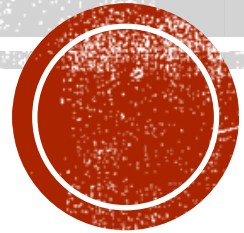
PLUMBING FIXTURES AND INSTALLATIONS



2024 ANNUAL CONFERENCE

NCBIA & NCMIA

EDUCATION · INTEGRITY · PROFESSIONALISM

NCBIA

NORTH CAROLINA BUILDING INSPECTORS' ASSOCIATION

HOTEL BALLAST
WILMINGTON, NC
JULY 28TH – JULY 31ST, 2024

NC MECHANICAL INSPECTORS ASSOC.

PLAN REVIEW BOOTCAMP

- 3 days

-Registration Applications will be available March/April

-Held May

-High Point

NCGS 83A-13

EXEMPTIONS FROM A REQUIRED SEAL

This statute was modified to increase the total value and add a total building area exemption for an institutional or commercial building where a professional architectural seal is not required on the plans. The total value was increased from less than $200,000 to less than $300,000. The total building area was not referenced previously. The new total building area exemption is for a building of less than 3,000 square feet.

SECTION 1. G.S. 83A-13, as amended by Section 1 of S.L. 2021-81, reads as rewritten:

"**§ 83A-13. Exemptions.** …

(c) Nothing in this Chapter shall be construed to require an architectural license for the preparation, sale, or furnishing of plans, specifications and related data, or for the supervision of construction pursuant thereto, where the building, buildings, or project involved is in one of the following categories: …

(3) An institutional or commercial building if it does not have a total value exceeding ~~two hundred thousand dollars ($200,000);~~three hundred thousand dollars ($300,000);

(4) An institutional or commercial building if the total building area does not exceed 3,000 square feet in gross floor area; …

(c1) Notwithstanding subdivisions (c)(3) and (4) of this section, ~~a~~ all of the following shall be exempt from the requirement for a professional architectural seal:

(1) A commercial building project with a total value of less than ~~two hundred thousand dollars ($200,000)~~ three hundred thousand dollars ($300,000) and a total project area of less than 3,000 square ~~feet shall be exempt from the requirement for a professional architectural seal.~~feet in gross floor area.

(2) Any alteration, remodeling, renovation, or repair of a commercial building with a total value of less than three hundred thousand dollars ($300,000).

(3) Any alteration, remodeling, renovation, or repair of a commercial building if the total building area does not exceed 3,000 square feet in gross floor area.

…"

NCGS 87-1.1

EXEMPTIONS 2 &4

General Statute 87-1.1 allows a plumber, HVAC, or electrical contractor an exemption to general contractor licensure for public or private projects. If the project is $30,000 or more and no more than 25% of the work is general contractor work, the trade contractor can engage the consumer directly without a licensed general contractor. This revision to the statute allows the trade contractor licensing agencies to adopt rules that will apply to the licensed plumbing, HVAC and electrical contractors as long as all other conditions set forth in the statute are met.

NCGS 87-14 BUILDING PERMIT EXEMPTION

- PERMIT REQUIRED $40,000 OR MORE
- SATISFACTORY PROOF THAT APPLICANT IS LICENSED GENERAL CONTRACTOR
  - **OR**
- OWNER BUILDER AFFIDAVIT
  - REPORTED TO BOARD (NCLBGC) GS 160D-1115

§ 87-14. Regulations as to issue of building permits. (a) Any person, firm, or corporation, upon making application to the building inspector or ~~such~~ other authority of any incorporated city, town, or county in North Carolina charged with the duty of issuing building or other permits for the construction of any building, highway, sewer, grading, or any improvement or structure where the cost ~~thereof~~ is to be thirty thousand dollars ($30,000) or more, shall, before being entitled to ~~the issuance~~ of a permit, satisfy the following:

(1) Furnish satisfactory proof to the inspector or authority that the ~~person~~ applicant seeking the permit or another person contracting to superintend or manage the construction is ~~duly~~ licensed under ~~the terms of~~ this Article to carry out or superintend the construction or is exempt from licensure under G.S. 87-1(b). If an applicant claims an exemption from licensure pursuant to G.S. 87-1(b)(2), the applicant for the building permit shall execute a verified affidavit attesting to the following:

a. That the ~~person~~ applicant is the owner of the property on which the building is being constructed ~~or, in the case of~~ and, if the applicant is a firm or corporation, ~~is legally authorized~~

~~to act on behalf~~ that the person submitting the application is an owner, officer, or member of the firm or ~~corporation.~~ corporation that owns the property.

b. That the ~~person~~ applicant will personally superintend and manage all aspects of the construction of the building and that the duty will not be delegated to any other person not ~~duly~~ licensed under ~~the terms of~~ this Article.

c. That the ~~person~~ applicant will be personally present for all inspections required by the North Carolina State Building Code, unless the plans for the building were drawn and sealed by an architect licensed pursuant to Chapter 83A of the General Statutes.

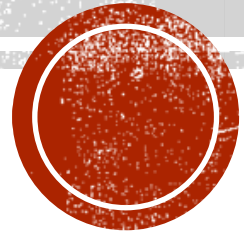
The building inspector or other authority shall transmit a copy of the affidavit to the Board, ~~who~~ which shall verify that the applicant was validly entitled to claim the exemption under G.S. 87-1(b)(2). If the Board determines that the applicant was not entitled to claim the exemption under G.S. 87-1(b)(2), the building permit shall be revoked pursuant to ~~G.S. 153A-362 or G.S. 21 160A-422.~~ G.S. 160D-1115.

(2) Furnish proof that the ~~person~~ applicant has in effect Workers' Compensation insurance as required by Chapter 97 of the General Statutes.

(3)(a1) Any person, firm, or corporation, upon making application to the building inspector or such other authority of any incorporated city, town, or county in North Carolina charged with the duty of issuing building permits pursuant to ~~G.S. 160A-417(a)(1) or G.S. 153A-357(a)(1)~~ G.S. 160D-1110 for any improvements for which the combined cost is to be thirty thousand dollars ($30,000) or more, other than for improvements to an existing single-family residential dwelling unit as defined in G.S. 87-15.5(7) that the owner occupies as a residence, or for the addition of an accessory building or accessory structure as defined in the North Carolina Uniform Residential Building Code, the use of which is incidental to that residential dwelling unit, shall be required to provide to the building inspector or other authority the name, physical and mailing address, telephone number, facsimile number, and ~~electronic mail~~ email address of the lien agent designated by the owner pursuant to G.S. 44A-11.1(a).

NCGS 143-138

BUILDING PERMIT EXEMPTIONS FOR MINOR ACTIVITIES



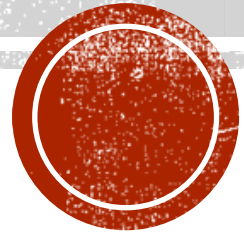
Changed to $40,000

General Statute 143-138 provides an exclusion for a building permit for minor activities in commercial buildings and structures. This addition determines the project to be considered exempt from permitting requirements when the project cost is $20,000 or less. In addition, commercial buildings can be excluded for minor activities. This regulation also defines the cost of the project to include the total cost of work, including all building addition, demolition, alteration, and repair work, occurring on the property within 12 consecutive months.

NCGS 143-138 (SEC 2B)

EXEMPTIONS FROM A SEAL

General Statute 143-138 provides an exemption to the requirement for a seal of a registered architect or engineer on the plans. The statute also provides specifications for certain commercial building projects that cost less than $300,000 or have a total building area of less than 3,000 square feet that does not affect load-bearing structures.



"(b22) Limit Requirement for Certain Plans to be Under Professional Seal. – The North Carolina State Building Code shall not require that plans and specifications for any alteration, remodeling, renovation, or repair of a commercial building or structure be prepared by and under the seal of a registered architect licensed under Chapter 83A of the General Statutes, or a registered engineer licensed under Chapter 89C of the General Statutes, if the alteration, remodeling, renovation, or repair costs less than three hundred thousand dollars ($300,000) or if the total building area does not exceed 3,000 square feet in gross floor area and all of the following apply:

1. The alteration, remodeling, renovation, or repair does not include the addition, repair, or replacement of load-bearing structures.

2. The alteration, remodeling, renovation, or repair is not subject to the requirements of G.S. 133-1.1(a).

3. The alteration, remodeling, renovation, or repair is performed in accordance with the current edition of the North Carolina Fire Prevention Code."

