

WISCONSIN MODIFICATIONS
Recommendations
for
2006 INTERNATIONAL FUEL GAS CODE (IFGC)
(FUEL GAS TECHNICAL REQUIREMENTS)

Wisconsin Modification		Recommendation	Justification
65.0202 Definitions	Add a definition for the term “DHFS”. This term is used in other Wisconsin modifications to IMC chapters 6 and 8. Revise the definition of “unusually tight construction” to coordinate that under fuel gas provisions.	Keep Delete	The acronym “DHFS” is used only in “Notes” to rules. The definition of “unusually tight construction” has been removed from the IFGC.
65.0300 Space-Heating Systems	Do not require all spaces to have equipment capable of maintaining an indoor temperature of 68°F. Allow occupancies that are currently allowed to have minimum indoor temperatures of below 67°F to remain. These are industrial, storage, athletic, garage and kitchen uses.	Keep	In many spaces, it is not necessary to maintain 68°F. The requirement to size equipment for a 68°F minimum indoor temperature will impose higher first cost as well as higher operating costs from reduced energy efficiency.
65.0301 Listing and Labeling	IFGC 301.3 requires all appliances to be listed and labeled unless approved as a "modification " by the code official under IFGC 105. The current process for department approval of unlisted equipment should be retained as an additional option.	Keep	The Commerce procedure is similar to the IFGC's variance process, but is more specific as to the type of information and tests that must be submitted for review.
65.0303(1) Air Temperature	Keep the current requirement for gas-fired equipment exposed to air $\leq 30^{\circ}\text{F}$ to have the heat exchanger and burners be constructed of corrosion-resistant materials.	Keep	The Council recommended keeping this requirement due to Wisconsin's severe climate. The provision is needed to protect occupant health/safety.
65.0303(2) Prohibited Locations	Don't allow appliances to be located in or obtain combustion air from toilet rooms or storage closets.	Keep	Wisconsin buildings are tightly constructed and severe weather limits the use of openable windows for venting. The build-up of products of combustion causes concern for occupant safety and health and structural damage from moisture. The Wisconsin fire code will prohibit the use of portable unvented space heating equipment for the same reasons.
65.0304(1) Combustion Air	Added reference to IMC 705, 706, and 707 provisions for combustion air options.	Delete	The references to IMC 705, 706 and 707 are not needed, conditioned on the review of the new IFGC changes.

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65.0304(2) & (3) Unusually Tight Construction	Under both the IMC and the IFGC, combustion air may be taken from the space only if the building is <u>not</u> of "unusually tight construction" <u>and</u> the volume of the room meets the definition of an "unconfined space" (has 50 cu. ft. volume per 1000 Btu/hr input rating of all appliances combined). The definition of "unusually tight construction" describes a building built to the WI energy code. Replace it with the current definition that uses a criterion of 3% openables. Also allow the use of inside air for combustion without openables when the space has 250 cu. ft. volume per 1000 Btu/hr input rating of all appliances combined.	Delete	The definition of "unusually tight construction" has been removed from the IFGC.
65.0304(4) Combustion Air Ducts	Added a provision to require the combustion air inlet to be at least 12" above grade.	Delete	The 12-inch above grade requirement is now in IFGC section 304.11-8.
65.0305(1) Installation Requirements	Added various provisions of the IMC, 304.2, 304.8, 304.9, 304.10 and 305.	Delete	Concerns now addressed in sections 305 and 306 of the 2003 and 2004 IFGC editions.
65.0305(2) Final Test	Added a requirement for the final testing and balancing of the HVAC system.	Delete	This does not pertain to the installation of gas-fired appliances/equipment. Redundant and unnecessary, the requirements under IMC and the Wisconsin modifications would apply to "systems", even gas-fired systems.
65.0306 Access to Appliances	Added an exception for roof access to fans.	Delete	The chapter applies to "gas-fired" appliances and equipment; fans are not gas-fired.
65.0400 Gas Piping	Substituted and reference NFPA 54 for IFGC chapter 4 regarding gas piping installations.	Keep	Provides consistency with chapter Comm 40, which adopts NFPA 54.
65.0501(1) DHFS Information	Created references alerting people to other state regulations applying to health care facilities.	Keep	Reminds people of the DHFS regulations.
65.0501(2) and (3) Unvented Appliances	Negated the allowance for listed room heaters to be unvented. Substituted listed infrared radiant heaters to be unvented.	Keep Keep	Wisconsin buildings are tightly constructed and severe weather limits the use of openable windows for venting. The build-up of products of combustion causes concern for occupant safety and health and structural damage from moisture. The Wisconsin fire code will prohibit the use of portable unvented space heating equipment for the same reason.

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65.0503(1) Mechanical Draft Systems	Revised the termination locations for mechanical draft system.	Keep	The Council recommended keeping for now until staff can provide a more detailed review of the differences between the IMC and IFGC.
65.0503(2) Vent Locations	Revised the termination separations from intakes.	Keep	The Council recommended keeping for now until staff can provide a more detailed review of the differences between the IMC and IFGC.
65.0609 Duct Furnaces	Deleted the requirement to have removable access panels in ducts attached to both the upstream and downstream side of the furnace.	Keep	Such access panels are not needed. The standard does not require similar access panels on other furnace types. The change will reduce cost and make the code internally consistent. This is now section 610 under the 2003 edition.
65.0617 Furnaces	IFGC 618.5 and IMC 918.54.1-2 specifies the setback between furnace return or outside air intakes and contaminant sources. The two sections specify different setback distances. They should be the same. Also add requirement for the intake to be 12" from grade to address snow cover as was recommended for IMC 401.5.	Delete	The IFGC requirements in section 618.5 are the same as the IMC requirements.
65.0620 Unvented Room Heaters	Prohibited unvented room heaters.	Keep	This is now section 621 under the 2003 edition.
65.0629 Infrared Radiant Heaters	Required spaces with unvented radiant heaters to be provided with at least 4 cfm of outside air per 1000 Btu per hour input of installed heaters. Restricted use in Occupancy Groups F, S, U and H.	Keep	This is now section 630 under 2003 edition. This is the same outside air requirement as for unvented direct-fired industrial air heaters in the IFGC. This change makes the codes consistent for unvented heater types. Provision of adequate outside air with unvented heaters is a health and safety issue. Outside air is needed to dilute products of combustion and to vent moisture.
65.0630 Boilers	Replaced section with a reference to ch. 41 for boilers	Keep	This is now section 631 under 2003 edition.
65.0700 Referenced Standards	Added ANSI Z223.1/NFPA 54-1999, National Fuel Gas Code.	Keep	Maintain consistency with chapter Comm 40 for the appropriate edition.