1. Controlling all lamps or luminaires with dimmers.

2. Dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps.

3. Switching the middle lamps of three lamp luminaires independently of the outer lamps.

4. Switching each luminaire or each lamp.

5. Other methods approved by the department.

(b) The requirements of par. (a) do not apply to any of the following:

1. Lights in areas that are controlled by an occupant–sensing device that meets the requirements of s. Comm 63.1051 (4).

2. Lights in corridors.

3. Lights in areas that are controlled by an automatic time switch control device that has a timed manual override available at each switch location required by sub. (1), and that controls only the lights in that area enclosed by ceiling height partitions.

(3) DAYLIT AREAS. (a) Except as provided in par. (b), daylit areas in any interior enclosed space greater than 250 square feet and a lighting density more than 1.2 W/ft^2 shall meet the requirements of subds. 1. and 2.

1. Such areas shall have at least one control that complies with all of the following:

a. Controls only luminaires in the daylit area.

b. Controls at least 50% of the lamps or luminaires in the daylit area, in a manner described in sub. (2)(a) 1. to 5., independently of all other lamps or luminaires in the enclosed space. The other luminaires in the enclosed space may be controlled in any manner allowed by sub. (2)(a) 1. to 5.

2. Such areas shall have controls that control the luminaires in each vertically daylit area separately from the luminaires in each horizontally daylit area.

(b) The requirements of this subsection do not apply to any of the following:

1. Daylit areas where the effective aperture of glazing is equal or less than 0.1 for vertical glazing and 0.01 for horizontal glazing.

2. Daylit areas where existing adjacent structures or natural objects obstruct daylight to the extent that effective use of daylighting is not feasible.

(4) SHUT–OFF CONTROLS. (a) Except as provided in par. (b), for every floor or metered space, all interior lighting systems shall be equipped with at least one separate automatic control to shut off the lighting. This automatic control shall meet the requirements of s. Comm 63.1051 and may be an occupancy sensor, automatic time switch, or other device capable of automatically shutting off the lighting.

(b) The requirements of par. (a) do not apply to any of the following:

1. Buildings or separately metered spaces of less than 5,000 square feet of space.

2. Where the system is serving an area that must be continuously lit, or where the use of the space prohibits the use of a preestablished lighting program.

Note: Service equipment rooms as specified in NEC 110-26 (3) (d) are covered by this exception.

3. In residential buildings, hotels and motels, lighting of corridors, guest rooms, and lodging quarters.

4. Up to one–half watt per square foot of lighting in any area within a building that must be continuously illuminated for reasons of building security or emergency egress, if:

a. The area is designated a security or emergency egress area on the plans and specifications submitted to the department; or

b. The area is controlled by switches accessible only to authorized personnel.

(c) If an automatic time switch control device is installed to comply with par. (a), it shall incorporate an override switching device that complies with all of the following:

1. Is readily accessible.

2. Is located so that a person using the device can see the lights or the area controlled by that switch, or so that the area being lit is annunciated.

3. Is manually operated.

4. Allows the lighting to remain on for no more than two hours when an override is initiated.

5. Controls an area not exceeding 20,000 square feet in malls, auditoriums, gymnasiums, single tenant retail spaces, factories, warehouses and arenas, and not exceeding 5,000 square feet for other uses.

6. Two overrides may be provided for a maximum of 10,000 square feet if the lighting is dual level controlled in accordance with sub. (2) (a) 2. or 3.

(5) DISPLAY LIGHTING CONTROLS. Display lighting shall be separately switched on circuits that are 20 amps or less.

(6) EXTERIOR LIGHTING CONTROLS. Except in lighting in parking garages, tunnels, and large covered areas that require illumination during daylight hours, exterior lighting shall be controlled by a directional photocell or astronomical time switch that automatically turns off the exterior lighting when daylight is available. Time switches shall be equipped with back–up provisions to keep time during a power outage of 10 hours or more.

(7) HOTEL AND MOTEL GUEST ROOM CONTROLS. Hotel and motel guest rooms or suites excluding bathrooms shall have one or more master switches at the main entry door or at the entry door of each room that turn off all permanently wired lighting fixtures and switched receptacles in the room or suite.

Comm 63.1051 Requirements for lighting control devices. Automatic time switch control devices, occupant–sensing devices, automatic daylighting control devices, lumen maintenance control devices, or interior photocell sensor devices that are used to justify a wattage reduction factor in the calculation of the actual internal lighting power in s. Comm 63.1045 (2) shall be approved for compliance with all of the applicable requirements of subs. (1) to (7) and shall be installed in compliance with sub. (8). Approval of devices shall be obtained via the material approval program in accordance with ch. Comm 61 or via manufacturer certification to the California Energy Commission.

Note: Information on California Energy Commission Certification may be obtained from the California Energy Commission, Energy Efficiency and Demand Analysis Division, 1516 9th Street, MS–25, Sacramento, CA 95814, (916) 654–4080. A list of approved control devices is available on the internet at ftp://38.144.192.166/pub/efftech/appliance/.

(1) ALL DEVICES: INSTRUCTIONS FOR INSTALLATION AND CALIBRATION. The manufacturer shall provide step–by–step instructions for installation and start–up calibration of the device.

(2) ALL DEVICES: STATUS SIGNAL. The device shall have an indicator that visibly or audibly informs the device operator that it is operating properly, or that it has failed or malfunctioned, except for photocell sensors or other devices where a status signal is infeasible because of inadequate power.

(3) AUTOMATIC TIME SWITCH CONTROL DEVICES. Automatic time switch control devices shall comply with all of the following:

(a) Be capable of programming different schedules for weekdays and weekends.

(b) Incorporate an automatic "holiday shut–off" feature that turns off all loads for at least 24 hours, then resumes the normally scheduled operation.

(c) Have program backup capabilities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted.

(4) OCCUPANT–SENSING DEVICES. Occupant–sensing devices shall be capable of automatically controlling all the lights in an area no more than 30 minutes after the area has been vacated. In addition, ultrasonic and microwave devices shall have a built–in mechanism that allows calibration of the sensitivity of the device to room movement in order to reduce the false sensing of occupants and shall comply with either par. (a) or (b), as applicable:

(a) If the device emits ultrasonic radiation as a signal for sensing occupants within an area, the device shall comply with all of the following:

1. Have had an Initial Report submitted to the Bureau of Radiological Health, Federal Food and Drug Administration, under 21 CFR 1002.10.

2. Emit no audible sound.

3. Not emit ultrasound in excess of the decibel (dB) values given in Table 63.1051 measured no more than 5 feet from the source on axis.

Table 63.1051
Maximum Ultrasound Emissions

Midfrequency of Sound Pressure Third-Octave Bank (in kHz)	Maximum dB Level within Third-Octave Band (in dB reference 20 micropascals)
less than 20	80
20 or more to less than 25	105
25 or more to less than 31.5	110
31.5 or more	115

(b) If the device emits microwave radiation as a signal for sensing occupants within area, the device shall comply with all of the following:

1. Comply with all applicable provisions in 47 CFR Part 5, and have an approved Federal Communications Commission identification number that appears on all units of the device and that has been submitted to the department.

2. Not emit radiation in excess of 1 milliwatt per square centimeter measured at no more than 5 centimeters from the emission surface of the device.

3. Have permanently affixed to it installation instructions recommending that it be installed at least 12 inches from any area normally used by room occupants.

(5) AUTOMATIC DAYLIGHTING CONTROL DEVICES. Automatic daylighting control devices shall comply with all of the following:

(a) Be capable of reducing the light output of the general lighting of the controlled area by at least one-half while maintaining a uniform level of illluminance throughout the area.

(b) If the device is a dimmer, provide electrical outputs to lamps for reduced flicker operation through the dimming range and without causing premature lamp failure.

(c) If the device is a stepped dimming system, incorporate time delay circuits to prevent cycling of light level changes of less than three minutes.

(d) If the device uses step switching with separate "on" and "off" settings for the steps, have sufficient separation or deadband of "on" and "off" points to prevent cycling.

(e) Have provided by the manufacturer step-by-step instructions for installation and start-up calibration to design foot-candle levels.

(6) LUMEN MAINTENANCE CONTROL DEVICES. Lumen maintenance control devices shall comply with all of the following:

(a) Be capable of reducing the light output of the general lighting of the controlled area by at least 30% while maintaining a uniform illuminance throughout the area.

(b) Provide electrical outputs to lamps for reduced flicker operation through the dimming range and without causing premature lamp failure.

(c) Incorporate an alarm, either audible or visible, to announce when a specified setpoint of lumens or watts has been reached.

(d) Have provided by the manufacturer step–by–step instructions for installation and start up calibration to design foot–candle levels.

(7) INTERIOR PHOTOCELL SENSOR DEVICES. Interior photocell sensors shall not have a mechanical slide cover or other device that permits easy unauthorized disabling of the control, and shall not be incorporated into a wall–mounted occupant–sensing device.

(8) INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. If an automatic time switch control device, occupant–sensing device, automatic daylighting control device, lumen maintenance control device, or interior photocell sensor device is installed, it shall comply with both pars. (a) and (b).

(a) The device shall be installed in accordance with the manufacturer's instructions.

(b) Automatic daylighting control devices and lumen maintenance control devices shall:

1. Be installed so that automatic daylighting control devices control only luminaries within the daylit area; and

2. Have photocell sensors that are either ceiling mounted or located so that they are accessible only to authorized personnel, and that are located so that they maintain adequate illumination in the area according to the designer's or manufacturer's instructions.

