24.301.301 INCORPORATION BY REFERENCE OF UNIFORM PLUMBING CODE

- (1) The department adopts and incorporates by reference the Uniform Plumbing Code, 2018 edition, unless another edition is specifically stated, together with the following appendix chapters and amendments:
 - (a) Appendix A, Recommended Rules for Sizing the Water Supply System is adopted.
- (b) Appendix B, Explanatory Notes on Combination Waste and Vent Systems is adopted.
 - (c) Appendix D, Sizing Stormwater Drainage Systems is adopted.
- (d) Subsection 103.3.1, Licensing, is amended with the addition of the following language: The requirements for who must be licensed to perform plumbing work is regulated by Title 37, chapter 69, MCA.
- (e) Subsections 104.1, 104.2, 104.3, 104.3.2, 104.4, 104.5, 105.0, 105.4, 106.1, 106.3, and 107.0 will be left as is for use by local governments (i.e., municipalities and counties), but will not be used by the department and the state of Montana. For the purposes of enforcement by the department, these subsections are replaced with provisions of Title 50, chapter 60, part 5, MCA.
- (i) No permit is required for any minor replacement or repair work, the performance of which does not have a significant potential for creating a condition hazardous to public health and safety.
- (ii) No permit is required where the installation is exempt under the provisions of <u>50-60-</u>503 or <u>50-60-506</u>, MCA.
- (iii) The requirements for permits do not apply to regularly employed maintenance personnel doing maintenance work on the business premises of their employer unless work is subject to the permit provisions of these rules.
- (iv) Factory-built buildings covered by an insignia issued by the department need not have a plumbing permit for the construction of the unit; however, a permit will still be required for on-site work, as provided for in these rules.
- (f) Delete Table 104.5 PLUMBING PERMIT FEES and replace with the following schedule:
 - (i) for each plumbing fixture \$10
 - (ii) water service domestic or commercial 20
 - (iii) for each building sewer and each trailer park sewer 20
 - (iv) storm drains and storm drainage 20
 - (v) for each water heater (replacement or new) 25
- (vi) for each industrial water pretreatment interceptor, including its tray and vent, excepting kitchen type grease interceptors functioning as fixture traps 30
 - (vii) for alteration or repair of water piping and/or water treatment equipment 30
 - (viii) for repair or alteration of drainage or vent piping 30
- (ix) for each lawn sprinkler system and fire protection system or any one meter, including backflow protection devices therefore 30
- (x) for each hose bibb, vacuum breakers, or backflow protective devices on tanks, vats, etc., or for installation on unprotected plumbing fixtures, including necessary water piping 6 each
- (xi) requested plumbing inspection fee (provided that such service is not in excess of one hour in duration, and then \$35 for each 30 minutes or fractional part thereof in excess of one
- hour. Travel and per diem may be charged as per the state of Montana's existing rate for these items) 75
- (xii) reinspection (provided the \$30 does not exceed the original permit fee, in which case the original fee will be charged) 45
 - (xiii) for each medical gas type/piping system as follows:
 - (A) oxygen piping 100
 - (B) nitrogen piping 100