GS 160D-1104

EXEMPTIONS FROM A SEAL AND LOCAL GOVERNMENT

SECTION 3. G.S. 160D-1104, as amended by Section 12.5(b) of S.L. 2021-117 and Section 4(a) of S.L. 2021-121, is amended by adding a new subsection to read:

"(d1) A local government may not adopt or enforce a local ordinance, resolution, or policy that requires that plans and specifications for any alteration, remodeling, renovation, or repair of a commercial building or structure be prepared by and under the seal of a registered architect licensed under Chapter 83A of the General Statutes, or a registered engineer licensed under Chapter 89C of the General Statutes, if the alteration, remodeling, renovation, or repair costs less than three hundred thousand dollars ($300,000) or if the total building area does not exceed 3,000 square feet in gross floor area and all of the following apply:

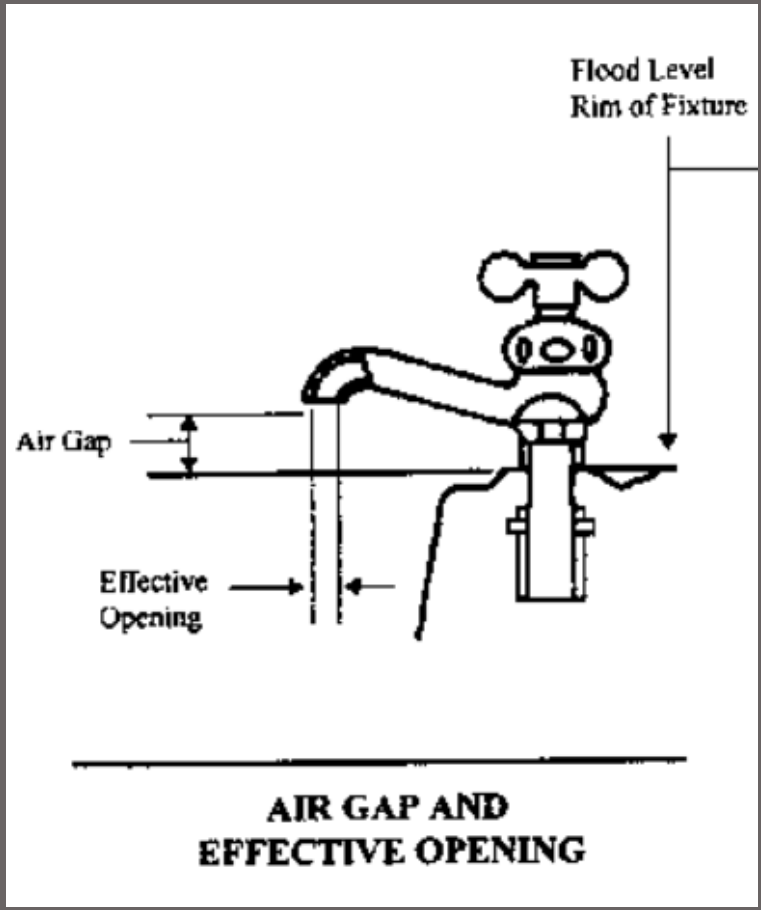
1. The alteration, remodeling, renovation, or repair does not include the addition, repair, or replacement of load-bearing structures.

NCGS 143-138 (SEC 4)

PERMIT EXEMPTIONS

- $40,000 unless
- Load Bearing
- Addition or Change in Design of Plumbing
- Change heat pump or electrical systems (excluding like for like)

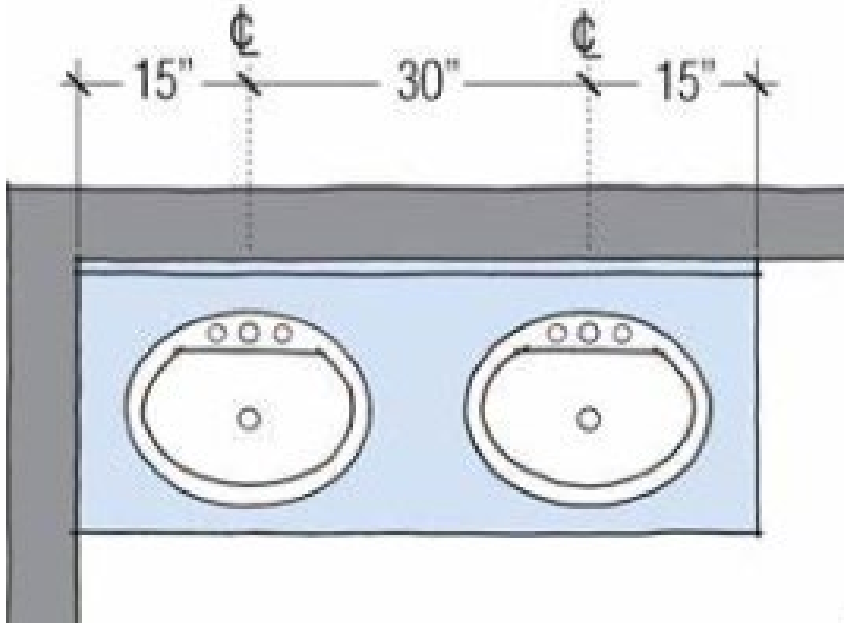
SECTION 405 INSTALLATION OF FIXTURES

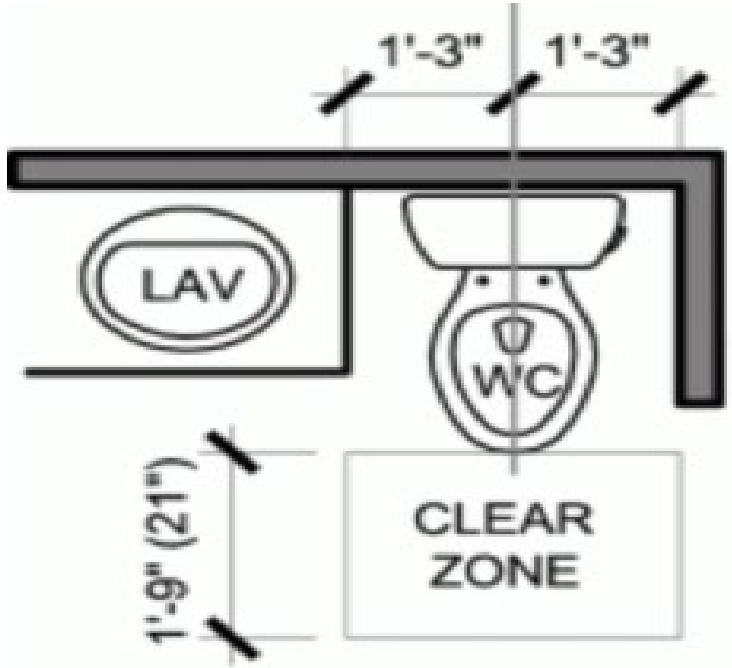


AIR GAP AND
EFFECTIVE OPENING

405.1 water supply protection- the supply lines and fittings for every plumbing fixture shall be installed so as to prevent backflow.

405.2 Access for cleaning- plumbing fixtures shall be so as to afford easy access for cleaning both the fixture and the area around the fixture.





SECTION 405 INSTALLATION OF FIXTURES

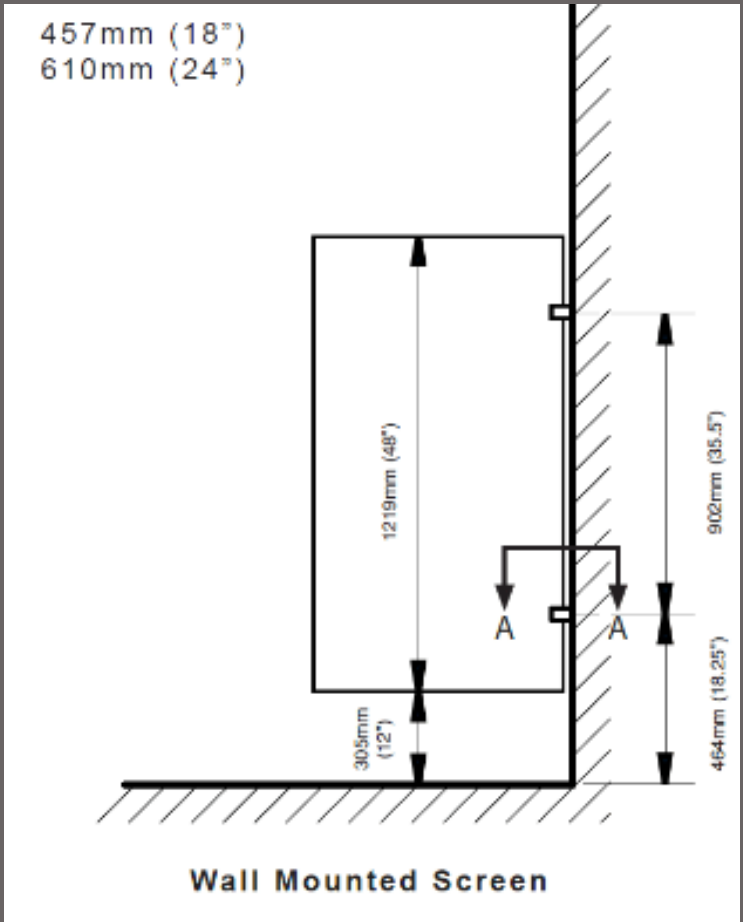
405.3 Setting- fixtures shall be set level and in proper alignment with reference to adjacent walls.