Comm 63.1052 Exit signs. Exit signs shall have an installed wattage of 20 watts or less.

Comm 63.1053 Reduction of single lamp ballasts. The following luminaries located within the same room shall be tandem wired or provided with three-lamp ballasts:

(1) One–lamp or three–lamp fluorescent luminaries recess–mounted within 10 feet center–to–center of each other.

(2) One–lamp or three–lamp fluorescent luminaries pendant–or surface–mounted within one foot edge–to–edge of each other.

Part 6 Nondepletable Energy Source

Comm 63.1060 Buildings utilizing solar, geothermal, wind or other nondepletable energy source. Any building, or portion thereof, utilizing any nondepletable energy source shall meet all the requirements in IECC section 806.

Part 7 System Analysis Design

Comm 63.1070 System analysis design. A building designed using system analysis design shall comply with IECC section 806.

File Reference: IBC/Comm 63C lr

Chapter Comm 64
Heating, Ventilating and Air Conditioning

Subchapter I — Purpose, Scope, Application and Compliance

Comm 64.0001 Purpose and scope. (1) PURPOSE. (a) The purpose of this chapter is to regulate the design, installation, operation and maintenance of heating, ventilating and air conditioning systems in buildings and structures as specified in ch. Comm 61.

(b) The installation of fuel gas distribution piping and equipment, fuel gas-fired appliances and fuel gas-fired appliance venting systems shall be regulated by ch. Comm 65.

(c) Fixed electric space heating equipment shall comply with ch. Comm 16.

(2) SCOPE. The scope of this chapter is as specified in s. Comm 61.02.

Comm 64.0002 Application. (1) GENERAL. The application of this chapter is as specified in s. Comm 61.03 and as modified in this section.

(2) APPLICABILITY. All heating, ventilating and air conditioning systems shall be designed, installed, maintained and operated so as to provide the service and results required within
the provisions of this chapter. The minimum requirements established in each part of this chapter shall be complied with as they apply to the structures and facilities covered in the IBC.

Note: The administrative rules pertaining to energy conservation, ch. Comm 63, may be applied retroactively to existing buildings and structures.

(3) EXISTING SYSTEMS. The provisions for existing systems shall be as specified in pars. (a) and (b).

(a) *Additions*. 1. The provisions of this chapter shall apply to all additions to existing buildings and structures as specified in s. Comm 61.03.

2. Except when an existing heating, ventilation and air conditioning system is extended to serve an addition, existing system components are not required to be replaced if the provisions in this chapter are met within the addition.

(b) *Alterations.* 1. The provisions of this chapter shall apply to all alterations in any building or structure which affect the replacement of major equipment as specified in s. Comm 61.03.

2. When an existing heating, ventilating and air conditioning system serves a remodeled or altered space that has not undergone a change in occupancy classification, the existing system components are not required to be replaced if the provisions in this chapter that applied to the original construction of the space are met.

Note: "Occupancy classification" refers to the entries in Table 64.0403.

Note: Compliance with this chapter shall not constitute assurance of proper installation or operation of the heating, ventilating and air conditioning system. This chapter is not to be used as a design manual, but it is established as a minimum standard for safety, health and general welfare of the public.

Note: Maintenance and repair to existing equipment when there is no change to the building or occupancy, is considered an alteration.

(4) RETROACTIVITY. Retroactivity shall apply as specified in s. Comm 61.03.

(5) CONFLICTS. Conflicts between rules and other requirements shall apply as specified in s. Comm 61.03.

Comm 64.0003 Compliance. All buildings and structures shall comply with the IMC and the changes, additions or omissions under subch. II.

Comm 64.0004 Approval of drawings and specifications. All drawings and specifications shall be submitted to the department in accordance with the provisions of subch. III, ch. Comm 61.

Subchapter II — Changes, Additions or Omissions to the International Mechanical Code (IMC)

Comm 64.0100 Changes, additions or omission to the International Mechanical Code® (IMC). Changes, additions or omission to the international mechanical code are specified in this subchapter and are rules of the department and are not requirements of the IMC.

Note: This code subchapter is numbered to correspond to the numbering used within the model code; i.e., s. Comm 64.0102 refers to section IMC 102.

Comm 64.0101 General. (1) ADMINISTRATION. (a) The requirements in IMC section 101 are not included as part of this chapter.

(b) The requirements in IMC sections 102.1, 102.2, 102.4 to 102.7 and 102.9 are not included as part of this chapter.

(2) SCOPE. The requirements of IMC sections 103 to 107, 108.1 to 108.6 and 109 are not included as part of this chapter.

Comm 64.0102 Applicability. This is a department rule in addition to the requirements in IMC section 102.3:

(1) The designer or installer shall provide the owner with written instructions for the operation and maintenance of the system and equipment. An operating and maintenance manual shall be provided to the building owner or operator. The manual shall include basic data relating to the operation and maintenance of HVAC systems and equipment.

(2) Required routine maintenance actions shall be clearly identified. Where applicable, HVAC controls information such as diagrams, schematics, control sequence descriptions, and maintenance and calibration information shall be included.

Comm 64.0202 Definitions. (1) ADDITIONS. These are department definitions in addition to the definitions in IMC section 202:

(a) "Air change" means the introduction of new, cleaned, or recirculated air to a space.

(b) "Air change rate" means airflow in volume units per hour divided by the building space volume in identical volume units.

(c) "DHFS" means the department of health and family services.

(d) "Spot heating" means to provide heat to raise the air temperature to the required minimum in the immediate area of the occupants.

(2) SUBSTITUTIONS. Substitute the following meanings for the corresponding definitions in IMC section 202:

(a) "Approved" means acceptable to the department.

(b) "Approval agency" means the department or its authorized representative.

(c) "Unusually tight construction" has the meaning given in s. Comm 65.0201.

Note: Section Comm 65.0201 reads: "Unusually tight construction" means the total area of outdoor openings is less than 3% of the floor area of the space in which equipment is located.

Comm 64.0301 General regulations. (1) ENERGY UTILIZATION. This is a department informational note to be used under IMC section 301.2:

Note: See ch. Comm 63 for additional requirements.

(2) LISTED AND LABELED. Substitute the following wording for the requirements in IMC section 301.4:

(a) *General.* All appliances regulated by this chapter shall be listed and labeled as specified in this chapter, unless otherwise approved by the department in accordance with par. (b).

(b) *Unlisted equipment.* If the equipment is unlisted, the one of the following provisions shall be taken:

1. A statement from the equipment manufacturer shall be provided indicating the national standard with which the equipment complies. A test by a Wisconsin registered engineer shall be conducted on the output and safety controls, in accordance with the national standard used by the manufacturer. A statement regarding the test of the rating and safety controls shall be furnished for each installation unless an approval for the equipment is obtained from the department.

Note: The purpose of the statement is to show that the equipment is in complete compliance with the national standard by which the equipment is designed, constructed and tested.

2. Approvals for unlisted equipment and products regulated by this chapter shall be as specified in ch. Comm 61.

(3) ELECTRICAL. Substitute the following wording for the requirements in IMC section 301.7: Electrical wiring, controls and connections to equipment and appliances regulated by this chapter shall be in accordance with ch. Comm 16.

(4) PLUMBING CONNECTIONS. Substitute the following wording for the requirements in IMC section 301.8: Potable water supply and building drainage system connections to equipment and appliances regulated by this chapter shall be in accordance with chs. Comm 81-87.

Comm 64.0304 Installation. This is a department informational note to be used under IMC section 304.2:

Note: See s. Comm 61.03 (2) for clarification on the application of different requirements and where the most restrictive requirements apply.

Comm 64.0306 Access and service space. This is a department exception to the requirements in IMC section 306.6: These provisions do not apply when the installation consists of fans only.

Comm 64.0309 Temperature control. Substitute the following wording for the requirements and exception in IMC section 309:

(1) HEATING SYSTEM DESIGN. Except as provided in subds. (2) or (3), the heating system shall be designed to maintain a temperature of not less than that shown in Table 64.0403 at 3 feet above the floor within the occupied space.

(2) SPOT HEATING. Spot heating may be used to heat individual fixed work stations in industrial buildings in lieu of heating the entire space as specified in sub. (1), provided the inside design temperature at the fixed work station is at least 60°F.

(3) SEASONAL OCCUPANCIES. When approved by the department, heating requirements may be waived, but not ventilation required by this chapter, during the period of May 15 through September 15 for the following or similar occupancies: drive-in eating places, club houses, outdoor toilets, camp lodge buildings, canning factories and migrant labor camps.

Comm 64.0312 Heating and cooling load calculations. This is a department informational note to be used under IMC section 312:

Note: For design parameters in the IECC refer to ch. Comm 63 or IECC section 803.

Comm 64.0313 Other requirements. These are department rules in addition to the requirements in IMC chapter 3:

(1) BALANCING, FINAL TEST REQUIRED. Every heating, ventilating and air conditioning system shall be balanced upon installation. The person or agency responsible for balancing of the ventilating system shall document in writing the amount of outdoor air being provided and distributed for the building occupants and any other specialty ventilation. The document shall be retained at the site and shall be made available to the department upon request.

(a) Air systems shall be balanced in a manner to minimize losses from damper throttling by first adjusting fan speed then adjusting dampers to meet design flow conditions. Balancing procedures shall be acceptable to the department. Damper throttling alone may be used for air system balancing with fan motors of 1 hp or less, or if throttling results in no greater than 1/3 hp fan horsepower draw above that required if the fan speed were adjusted.

