

Florida Building Code Mechanical and Plumbing

Significant Changes

8th Edition 2023

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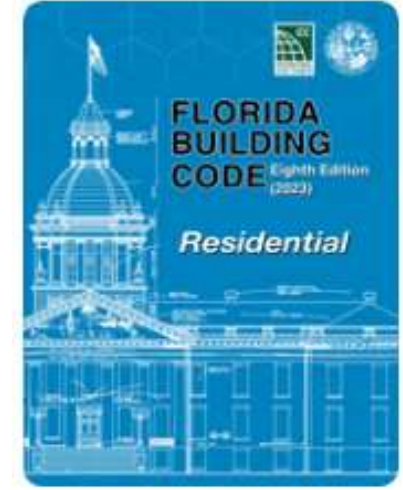
Sources

This presentation is not intended to replace the provisions contained in the 8th Edition (2023) of the FBC neither to be used without the official code book.

For more comprehensive analysis and section by section comparison between 7th and 8th Edition of the FBC, visit the web link:

http://www.floridabuilding.org/fbc/Links_to_Code_Resources.html

Florida Building Code Mechanical



Significant Changes
8th Edition 2023

M Chapter 3 – General Regulations

➤ 307.1.1 Identification

- ❑ Identifying primary/secondary drain from fuel-burning appliances is now required for concealed condensate piping.

307.1.1 Identification.

The termination of concealed condensate piping shall be marked to indicate whether the piping is connected to the primary or secondary drain.

➤ 307.2.1.1 Condensate discharge

- ❑ More specific requirements on condensate discharge. The code now allows discharging to certain Plumbing fixtures. However, this is not allowed in Miami-Dade County. The Water and Sewer Department's ordinance 8-CC prohibits any unmetered water from air conditioners to enter the sewer system.

307.2.1.1 Condensate discharge.

Condensate drains shall not directly connect to any plumbing drain, waste or vent pipe. Condensate drains shall not discharge into a plumbing fixture other than a floor sink, floor drain, trench drain, mop sink, hub drain, standpipe, utility sink or laundry sink. Condensate drain connections to a lavatory wye branch tailpiece or to a bathtub overflow pipe shall not be considered as discharging to a plumbing fixture. Except where discharging to grade outdoors, the point of discharge of condensate drains shall be located within the same occupancy, tenant space or *dwelling unit* as the source of the condensate.

M Chapter 4 - Ventilation

➤ 401.4 Intake opening location

- ❑ For dwelling units only. Exhaust from bathrooms, clothes dryers and domestic and range is not required to be separated from air intake openings where an approved factory-built intake/exhaust combination termination fitting is used.

401.4 Intake opening location.

Air intake openings shall comply with all of the following:

1. Intake openings shall be located not less than 3 feet (914 mm) below contaminant sources where such sources are located within 10 feet (3048 mm) of the opening. Separation is not required between intake air openings and living space exhaust air openings of an individual dwelling unit or sleeping unit where an approved factory-built intake/exhaust combination termination fitting is used to separate the air streams in accordance with the manufacturer's instructions.

➤ 403.3.1.1 Outdoor airflow rate.

- ❑ The required O/A and exhaust rate has been increased or modified for some occupancy classifications such as commercial laundries, private kitchens, and bathrooms, as well as refrigerated warehouses.

M Chapter 5 – Exhaust Systems

➤ 501.3.1 Location of exhaust outlets.

- ❑ For dwelling units only. Exhaust from bathrooms, clothes dryers and domestic and range is not required to be separated from air intake openings where an approved factory-built intake/exhaust combination termination fitting is used.

501.3.1 Location of exhaust outlets

The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:

3. For all *environmental air* exhaust: 3 feet from property lines; 3 feet from operable openings into buildings for all occupancies other than Group U, and 10 feet (3048 mm) from mechanical air intakes. Such exhaust shall not be considered hazardous or noxious. *Separation is not required between intake air openings and living space exhaust air openings of an individual dwelling unit or sleeping unit where an approved factory-built intake/exhaust combination termination fitting is used to separate the air streams in accordance with the manufacturer's instructions.*

M Chapter 5 – Exhaust Systems

- **504.6 and FBC/R M1502.4.8 Booster fans prohibited.**
 - ❑ Domestic booster fans shall not be installed in dryer exhaust systems.