405.3.1 water closets, urinals, lavatories and bidets- a water closet, urinal, lavatory or bidet shall not be closer than15 inches from is center to any wall, partition, vanity, or other obstruction, or closer than 30 inches center to center between adjacent fixtures.

There shall be not less than a 21-inch clearance in front of the water closet, urinal, lavatory, or bidet to any wall, fixture or door.

Water closet compartments shall not be less than 30 inches in width and not less than 60 inches in depth for floor-mounted water closets and not less than 30inches in width and 56 inches in depth for wall hung water closets.

SECTION 405 INSTALLATION OF FIXTURES



405.3.5 urinal partitions- each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy.

The walls or partitions shall begin not greater than 12" from and extend not less than 60" above the finished floor surface.

The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18" or to a point not less than 6"beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

SECTION 405 INSTALLATION OF FIXTURES

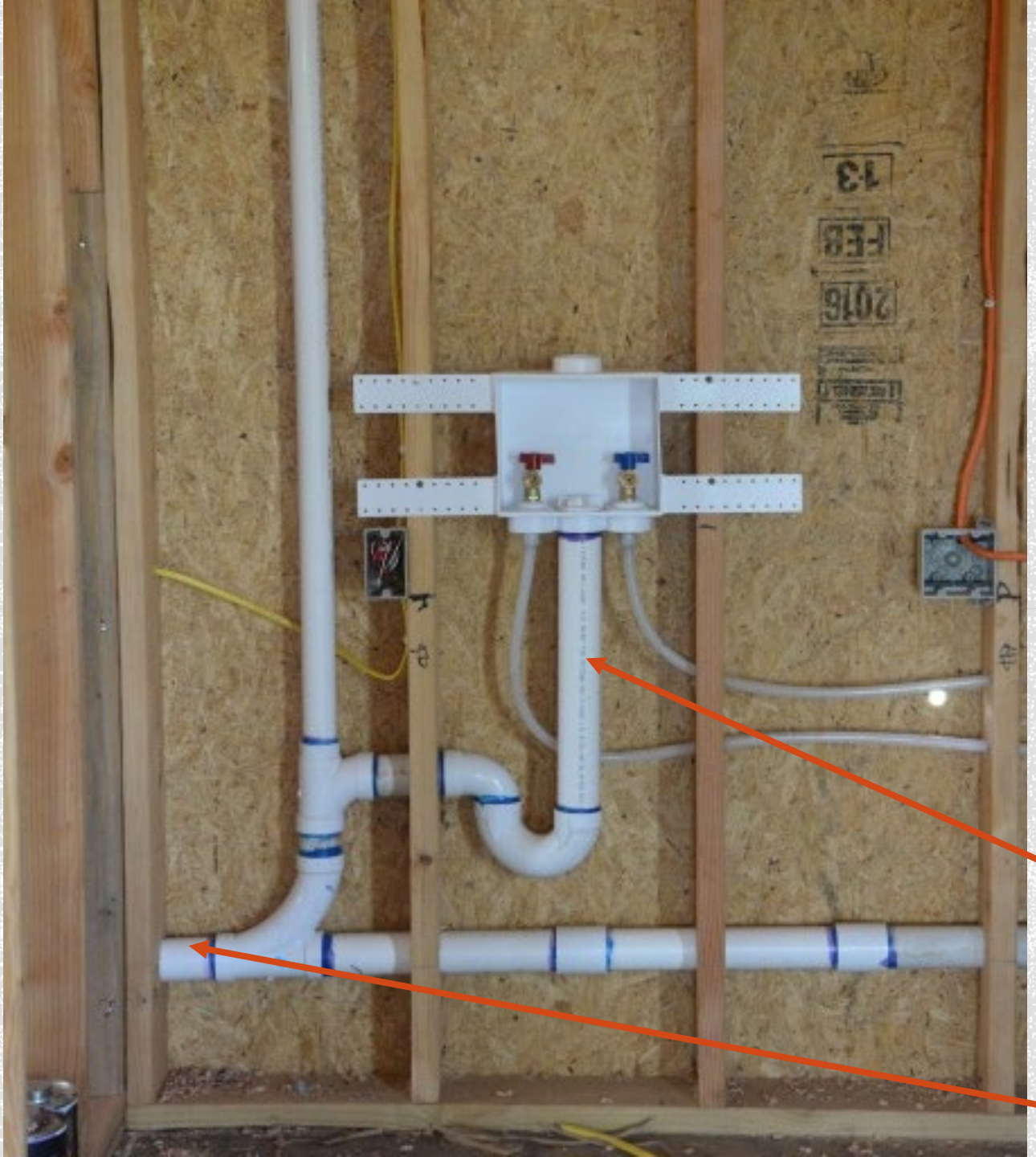
405.3.2 public lavatories- in employee and public toilet rooms, the required lavatory shall be located in the same room as the required water coset.

Except in education K-5, lavatories may be provided in a common toilet room vestibule, visible from the corridor.

SECTION 405 INSTALLATION OF FIXTURES

405.3.4 water closet compartment- each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy.

Exceptions- single occupant toilet rooms with a lockable door- toilets in childcare facilities- group I-3 occupancy housing areas.



SECTION 406 AUTOMATIC CLOTHES WASHERS

406.1 water connection- the water supply to an automatic clothes washer shall be protected against backflow by an air gap that is integral with the machine, or a backflow preventer shall be installed in accordance with section 608.

406.2 waste connection- the waste connection from an automatic clothes washer shall connect to a vertical drain of not less than 2”in diameter, or a horizontal drain of not less than 3”in diameter.

The 2”trap in the waste connection may be used as a cleanout for both the 2” and 3” drains.

In retro fit or remodel work, automatic domestic clothes washers shall be permitted to drain to a laundry sink.

Automatic clothes washers that discharge by gravity shall be permitted to drain to a waste receptor or an approved trench drain.

SECTION 407 BATHTUBS

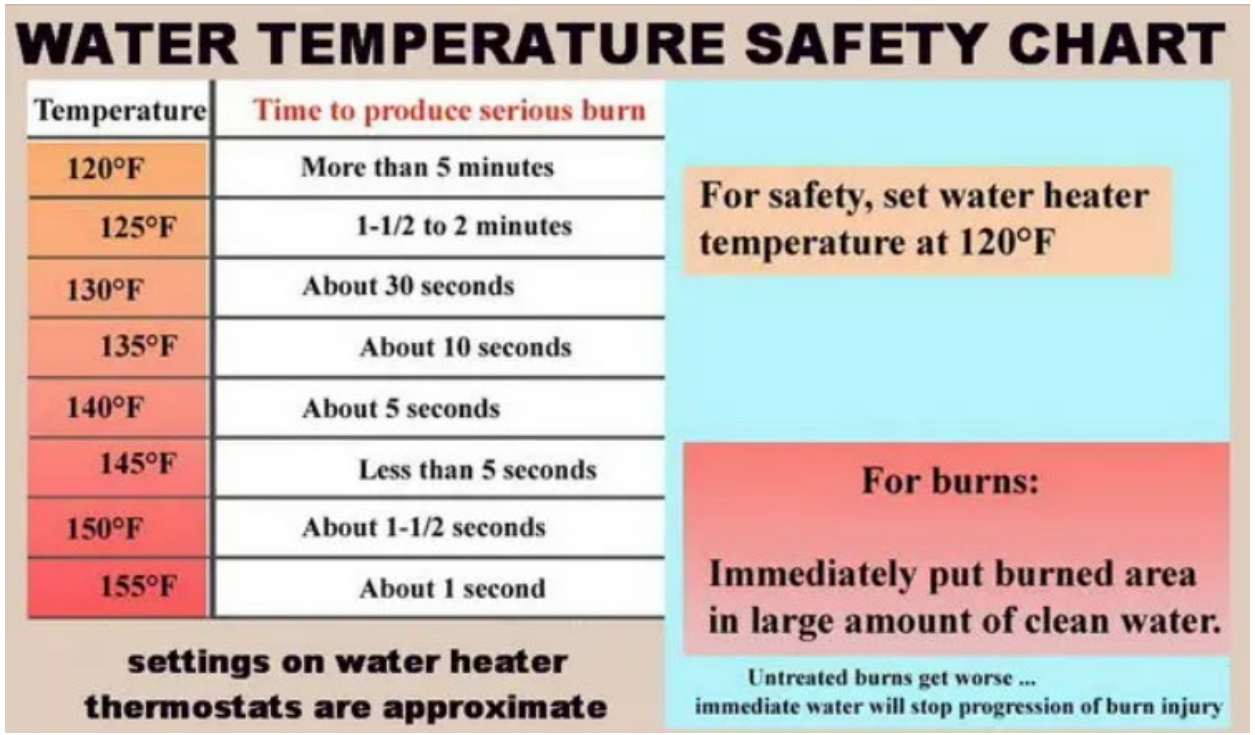
407.2 Bathtub waste outlets and overflows- bathtubs shall be equipped with a waste outlet and overflow outlet.