- (C) medical compressed air piping 100
- (D) nitrous oxide piping 100
- (E) carbon dioxide piping 100
- (F) medical vacuum piping 100
- (G) any other medical gas piping not included above in (A) through (F) 100
- (H) if total outlets for all gases/vacuum piping exceed 20 outlets, then there is an additional fee for each outlet over 20 10
 - (xiv) for each gray water system (commercial or residential) 60
- (g) Section 218, Definition of Plumbing System, is amended to read: "Includes all potable water and alternate water sources including supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipes, building drains and building sewers, including their respective joints and connections, devices, receptacles, and appurtenances within the property line of any premises, and includes water heaters and vents for the premises."
- (h) Table 422.1, Minimum Plumbing Facilities, is deleted and replaced with ARM <u>24.301.351</u>, Minimum Required Plumbing Fixtures.
- (i) Subsection 507.13, paragraph one is amended to read as follows: "Gas utilization equipment, or any equipment that generates a glow, spark, or flame, in residential garages and in adjacent spaces that open to the garage and are not part of the living space for a dwelling unit shall be installed so that all burners, burner-ignition devices, and heating elements are located not less than 18 inches (450 mm) above the floor unless listed as flammable vapor ignition resistant."
 - (j) Delete Subsection 603.4.2.
- (k) Subsection 603.2, Approval of Devices or Assemblies, is amended to read as follows: "Before any device or assembly is installed for the prevention of backflow, it shall have first been approved by the authority having jurisdiction. Devices or assemblies shall be tested for conformity with recognized standards or other standards acceptable to the authority having jurisdiction, so long as those standards are consistent with the intent of this code. All devices or assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the person or persons having control of such devices or assemblies. If found to be defective or inoperative, the device or assembly shall be repaired or replaced. No device or assembly shall be removed from use or relocated or other device or assembly substituted, without the approval of the authority having jurisdiction."
- (I) Subsection 603.5.10, is amended with the addition of the following language: "Boiler feed lines, in single-family dwellings on their own private well, may be protected with a dual check valve with intermediate atmospheric vent when a nontoxic transfer fluid is utilized in the boiler."
- (m) Subsection 603.5.12, Beverage Dispensers, delete the first sentence and replace with: "Potable water supply to carbonated beverage dispensers or coffee machines that may produce back pressure shall be protected by an air gap or a vented backflow preventer in accordance with ASSE 1022."
- (n) Subsection 604.3, the exception is amended to read as follows: Exception: Type M copper tubing may be used for water piping when piping is above ground in, or on, a building.
- (o) Subsection 605.12.2, Solvent Cement Joints, delete the third sentence and replace with the following: "Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, apply approved primer in accordance with ASTM F 656."
 - (p) Subsection 609.11, Pipe Insulation, is deleted in its entirety.
- (q) Subsection 610.8, last sentence, is amended to read as follows: No building supply pipe shall be less than 3/4 inch (19.1 mm) in inside diameter.
 - (r) Subsection 612.0, Residential Fire Sprinkler Systems, is deleted in its entirety.
- (s) Subsection 704.3, is amended by deleting the first sentence and replacing it with, "There may not be a direct connection between the sewerage system and any drains

originating from equipment in which food, portable equipment, or utensils are placed." Exception: A warewashing (3-compartment) sink may have a direct connection only when used as a wash bin, rinse bin, and sanitizing bin and shall not be used for any other purpose. Establishments that use the sanitizing bin of their warewashing sink to wash produce or conduct other food preparation must maintain an indirect connection and are not eligible for this exception.