- **506.3.9 Grease duct horizontal cleanouts.**
 - ❑ New requirement to have a cleanout within 3 feet of a horizontal discharge fan.

506.3.9 Grease duct horizontal cleanouts.

Cleanouts serving horizontal sections of grease ducts shall: (provision no. 7 added for 2023)

1. Be spaced not more than 20 feet (6096 mm) apart.
2. Be located not more than 10 feet (3048 mm) from changes in direction that are greater than 45 degrees (0.79 rad).
3. Be located on the bottom only where other locations are not available and shall be provided with internal damming of the opening such that grease will flow past the opening without pooling. Bottom cleanouts and openings shall be approved for the application and installed liquid-tight.
4. Not be closer than 1 inch (25 mm) from the edges of the duct.
5. Have opening dimensions of not less than 12 inches by 12 inches (305 mm by 305 mm). Where such dimensions preclude installation, the opening shall be not less than 12 inches (305 mm) on one side and shall be large enough to provide access for cleaning and maintenance.
6. Be located at grease reservoirs.
7. Be located within 3 feet (914 mm) of horizontal discharge fans.

M Chapter 5 – Exhaust Systems

➤ 507.1 Commercial Kitchen Hoods - General.

- ❑ The code now exempts listed and labeled smoker ovens with integral exhaust systems from the requirement of capturing effluents with a hood.

507.1 Commercial Kitchen Hoods - General.

Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or II and shall be designed to capture and confine cooking vapors and residues. A Type I or Type II hood shall be installed at or above all *commercial cooking appliances* in accordance with Sections 507.2 and 507.3. Where any *cooking appliance* under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed. Where a Type I hood is installed, the installation of the entire system, including the hood, ducts, exhaust equipment and makeup air system shall comply with the requirements of Sections 506, 507, 508 and 509.

Exceptions (New Exception no. 4 was added)

4. Smoker ovens with integral exhaust systems, provided that the appliance is installed in accordance with the manufacturer's installation instructions, is listed and tested for the application and complies with Chapter 5.



M Chapter 5 – Exhaust Systems

➤ 507.2 Type I hoods

- ❑ A new provision was added to exempt listed pizza ovens with direct venting from requiring a type I hood.

507.2 Type I hoods.

Type I hoods shall be installed where cooking *appliances* produce grease or smoke as a result of the cooking process. Type I hoods shall be installed over *medium-duty, heavy-duty and extra-heavy-duty cooking appliances*.

Exceptions (New exception no. 2 was added)

2. A Type I hood shall not be required for solid fuel or combination gas and solid fuel pizza ovens if the oven is tested and listed using direct venting as allowed in NFPA 96. The venting system shall be constructed and installed per the conditions of listing of the oven and of the duct or chimney used for venting. This applies to pizza ovens listed with natural draft or forced draft venting.



M Chapter 6 – Duct Systems

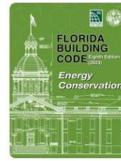
➤ 608 Balancing

- ❑ This new section was added to require the installation of balancing devices in all commercial air distribution systems. The balancing of such systems is also required by this section.

608.1 Balancing.

Air distribution, ventilation and exhaust systems shall be provided with means to adjust the system to achieve the design airflow rates and shall be balanced by an *approved* method. Ventilation air distribution shall be balanced by an *approved* method and such balancing shall verify that the air distribution system is capable of supplying and exhausting the airflow rates required by Chapter 4.

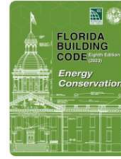




Florida Building Code Energy Conservation

- **C403.2.3 HVAC equipment performance requirements.**
 - ☐ Minimum efficiencies and performance requirements updated on most equipment categories. Different efficiency nomenclature was also introduced. Refer to tables.