(b) Either of the following test methods shall be used:

1. Hydronic systems shall be balanced in a manner to minimize valve throttling losses by first trimming the pump impeller or adjusting the pump speed then adjusting the valves to meet design flow conditions.

2. Valve throttling alone may be used for hydronic system balancing under any of the following conditions as specified in subds. 3.a. to d.

a. Pumps with pump motors of 10 hp or less.

b. If throttling results in no greater than 3 hp pump horsepower draw for pumps of 60 hp or less, or no greater than 5% of pump horsepower draw for pumps greater than 60 hp, above that required if the impeller were trimmed.

c. To reserve additional pump pressure capability in open circuit piping systems subject to fouling. Valve throttling pressure drop shall not exceed that expected for future fouling.

d. Where it can be shown that throttling will not increase overall building energy costs.

Note: National Environmental Balancing Bureau (NEBB) Procedural Standards, the Associated Air Balance Council (AABC) National Standards, the Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA), or equivalent balancing procedures are acceptable to the department.

(2) BALANCING, PROPER WORKING CONDITION. HVAC control systems shall be tested to assure that control elements are calibrated, adjusted and in proper working condition.

(3) BALANCING, OPERATING AND MAINTENANCE MANUAL. An operating and maintenance manual shall be provided to the building owner or operator. The manual shall include basic data relating to the operation and maintenance of HVAC systems and equipment. Required routine maintenance actions shall be clearly identified. Where applicable, HVAC controls information such as diagrams, schematics, control sequence descriptions, and maintenance and calibration information shall be included.

Comm 64.0401 Ventilation. (1) VENTILATION REQUIRED. Substitute the following wording for the requirements in IMC section 401.2: Every occupied space shall be ventilated by natural means in accordance with IMC section 402 or by mechanical means in accordance with IMC section 403 and as specified in Table 64.0403.

(2) WHEN REQUIRED. Substitute the following wording for the requirements in IMC section 401.3:

(a) *Outside air.* Mechanical ventilation systems shall be operated to provide a continuous source of outside air to all areas while people are present.

(b) *Operation.* 1. Except as provided in subd. 2., the required building exhaust ventilating systems shall operate continuously when people are in the building to provide the amount of exhaust specified in Table 64.0403.

Note: Chapter Comm 32 may require continuous operation of some exhaust systems, such as purging systems, chloride storage exhaust or industrial exhaust.

2. Subdivision 1. does not apply to all of the following:

a. Toilet rooms with 2 or fewer total water closets or urinals, if the required ventilation is provided when the room is occupied.

b. Shower rooms with 2 or fewer showerheads if the required ventilation is provided when the room is occupied.

c. Common residential laundry rooms with a total of 4 or fewer washers and dryers if the required ventilation is provided when the room is occupied.

d. Mechanical exhaust systems for natatoriums even when the building is not occupied.

(3) EXITS. Substitute the following wording for the requirements in IMC section 401.4: Vestibule ventilation for smokeproof enclosures shall be in accordance with the IBC.

(4) INTAKE OPENINGS. (a) These are department rules in addition to the requirements in IMC section 401.5.1:

1. Mechanical and required gravity outside air intake openings shall be located a minimum of 10 feet from any hazardous or noxious contaminant such as vents, chimneys, plumbing vents, streets, alleys, parking lots and locating docks, except as otherwise specified in this chapter. Where a source of contaminant is located within 10 feet of an intake opening, such opening shall be located a minimum of 2 feet below the contaminant source.

2. The lowest side of outside air intake required openings shall be located at least 12 inches vertically from the adjoining grade level, above adjoining roof surfaces, or above the bottom of an areaway.

3. Outside air intakes located in areaways shall be provided the minimum horizontal cross section of the areaway is equal to the free area of the opening.

(b) These are department exceptions in addition to the requirements in IMC section 401.5.1:

1. The setback distances as specified in IMC section 401.5.1 shall not apply to the combustion air intake of a direct vent appliance.

2. Unless a greater distance is specified by the manufacturer, exhaust openings of 100 cfm or less shall be located at least 12 inches, measured in any direction, from doors or openable windows.

3. The 10-foot minimum separation does not apply to the intake and exhaust of a factory-packaged rooftop unit or other listed outdoor appliance provided nothing restricts air flow around the unit. The exhaust and intake of the unit shall be located to minimize contamination of outside air.

4. Unless a greater distance is specified by the manufacturer, product of combustion outlets of direct vent appliance vents shall terminate at least 12 inches measured in any direction from doors or openable windows.

Note: See ch. Comm 82 for plumbing vent setbacks. That rule requires plumbing vents to be 10 feet from air intakes and 10 feet horizontally from or 2 feet above roof scuttles, doors or openable windows.

Note: See NFPA standard 45, Fire Protection for Laboratories Using Chemicals, adopted under ch. Comm 10, for chemical fume hood exhaust location. Health care and related facilities may have additional requirements.

(5) EXHAUST OPENINGS. These are department rules in addition to the requirements in IMC section 401.5.2:

(a) *Gravity ventilation ducts*. Gravity ventilation ducts shall extend not less than 2 feet above the highest portion of the building within a 10-foot radius of the duct and shall be provided with a siphon roof ventilator.

(b) *Barometric relief vents*. Where barometric relief vents are installed on the roof, the discharge openings shall be no less than 2 feet above the roof surface where the vent pierces the roof.

Comm 64.0402 Natural ventilation. This is a department rule in addition to the requirements in IMC section 402: Natural ventilation shall be permitted only in areas specified in Table 64.0403.

Comm 64.0403 Mechanical ventilation. (1) VENTILATION SYSTEMS. Substitute the following wording for the requirements in IMC section 403.1:

(a) Mechanical ventilation shall be provided by a method of supply air and exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing negative or positive pressure. The system to convey ventilation air shall be designed and installed in accordance with IMC chapter 6.

(b) Ventilation supply systems shall be designed to deliver the required rate of supply air into the occupied zone within an occupied space.

(2) OUTDOOR AIR REQUIRED. (a) This is a department exception to the requirements in IMC section 403.2: Where it can be demonstrated that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding the maximum obtainable by providing the rate of outdoor air ventilation determined in accordance with IMC section 403.3, the minimum required rate of outdoor air may be reduced in accordance with such engineered system design.

(b) This is a department rule in addition to the requirements in IMC section 403.2: The outdoor air shall be free from contamination of any kind in proportions detrimental to the health and comfort of the general population exposed to it.

(3) RECIRCULATION OF AIR. This is a department informational note to be used under IMC section 403.2.1:

Note: The following are examples where the department will accept air transferred from: corridor to toilet room; corridor to cloak room or janitor closet; dining room to kitchen; locker room to toilet room; gymnasium to locker room; showroom to garage; and corridor to school vocational shops.

(4) VENTILATION RATE. (a) This is a department rule in addition to the requirements in IMC section 403.3:

1. 'Toilet rooms.' A toilet room that has only one water closet or urinal and no bathtub or shower shall be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

2. 'Janitor closets.' A janitor closet that has only one service sink shall be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

3. 'Locker and shower rooms.' An adjoining locker, shower and toilet room shall be exhausted at the rate specified in Table 64.0403 based on the largest amount of exhaust required for any of the three rooms. A negative pressure relationship shall be maintained in the shower and toilet rooms with respect to the locker room.

4. 'Chemical or septic toilets.' Chemical or septic toilets and composting privies are prohibited in spaces under negative pressure. Toilet rooms with chemical or septic toilets shall be provided with natural ventilation via a window, louver or skylight with at least 2 square feet of area openable directly to the outside. The opening shall be provided with a screen to limit the passage of insects and vermin.

5. 'Pool ventilation.' In a natatorium, the volume of supply air and exhaust air may be reduced to a minimum of 1 cfm per square foot of pool surface provided automatic humidity controls perform so as not to create accelerated building material deterioration from moisture condensation.

(b) Substitute the following wording for the requirements and exceptions in IMC section 403.3:

1. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with Table 64.0403 based on the occupancy of the space, the occupant load and a minimum of 7.5 cfm of outside air per person, or other parameters stated therein.

2. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 64.0403.

3. Where there is no value indicated for the net square feet per person in Table 64.0403, the actual number of occupants shall be used to determine the required amount of outside air.

4. Ventilation rates for occupancies not represented in Table 64.0403 shall be determined by an approved engineering analysis, or by using the most similar occupancy in the table.

5. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of this chapter.

Note: See Table 64.0403 for specific occupancies.

(c) This is an additional department exception to the requirements in IMC section 403.3: The estimated maximum occupant load rate may be determined using other means with justification acceptable to the department to show that a different number of occupants is reasonable.

(d) This is a department rule in addition to the requirements in IMC section 403.3:

1. Except as provided in subd. 2., spaces requiring different ventilation requirements shall be provided with a complete solid separation or the most stringent ventilation requirement shall apply to all unseparated areas.

2. The separation as specified in subd. 1. shall not be required where an engineered ventilation design system will prevent the concentration of contaminants from exceeding that obtainable by providing a physical separation.

(e) This is a department rule in addition to the requirements in IMC section 403.3:

1. 'Outside air requirement waived'. If a mechanical air supply system is provided and the requirement for outdoor air determined in accordance with Table 64.0403 is less than 5% of the minimum required air changes per hour, the requirement for outside air may be eliminated.