The outlets shall be connected to waste tubing or piping not less than 1½" in diameter.

The waste outlet shall be equipped with a water-tight stopper.

407.5 bathtub and whirlpool valves- hot water supplied to bathtubs and whirlpool bathtubs shall be limited to a temperature of not greater than 120 degrees F by a water-temperature limiting device.

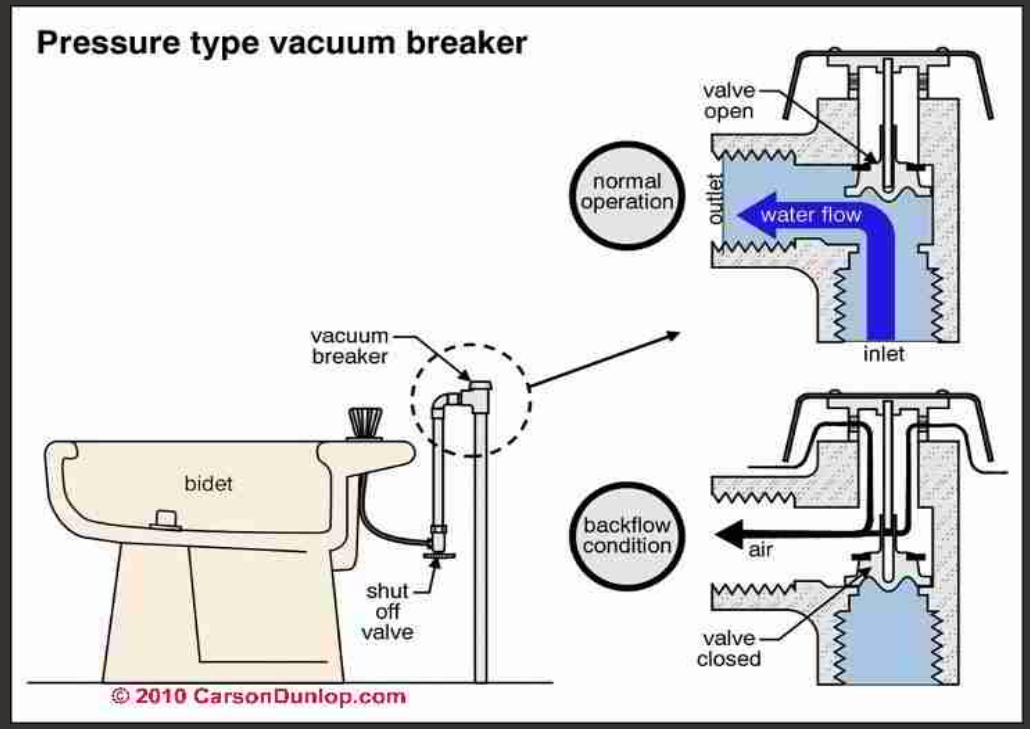
Except as other wise provided in 424.3.



SECTION 408 BIDETS

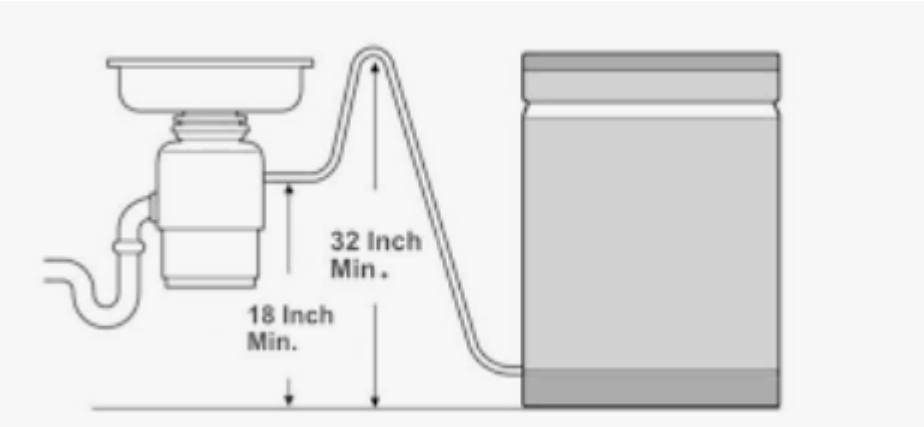
408.2 water connection- the water supply to a bidet shall be protected against backflow by an air gap or a backflow preventer in accordance with chapter 6.

408.3 Bidet water temperature- the discharge water temperature from a bidet fitting shall be limited to a maximum temperature of 110-degree F. by a water temperature limiting device.

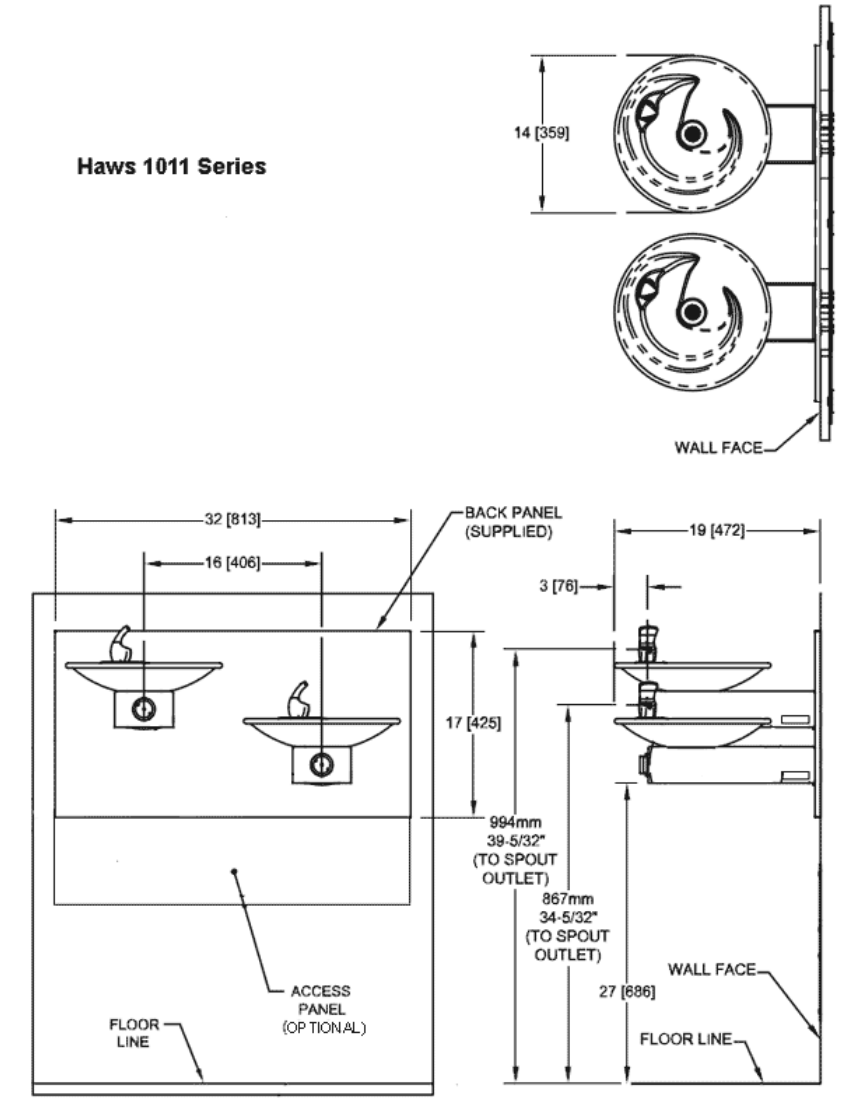


409 DISHWASHING MACHINES

Commerical-ASSE 1004



SECTION 410
DRINKING FOUNTAINS



410.3 provide high and low drinking fountains- where drinking fountains are required, not fewer than 2 drinking fountains shall be provided .

