





NOTE: Numerals indicated in parenthesis are applicable code sections of the 2006 International Mechanical Code (IMC), unless otherwise noted. 2006 International Fuel Gas Code (IFGC) section numbers are shown in italics, preceded by "IFGC" and 2006 International Building Code (IBC) section numbers are shown in italics preceded by "IBC." Where the section number is applicable to both the IMC and IFGC, the section number is followed by an asterisk "\*\*."

## GENERAL REGULATIONS

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| <p>_____ Construction documents to be submitted (106.3*, 106.3.1*)</p> <p>_____ Energy utilization (301.2*)</p> <p>_____ Equipment approval (301.3*, 301.4*, 301.5*; 301.6)</p> <p>_____ Prohibited locations (303.1*, 303.2*, 303.3*; 303.8; <i>IFGC 301.15</i>)</p> <p>_____ Equipment installation (301.10*-301.14*, 303.4*, 303.5*, 303.7*, 306*; 301.15, 304.1, 304.7, 304.8, 304.9; <i>IFGC 301.8, 301.9, 305.1, 305.6</i>)</p> | <p>_____ Hazardous location installation (304.3, 304.4, 304.5, 304.6; <i>IFGC 305.2, 305.3, 305.4, 305.5</i>)</p> <p>_____ Outdoor installation (303.6*, 306.5*; 304.10; <i>IFGC 306.6</i>)</p> <p>_____ Piping support (305; <i>IFGC 407.2, 415.1</i>)</p> <p>_____ Condensate disposal (307*; <i>IFGC 503.9</i>)</p> <p>_____ Clearance reduction (308*)</p> |
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## VENTILATION MECHANICAL VENTILATION OUTDOOR AIR REQUIREMENTS (TABLE 403.3)

A	B	C	D	E	F	G
Location	Area (ft <sup>2</sup> )	Estimated Occupant Load (persons /1,000 ft <sup>2</sup> )	Calculate Occupant Load <sup>1</sup>	Required Outdoor Air (cfm/person or cfm/ft <sup>2</sup> )	Total Required Outdoor Air <sup>2</sup> (cfm)	Actual Outdoor Air (cfm)

**FOOTNOTES:**

1. B × C/1000
2. D × E or B × E, As Applicable

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
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**GENERAL**

- \_\_\_\_\_ Exits (601.3; *IBC 1020.1.3*)
- \_\_\_\_\_ Outside air exhaust and intake location (401.4, 501.2, 501.2.1, 918.6; *IFGC 618.5*)
- \_\_\_\_\_ Outside opening protection (401.5)

**NATURAL VENTILATION**

- \_\_\_\_\_ Ventilation requirements (402)
- \_\_\_\_\_ Contaminants exhausted (*IBC 1203.4.2*)

**MECHANICAL VENTILATION**

- \_\_\_\_\_ Ventilation air requirements (401.2, 401.3 403.1, 403.2, 403.3, Table 403.3)
- \_\_\_\_\_ Recirculation and transfer air (403.2.1, 403.2.2)
- \_\_\_\_\_ System operation (403.3.1)
- \_\_\_\_\_ System control (405.1)
- \_\_\_\_\_ Energy recovery ventilation systems (514)
- \_\_\_\_\_ Public garages (404, 502.13)
- \_\_\_\_\_ Uninhabited spaces (406.1)

## EXHAUST SYSTEMS

### REQUIRED SYSTEMS

- \_\_\_\_\_ General (401.6, 502.1, 502.2, 502.6, 502.11, 502.12, 502.15, 502.16, 502.17, 502.18, 502.19)
- \_\_\_\_\_ Battery-charging areas (502.3, 502.4, 502.5)
- \_\_\_\_\_ Application of flammable finishes (502.7)
- \_\_\_\_\_ Hazardous materials (502.8, 502.9, 502.10)
- \_\_\_\_\_ Motor vehicle operation (502.14)
- \_\_\_\_\_ Motors and fans (503)
- \_\_\_\_\_ Clothes dryer exhaust (504; *IFGC 614*)
- \_\_\_\_\_ Domestic kitchen exhaust equipment (505)
- \_\_\_\_\_ Hazardous exhaust systems (510)
- \_\_\_\_\_ Dust, stock and refuse conveyor systems (511)
- \_\_\_\_\_ Subslab soil exhaust systems (512)
- \_\_\_\_\_ Smoke control systems (513)