2. 'Outside air requirement and percent of openings waived.' The requirement for outside air or percent of openings specified in Table 64.0403 may be omitted in large volume spaces containing 5,000 or more cubic feet per occupant. Required exhaust ventilation and makeup air shall not be omitted.

(5) COMMON VENTILATION SYSTEM. These are department alternatives to the requirements in IMC section 403.3.2:

(a) *General.* Each room served by a mechanical ventilation system shall be provided with the minimum outdoor airflow rate determined individually for each room, or the minimum amount of outside air may be supplied to the system if a minimum air change rate is provided in accordance with this subsection or waived in accordance with par. (c).

(b) *Minimum air change.* 1. 'Application.' a. Required air change shall be provided while people are present.

b. The air-change rate may be based on actual room height or up to 10 feet from the floor level of the room in question. The volume above 10 feet, in rooms that are more than 10 feet in height, need not be considered in the air change requirement if the required air change is designed to occur in the lower 10 feet of the occupied space.

c. The required minimum air change volume shall be transferred through the air handling equipment where it is diluted or replaced with outside air, and supplied back to the space.

2. 'Six air changes per hour.' Except as specified in subd. 3 and unless mechanical exhaust is required by Table 64.0403, the total air change rate for each room shall be at least 6 air changes per hour.

3. 'Less than six air changes per hour.' An air change rate of less than 6 air changes per hour will be permitted where mechanical cooling (air conditioning) is provided to maintain an interior design temperature of 78°F or lower and the heat gain requirement for the space has been satisfied. The air change rate may not be less than the minimum air changes per hour if specified in Table 64.0403.

Note: As specified in s. Comm 64.0403, the amount of outside air required must be maintained even if the air change rate is reduced.

(c) *Air change requirement waived.* The air change requirement for 6 air changes per hour may be omitted in any of the following applications:

1. Spot heating.

2. Buildings where the requirement for outside air is waived in accordance with sub. (4) (e).

3. Buildings utilizing natural ventilation as specified in IMC section 402.

(6) REQUIRED OUTDOOR VENTILATION AIR. (a) Substitute the following table for IMC Table 403.3:

Table 64.0403

Required Minimum Inside Temperature And Outdoor Ventilation Air

Occupancy Classification[i]	Minimum Inside Temperature (degrees F)	Ventilation Requirements Basis of Capacity: Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)[a]	Ventilation Requirements Basis of Capacity: Natural Ventilation Allowed	Ventilation Requirements Basis of Capacity: Exhaust[e] (cfm/net sq. ft. floor area)	Ventilation Requirements Basis of Capacity: Air Change Rate[k] (minimum air change per hour with A/C)
Correctional facilities					
Sleeping rooms[j]	68	20	yes	---	---
Dining halls	68	100	no	---	2.0
Guard stations	68	40	yes	---	---
Dry cleaners, laundries					
Coin-operated dry cleaners	68	8	yes	---	1.0
Coin-operated laundries	68	8	yes	---	1.0
Commercial dry cleaner	60	---	no	2.00	---
Commercial laundries	60	---	no	2.00	---
Storage, pick up	60	8	yes	---	1.0
Apartment laundry rooms	60	---	no	0.5	---
Education					
Auditoriums	68	150	no	---	2.0
Classrooms	68	50	no	---	2.0
Day care facilities	68	30	yes only if ≤ 20 children	---	2.0
Laboratories (science)	68	30	no	---	2.0
Corridors with lockers	68	---	---	---	10 cfm/lineal ft. of length
Music rooms	68	50	no	---	2.0
Smoking lounges[b,g]	68	---	no	2.00	---
Special education	68	35	no	---	2.0
Training shops	60	30	no	---	---
Food and beverage service					
Bars and cocktail lounges	68	100	no	---	2.0
Cafeterias, fast food	68	100	no	---	2.0
Dining rooms	68	70	no	---	2.0
Kitchens (cooking)[f,g]	60	20	yes	---	1.0

Table 64.0403

Required Minimum Inside Temperature And Outdoor Ventilation Air

Occupancy Classification[i]	Minimum Inside Temperature (degrees F)	Ventilation Requirements Basis of Capacity: Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)[a]	Ventilation Requirements Basis of Capacity: Natural Ventilation Allowed	Ventilation Requirements Basis of Capacity: Exhaust[e] (cfm/net sq. ft. floor area)	Ventilation Requirements Basis of Capacity: Air Change Rate[k] (minimum air change per hour with A/C)
Health care facilities Hospitals Nursing homes Ambulatory surgery centers	footnote m	footnote m	footnote m	footnote m	footnote m
Hotels, motels, resorts and dorms					
Assembly rooms	68	120	no	---	2.0
Bathrooms[b,g]	68	---	no	35 cfm/room	---
Bedrooms	68	footnote n	yes	---	---
Conference rooms	68	50	no	---	2.0
Dormitory sleeping areas	68	20	yes	---	---
Casinos	68	---	no	2.00	---
Living rooms	68	footnote n	yes	---	---
Lobbies	68	30	no	---	---
Industrial/Factory					
Factories and machine shops	60	13	yes	---	---
Foundries	NMR	13	yes	---	---
Sawmill	NMR	---	yes	---	---
Offices					
Conference rooms	68	50	no	---	1.5
Office spaces	68	7	no	---	1.5
Reception areas	68	60	no	---	1.5
Telecommunication centers and data entry	68	60	no	---	1.5
Places of worship, entertainment and recreation which accommodates less than 100 persons	footnote h	---	yes	footnote h	---

Table 64.0403

Required Minimum Inside Temperature And Outdoor Ventilation Air

Occupancy Classification[i]	Minimum Inside Temperature (degrees F)	Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)[a]	Ventilation Requirements Basis of Capacity: Natural Ventilation Allowed	Ventilation Requirements Basis of Capacity: Exhaust [e] (cfm/net sq. ft. floor area)	Ventilation Requirements Basis of Capacity: Air Change Rate [k] (minimum air change per hour with A/C)
Private dwellings, single and multiple					
Living areas	68	2 people for first bedroom plus one person for each additional bedroom	yes	---	---
Kitchens [g]	68	---	yes	100 cfm intermittent or 20 cfm continuous	---
Toilet rooms and bathrooms [g, l]	68	---	no	Mechanical exhaust capacity 50 cfm intermittent or 20 cfm continuous	---
Garages, separated by a solid wall for each dwelling	NMR	---	yes	100 cfm/vehicle	---
Garages, common for multiple units [b]	NMR	---	no	0.5	---
Retail stores, sales floors and showroom floors	68	8	yes	---	1.0

Table 64.0403

Required Minimum Inside Temperature And Outdoor Ventilation Air

Occupancy Classification[i]	Minimum Inside Temperature (degrees F)	Ventilation Requirements Basis of Capacity: Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)[a]	Ventilation Requirements Basis of Capacity: Natural Ventilation Allowed	Ventilation Requirements Basis of Capacity: Exhaust[e] (cfm/net sq. ft. floor area)	Ventilation Requirements Basis of Capacity: Air Change Rate[k] (minimum air change per hour with A/C)
Seasonal occupancies, camps and lodges					
Dining and recreational areas	NMR	15	yes	---	---
Living and sleeping areas	NMR	---	yes	---	---
Club houses	NMR	15	yes	---	---
Drive-ins	NMR	15	yes	---	---
Specialty shops					
Automotive service and repair garages	60	---	no	0.5	---
Barber shops	68	25	no	---	---
Beauty salons[c]	68	---	no	0.5	---
Clothier, furniture specialty shops	68	8	yes	---	1.0
Florist shops	68	8	yes	---	1.0
Hardware, drugs, fabrics stores	68	8	yes	---	1.0
Supermarkets	68	8	yes	---	1.0
Sports and amusement					
Ballrooms and discos	68	100	no	---	2.0
Bleacher areas	68	363 or 18 in./person	no	---	2.0
Bowling centers (seating areas)	68	70	no	---	2.0
Game rooms	68	70	no	---	2.0
Natatoriums	76	---	---	2.0 cfm/ sq. ft. pool area	---
Ice skating rinks (indoor)	NMR	5	no	---	---
Playing floor (gymnasiums)	68	30	no	---	2.0
Roller skating rinks (indoor)	60	30	no	---	2.0
Spectator areas (non-bleacher)	68	150	no	---	2.0

Table 64.0403

Required Minimum Inside Temperature And Outdoor Ventilation Air

Occupancy Classification[i]	Minimum Inside Temperature (degrees F)	Ventilation Requirements Basis of Capacity: Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)[a]	Ventilation Requirements Basis of Capacity: Natural Ventilation Allowed	Ventilation Requirements Basis of Capacity: Exhaust[e] (cfm/net sq. ft. floor area)	Ventilation Requirements Basis of Capacity: Air Change Rate[k] (minimum air change per hour with A/C)
Storage					
Chlorine storage and handling rooms	NMR	---	no	2.00	---
Enclosed parking garages[d]	NMR	---	no	0.50	---
Warehouses	NMR	---	---	---	---
Theaters					
Auditoriums	68	150	no	---	2.0
Lobbies	68	150	no	---	---
Stages, studios	68	70	no	---	2.0
Ticket booths	68	60	no	---	2.0
Transportation					
Platforms	NMR	100	no	---	2.0
Waiting rooms	68	100	no	---	2.0
Utility and public spaces					
Elevators[g]	NMR	---	no	1.00	---
Janitor closets[l]	NMR	---	no	2.0 or 75 cfm/sink	---
Locker and dressing rooms[b]	70	---	no	0.5	---
Shower rooms	70	---	no	2.00	---
Toilet rooms[b, g, l]	68	---	no	75 cfm/TF	---
Smoking lounges[b, g]	68	---	no	2.00	---
Workrooms					
Bank vault	68	5	no	---	---
Meat processing workroom	NMR	10	yes	---	---
Pharmacy	68	20	yes	---	1.5
Photo studio	68	10	yes	---	1.0
Printing	60	13	yes	footnote[o]	---

CFM = Cubic feet per minute; LF = Lineal foot; NMR = No minimum requirement; TF = Toilet fixtures (water closets and urinals); A/C =Air conditioning

[a] Based upon net floor area.