One drinking fountain shall comply with the requirements for people who use a wheelchair and one drinking fountain shall comply with the requirements for standing persons.

Exceptions- one fountain with two spouts complying with the requirements- fountains for children are allowed to be at 30".

410.4 substitution- where restaurants, night clubs, taverns or bars provide drinking water in a container free of charge, drinking fountains shall not be required in those establishments.

SECTION 410 DRINKING FOUNTAINS

The ADA height and reach are required for the bottle fill as well.

Remember that the spout height are also covered in the ADA standards.

410.5 PROHIBITED LOCATIONS- DRINKING FOUNTAINS OR WATER COOLERS OR WATER DISPENSERS SHALL NOT BE INSTALLED IN PUBLIC RESTROOMS.

SECTION 411 EMERGENCY SHOWER AND EYE WASH STATIONS

411.1 Approval- water supplies to eyewash stations shall be tepid water temperature from 60 degrees to no more than 100 degrees.

411.2 waste connection- waste connection shall not be required for emergency showers and eye wash stations.

SECTION 412 FLOOR AND TRENCH DRAINS

412.2 floor drains- floor drains shall have removable strainers.

The floor drain shall be constructed so that the drain is capable of being cleaned.

Access shall be provided to the drain inlet ready access shall be provided to floor drains.

Exception- floor drains serving refrigerated display cases shall be provided with access

SECTION 412 FLOOR AND TRENCH DRAINS

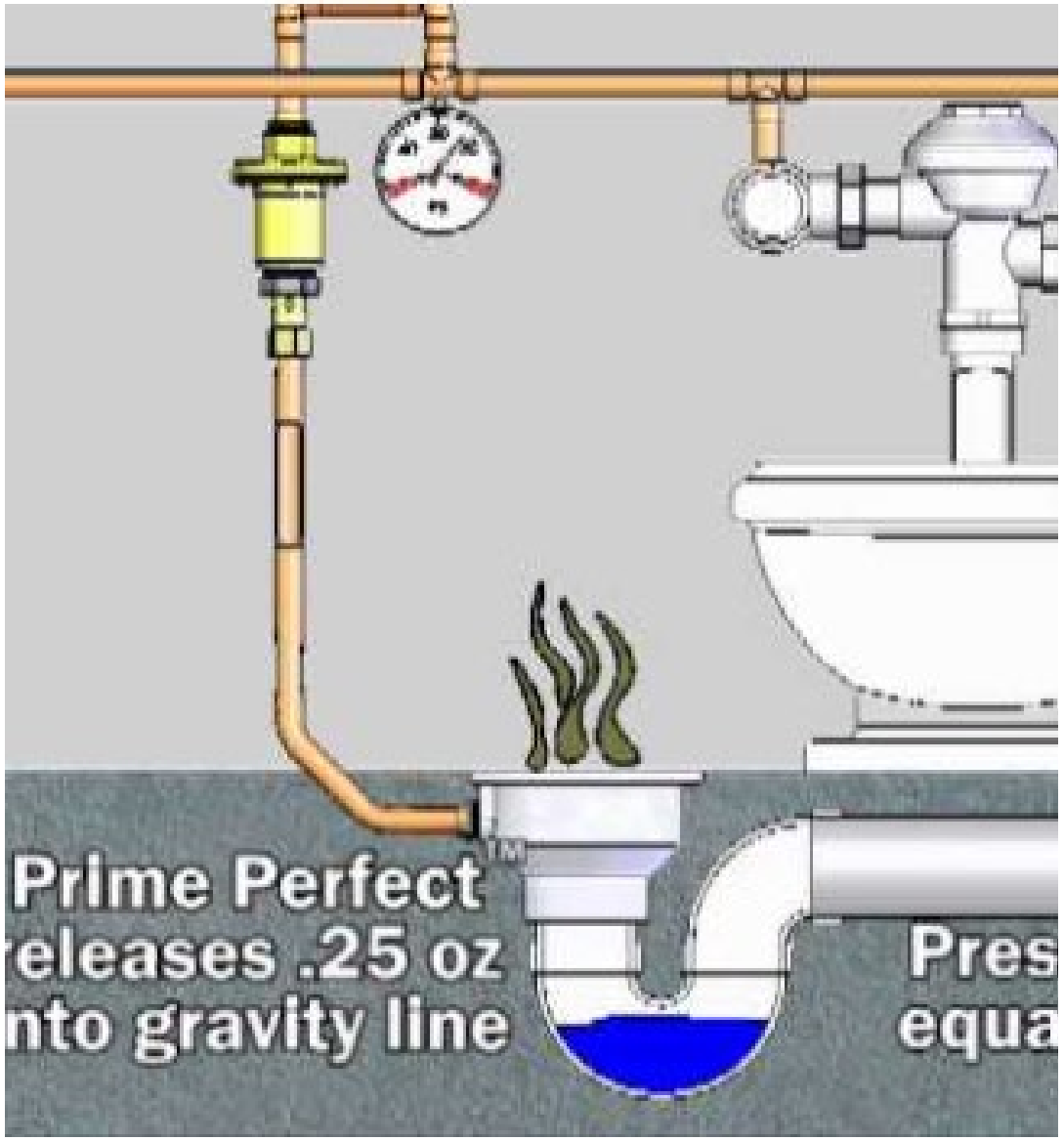
412.3 size of floor drains- floor drains shall have a drain outlet not less than 2" in diameter.

412.5 location- floor drains shall be located to drain the entire floor area.

412.6 trap primers- the water seal of floor drain traps shall be maintained in conformance to section 1002.4.

Trap seals, or another method acceptable to the authority having jurisdiction.

Exception- hose bib located in the rooms with nonabsorbent floors may be used in lieu of an automatic trap primer.


Prime Perfect
releases .25 oz
nto gravity line
Pres
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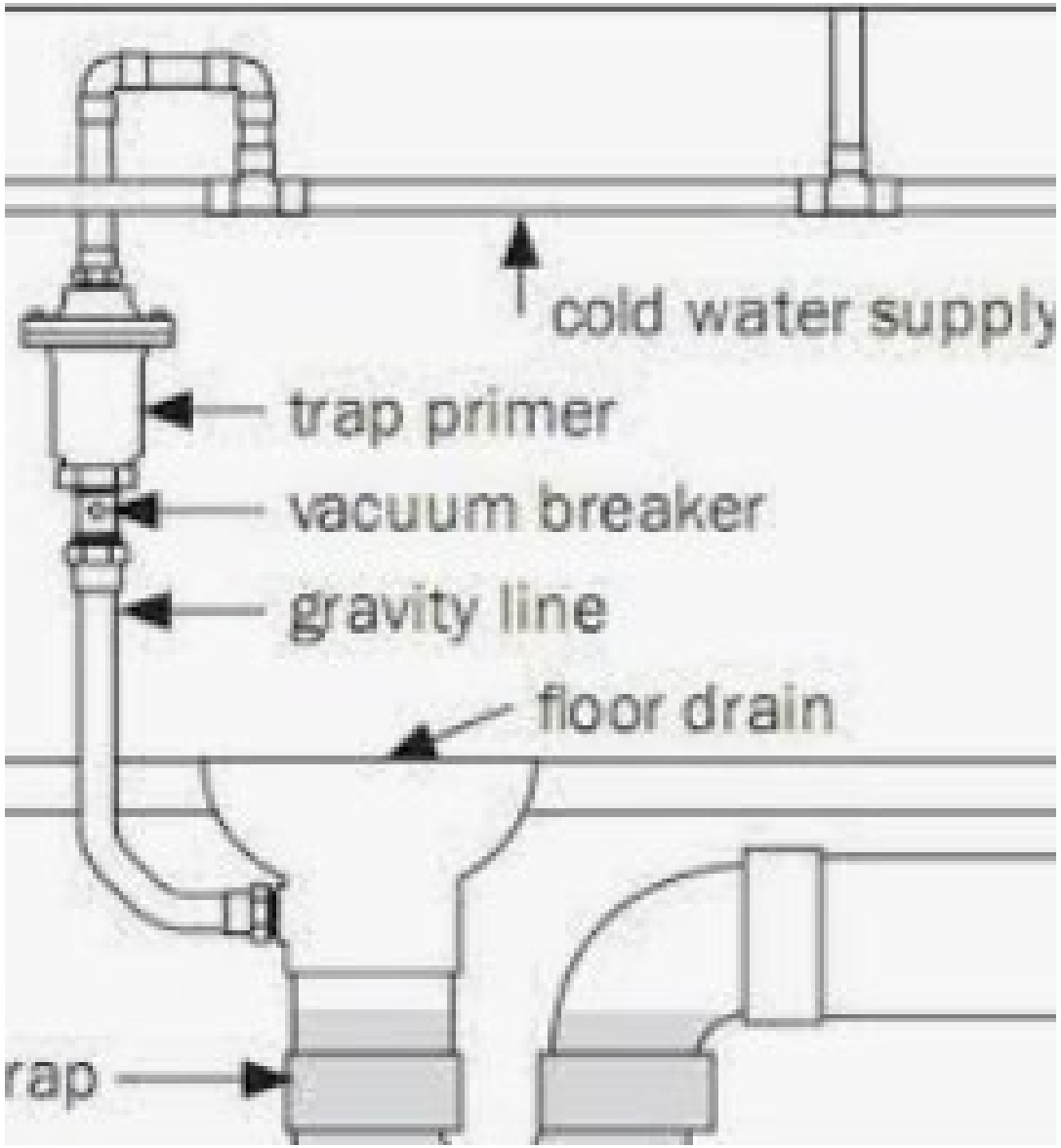