- (t) Subsection 705.6.2, Solvent Cement Joints, delete the third sentence and replace with the following: "Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, apply approved primer in accordance with ASTM F 656."
- (u) Subsection 707.4 is amended by deleting the first sentence and replacing with, "Each horizontal drainage pipe shall be provided with a cleanout at its upper terminal and each run of piping, which is more than 50 feet in total developed length, shall be provided with a cleanout for each 50 feet, or fraction thereof, in length of such piping."
- (v) Section 708.1, is amended to read as follows: Horizontal drainage piping shall be run in practical alignment and a uniform slope of not less than 1/4 of an inch per foot or 2 percent toward the point of disposal provided that, where it is impractical due to the depth of the street sewer or to the structural features or to the arrangement of any building or structure to obtain a slope of 1/4 of an inch per foot or 2 percent, any such pipe or piping 2 inches or larger in diameter may have a slope of not less than 1/8 of an inch per foot or 1 percent.
- (w) Subsection 710.1, is amended to read as follows: "Where a fixture is installed on a floor level that is lower than the next upstream manhole cover of the public or private sewer serving such drainage piping may be protected from the backflow of sewage by installing an approved type backwater valve. Fixtures on floor levels above such elevation shall not discharge through the backwater valve."
- (x) Subsection 718.1, the exception is amended to read as follows: Exception: Where it is impractical, due to the depth of the street sewer or to the structural features or to the arrangement of any building or structure, to obtain a slope of 1/4 of an inch per foot, any pipe or piping 3 inches or larger in diameter may have a slope of 1/8 of an inch per foot and any such pipe or piping 8 inches in diameter or larger may have a slope of 1/16 of an inch per foot.
- (y) Subsection 807.3, Domestic Dishwashing Machine, add exception as follows: "Exception #1: The waste connection of a residential dishwasher shall connect directly to a wye branch fitting on the tailpiece of the kitchen sink, directly to the dishwasher connection of a food waste disposer, or through an air break to a standpipe. The waste line of a residential dishwasher shall rise and be securely fastened to the underside of the sink rim or countertop."
- (z) Subsection 906.1, the first sentence is amended to read as follows: Each vent pipe or stack shall extend through its flashing and shall terminate vertically not less than 12 inches above the roof nor less than one foot from any vertical surface.
- (aa) Subsection 906.3, is amended to read as follows: Vent pipes shall be extended separately or combined, of full required size, not less than 12 inches above the roof or fire wall.
- (ab) Subsection 906.7, is amended to read as follows: Frost and Snow Closure: Where frost or snow closure is likely to occur in locations having a minimum design temperature below zero degrees Fahrenheit vent terminals shall be a minimum of 3 inches in diameter, but in no event smaller than the required vent pipe. The change in diameter shall be made inside the building at least 1 foot below the roof and terminate not less than 12 inches above the roof, or as required by the administrative authority.
 - (ac) Subsection 908.1 is amended to read, "Wet Venting."
- (ad) Subsection 908.1.1 is deleted and replaced with, "Wet venting is limited to drainage piping receiving the discharge from the trap arm of one and two fixture unit fixtures that also serves as a vent for not to exceed four fixtures. All wet vented fixtures

shall be within the same story; provided, further, that fixtures with a continuous vent discharging into a wet vent shall be within the same story as the wet vented fixtures."

- (ae) Subsection 908.1.2, is amended to read as follows: "The piping between any two consecutive inlet levels shall be considered a wet vented section. Each wet vented section shall be a minimum of one pipe size larger than the required minimum waste pipe size of the upper fixture or shall be one pipe size larger than the required minimum pipe size for the sum of the fixture units served by such wet vented section, whichever is larger, but in no case less than two inches."
- (af) Subsection 908.2 is amended with addition of the following: "Bathroom group locations include private bathrooms, private patient hospital rooms, commercial toilet rooms with only one toilet, one lavatory and may include one floor drain."
- (ag) Chapter 12, Fuel Piping, is deleted and replaced with the International Fuel Gas Code.
- (ah) Chapter 13, Health Care Facilities and Medical Gas and Vacuum Systems, is deleted except for Subsections 1301.0, 1302.0, and 1303.0, Health Care Facilities. In lieu of Chapter 13, except for the subsections not deleted, the Department of Labor and Industry adopts and incorporates by reference the National Fire Protection Association's Standard NFPA 99, 2018 edition, Chapters 1 through 5 and Chapter 15 for the exclusive use as a standard for medical gas and vacuum systems, unless a different edition date is specifically stated, as the standard for the installation of medical gas and vacuum systems. The requirements of this rule shall not be construed as to replace or supersede any additional requirements for testing and certification of medical gas and vacuum systems, including independent third-party certification of systems, as may be applicable. NFPA 99 is a nationally recognized standard setting forth minimum standards and requirements for medical gas and vacuum systems. A copy of NFPA 99 may be obtained from the National Fire Protection Association at www.nfpa.org.
- (2) The purpose of this code is to provide minimum requirements and standards for plumbing installations for the protection of the public health, safety, and welfare. The Uniform Plumbing Code is a nationally recognized model code setting forth minimum standards and requirements for plumbing installations. A copy of the Uniform Plumbing Code may be obtained from the International Association of Plumbing and Mechanical Officials at www.iapmo.org.