[b] Mechanical exhaust is required and the recirculation of air from these spaces that would otherwise be allowed by IMC section 403.2.1 is prohibited.
[c] The classification of a 'beauty' shop depends on the types of services provided. Only beauty salons routinely provide chemical processing of hair to produce texture or color changes, or manicures or other services with a similar need for air-borne contaminant and odor control.
[d] Enclosed parking garages are parking garages with less than 30% open areas in the total wall area enclosing the garage. Ventilation systems in enclosed parking garages shall comply with IMC section 404. A mechanical ventilation system shall not be required in garages having a floor area of 850 square feet or less and used for the storage of 5 or fewer motorized vehicles. Requirements for parking garages shall apply to all buildings, or parts of buildings, into which motor vehicles are driven for loading or unloading or are stored.
[e] The ventilation rate is based upon cubic feet per minute per square foot of the floor area being ventilated.
[f] The sum of the outdoor and transfer air from adjacent spaces shall be sufficient to provide an exhaust rate of not less than 1.5 cfm/sf.
[g] Transfer air permitted in accordance with IMC section 403.2.2.
[h] See specific occupancy classification table entries for inside design temperature and cfm per net square feet floor area requirements.
[i] This table is intended as a reference guide with generic Use types listed under those Occupancy types most often associated with the use. When Use types are mixed between Occupancy types and the Use type is unlisted within the specific Occupancy type, the use shall be ventilated as required by the same Use type listed in the other Occupancy type. Unlisted occupancies or uses shall be ventilated as required for the most similar listed occupancy classification acceptable to the department. Rooms that are used for different purposes at different times shall be designed for the greatest amount of ventilation required for any of the uses.
[j] When unseparated toilet fixtures are included in sleeping areas (such as cells), the room shall be ventilated as required for toilet rooms.
[k] See sub. (5) for specific requirements and exceptions. Units listed as minimum air change per hour with air conditioning unless otherwise specified.
[l] Natural ventilation may be allowed under this section.
[m] For air ventilation requirements in healthcare facilities; use American Institute of Architects (AIA) guidelines, (R673, Guidelines for Design and Construction of Hospital and Health Care Facilities).
[n] The minimum mechanical ventilation rate is 15 cfm/room of outside air.
[o] Refer to IMC chapter 5 for requirements.

Comm 64.0404 Enclosed parking garages. (1) ENCLOSED PARKING GARAGES. (a) These are department rules in addition to the requirements in IMC section 404.1:

1. Operate the exhaust for a minimum of 5 hours per day.

2. Maintain 1 ppm NO_2 or less where diesel fuel vehicles are stored.

3. Maintain negative or neutral pressure relative to other spaces.

(b) Substitute the following wording for the requirements in IMC section 404.1: Mechanical ventilation systems for enclosed parking garages are not required to operate continuously where the system is arranged to operate automatically upon detection of carbon monoxide of 35 parts per million (ppm) by approved automatic detection devices.

(2) MINIMUM VENTILATION. Substitute the following wording for the requirements in IMC section 404.2: Automatic operation of the system shall not reduce the ventilation rate below 7.5 cfm per person and the system shall be capable of producing an exhaust rate of 0.5 cfm per square foot of floor area.

Comm 64.0501 Required systems. This is a department exception to the requirements in IMC section 501.4: A mechanically exhausted room or space that is within a dwelling unit which is served by an independent heating, ventilating and air conditioning system is not required to be maintained with negative or neutral pressure.

Comm 64.0502 Required systems. Substitute the following wording for the requirements in IMC section 502.1: An exhaust system shall be provided, maintained and operated as specifically required by this section and for all occupied areas where machines, vats, tanks, furnaces, forges, salamanders and other appliances, equipment and processes in such areas produce or throw off dust particles sufficiently light to float in the air or which emit heat, odors, fumes, spray, gas or smoke, in such quantities to be injurious to health or safety.

Comm 64.0506 Commercial kitchen grease ducts and exhaust equipment. (1) GENERAL. This is an informational note to be used under IMC section 506.1:

Note: See Table 64.0403 for modifications in regarding required cfm/person.

(2) EXHAUST FANS. (a) This is a department alternative to the requirements, but not the exceptions, in IMC section 506.3.3: Joints may be made with any other means that provide a liquid-tight seal at 1500°F.

(b) Substitute the following wording for the requirements in IMC section 506.3.3.1:

1. Duct joints shall be butt joints or overlapping duct joints of either the telescoping bell type or flanged. Overlapping joints shall be installed to prevent ledges and obstructions from collecting grease or interfering with gravity drainage to the intended collection point.

2. The difference between the inside cross-sectional; dimensions of overlapping sections of duct shall not exceed 0.25 inch.

3. The length of overlap for overlapping duct joints shall not exceed 2 inches.

(c) This is a department rule in addition to the requirements in IMC section 506.3.8: Fans serving commercial kitchen hoods shall be listed for use with grease-laden air.

Comm 64.0507 Capacity of hoods. Substitute the following wording for the requirements in IMC section 507.13: The kitchen exhaust hood shall be provided with a capture velocity to effectively capture the grease vapors and may be designed through engineering analysis, or based this section and the requirements in IMC sections 507.13.1 through 507.13.4.

Comm 64.0603 Duct construction and insulation. This is a department informational note to be used under IMC sections 603.3 and 603.4:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 131, 132, and 134, also refer to the following standards: Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA), HVAC Duct Construction Standards-- Metal and Flexible, 1995 edition.

Comm 64.0604 Insulation. This is a department exception to the requirements in IMC section 604.8: The distances from a listed duct lining to a heater may be reduced in accordance with the duct lining listing.

Comm 64.0605 General. These are department exceptions to the requirements in IMC section 605.1:

(1) Hospitals, nursing homes and ambulatory surgery centers shall comply with the filtration requirements in Tables 2 and 6, part III of the AIA Guidelines for Design and Construction of Hospitals and Health Care Facilities.

(2) Preheat coils for snow melting that are single row, have a maximum 8 fins per inch, are accessible for pressure washing and have ductwork that is designed for drainage need not be provided with air filters.

Comm 64.0606 Smoke detection system control. (1) This is a department informational note to be used under IMC section 606.2.1:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 131, 132, and 134, also refer to NFPA standard 90A section 4-4.2A for air handling units between 2,000 cfm and 15,000 cfm.

(2) This is a department informational note to be used under IMC section 606.4:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 131, 132, and 134, also refer to NFPA standard 90A section 4-3.2 for smoke dampers isolating air handling units.

Comm 64.0702 Inside air. (1) This is a department rule in addition to the requirements in IMC section 702.1: When the space providing air for combustion, ventilation and dilution of flue gases has a minimum volume of 250 cubic feet per 1,000 Btu per hour combined input rating of all appliances, the use of inside air for combustion shall be allowed.

(2) This is a department informational note to be used under IMC section 702.1:

Note: When applying the provisions of this section, refer to IFGC section 201 as adopted and modified in s. Comm 65.0210 for the definition of "unusually tight construction".

Comm 64.0710 Opening location and protection. Substitute the following wording for the requirements in IMC section 710.1: Mounting height of the combustion air intakes shall have the lowest side of outside air intake openings located at least 12 inches vertical from the adjoining grade level.

Comm 64.0801 (1) GENERAL. This is a department informational note to be used under IMC chapter 8:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 132, and 134, also refer to NFPA 211 as adopted in these chapters.

(2) CHIMNEYS AND VENTS. These are department rules in addition to the requirements in IMC section 801.2: Permanently installed and portable unvented fuel-fired space heaters are prohibited.

Note: See ch. Comm 65, subch. II, Part 6 for the prohibition of unvented gas-fired space heaters.

Comm 64.0918 Forced-air warm-air furnaces. (1) This is a department rule in addition to the requirements in IMC section 918.6: The outside air intake openings shall be located at least 12 inches vertical from the adjoining grade level.

(2) Substitute the following wording for the requirements IMC section 918.6 item 1: Closer than 10 feet from any appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 2 feet above the outside air inlet.

(3) Substitute the following wording for the requirements in IMC section 918.6 item 2: Where located less than 10 feet above the surface of any abutting public way or driveway, or at grade level by a sidewalk, street, alley or driveway.

Comm 64.1001 Boilers, water heaters and pressure vessels. Substitute the following wording for the requirements and exceptions in IMC chapter 10:

(1) The provisions of ch. Comm 41 shall govern the installation, alteration and repair of boilers and pressure vessels. The provisions of chapters Comm 81 to 86 shall govern the installation, alteration and repair of water heaters.

(2) Water heaters utilized both to supply potable hot water and provide hot water for space-heating applications shall be listed and labeled by the manufacturer and shall be installed in accordance with the manufacturer's installation instructions and applicable provisions in chs. Comm 81 to 86.