cold water supply
trap primer
vacuum breaker
gravity line
floor drain
rap

SECTION 413 FOOD WASTE DISPOSER UNITS

413.32 domestic food waste disposer waste outlets- domestic food waste outlets shall be connected to a drain of not less than 1 ½" in diameter.

413.3 Commercial food waste disposer waste outlets- Commercial food waste disposers shall be connected to a drain not less than 1.5" in diameter.

Commercial food waste disposers shall be connected and trapped separately from any other fixtures or sink compartments.

413.4 water supply required- food waste disposers shall be provided with a supply of cold water.

The water supply shall be protected against backflow.

SECTION 414 GARBAGE CAN WASHERS

414.1 Water connection- The waler supply Lo a garbage can washer shall be protected against backflow by an air gap or a backflow preventer in accordance with Section 608.13.1, 608.13.2, 608.13.3, 608.13.5, 608. 13.6 or 608.13.8.

414.2 Waste connection- Garbage can washers shall be trapped separately. The receptacle receiving the waste from the washer shall have a removable basket or strainer to pre- vent the discharge of particles 1L, • inch(] 3 mm) or larger into the drainage system.

SECTION 415 LAUNDRY TRAYS

415.2 Waste outlet- Each compartment of a laundry tray shall be provided with a waste outlet not less than 1 1/2 inches (38 mm) in diameter and a strainer or crossbar to restrict the clear opening of the waste outlet.

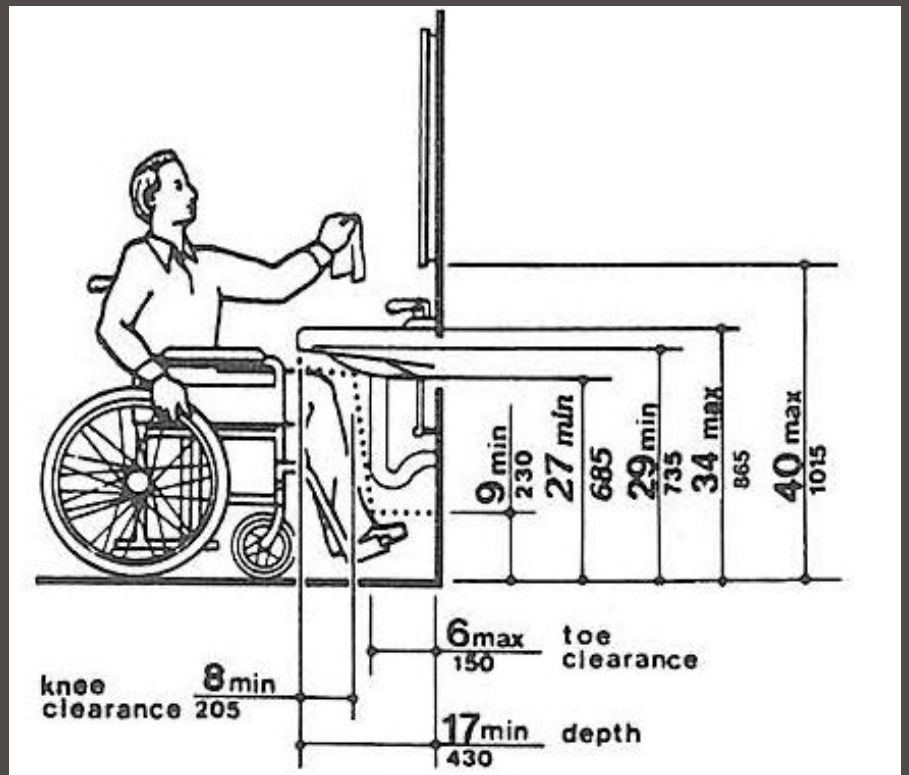


Fig. 31
Lavatory Clearances

SECTION 416 LAVATORIES

416.1 Approval- Every 20 inches (508 mm) of rim space shall be considered as one lavatory.

416.3 Lavatory waste outlets- Lavatories shall have waste outlets not less than 11 /4 inches in diameter.

A strainer, pop-up stopper, crossbar or other device shall be provided to restrict the clear opening of the waste outlet.

416.4 Moveable lavatory systems. Moveable lavatory systems shall comply with ASME Al 12.19.12.

416.5 Tempered water for public hand-washing facilities- When hot water is provided to a public hand-washing facility, such water shall be tempered water delivered through an approved water-temperature limiting device that conforms to ASSE 1070 or CSA B 125.3.

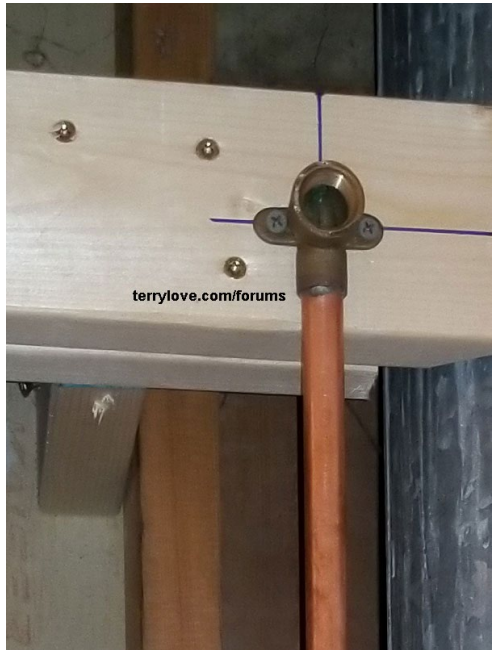
MOVEABLE LAVATORIES

ASME A112.19.12

PUBLIC HANDWASHING

416.5 Tempered Water for Public Hand-Washing Facilities Amendment

When hot water is provided to a public hand-washing facility, such water shall be tempered water delivered through an approved water-temperature limiting device that conforms to ASSE 1070 or CSA B125.3.

