

To meet air quality standards

each cubic foot of air needs to be replenished **6 times an hour**. (ASHRAE)

1 hr x 6 cycles x 8,100 cu ft¹ =
48,600 cu ft of air/hr
circulating in the classroom



Contaminants in the Air

Cleaning Product O-Gassing
Volatile Organic Compounds
Carpet and Tile Chemicals
Combustion Gases
Dust Mites
Asbestos
Viruses
Molds



Minimum occupancy standard

A recent study concluded **18 students** and **1 teacher** must have **900 sq ft** in an average elementary school classroom and **1,216 sq ft** for secondary schools.²



Indoor air pollution

is **2x to 5x higher** than outdoor levels.



Open windows

provide **1/10th** the ventilation effectiveness to that of a proper HVAC system.

Air filter requirements



The standard recommended rating for air filters is **MERV 13 or higher**. Many school HVAC systems will need to be upgraded to operate effectively at this level.