(3) Water heaters utilized for both potable water heating and space-heating applications shall be sized to prevent the space-heating load from diminishing the required water-heating capacity.

(4) Where a combination potable water-heating and space-heating system requires water for space heating at temperatures higher than 140°F, a tempering valve shall be provided to temper the water supplied to the potable hot water distribution system to a temperature of 140°F or less.

Comm 64.1101 Refrigeration. Substitute the following wording for the requirements and exceptions in IMC chapter 11: Mechanical refrigerating systems installed in public buildings and places of employment shall comply with ch. Comm 45.

Comm 64.1201 Hydronic piping. Substitute the following wording for the requirements and exceptions in IMC Chapter 12: The provisions of ch. Comm 41 shall apply to boilers, piping components associated with boilers, pressure vessels and power piping in places of employment and in public buildings.

Comm 64.1300 Fuel oil piping and storage. Substitute this informational note for the requirements in IMC chapter 13:

Note: See ch. Comm 10 for fuel oil piping requirements.

Comm 64.1500 Referenced standards. (1) Substitute the following NFPA standard for the corresponding standard listed in IMC chapter 15: NFPA 13-1999 and NFPA 72-1999.

(2) These are department rules in addition to the requirements in IMC chapter 15: American Institute of Architects (AIA), R673-1996-97, Guidelines for Design and Construction of Hospital and Health Care Facilities, The American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations as listed in the IMC.

Note: The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.

Comm 64.1600 Appendices. IMC Appendices A and B are not included as part of this chapter.

File reference: Comm 64C lr

Comm 65
Fuel Gas Appliances

Subchapter I — Purpose, Scope, Application and Compliance

Comm 65.0001 Purpose and scope. **(1)** PURPOSE. The purpose of this chapter is to regulate the design, installation, operation and maintenance of gas-fueled heating, ventilating and air conditioning systems in buildings and structures as specified in ch. Comm 61.

(2) SCOPE. The scope of this chapter is as specified in s. Comm 61.02.

Comm 65.0002 Application. **(1)** GENERAL. The application of this chapter is as specified in s. Comm 61.03 and as modified in this section.

(2) APPLICABILITY. All heating, ventilating and air conditioning systems shall be designed, installed, maintained and operated so as to provide the service and results required within the provisions of this chapter. The minimum requirements established in each part of this chapter shall be complied with as they apply to the structures and facilities covered in the IBC.

(3) ADDITIONS. (a) This chapter applies to all additions to existing buildings and structures as specified in s. Comm 61.03.

(b) Except when an existing heating, ventilation and air conditioning system is extended to serve an addition, existing system components are not required to be replaced if the provisions in this chapter are met within the addition.

(4) ALTERATIONS. (a) This chapter applies to all remodeling and alterations in any building or structure which affect the replacement of major equipment as specified in s. Comm 61.03.

(b) When an existing heating, ventilating and air conditioning system serves a remodeled or altered space that has not undergone a change in occupancy or use, the existing system components are not required to be replaced if the provisions in this chapter that applied to the original construction of the space are met.

Note: "Occupancy or use" refers to the entries in Table 64.0403.

Note: Maintenance and repair to existing equipment when there is no change to the building or occupancy, is considered an alteration.

Comm 65.0003 Compliance. All gas-fueled heating, ventilating and air conditioning systems in buildings and structures shall comply with the IFGC and the changes, additions or omissions under subch. II.

Comm 65.0004 Approval of drawings and specifications. All drawings and specifications shall be submitted to the department in accordance with the provisions of subch. III, ch. Comm 61.

Subchapter II—Changes, Additions or Omissions to the International Fuel Gas Code (IFGC)

Comm 65.0100 Changes, Additions or Omissions to the International Fuel Gas Code® (IFGC). Changes, Additions or Omissions to the international fuel gas code are specified in this subchapter and are rules of the department and are not requirements of the IFGC.

Note: This subchapter is numbered to corresponds with the numbering used within the model code; i.e., s. Comm 65.0201 refers to section IFGC 201.

Comm 65.0101 Administration. Except for IFGC sections 102.8 and 108.7, the requirements in IFGC chapter 1 are not included as part of this chapter.

Comm 65.0201 Definitions. **(1)** This is a department substitution for the corresponding definition in IFGC section 201: "Unusually tight construction" means the total area of outdoor openings is less than 3% of the floor area of the space in which equipment is located.

(2) This is a department addition to the definitions in IFGC section 201: "DHFS" means the department of health and family services.

Comm 65.0300 Temperature control. This is a department rule in addition to the requirements in IFGC chapter 3: The requirements in IMC section 309 and s. Comm 64.0309 apply to gas-fired equipment and systems.

Comm 65.0301 General regulations. Substitute the following wording for the requirements in IFGC section 301: The requirements as specified in s. Comm 64.0301 (2) (b) shall apply.

Comm 65.0303 Appliance location. **(1)** GENERAL. This is a department rule in addition to the requirements in IFGC section 303.1: If the air entering the heat exchanger of all gas–fired equipment is 30°F or lower, the heat exchanger and burners shall be constructed of corrosion–resistive materials.

(2) PROHIBITED LOCATIONS. The requirements in IFGC section 303.3 Exceptions 3. and 4. are not included as a part of this chapter.

Comm 65.0304 Combustion, ventilation and dilution air. **(1)** GENERAL. This is a department rule in addition to the requirement of IFGC section 304.1: The requirements in IMC sections 705, 706, and 707 shall apply to gas appliances.

(2) UNUSUALLY TIGHT CONSTRUCTION. This is a department informational note to be used under IFGC section 304.9:

Note: When applying the provisions of this section, refer to s. Comm 65.0201 (1) for the definition for "unusually tight construction".

(3) ALL AIR FROM INSIDE THE BUILDING. This is a department rule in addition to the requirements in IFGC section 304.10: When the space providing air for combustion, ventilation and dilution of flue gases has a minimum volume of 250 cubic feet per 1,000 Btu per hour combined input rating of all appliances, the use of inside air for combustion shall be allowed.

(4) COMBUSTION AIR DUCTS. This is a department rule in addition to the requirement of IFGC section 304.15: Mounting height of the combustion air intakes shall have the lowest side of outside air intake openings located at least 12 inches vertically from the adjoining grade level.

Comm 65.0305 Installation. (1) GENERAL. These are department rules in addition to the requirements in IFGC section 305.1:

(a) *Additional requirements.* The requirements in IMC sections 304.2, 304.8, 304.9, 304.10, and 305 as adopted in s. Comm 64.0304 shall apply to gas appliance installations.

(b) *Final test required.* The requirements as specified in s. Comm 64.0313 shall apply.

Comm 65.0306 Access and service space. This is a department exception to the requirements in IFGC section 306.5.1: Section IFGC 306.5.1 does not apply to installations which consist of only fans.

Comm 65.0400 Gas piping installations. Substitute the following wording for the requirements and exceptions in IFGC chapter 4: All gas piping and gas piping installations shall comply with NFPA 54, National Fuel Gas Code.

Comm 65.0501 Chimneys and vents. (1) This is a department informational note to be used under IFGC chapter 5:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 132, and 134, also refer to NFPA 211 as adopted in these chapters.

(2) The requirements in section IFGC 501.8 item 8 are not included as a part of this chapter.

(3) Substitute the following wording for the requirements in section IFGC 501.8 item 10: Infrared radiant heaters listed for unvented use and not provided with flue collars.

Comm 65.0503 Venting of equipment. (1) MECHANICAL DRAFT SYSTEMS. These are department rules in addition to the requirements in IFGC section 503.3.3:

(a) All horizontal exit terminals of a gas appliance mechanical draft system shall be located in accordance with IMC section 804.3.4, items 4 and 5.

(b) All vertical exit terminals of a gas appliance mechanical draft system shall be located accordance with IMC section 804.3.5, items 3 and 6.

(2) VENTING SYSTEM TERMINATION LOCATION. Substitute the following wording for the requirements, but not the exceptions, in IFGC sections 503.8 items 1, 2 and 3:

(a) The separation between gravity and mechanical air inlets and venting system terminations shall comply with IMC section 401.5.1 and s. Comm 64.0401 (4).

(b) Unless a greater distance is specified by the manufacturer, mechanical draft venting systems shall terminate at least 12 inches vertically from the adjoining grade level.

Comm 65.0609 Duct furnaces. The requirements in IFGC section 609.2 are not included as part of this chapter.

Comm 65.0617 Forced-air warm-air furnaces. Substitute the following wording for the requirements and exceptions in IFGC section 617.5: Gas-fired appliances shall comply with IMC section 918 and s. Comm 64.0918.

Comm 65.0620 Unvented room heaters. Substitute the following wording for the requirements in IFGC section 620: The use of unvented room heaters is prohibited.

Comm 65.0629 Infrared radiant heaters. These are department rules in addition to the requirements in IFGC section 629.1:

(1) Spaces served with unvented infrared radiant heaters shall be provided with at least 4 cfm of outside air per 1,000 Btu per hour input of installed heaters.

(2) Unvented infrared radiant heaters may be used only in the following occupancies:

(a) Groups F and S.

(b) Groups U and H only with written approval.

Comm 65.0630 Boilers. Substitute the following wording for the requirements in IFGC section 630: The provisions of ch. Comm 41 shall govern the installation, alteration and repair of boilers and pressure vessels.

Comm 65.0700 Referenced standards. This is a department rule in addition to the requirements in IFGC chapter 7: ANSI Z223.1/NFPA 54-1999.