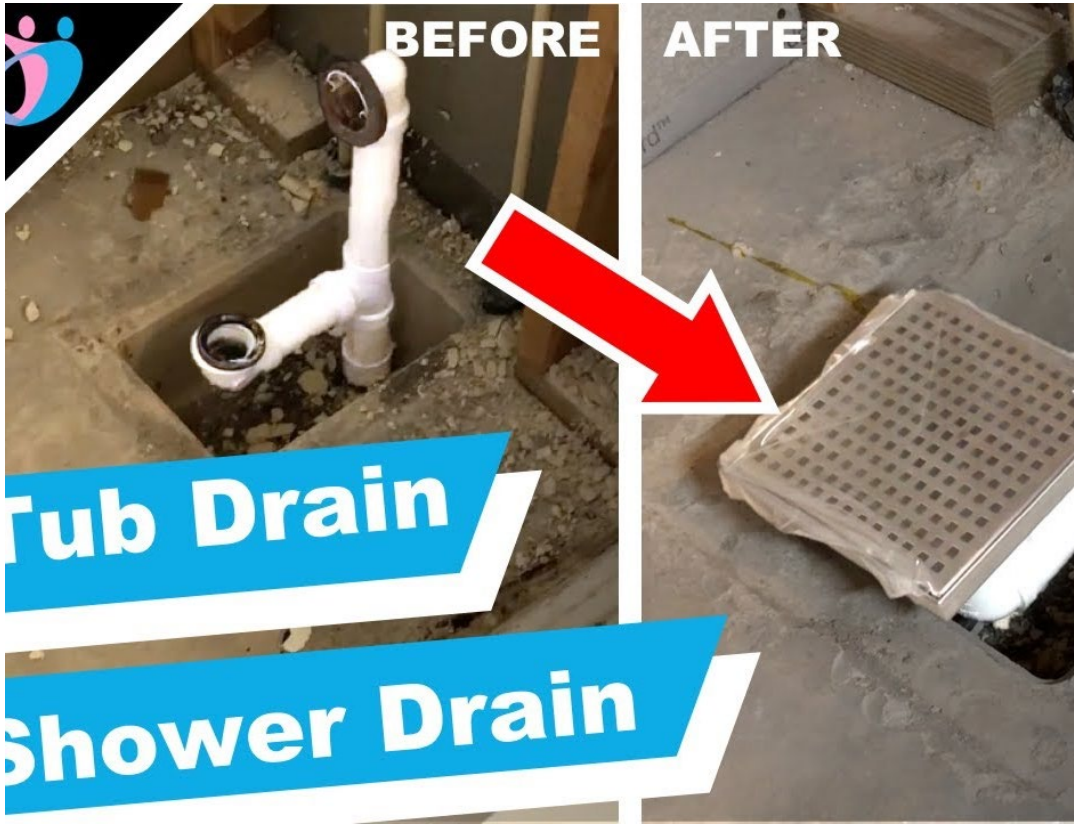


SECTION 417 SHOWERS

417.2 Water supply riser- Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure.

The attachment to the structure shall be made using support devices designed for use with the specific piping material or by fittings anchored with corrosion-resistant screws of a minimum nominal length of 3/4 inch.

SECTION 417 SHOWERS



417.3 Shower waste outlet- Waste outlets serving showers shall be not less than 2 inches in diameter and, for other than waste outlets in bathtubs, shall have removable strainers not less than 3 inches in diameter with strainer openings not less than 1/4 inch in least dimension.

Where each shower space is not provided with an individual waste outlet, the waste outlet shall be located and the floor pitched so that waste from one shower does not flow over the floor area serving another shower.

Waste outlets shall be fastened to the waste pipe in an approved manner.

Exception: Retaining pre-existing 11/2 inch in diameter waste outlets shall be permitted when removing an existing bathtub and installing a shower in its place.

SECTION 417 SHOWERS

417.4 Shower compartments- Shower compartments shall be not less than 900 square inches in interior cross sectional area.

Shower compartments shall be not less than 30 inches in least dimension as measured from the finished interior dimension of the compartment, exclusive of fixture valves, showerheads, soap dishes and safety grab bars or rails.

Except as required in Section 404, the minimum required area and dimension shall be measured from the finished interior dimension at a height equal to the top of the threshold and at a point tangent to its centerline and shall be continued to a height not less than 70 inches above the shower drain outlet.

SECTION 417 SHOWERS

417.4.1 Floor and wall area- Bathtub floors, shower floors, wall areas above built-in tubs that have installed shower heads and walls in shower compartments shall be constructed of smooth, corrosion-resistant and nonabsorbent waterproof materials.

Wall materials shall extend to a height of not less than 6 feet above the room floor level, and not less than 70 inches above the drain of the tub or shower.

Such walls shall form a water-tight joint with each other and with either the tub or shower floor.

SECTION 417 SHOWERS

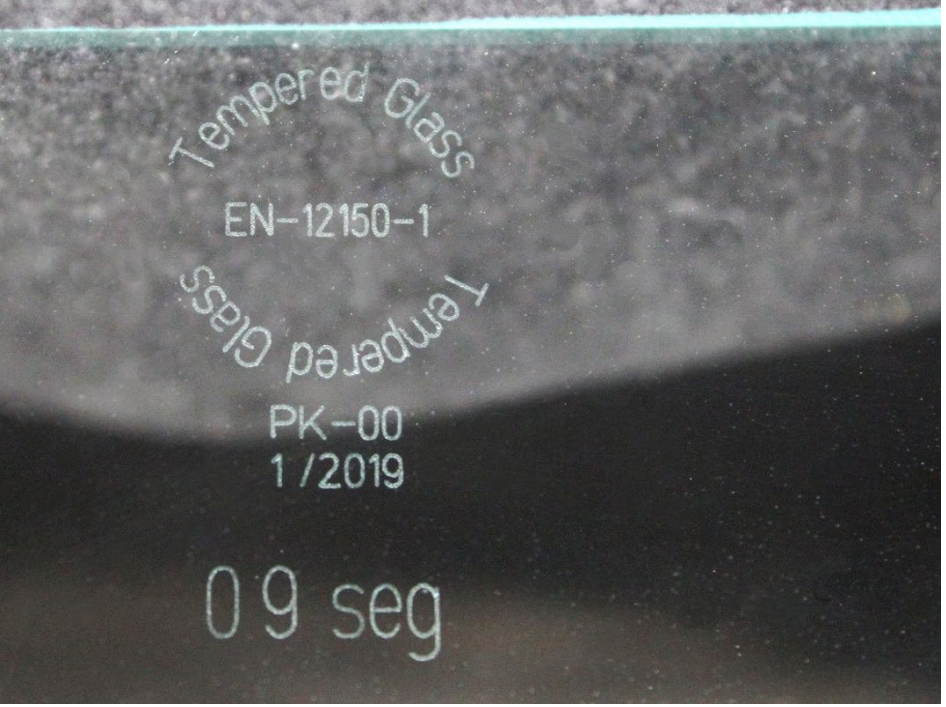
417.5.2 Shower lining- Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made watertight utilizing material complying with Sections 417.5.2.1 through 417.5.2.6.

Such liners shall turn up on all sides not less than 2 inches (51 mm) above the finished threshold level.

Liners shall be recessed and fastened to an approved backing so as not to occupy the space required for wall covering and shall not be nailed or perforated at any point less than 1 inch above the finished threshold.

Liners shall be pitched a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) and shall be sloped toward the fixture drains and be securely fastened to the waste outlet at the seepage entrance, making a water-tight joint between the liner and the outlet.

The completed liner shall be tested in accordance with Section 312.9.



SECTION 417 SHOWERS

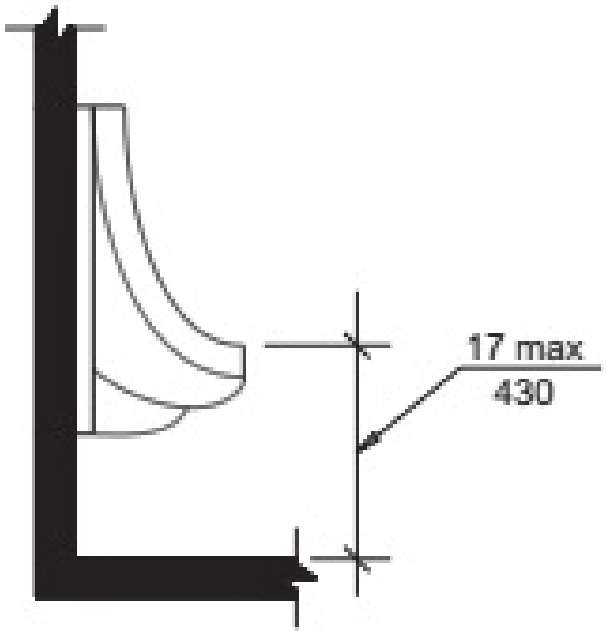
417.6 Glazing- Windows and doors within a shower enclosure shall conform to the safety glazing requirements of the International Building Code.

SECTION 418 SINKS

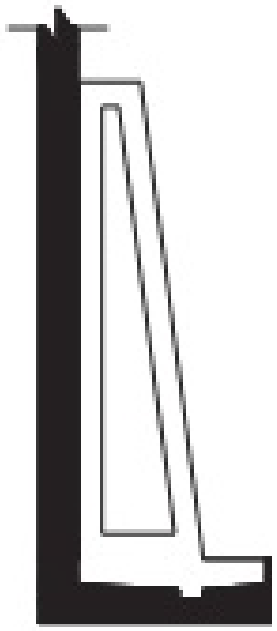
418.2 Sink waste outlets- Sinks shall be provided with waste outlets having a diameter not less than 1 1/2 inches.

A strainer or crossbar shall be provided to restrict the clear opening of the waste outlet.

SECTION 419 URINALS



(a)
Wall Hung Type



(b)
Stall Type

419.1 Approval- Urinals shall conform to the water consumption requirements of Section 604.4.

Water-supplied urinals shall conform to the hydraulic performance requirements of ASME Al 12.19.2/CSA B45.l or CSA B45.5/IAPMO Z124.