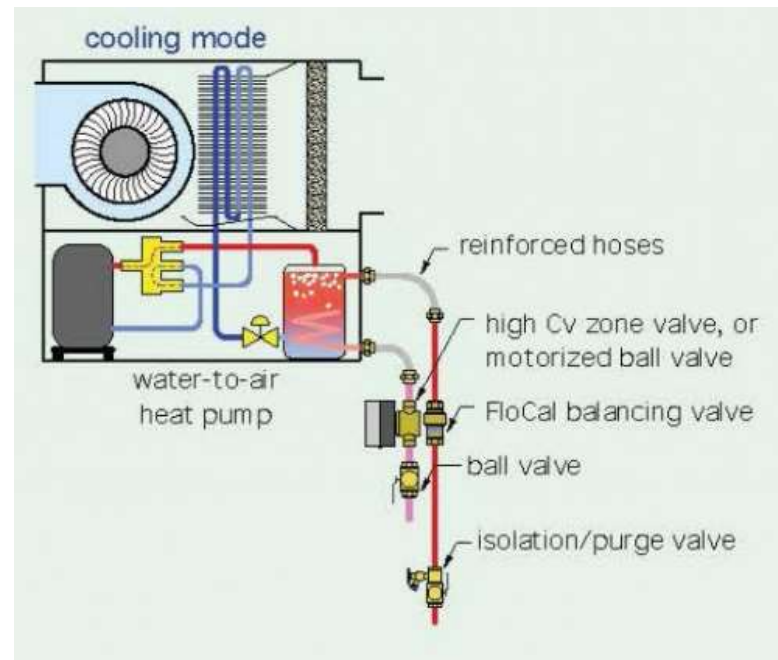




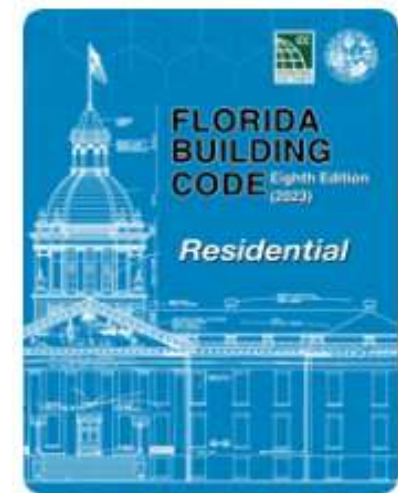
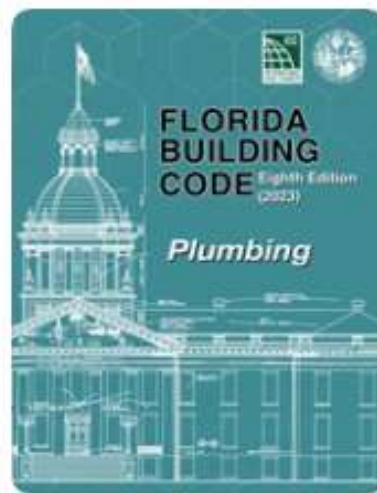
Florida Building Code Energy Conservation

➤ C403.4.2.3.3 Two-position valve

- ❑ A hydronic heat pump on a hydronic system having a total pump system power exceeding 10 hp (7.5 kW) must have a two-position automatic valve that interlocks with the compressor to shut off water flow when the compressor is off.



Florida Building Code Plumbing



Significant Changes
8th Edition 2023

P Chapter 3

General Regulations

➤ 314.2.1.1 Condensate discharge.

- ❑ More specific requirements on condensate discharge. The code now allows discharging to certain Plumbing fixtures. However, this is not allowed in Miami-Dade County. The Water and Sewer Department's ordinance 8-CC prohibits any unmetered water from air conditioners to enter the sewer system.

314.2.1.1 Condensate discharge.

Condensate drains shall not directly connect to any plumbing drain, waste or vent pipe. Condensate drains shall not discharge into a plumbing fixture other than a floor sink, floor drain, trench drain, mop sink, hub drain, standpipe, utility sink or laundry sink. Condensate drain connections to a lavatory wye branch tailpiece or to a bathtub overflow pipe shall not be considered as discharging to a plumbing fixture. Except where discharging to grade outdoors, the point of discharge of condensate drains shall be located within the same occupancy, tenant space or dwelling unit as the source of the condensate.

P Chapter 4

Fixtures, Faucets and Fixture Fittings

➤ 403.2 Separate facilities.