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations as listed in the IMC.

Note: The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.

Comm 65.0800 Appendices. IFGC Appendices A to D are not included as part of this chapter.

File reference: IBC/Comm 65C lr

CHAPTER Comm 61 to 65 APPENDIX A

The material contained in this appendix is for clarification purposes only and is numbered to correspond to the number of the rule as it appears in the text of the code.

A-61.03 (4)(b) Lower thresholds for municipalities with preexisting stricter sprinkler ordinances. Section 101.14 (4m) (d) and (e), Stats, provides the following thresholds above which fire sprinkler protection or 2-hour fire-resistance can be required by a municipality with a preexisting stricter sprinkler ordinance.

<table>
<tr><th>Class of Construction</th><th>Total Floor Area Within Individual Dwelling Units</th><th>Number of Units</th><th>Total Floor Area of Nondwelling Unit Portions (Common use areas, such as corridors, stairways, basements, cellars, vestibules, community rooms, laundry rooms, pools, etc.)</th></tr>
<tr><td>Type IA</td><td rowspan="6">8,000 sq ft</td><td rowspan="6">8 units</td><td>12,000 sq ft</td></tr>
<tr><td>Type IB</td><td>10,000 sq ft</td></tr>
<tr><td>Type IIA</td><td>8,000 sq ft</td></tr>
<tr><td>Type IIB
Type III
Type IV
Type VA</td><td>5,600 sq ft</td></tr>
<tr><td>Type VB</td><td>4,800 sq ft</td></tr>
</table>

The department, based on ordinances forwarded by municipalities (and checked by Safety and Buildings staff for conformance with the preexisting sprinkler ordinance criteria) believes the following municipalities have preexisting stricter sprinkler ordinances:

Appleton	Greenfield	Muskego	Shorewood Hills
Brookfield	Madison	New Berlin	Sussex
Franklin	Menomonee Falls	Oak Creek	West Allis
Greendale	Monona	Racine	West Bend

SECTION 8. Chapter Comm 50 to 64 Appendix C is renumbered Comm 61 to 65 Appendix B.

SECTION 9. Chapters Comm 66, 69 and 73 are repealed.

****

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (b), Stats., these rules shall take effect on July 1, 2002.

****

Wisconsin
Concrete
Masonry Association

P.O. Box 339 • Valders, WI 54245 • 414-773-2888 • 1-800-722-4248 • FAX: 414-773-2823

July 12, 2001

HAND DELIVERED

Senator Mark Meyer
Chair, Universities, Housing and Gov. Operations Committee
State Capitol, Room 20-S
Madison, WI 53707-7882

RE: Adoption of the Proposed International Building Code (IBC) in Wisconsin - CR 00-179

Dear Senator Meyer:

I write to request that your Committee exercise its authority over the proposed administrative rules of the Department of Commerce concerning adoption of the International Building Code in Wisconsin.

In the view of our statewide construction industry supplier members, there are serious problems with the IBC in the form that it has been presented to you. Unless you intervene, Wisconsin consumers, builders and suppliers will have serious problems with the proposed construction code when it is scheduled to go into effect.

If we are afforded the opportunity to present factual information to you at a public hearing on the proposed code, we would make these points in depth:

- The code is neither uniform nor international. Many within Wisconsin's construction industry (including our members) favor the state adopting construction standards that would be uniform (the same) among the states. However, the proposed rules before you have so many changes made to them by Department of Commerce staff that the changes alone run nearly 200 pages! If we therefore end up with a code that is heavily modified for Wisconsin purposes, what are we gaining compared to the longstanding and widely-accepted construction standards now on the books?

- The proposed code does not treat brick and block materials fairly. Modifications are needed to the proposed rule to make the new standards competitively neutral. We will provide you with much detail about this, prior to your public hearing.

- An independent study is needed to objectively show the costs and benefits to consumers of the construction standards you have before you today. For example, does it make any sense for state regulators to drive up the cost of construction with earthquake requirements, when more safety could be gained instead with more rigorous fire safety code provisions?

To conclude, CR 00-179 has the potential to bring Wisconsin's construction industry to a standstill, if you allow it to go into effect without modification. We therefore respectfully request that your Committee exercise its important oversight and learn more about what exactly is being proposed. This "train-wreck" which is about to happen can be avoided.

Very truly yours,

Paul Wank

Paul Wank
WCMA President

Brooks, Bryan

From: Jim Boullion [jimbn@agcwi.org]
Sent: Tuesday, July 17, 2001 12:10 PM
To: 'Curt Hastings'; Sen.Meyer@legis.state.wi.us
Subject: RE: Adoption of Proposed International Building Code

Dear Senator Meyer,

I would like to confirm and echo the comments of Mr. Hastings. AGC of Wisconsin has been working very closely with the staff of the Safety and Buildings (S&B) Division of the Department of Commerce as well as representatives from all aspects of the design and construction community to develop a good modern building code for Wisconsin.

We have spent many years of committee meetings and months of public hearings and debate to get the code proposal to its current point of development. Every group or individual who had a concern with the proposal has been given every opportunity to bring that concern to the committee and S&B. All of these concerns have been carefully considered. No group got everything that they wanted out of this process, but we feel comfortable that the current code proposal strikes a good balance among all of the interest groups.

It is also important to point out that the State Building Code is a "living document." It is reviewed and updated on a regular basis. If any problems with the new code are found they can be handled on the short term with a code interpretation or emergency rule, or in the long term the next time the code is up for review.

In short, we ask you to please support the S&B building code proposal and allow it to pass in its current form.

Thank you,

Jim Boullion
Government Affairs Director
AGC of Wisconsin
(608) 221-3821
jimbn@agcwi.org

-----Original Message-----
From: Curt Hastings [mailto:chastings@findorff.com]
Sent: Tuesday, July 17, 2001 11:19 AM
To: Sen.Meyer@legis.state.wi.us
Cc: jimbn@agcwi.org
Subject: Adoption of Proposed International Building Code

Dear Senator Meyer:

I am in receipt of a copy of a letter written to you by Paul Wank of the Wisconsin Concrete Masonry Association (WCMA). I am disappointed at the tone of Mr. Wank's letter and wish to give you my perspective on the matter.

By way of background and to give you my credentials, I am President of J. H. Findorff & Son, Inc. of Madison and Milwaukee. We are a general contractor specializing in commercial construction and put in place about $190,000,000 worth of buildings last year, all in Wisconsin. I have been in the business for more than thirty years and am, personally, well versed in most types of construction and the building code in general. We at Findorff employ about 25 to 50 masons depending on workload so I am very much a fan of masonry construction.

In addition, for the past five or so years, I have been the contractor representative on the Commercial Building Code Council representing the Associated General Contractors of Wisconsin. To say we have worked laboriously on this Council to evaluate and recommend adoption of the IBC would be an understatement. The AGC (both Wisconsin and Greater Milwaukee Chapters) is in full support of adoption of the new code as we are

convinced it will save dollars on both public and private building construction while, at the same time, providing for the life safety of occupants and fire fighters.

I recall only one meeting where the WCMA protested adoption of the IBC and this was two or three years ago. As I remember, WCMA was opposed to a provision that allowed fire sprinklers to replace masonry fire walls in apartment buildings. It is a well proven fact that fire sprinklers save lives and do reduce the need for other measures such as redundant fire walls. I find it troubling that a group attempts to legislate use of its materials through the building code; I have made every attempt not to do this.

I do not wish to pick apart Mr. Wank's letter and will not. However, be aware that most of the exceptions or changes to the uniform code are in response to issues mandated by State Statute; we on the Council were very strict about allowing what we called "Wisconsinisms". Mr. Wank's letter is full of generalities and offers nothing of substance in my opinion.

In conclusion, we have worked very hard to bring this new code to you for approval. It has been endorsed by a wide reaching group including contractors, architects, building owners, manufacturers, building inspectors, fire fighters, labor, and code officials. To state that adoption of the IBC will bring construction to a "standstill" is ridiculous; in fact, to delay adoption would be a major setback to progress in our industry in Wisconsin.

Curt Hastings
President
J. H. Findorff & Son Inc.
Phone: 608-257-5321 ext. 3056
FAX: 608-257-5306
Email: chastings@findorff.com

Huber, Grant

From: Whitesel, Russ
Sent: Friday, July 20, 2001 1:40 PM
To: Huber, Grant
Subject: Language for Meeting/Hearing on Rule

Grant--here is the language for the letter:

Pursuant to s. 227.19(4)(b), Stats., the Senate Universities, Housing and General Government Committee requests that the department not promulgate CHR xx-XX, relating to..... (fill in from rule) in order to allow the Committee to either meet or conduct a hearing on the rule.

If you have any questions, ..etc.

Russ Whitesel
Legislative Council Staff
608-266-0922
Russ.Whitesel@legis.state.wi.us

Russ Whitesel
Legislative Council Staff
608-266-0922
Russ.Whitesel@legis.state.wi.us

Huber, Grant

From: Spooner, Christopher
Sent: Tuesday, July 24, 2001 9:18 AM
To: Huber, Grant
Subject: Wisconsin Concrete Masonry Association Concerns

Hello Grant: We have prepared these notes regarding the WCMA's concerns. Martha Kerner, Mike Corry, and Jim Quast will be able to provide more detail and answer additional questions during the meeting tomorrow afternoon.

Let us know if you need additional information before then. Thanks, Chris

Concern: The code is neither uniform nor international.

