITION (placed on the drawings)
- a. Indoor Condition
    1. Administrative, media, classrooms, cafeteria, multipurpose rm, gym & auditorium - 70°FDB.
  - b. Outdoor Condition
    1. 39° FDB
5. Fresh air ventilation criteria (No less than 7.5 cfm per occupant)  
As permitted in the SREF section of the FBC, the ventilation rate of fresh air cfm for air conditioning systems, to be calculated by multiplying the number of occupants (students and staff) intended for the space, times the "HCPS Design cfm / person" listed in the table below.
6. For design occupancies, refer to the following:
- a. High School Prototype Educational Specifications, the "Schedule of Spaces"
  - b. Middle School Prototype Education Specifications, the "Schedule of Spaces"
  - c. Elementary School Prototype Educational Specifications, the "Schedule of Spaces"

2010  
FMC 403.3  
Table 403.3  
Requirements

| OUTDOOR AIR VENTILATION RATES                                                                   |                |             |                                     |                                 |                                       |                                                                        |
|-------------------------------------------------------------------------------------------------|----------------|-------------|-------------------------------------|---------------------------------|---------------------------------------|------------------------------------------------------------------------|
| FACILITY                                                                                        |                | UTILIZATION |                                     |                                 | VENTILATION                           |                                                                        |
| GRADE LEVEL                                                                                     | SPACE          | Type<br>(1) | Student<br>Occupancy ÷<br>hrs / day | A/C<br>Operation =<br>hrs / day | Occupancy<br>Adjustment<br>Factor (2) | FBC-MECH<br>Table 403.3 ×<br>Occupancy<br>Adjustment =<br>cfm / person |
| <b>ELEMENTARY (K - 5)</b><br>Student Schedule: 8:00AM - 2:15PM<br>A/C Schedule: 6:00AM - 4:30PM | Classroom      | I           | 5.25                                | + 10.50                         | = 0.50                                | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Cafeteria      | C           | 3.50                                | + 10.50                         | = 0.33 (use 1.00) (3), (4)            | 20 × 0.50 (4) = 20                                                     |
|                                                                                                 | Multipurpose   | I           | 5.00                                | + 10.50                         | = 0.48 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Music          | I           | 3.50                                | + 10.50                         | = 0.33 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Media Center   | I           | 3.50                                | + 10.50                         | = 0.33 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Administration | C           | 6.75                                | + 10.50                         | = 0.64 (use 1.00) (3)                 | 20 × 1.00 = 20                                                         |
| <b>MIDDLE (6 - 8)</b><br>Student Schedule: 9:00AM - 3:45PM<br>A/C Schedule: 6:00AM - 4:30PM     | Classroom      | I           | 4.75                                | + 10.50                         | = 0.45 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Cafeteria      | C           | 3.50                                | + 10.50                         | = 0.33 (use 1.00) (3), (4)            | 20 × 0.50 (4) = 20                                                     |
|                                                                                                 | Multipurpose   | I           | 4.75                                | + 10.50                         | = 0.45 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Music          | I           | 4.00                                | + 10.50                         | = 0.38 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Media Center   | I           | 4.00                                | + 10.50                         | = 0.38 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Administration | C           | 6.75                                | + 10.50                         | = 0.64 (use 1.00) (3)                 | 20 × 1.00 = 20                                                         |
| <b>HIGH (9 - 12)</b><br>Student Schedule: 7:30AM - 2:50PM<br>A/C Schedule: 6:00AM - 4:30PM      | Classroom      | I           | 6.25                                | + 10.50                         | = 0.60                                | 15 × 0.60 = 9                                                          |
|                                                                                                 | Cafeteria      | C           | 3.50                                | + 10.50                         | = 0.33 (use 1.00) (3), (4)            | 20 × 0.50 (4) = 20                                                     |
|                                                                                                 | Auditorium     | I           | 4.50                                | + 10.50                         | = 0.43 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Music          | I           | 5.00                                | + 10.50                         | = 0.48 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Media Center   | I           | 5.00                                | + 10.50                         | = 0.48 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |
|                                                                                                 | Administration | C           | 6.75                                | + 10.50                         | = 0.64 (use 1.00) (3)                 | 20 × 1.00 = 20                                                         |
|                                                                                                 | Gymnasium      | I           | 3.00                                | + 10.50                         | = 0.29 (use 0.50)                     | 15 × 0.50 = 7.5                                                        |

10  
 7.5  
 7.5  
 10  
 10  
 5  
 10  
 7.5  
 7.5  
 10  
 10  
 5  
 0.3 CFM/ft<sup>2</sup>

**NOTES:**

- (1) C = continuous occupancy; I = intermittent occupancy
- (2) Minimum allowable occupancy adjustment factor = 0.50.
- (3) Use of occupancy adjustment factor not allowed for spaces having continuous occupancy 3 hours or more.
- (4) Owner may identify specific sites where continuous occupancy is less than 3 hours. In such cases, FBC 423.15.6 (SREF) allows use of an occupancy adjustment factor.

## D. Duct Design:

1. **Variable Air Volume boxes** to be installed with a straight section of round duct approximately 4 foot long on the inlet. This round duct size is to be 2" larger than the duct connection on the box; then use a