History: 50-60-203, 50-60-504, 50-60-508, MCA; IMP, 50-60-201, 50-60-203, 50-60-504, 50-60-508, MCA; NEW, 1978 MAR p. 380, Eff. 3/25/78; AMD, 1978 MAR p. 1480, Eff. 10/27/78; AMD, 1979 MAR p. 1662, Eff. 12/28/79; AMD, 1981 MAR p. 1052, Eff. 9/18/81; AMD, 1982 MAR p. 2170, Eff. 12/31/82; TRANS, from Dept. of Admin., Ch. 352, L. 1985, Eff. 7/1/85; AMD, 1986 MAR p. 106, Eff. 1/31/86; AMD, 1989 MAR p. 476, Eff. 4/28/89; AMD, 1992 MAR p. 1133, Eff. 5/29/92; AMD, 1994 MAR p. 299, Eff. 2/11/94; AMD, 1996 MAR p. 420, Eff. 2/9/96; AMD, 1997 MAR p. 44, Eff. 1/17/97; AMD, 1997 MAR p. 2061, Eff. 11/18/97; AMD, 1998 MAR p. 2563, Eff. 9/25/98; AMD, 1999 MAR p. 1885, Eff. 10/1/99; AMD, 2000 MAR p. 3168, Eff. 11/10/00; TRANS, from Commerce, 2001 MAR p. 2301; AMD, 2004 MAR p. 571, Eff. 3/12/04; AMD, 2006 MAR p. 567, Eff. 2/24/06; AMD, 2007 MAR p. 112, Eff. 1/26/07; AMD, 2010 MAR p. 1733, Eff. 7/30/10; AMD, 2014 MAR p. 2776, Eff. 11/7/14; AMD, 2016 MAR p. 316, Eff. 2/20/16; AMD, 2019 MAR p. 2242, Eff. 12/7/19.

24.301.351 MINIMUM REQUIRED PLUMBING FIXTURES

(1) The following table will be used to determine the minimum number of plumbing fixtures to be installed in new buildings:

MINIMUM NUMBER OF PLUMBING FACILITIES^{a, n, q} Fixtures (Number of fixtures per number of occupants)

Occupancy or Use		Water Closets (Urinals - see footnotes g & m)		Lavatories	Bathtubs/ Showers	Drinking Fountains ^r
		Male	Female			
ASSENBLY	Theaters	1 per 125	1 per 65	1 per 2 water closets		1 per 1,000
	Nightclubs ^{g,n,p}	1 per 40	1 per 40			
	Restaurants ^{g,n,p}	1 per 75	1 per 75			
	Halls, museums, coliseums, arenasº, stadiums, pools, etc.	1 per 125	1 per 75			1 per 1,000
	Churches ^o	1 per 150	1 per 75			1 per 1,000
	Businessup	1 per 25	1 per 25			
	Educational Elementary	1 per 100	1 per 35	1 per 2 water closets		1 per floor
	Educational Secondary	1 per 100	1 per 45	1 per 2 water closets		1 per floor
	Factory and industrial	1 per 100	1 per 100	1 per 100		1 per 400
	High hazard	1 per 100	1 per 100	1 per 100		1 per 1,000
	Residential care	1 per 10	1 per 10	1 per 10	1 per 8	
N	Hospitals, ambulatory nursing home patients ^c	1 per room		1 per room ^e	1 per 15	1 per 100
TIONAL	Day nurseries ^k , sanitariums, nonambulatory nursing home patients, etc. ^c	1 per 15	1 per 15	1 per 15	1 per 15 [†]	1 per 100
	Employees, other than residential care ^c	1 per 25	1 per 25	1 per 35		1 per 100
	Visitors, other than residential care	1 per 75	1 per 75	1 per 100		1 per 500
	Prisons ^c	1 per cell		1 per cell	1 per 15	1 per 100
	Asylums, reformatories, etc.c	1 per 15	1 per 15	1 per 15	1 per 15	1 per 100
	Mercantile ¹	1 per 500	1 per 500	1 per 750		
RES-DEXF-4L	Hotels, motels	1 per guestroom		1 per guestroom	1 per guestroom	
	Lodges	1 per 10	1 per 10	1 per 10	1 per 8	
	Multiple family	1 per dwelling unit		1 per dwelling unit	1 per dwelling unit	
	Dormitories	1 per 10	1 per 10	1 per 10	1 per 8	1 per 100
	One and two-family dwelling ^a	1 per dwelling unit		1 per dwelling unit	1 per dwelling unit	