Commerce and our advisory code councils set a goal to have as few Wisconsin amendments to the model codes (Wisconsinisms) as possible. "Wisconsinisms" can be placed into three categories: reflection of state laws that specifically address administrative and technical building code issues; administrative processes pertaining to plan review and inspection processes in Wisconsin; and technical design and construction practices that the code councils and the department felt were best for Wisconsin.

The building code administrative topics in Comm 61 take up 39 pages, while the technical Wisconsinisms take up 34 pages. Public hearing drafts have less code text on each page than the final two column code printed by the Revisor of Statutes. We estimate that the entire Comm 61 and 62 chapters will be 27 pages long in their final form.

The International Building Code is in dual column print and is 755 pages long. Wisconsin amendments, 27 pages in length, compare to be less than four percent of the text of the original IBC.

Concern: The proposed code does not treat brick and block materials fairly.

The IBC is a performance based model building code developed with input from hundreds of professionals from across the country. Construction designs, methods and materials that result in a safe building are allowed in various configurations and assemblies as long as they meet the basic criteria for performance - resulting in a safe building.

At recent meetings of the Multifamily Dwelling Code Council and the Commercial Building Code Council, the Wisconsin Concrete Masonry Association representative described concerns about the national standard for Fire Tests of Building Construction and Materials; ASTM E 119.

This national standard is adopted in Wisconsin's current building code. The provisions of this standard as they relate to Fire Endurance Tests and Hose Stream Tests have not changed since at least 1988. Adoption of the IBC would not change how brick and block are "credited" in terms of fire resistance by the building code standards in use in Wisconsin.

Furthermore, the recent suggestion by the WCM representative at the Commercial Building Code Council meeting - to give concrete masonry walls double "credits" in terms of fire resistance ratings, as compared to competitive products such as poured concrete and gypsum wall board, is unfounded in any scientific basis or engineering analysis known to Commerce.

Neither the Multifamily Dwelling Code Council nor the Commercial Building Code Council were compelled to recommend any changes to the code proposal based upon the concerns of the WCM Association.

Concern: An independent study is needed to objectively show the costs and benefits to consumers of the construction standards...

Commerce is not recommending implementation of earthquake requirements that are in place in California - as some have stated. We do not feel we are focusing on earthquakes at the expense of fire safety. Rather, Commerce is recommending use in Wisconsin of a national model building code that reflects the latest thoughts at the national level, regarding construction of safe, cost effective buildings.

July 25, 2001

Meeting to discuss CHR 00-179 relating to Construction & Fire Prevention rules

Sen. Meyer
Bryan Brooks
Grant Huber

Senator Ellis office
Genie Matinez

Rep. Sykora
Martha Hess

Leg Council
Don Dyke

Dept. of Commerce
Chris Spooner
Martha Kerner
Mike Corry
Jim Quast

Wis. Concrete Masonry Assn.
Dick Walters
Kevin Cavaunaugh
Bob Goldman
Tony Driessen?
La Crosse Co. Concrete person?

Mark Meyer

State Senator • 32nd Senate District

July 26, 2001

Brenda Blanchard, Secretary
WI Dept. of Commerce
201 W. Washington Avenue
Madison, WI 53708

Dear Secretary ~~Blanchard~~ Brenda:

Pursuant to s. 227.19(4)(b), Stats., the Senate Universities, Housing and Government Committee requests that the department not promulgate CHR 00-179, relating to construction and fire prevention for public buildings and places of employment, including commercial buildings and structures and multifamily dwellings in order to allow the Committee to either meet or conduct a hearing on the rule.

If you have any questions please feel free to contact my office at **266-5490**.

Sincerely,

Mark Meyer

Mark Meyer
State Senator
32nd District

MM/gh

P.O. Box 7882, Madison, Wisconsin 53707-7882 • (608) 266-5490 • www.legis.state.wi.us

Post-it® Fax Note 7671	Date 8-3-01	# of pages ▶ 1
To Geist	From Genie	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

Dick Walter

From: <Svskalko@cs.com>
To: Roy Keck <creteguy@aol.com>
Cc: <sszoke@portcement.org>; K Mark Kluver <
Sent: Thursday, July 26, 2001 12:26 AM
Subject: Re: International Codes in Georgia

Roy,

The State has adopted the 2000 International Mechanical, Plumbing and Gas Codes effective January 1, 2001. Today, July 25th, the State Codes Adivisory Committee will meet at 10:00 am at DCA headquarters to hear recommendations from their various task groups on proposed amendments to the International Building Code (IBC) and International Residential Code (IRC). I do not know what will come out from those meetings but two areas of interest to GC&PA are fire walls and highrise buildings.

For fire walls we proposed to the Task Group that an exception allowing fire walls of combustible construction be deleted. In addition, we recommended that a footnote to Table 704.5 that permits the fire resistance rating for fire walls to be reduced from 3 hours to 2 hours be deleted.

The highrise provisions allow a reduction in the fire resistance rating by one hour for Type I-A and I-B construction. This is significant for Georgia because Type I-B construction in the IBC allows buildings up to 160 feet in height whereas the similar SBC Type of construction would be limited to 80 feet. In addition, the new highrise provisions allow the one hour reduction that the SBC does not so the highrise building can be 160 feet high with structural fire resistance that is reduced by one hour. We proposed the section allowing this reduction be deleted.

If I can answer any questions let me know.

Steve Skalko

c. Stephen Szoke
Mark Kluver

August 15, 2001

Senator Mark Meyer
Chair, Universities, Housing and Gov. Operations Committee
State Capitol, Room 20-S
Madison, WI 53707-7882

Dear Senator Meyer:

I represent the Wisconsin Building Inspector Associations and the League of Wisconsin Municipalities on the Commercial Building Code Council. I have been involved with, and in support of, the Department of Commerce model code adoption project (Clearinghouse Rule 00-179) since its beginning. It has recently come to my attention that the Wisconsin Concrete Masonry Association (WCMA) has suggested to you that implementing the Commerce proposal would result in a train wreck. I cannot agree. The recently requested code changes are very similar to suggestions WCMA made earlier in the process, but not found to be reasonable. Suggesting that because their interests have not been met, a problem exists, is not reasonable.

The majority (4 of 6) of the suggested code changes focus on the subject of firewalls and suggest that firewalls are the only way to protect buildings in Wisconsin. They also suggest that the current Wisconsin code only recognizes 4HR firewalls, a suggestion that simply is not true. Firewalls having a fire resistive rating as low as 2 hours have been permitted for some uses in Wisconsin since 1984. The approach found in the model code is different than the current Wisconsin Commercial Building Code and when compared to the code we currently use, more firewalls of varying fire restive ratings will be required than have ever been required in the past.

The differences between the current fire wall requirements and those within the IBC were identified by Safety & Buildings Division staff early in the analysis of the code. The process they used was deliberate and methodical, considering the provisions of both the IBC 2000 and the current code. The entire process took over 4 years to complete. On the subject of firewalls alone, the process included numerous reviews by, and the recommendations from, several advisory councils. Wisconsin Building Inspectors are represented on those councils.

I am sure you know that a building is a complex structure, the design of which must take into consideration numerous variables before it is deemed "fire safe". The firewalls referenced by WCMA are an important variable within the equation, but not to the exclusion of others including use, structural integrity, egress and fire protection systems such as sprinklers and fire alarms. It is this complexity that is weighed and balanced during the code development process. This same balancing act occurs during the development of the model code, with the exception that the balance is created with far greater information at the National level than can ever be weighed in Wisconsin alone. Subjects are also exposed to more scrutiny, by more experts at the National level, than they are in Wisconsin.

I understand the importance that fire safety plays in the complicated equation that ultimately leads to the determination that a building is safe. I also understand that such safety cannot be so conservative as to be economically unfeasible. It is that effective balancing that results in the most cost-effective regulatory approach to building construction. The adoption package includes the flexibility to assure that a balance between safety and economic viability is maintained. Code officials do not recommend one product over another, but look at the ratings that are required to achieve the desired result.

In summary, Wisconsin's Building Inspectors strongly support the adoption of the building code package (Clearinghouse Rule 00-179) as submitted and without delay.

Sincerely yours,

Joseph H Jameson

Joseph H. Jameson
Member, Commercial Code Council
Past President, Wisconsin Buildings Inspectors Association
Electrical and Building Inspector, City of Middleton

August 23, 2001

Honorable Senator Mark Meyer
Chairman, Senate Committee on Universities, Housing, and Government Operations
Room 131 South
State Capitol
PO Box 7882
Madison, Wig 53707-7882
Fax number: 608-267-5173

Dear Senator Meyer:

My name is Rod Visser of Builders Service Inc. in Elcho, Wi. We employ 14 people and operate a Complete Home Center, supplying contractors, and homeowners with building supplies.

It has come to my attention that the Wisconsin Concrete Masonry Association is attempting to delay the adoption of the ICC International Building Code as the state-wide code for Wisconsin demanding that technical changes be made to the code package submitted by the Department of Commerce.

The changes they are demanding would add restrictions which are not in the interests of my company. I have full confidence in the advisory council process, where all Wisconsin industries were fully and fairly represented, including the WCMA. This late attempt at technical changes to the proposed building code for the purpose of promoting certain products over others should be strongly rejected. I respectfully urge you to support the passage of this codes package without delay, and to ignore the untimely complaints of the WCMA.

Sincerely,

Rod Visser
President. Builders Service Inc
Past President WRLA