### COMMERCIAL KITCHEN GREASE DUCTS AND EXHAUST EQUIPMENT

- \_\_\_\_\_ Exhaust fans (506.5.1)
- \_\_\_\_\_ Duct materials (506.3.1)
- \_\_\_\_\_ Duct design and velocity (506.3, 506.3.4, 506.3.5)
- \_\_\_\_\_ Duct construction (506.2, 506.3.2, 506.3.3, 506.3.7)
- \_\_\_\_\_ Cleanouts (506.3.8, 506.3.9, 506.3.11)
- \_\_\_\_\_ Duct enclosure (506.3.10, 507.10)
- \_\_\_\_\_ Clearance to combustibles (506.3.6, 506.5.4)
- \_\_\_\_\_ Exhaust outlets (506.3.12, 506.5.2, 506.5.3, 506.5.5)
- \_\_\_\_\_ Ventilation/exhaust hood venting (*IFGC 503.3.4, 505.1*)

### COMMERCIAL KITCHEN TYPE I HOODS

- \_\_\_\_\_ Where required (507.1, 507.2)
- \_\_\_\_\_ Factory-built commercial kitchen hoods (507.1, 507.16)
- \_\_\_\_\_ Hood construction (507.4, 507.6, 507.7.1, 507.8, 507.15)
- \_\_\_\_\_ Clearance to combustibles (507.9)
- \_\_\_\_\_ Grease filters (507.11)
- \_\_\_\_\_ Canopy-type hoods (507.12, 507.13)
- \_\_\_\_\_ Noncanopy-type hoods (507.13, 507.14)
- \_\_\_\_\_ Makeup air (508)
- \_\_\_\_\_ Exhaust fan activation (507.2.1.1)

### COMMERCIAL KITCHEN TYPE II HOODS AND DUCTS

- \_\_\_\_\_ Where required (507.1, 507.2)
- \_\_\_\_\_ Duct construction (506.4)
- \_\_\_\_\_ Hood construction (507.5, 507.6, 507.7.2)
- \_\_\_\_\_ Design (507.13.4, 507.13.5)

### FIRE SUPPRESSION SYSTEMS

- \_\_\_\_\_ Where required (509.1)
- \_\_\_\_\_ Type of system (*IBC 904.5, 904.6, 904.8, 904.11; IFC 904.5, 904.6, 904.8, 904.11*)
- \_\_\_\_\_ Actuation and interconnection (*IBC 904.11.1, 904.11.2; IFC 904.11.1, 904.11.2*)

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## DUCT SYSTEMS

- \_\_\_\_\_ Plenums, general (602.1, 602.2, 602.3)
- \_\_\_\_\_ Air movement in corridors (601.2, 601.2.1)
- \_\_\_\_\_ Duct construction and insulation (603.1- 603.5, 604)
- \_\_\_\_\_ Flexible air ducts and air connectors (603.6)
- \_\_\_\_\_ Duct installation (601.4, 603.7 - 603.17)
- \_\_\_\_\_ Air filters (605)
- \_\_\_\_\_ Duct smoke detectors (606)
- \_\_\_\_\_ Fire, smoke and ceiling radiation dampers (302.2\*; 504.2, 607)

## COMBUSTION AIR

### ALL APPLIANCES EXCEPT GAS-FIRED

\_\_\_\_\_ Prohibited sources (701.5)

### INSIDE AIR

\_\_\_\_\_ Unusually tight construction (202)

\_\_\_\_\_ Unconfined space (202, 702.1, 702.2)

\_\_\_\_\_ Openings (number, location and size) (702.3)

### OUTDOOR AIR

\_\_\_\_\_ Openings (number and location)  
(703.1, 703.1.1)

\_\_\_\_\_ Size of direct, horizontal or vertical  
openings (703.1.2, 703.1.3, 703.1.4)

### COMBINED USE OF INSIDE AND OUTDOOR AIR (CONDITION 1)

\_\_\_\_\_ Openings (number and location) (704.1,  
704.1.1)

\_\_\_\_\_ Ratio of direct, horizontal or vertical  
openings (704.1.2, 704.1.3, 704.1.4)