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the building code.
- b. Fixtures located in adjacent buildings under the ownership or control of the church shall be made available during periods the church is occupied.
 - c. Toilet facilities for employees shall be separate from facilities of inmates or patients.
- d. For attached one- and two-family dwellings, one automatic clothes washer connection shall be required per 20 dwelling units.
- e. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.
 - f. For day nurseries, a maximum of one bathtub shall be required.
- g. Food service establishments or any establishment that sells alcoholic beverages for on-site consumption requires at least one urinal.
- h. Contact the Department of Public Health and Human Services for additional requirements for food service establishments.
- i. At the discretion of the building official, certain nonassembly buildings where food and beverages are not consumed on the premises, may be allowed to furnish only one public toilet provided it is designed for male and female use and it is suitable for use by handicapped persons.
- j. At the discretion of the building official, for small (less than 1200 sq. ft. in floor area) convenience stores (typically gasoline sales plus convenience items and beverages) located to serve primarily neighborhood areas instead of major highways, only one public toilet is needed, provided it is designated for both male and female use and it is suitable for use by handicapped persons.
- k. If the total number of students plus staff exceeds 20, must provide separate male and female toilets.
- I. Keyed toilets under employee control of the type available at service stations are permitted.
- m. Where urinals are provided, notwithstanding the required urinal in footnote g. above, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one-half of the minimum specified.
- n. When calculating number of male and female occupants, the occupant load of the building shall be considered half male and half female, and the occupant load shall be calculated in accordance with the building code.
- o. Riding arenas as defined in ARM <u>24.301.146</u>(11) are required to provide separate male and female accessible restrooms which contain a minimum of one water closet and one lavatory.
- p. See ARM <u>24.301.903</u> for additional requirements and provisions concerning building accessibility.
- q. If a specific occupancy is not shown in the table, the building official shall determine on an individual case-by-case basis the requirements for that occupancy.
- r. On an individual case-by-case basis the building official may approve an alternative source of potable drinking water, such as, but not limited to, a bottled water cooler, in lieu of a drinking fountain.

History: 50-60-203, 50-60-504, MCA; IMP, 50-60-203, 50-60-504, MCA; NEW, 1978 MAR p. 1483, Eff. 10/27/78; AMD, 1981 MAR p. 515, Eff. 5/29/81; AMD, 1982 MAR p. 483, Eff. 3/12/82; TRANS, from Dept. of Admin., Ch. 352, L. 1985, Eff. 7/1/85; AMD, 1987 MAR p. 2237, Eff. 12/11/87; AMD, 1990 MAR p. 2041, Eff. 11/16/90; AMD, 1994 MAR p. 299, Eff. 2/11/94; AMD, 1996 MAR p. 420, Eff. 2/9/96; AMD, 1997 MAR p. 44, Eff. 1/17/97; AMD, 1997 MAR p. 2061, Eff. 11/18/97; AMD, 1998 MAR p. 2563, Eff. 9/25/98; TRANS,

from Commerce, 2001 MAR p. 2301; <u>AMD</u>, 2004 MAR p. 571, Eff. 3/12/04; <u>AMD</u>, 2010 MAR p. 1733, Eff. 7/30/10; <u>AMD</u>, 2019 MAR p. 2242, Eff. 12/7/19.