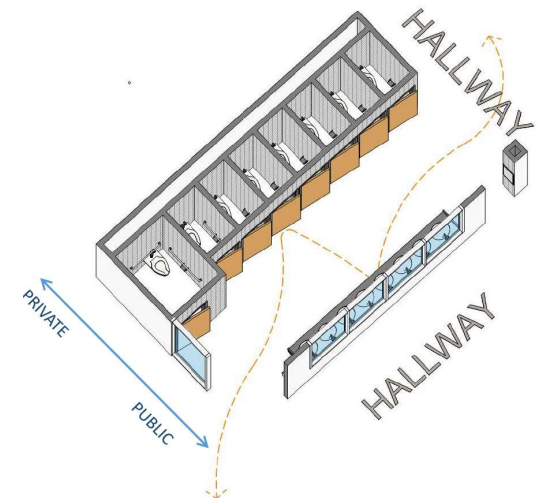
- ❑ Additional exceptions of the separate sex requirements were included to allow gender inclusive restroom layouts when toilets and urinals meet the privacy requirements.

403.2 Separate facilities.

Where plumbing fixtures are required, separate facilities shall be provided for each sex. (New exceptions 5 and 6 added for 2023)

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 403.1.2.
6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets is provided in accordance with Section 405.3.4. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.



P Chapter 4

Fixtures, Faucets and Fixture Fittings

➤ **403.8 Service sink location.**

- ❑ Service sinks shall not be required to be located in individual tenant spaces in a covered mall provided that service sinks are located within a distance of travel of 300 feet (91 m) of the most remote location in the tenant space and not more than one story above or below the tenant space. Service sinks shall be located on an accessible route.

P Chapter 6

Water Supply and Distribution

➤ **602.1 General. (New Sub-Meter Requirement for Miami-Dade)**

- ❑ Miami-Dade County added a new local technical amendment to the Florida Building Code Plumbing Section 602.1 to require submeters in all dwelling units where a multi-unit property is served by a single water meter.

As per code of Miami-Dade County section 8-31 the following local technical amendment to FBC/P 602.1 is in effect as of sept-16, 2023:

602.1 General (as amended)

Structures equipped with plumbing fixtures and utilized for human occupancy or habitation shall be provided with a potable supply of water in the amounts and at the pressures specified in this chapter. In multiple unit properties where two or more dwelling units are served by a single master water meter, each dwelling unit shall have individual water submeters.

602.1.1 Submeters (New sub-section added as part of local technical amendment)

Submeters and their installation must conform to American Waterworks Association (AWWA) standards C700-20, C708-19, C710-20, C713-19, or C715-18. All submeters must be rated for a minimum working pressure of 150 psi. A shut-off valve must be installed on the water line on the inlet side of the submeter.

P Chapter 6

Water Supply and Distribution

➤ **606.1 Location of full-open valves.**

- ❑ A new requirement added. A shutoff valve is now required for each tenant in multiple tenant buildings.

606.1 Location of full-open valves.

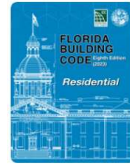
Full-open valves shall be installed in the following locations: (Requirement 2.1 has been added)

2. On the water distribution supply pipe at the entrance into the structure.

2.1. In multiple-tenant buildings, where a common water supply piping system is installed to supply other than one- and two-family dwellings, a main shutoff valve shall be provided for each tenant.

P Chapter 7 Sanitary Drainage

- **Section 717 Relining Building Sewers and Building Drains.**
 - ❑ This new section includes pre-installation requirements such as cleaning and video survey, permitting, prohibited applications, approved materials, installation and approval.



Florida Building Code Residential

➤ Chapter 19 - Section M1905 Residential permanently installed generators

❑ M1905.2.5 Exhaust location.

Permanently installed residential standby generator's exhaust shall be located to not create a nuisance. Exhaust termination shall be a **minimum of 10 feet from any openings that could allow fumes into the building** (doors, operable windows, eave vents, etc.) or air intakes.

Exception: The generator exhaust can be located a minimum of 5 feet (1524 mm) from any such openings (doors, operable windows, eave vents, etc.) or in compliance with generator manufacturer installation requirements and listing, whichever is more restrictive, if all of the following are complied with:

1. A carbon monoxide (CO) alarm(s) is installed in the residency within 10 feet (3048 mm) of each room used for sleeping purposes, or in accordance with the alarm's manufacturer installation requirements and listing, whichever is more restrictive.
2. An additional carbon monoxide (CO) alarm is installed in the residency as close as possible to the building's exterior opening nearest to the generator exhaust.
3. The carbon monoxide (CO) alarms mentioned above shall be of the types required by Sections R315.1.1 or R315.1.2 of this code.





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