Wisconsin Modification – IMC/IFGC Comparison
for
Intake Opening Separations

Reference	Wisconsin Modification	Reference	ICC
Comm 64.0401(4) (a)	Substitute the following wording for the requirements in IMC section 401.5.1		
64.0401(4) (a) 1.	Mechanical and required gravity outside air intake openings shall be located a minimum of 10 feet (3048 mm) 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 code. Where a source of contaminant is located within 10 feet (3048 mm) of an intake opening, such opening shall be located a minimum of 2 feet (610 mm) below the contaminant source.	**IMC 401.5.1**	Mechanical and gravity outside air intake openings, shall be located a minimum of 10 feet (3048 mm) from any hazardous or noxious contaminant source such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks, except as otherwise specified in this code. Where a source of contaminant is located within 10 feet (3048 mm) of an intake opening, such opening shall be located a minimum of 2 feet (610 mm) below the contaminant source. The exhaust from a bathroom or kitchen in a residential dwelling shall not be considered to be a hazardous noxious contaminant.
64.0401(4) (a) 2.	The lowest side of outside air intake required openings shall be located at least 12 inches (305 mm) vertically from the adjoining grade level, above adjoining roof surfaces, or above the bottom of an areaway.	**IFGC 304.11.8**	Combustion air intake openings located on the exterior of a building shall have the lowest side of such openings located not less than 12 inches (305 mm) vertically from the adjoining grade level.
64.0401(4) (a) 3.	If an outside air intake is located in an areaway, the areaway shall have a horizontal cross section equal to or greater than the free area of the outside air intake opening.		
64.0401(4) (a) 4.	For health care facilities, all of the following shall apply:		
64.0401(4) (a) 4. a.	Except as provided under subpar. b., outdoor air intakes shall be located at least 25 feet (7620 mm) from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vents or areas that may collect vehicular exhaust or other noxious fumes.		

64.0401(4) (a) 4. b.	Plumbing and vacuum vents that terminate at a level above the top of the air intake may be located as close as 10 feet (3048 mm) to an outdoor air intake.		
64.0401(4) (a) 4. c.	The bottom of outdoor air intakes serving central systems shall be located at least 6 feet (1829 mm) above ground level or, when installed above the roof, at least 3 feet (914 mm) above roof level.		
64.0401(4) (a) 4. d.	Exhaust outlets from areas that may be contaminated shall be located above roof level and arranged to minimize recirculation of exhaust air into the building.	**IMC 501.2**	Air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a nuisance and from which it cannot again be readily drawn in b a ventilating system. Air shall not be exhausted in an attic or crawl space. Exceptions: Whole-house ventilation-type attic fans that discharge into the attic space of dwelling units having private attics. Commercial cooking recirculating systems.
64.0401(4) (b)	Exceptions:		
64.0401(4) (b) 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.	**IFGC 304.1** **IMC 710.1**	. . . Direct-vented appliances, gas appliances of other than natural draft design and vented gas appliances other than Category I shall be provided with combustion, ventilation and dilution air in accordance with the equipment manufacturer's instructions. Combustion air openings to the outdoors shall comply with the location and protection provisions of Sections 401.5 and 401.6 applicable to outside air intake openings.
64.0401(4) (b) 2.	Unless a greater distance is specified by the manufacturer, exhaust openings for 100 cfm or less discharge shall be located at least 12 inches (305 mm), measured in any direction, from doors or openable windows.	**IMC 401.5.1**	. . . The exhaust from a bathroom or kitchen in a residential dwelling shall not be considered to be a hazardous noxious contaminant.

64.0401(4) (b) 3.	The 10-foot (3048 mm) 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.		
64.0401(4) (b) 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 (305 mm) measured in any direction from doors or openable windows.	**IFGC 503.2.3** **IFGC 503.8.3.**	Listed direct-vent equipment shall be considered properly vented where installed in accordance with the terms of the listing, the manufacturer's instructions, and Section 503.8, Item 3. The vent terminal of a direct-vent appliance with an input of 10,000 Btu per hour (3 kW) or less shall be located at least 6 inches (152 mm) from any air opening into a building, and such an appliance with an input over 10,000 Btu per hour (3 kW) but not over 50,000 Btu per hour (14.7 kW) shall be installed with a 9-inch (230 mm) vent termination clearance, and an appliance with an input over 50,000 Btu/h (14.7 kw) shall have at least a 12-inch (305 mm) vent termination clearance. The bottom of the vent terminal and the air intake shall be located at least 12 inches (305 mm) above grade.
64.0401(4) (b) 5.	Where it can be demonstrated that an engineered system design will prevent the maximum concentration of contaminants brought in through the outside air intake from exceeding the maximum contaminant concentration obtainable by providing the separation distances in accordance with sub. (4) (a), the outdoor air intakes may be located in accordance with such engineered system design.		