\_\_\_\_\_ Ratio of interior spaces (704.1.5)

\_\_\_\_\_ Prorating of inside and outdoor air (704.1.6)

### COMBINED USE OF INSIDE AND OUTDOOR AIR (CONDITION 2)

\_\_\_\_\_ Openings (number and location)  
(705.1, 705.1.1)

### OTHER

\_\_\_\_\_ Forced combustion air supply (706.1)

\_\_\_\_\_ Direct connection/direct-vent (707.1)

\_\_\_\_\_ Combustion air ducts (708.1)

\_\_\_\_\_ Opening obstructions, location and protection  
(709, 710.1)

### GAS FIRED APPLIANCES

\_\_\_\_\_ Prohibited sources (*IFGC 304.2, 304.4,  
304.12*)

### INSIDE AIR

\_\_\_\_\_ Indoor combustion air (*IFGC 304.5, 304.5.1,  
304.5.2*)

\_\_\_\_\_ Spaces on the same story (number, location  
and size) (*IFGC 305.3.1*)

\_\_\_\_\_ Spaces in different stories (number, location  
and size) (*IFGC 304.5.3.2*)

### OUTDOOR AIR

\_\_\_\_\_ Two-permanent openings method (size and  
location) (*IFGC 304.6, 304.6.1*)

\_\_\_\_\_ One-permanent openings method (size and  
location) (*IFGC 304.6, 304.6.2*)

### COMBINED USE OF INSIDE AND OUTDOOR AIR

\_\_\_\_\_ Indoor openings (*IFGC 304.5.3, 304.7.1*)

\_\_\_\_\_ Outdoor openings (size and location)  
(*IFGC 304.6, 304.7.2, 304.7.3*)

### OTHER

\_\_\_\_\_ Engineered combustion air supply  
(*IFGC 304.8*)

\_\_\_\_\_ Direct-vent (*IFGC 304.1*)

\_\_\_\_\_ Mechanical combustion air supply  
(*IFGC 304.9*)

\_\_\_\_\_ Louvers and grills (*IFGC 304.10*)

\_\_\_\_\_ Combustion air ducts (*IFGC 304.11*)

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## CHIMNEYS AND VENTS

\_\_\_\_\_ Masonry chimneys (801.3, 801.12, 801.13,  
801.15, 801.16, 801.17, 801.18; *IFGC 501.3,  
501.4, 501.9, 501.11, 501.12, 501.13,  
501.15, 503.5.3, 503.5.4, 503.5.5, 504.2,  
504.3*)

\_\_\_\_\_ Metal chimneys (806; *IFGC 503.5.2*)

\_\_\_\_\_ Category II, III, IV gas appliance venting  
systems (*IFGC 501.14, 502.1, 503.4,  
503.6.9.3, 503.11*)

### VENTS (GAS-FIRED APPLIANCES)

\_\_\_\_\_ Where required (*IFGC 503.2, 503.3*)

\_\_\_\_\_ Approval (*IFGC 502.1*)

\_\_\_\_\_ Vent application (*IFGC 502.3, 503.4*)

\_\_\_\_\_ Installation (*IFGC 502.4, 502.5, 502.6, 502.7,  
503.6.1*)

\_\_\_\_\_ Gas vent termination (*IFGC 503.6.4, 503.6.6,  
503.6.8, 503.8*)

