

**TABLE 6.5 Minimum Exhaust Rates**

Occupancy Category	Exhaust Rate, cfm/unit	Exhaust Rate, cfm/ft <sup>2</sup>	Notes	Exhaust Rate, L/s-unit	Exhaust Rate, L/s·m <sup>2</sup>	Air Class
Arenas	—	0.50	B	—	—	1
Art classrooms	—	0.70		—	3.5	2
Auto repair rooms	—	1.50	A	—	7.5	2
Barber shops	—	0.50		—	2.5	2
Beauty and nail salons	—	0.60		—	3.0	2
Cells with toilet	—	1.00		—	5.0	2
Copy, printing rooms	—	0.50		—	2.5	2
Darkrooms	—	1.00		—	5.0	2
Educational science laboratories	—	1.00		—	5.0	2
Janitor closets, trash rooms, recycling	—	1.00		—	5.0	3
Kitchenettes	—	0.30		—	1.5	2
Kitchens—commercial	—	0.70		—	3.5	2
Locker rooms for athletic, industrial, and health care facilities	—	0.50		—	2.5	2
All other locker rooms	—	0.25		—	1.25	2
Shower rooms	20/50		G,I	10/25		2
Paint spray booths	—	—	F	—	—	4
Parking garages	—	0.75	C	—	3.7	2
Pet shops (animal areas)	—	0.90		—	4.5	2
Refrigerating machinery rooms	—	—	F	—	—	3
Residential kitchens	50/100	—	G	25/50	—	2
Soiled laundry storage rooms	—	1.00	F	—	5.0	3
Storage rooms, chemical	—	1.50	F	—	7.5	4
Toilets—private	25/50	—	E, H	12.5/25	—	2
Toilets—public	50/70	—	D, H	25/35	—	2
Woodwork shop/classrooms	—	0.50		—	2.5	2

**NOTES:**

A Stands where engines are run shall have exhaust systems that directly connect to the engine exhaust and prevent escape of fumes.

B Where combustion equipment is intended to be used on the playing surface additional dilution ventilation, source control, or both shall be provided.

C Exhaust shall not be required where two or more sides comprise walls that are at least 50% open to the outside.

D Rate is per water closet, urinal, or both. Provide the higher rate where periods of heavy use are expected to occur. The lower rate shall be permitted to be used otherwise.

E Rate is for a toilet room intended to be occupied by one person at a time. For continuous system operation during hours of use, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.

F See other applicable standards for exhaust rate.

G For continuous system operation, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.

H Exhaust air that has been cleaned to meet Class 1 criteria from Section 5.16.1 shall be permitted to be recirculated.

I Rate is per showerhead.

growth shall not be installed. Nonporous materials with visible microbial growth shall be decontaminated.

**7.1.4 Protection of Occupied Areas**

**7.1.4.1 Application.** The requirements of Section 7.1.4 apply when construction requires a building permit and entails sanding, cutting, grinding, or other activities that generate significant amounts of airborne particles or procedures that generate significant amounts of gaseous contaminants.

**7.1.4.2 Protective Measures.** Measures shall be employed to reduce the migration of construction-generated contaminants to occupied areas.

**Informative Note:** Examples of acceptable measures include, but are not limited to, sealing the construction area

using temporary walls or plastic sheathing, exhausting the construction area, or pressurizing contiguous occupied areas.

**7.1.5 Air Duct System Construction.** Air duct systems shall be constructed in accordance with the following standards, as applicable:

- a. The following sections of SMACNA's *HVAC Duct Construction Standards—Metal and Flexible*<sup>17</sup>:
  - Section S1.9 of Section 1.3.1, "Duct Construction and Installation Standards"
  - Section 7.4, "Installation Standards for Rectangular Ducts Using Flexible Liner"
  - Section 3.5, "Duct Installation Standards"