## CHIMNEYS AND VENTS (cont'd.)

VENTS (GAS-FIRED APPLIANCES) (cont'd.)	_____ Sizing and installation (802.3, 802.7, 802.8)
_____ Minimum vent heights ( <i>IFGC 503.6.5</i> )	_____ Vent terminations (802.4, 802.5)
_____ Gas vents installed within masonry chimneys ( <i>IFGC 503.6.3, 504.3.19</i> )	_____ Minimum vent heights (802.6)
_____ Single-wall vent ( <i>IFGC 503.7</i> )	_____ Multistory vents (801.19)
	_____ Plastic vents (801.20)
SIZING OF CATEGORY I GAS APPLIANCE VENTING SYSTEMS	CONNECTORS (ALL APPLIANCES EXCEPT GAS-FIRED APPLIANCES)
_____ Sizing of venting system for a single gas appliance ( <i>IFGC 503.6.9, 504.2</i> )	_____ Size/location (803.2, 803.3)
_____ Chimney and vent location ( <i>IFGC 504.2.9</i> )	_____ Connectors serving two or more appliances (803.7)
_____ Sizing of venting system for two or more gas appliances ( <i>IFGC 503.6.9, 504.3</i> )	_____ Construction (803.8, 803.9)
_____ Multistory gas vents ( <i>IFGC 503.6.10</i> )	_____ Installation (803.5, 803.6, 803.10)
CONNECTORS (GAS-FIRED APPLIANCES)	DIRECT VENT, INTEGRAL VENT, MECHANICAL VENT AND VENTILATION/EXHAUST HOOD VENTING
_____ Materials ( <i>IFGC 503.10.2</i> )	_____ Direct vent (804.1; <i>IFGC 503.2.3, 503.8(3), 505.1</i> )
_____ Size/location ( <i>IFGC 503.10.3.1, 503.10.3.2, 504.2.10, 504.2.11</i> )	_____ Appliances with integral vents (804.2; <i>IFGC 503.2.4, 505.1</i> )
_____ Connectors serving two or more appliances ( <i>IFGC 503.10.3.3, 503.10.3.4, 503.10.4, 504.3.2, 504.3.3, 504.3.4, 504.3.21</i> )	_____ Mechanical draft systems (804.3; <i>IFGC 503.3.3</i> )
_____ Installation ( <i>IFGC 503.10.9, 503.10.10, 503.10.11, 503.10.14, 503.10.15, 503.10.16, 503.13, 503.14, 503.15</i> )	FACTORY-BUILT CHIMNEYS
VENTS (ALL APPLIANCES EXCEPT GAS-FIRED APPLIANCES)	_____ Approval and installation (805; <i>IFGC 503.5.1, 506.1</i> )
_____ Approval (802.1)	_____ Solid fuel appliances (805.2)
_____ Vent application (802.2)	_____ Factory-built fireplaces (805.3)

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## SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT

_____ Factory-built fireplaces (903)	_____ Incinerators and crematories (907; <i>IFGC 606</i> )
_____ Pellet fuel-burning appliances (904)	_____ Cooling towers, evaporative condensers and fluid coolers (908)
_____ Fireplace stoves and room heaters (905)	_____ Commercial-industrial incinerators ( <i>IFGC 607</i> )
_____ Factory-built barbecue appliances (906)	_____ Vented wall furnaces (909; <i>IFGC 608</i> )
_____ Decorative gas-fired appliances for installation in vented fireplaces ( <i>IFGC 602, 634</i> )	_____ Floor furnaces (910; <i>IFGC 609</i> )
_____ Gas-fired log lighters ( <i>IFGC 603</i> )	_____ Duct furnaces (911; <i>IFGC 610</i> )
_____ Vented gas-fired decorative appliances ( <i>IFGC 604</i> )	_____ Nonrecirculation direct-fired industrial air heaters ( <i>IFGC 611</i> )
_____ Vented gas fireplace heaters ( <i>IFGC 605</i> )	

## SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT (cont'd.)

_____ Recirculating direct-fired industrial air heaters (IFGC 612)	_____ Unit heaters (920; IFGC 620)
_____ Infrared radiant heaters (912; IFGC 630)	_____ Unvented room heaters (IFGC 621)
_____ Clothes dryers (913; IFGC 613)	_____ Vented room heaters (921; IFGC 622)
_____ Illuminating appliances (IFGC 628)	_____ Kerosene and oil-fired stoves (922)
_____ Sauna heaters (914; IFGC 615)	_____ Small ceramic kilns (923; IFGC 629)
_____ Engine and gas turbine-powered equipment and appliances (915; IFGC 616)	_____ Stationary fuel cell power plants (924)
_____ Pool and spa heaters (916; IFGC 617)	_____ Masonry heaters (925)
_____ Cooking appliances (917; IFGC 623)	_____ Refrigerators (IFGC 625)
_____ Forced-air warm-air furnaces (918; IFGC 618)	_____ Gas-fired toilets (IFGC 626)
_____ Conversion burners (919; IFGC 619)	_____ Air conditioning equipment (IFGC 627)
	_____ Fuel cell power plants (IFGC 633)
	_____ Hydrogen systems (926)

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## BOILERS, WATER HEATERS AND PRESSURE VESSELS

_____ Water heaters (1002; IFGC 624)	_____ Safety and pressure relief valves and controls (1006)
_____ Pressure vessels (1003)	_____ Low-water cutoff (1007)
<b>BOILERS</b>	_____ Steam blowoff valve (1008)
_____ Approval (1004.1; 1004.2; IFGC 631)	_____ Hot water expansion tank (1009)
_____ Working clearance (1004.3)	_____ Gauges (1010)
_____ Boiler connections (1005)	

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## REFRIGERATION

_____ Factory-built equipment (1101.2)	_____ Quantity and application of refrigerant (Table 1103.1, Table 1104.3.2, 1104.3, 1104.4)
_____ Refrigerant system classification (1103.3)	_____ Machinery room, general requirements (1105)
_____ Refrigerant classification (1103.1)	_____ Machinery room, special requirements (1106)
_____ Occupancy classification (1103.2)	_____ Refrigerant piping (1107)

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## HYDRONIC PIPING

_____ Materials (1202)	_____ Piping installation (1206)
_____ Joints and connections (1203)	_____ Transfer fluid (1207)
_____ Pipe insulation (1204)	_____ Embedded piping (1209)
_____ Valves (1205)	

## FUEL-GAS PIPING

### MATERIAL

- \_\_\_\_\_ Piping materials (*IFGC 403.1 - 403.6*)
- \_\_\_\_\_ Joints and connections (*IFGC 403.9 - 403.13*)
- \_\_\_\_\_ Identification (*IFGC 401.5*)

### INSTALLATION

- \_\_\_\_\_ Piping location (*IFGC 404.1, 404.2, 404.3*)
- \_\_\_\_\_ Piping protection (*IFGC 404.5, 404.6, 404.7*)
- \_\_\_\_\_ Piping through foundation walls (*IFGC 404.4*)
- \_\_\_\_\_ Minimum burial depth (*IFGC 404.9*)
- \_\_\_\_\_ Protection against corrosion (*IFGC 403.8, 404.8*)
- \_\_\_\_\_ Plastic pipe (*IFGC 404.14*)
- \_\_\_\_\_ Piping bends and changes direction (*IFGC 405*)
- \_\_\_\_\_ Appliance connection (*IFGC 411*)
- \_\_\_\_\_ Drips and sloped piping (*IFGC 408*)

### SIZING

- \_\_\_\_\_ Gas pipe sizing (*IFGC 402*)

### GAS SHUTOFF VALVES

- \_\_\_\_\_ Approval (*IFGC 409.1.1*)
- \_\_\_\_\_ Appliance shutoff (*IFGC 409.5*)
- \_\_\_\_\_ Tenant shutoff (*IFGC 409.3*)
- \_\_\_\_\_ Prohibited locations (*IFGC 409.1.2*)
- \_\_\_\_\_ Meter valve (*IFGC 409.2*)
- \_\_\_\_\_ Regulators (*IFGC 410*)

### OTHER GAS PIPING SYSTEMS

- \_\_\_\_\_ Liquefied petroleum gas motor vehicle fuel-dispensing stations (*IFGC 412*)
- \_\_\_\_\_ Compressed natural gas motor vehicle fuel dispensing stations (*IFGC 413*)
- \_\_\_\_\_ Supplemental and standby gas supply (*IFGC 414*)
- \_\_\_\_\_ Overpressure protection (*IFGC 416*)

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## FUEL OIL PIPING AND STORAGE

- \_\_\_\_\_ Storage system (1301.2)
- \_\_\_\_\_ Materials (1302)
- \_\_\_\_\_ Joints and connections (1303)
- \_\_\_\_\_ Fuel oil system installation (1305)
- \_\_\_\_\_ Oil gauging (1306)
- \_\_\_\_\_ Fuel oil valves (1307)

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## SOLAR SYSTEMS

- \_\_\_\_\_ Solar systems (Chapter 14)

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## GASEOUS HYDROGEN SYSTEMS

- \_\_\_\_\_ Gaseous hydrogen systems (*IFGC Chapter 7*)

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## APPENDICES A\*, B\*, IFGC C AND D.

- \_\_\_\_\_ Appendices adopted (101.2.1; *IFGC 101.3*)
- \_\_\_\_\_ Compliance verified

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## NOTES