419.2 Substitution for water closets- In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies.

Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.

SECTION 420 WATER CLOSETS

420.2 Water closets for public or employee toilet facilities- Water closet bowls for public or employee toilet facilities shall be of the elongated type.

420.3 Water closet seats- Water closets shall be equipped with seats of smooth, nonabsorbent material.

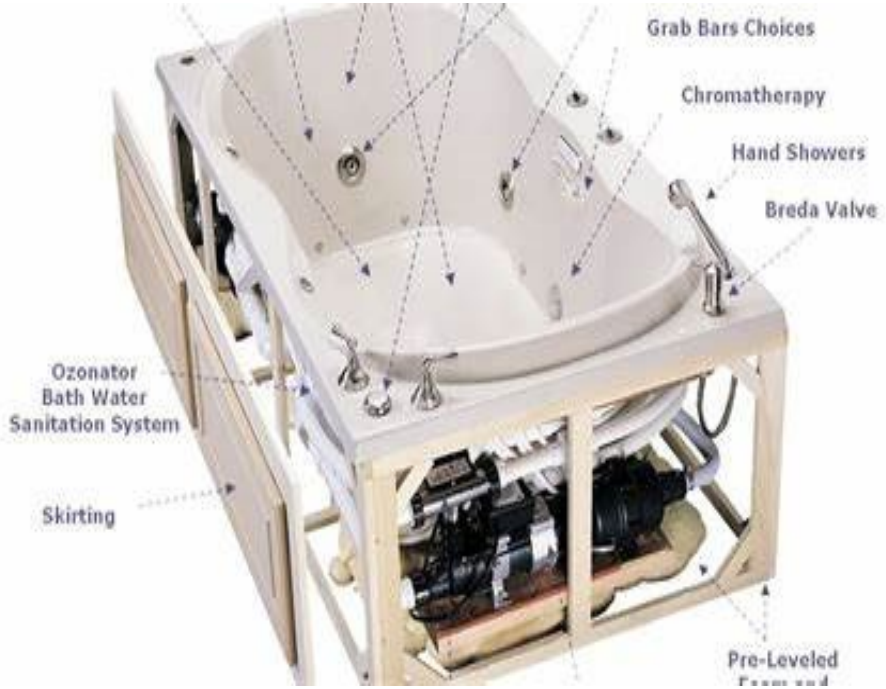
All seats of water closets provided for public or employee toilet facilities shall be of the hinged open-front type.

Integral water closet seats shall be of the same material as the fixture.

Water closet seats shall be sized for the water closet bowl type.

420.4 Water closet connections- A 4-inch by 3-inch closet bend shall be acceptable. Where a 3- inch bend is utilized on water closets, a 4-inch by 3- inch flange shall be installed to receive the fixture horn.

SECTION 421 WHIRLPOOL BATHTUBS



421.1 Approval- Whirlpool bathtubs shall comply with ASME A 112.19.7/CSA B45.10 and shall be listed and labeled in accordance with UL 1795.

421.2 Installation- Whirlpool bathtubs shall be installed and tested in accordance with the manufacturer's instructions.

The pump shall be located above the weir of the fixture trap.

Leak testing and pump operation shall be performed in accordance with the manufacturer's instructions.

421.3 Drain- The pump drain and circulation piping shall be sloped to drain the water in the volute and the circulation piping when the whirlpool bathtub is empty.

SECTION 421 WHIRLPOOL BATHTUBS

421.5 Access to pump- Access shall be provided to circulation pumps in accordance with the fixture or pump manufacturer's installation instructions.

Where the manufacturer's instructions do not specify the location and minimum size of field-fabricated access openings, an opening not less than 12 inches by 12 inches shall be installed to provide access to the circulation pump.

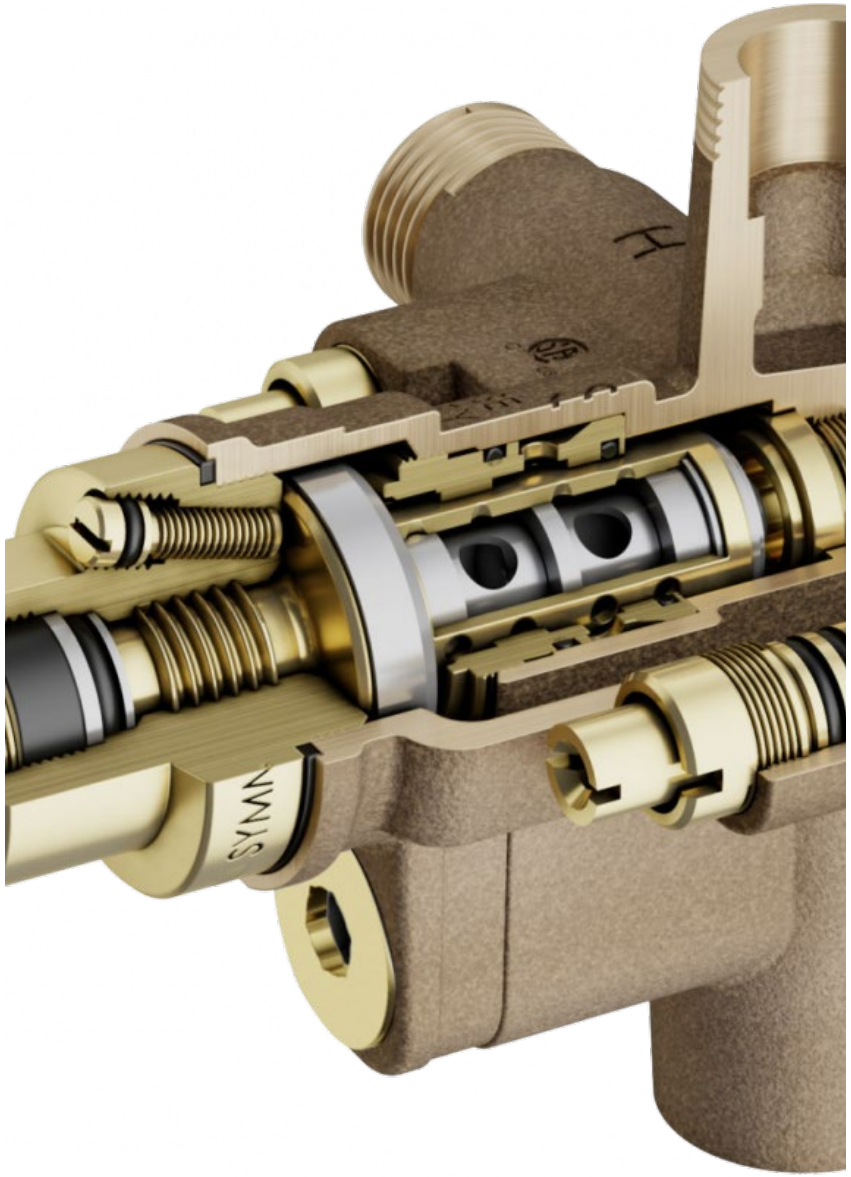
Where pumps are located more than 2 feet from the access opening, an opening not less than 18 inches by 18 inches shall be installed.

A door or panel shall be permitted to close the opening.

In all cases, the access opening shall be unobstructed and of the size necessary to permit the removal and replacement of the circulation pump.

A minimum clearance of 21 inches is required in front of the access door.

Removal of a toilet cannot be used to obtain the required clearance.



SECTION 421 WHIRLPOOL BATHTUBS

421.7 (P2713.3) Bathtub and whirlpool bathtub valves- Hot water supplied to bathtubs and whirlpool bathtubs shall be limited to a temperature of not greater than 120°F by a water-temperature limiting device that conforms to ASSE 1070 or CSA B125.3,

except where such protection is otherwise provided by a combination tub/shower valve in accordance with Section 424.3.

SECTION 424 FAUCETS AND OTHER FIXTURE FITTINGS

424.2 Hand showers- Hand-held showers shall conform to ASME Al 12. 1 8. 1/CSA B125.1. Hand-held showers shall provide backflow protection in accordance with ASME A I 12.18.1 /CSA B 125.1 or shall be protected against backflow by a device complying with ASME A 112.18.3.

424.3/424.5 Individual shower and tub valves- Individual shower and tub/shower combination valves shall be balanced-pressure, thermostatic or combination balanced-pressure/thermostatic valves that conform to the requirements of ASSE 1016/ASME Al 12.1016/CSA B125.16 or ASME A112.18.I/CSA B125.1 and shall be installed at the point of use.

Shower and tub-shower combination valves required by this section shall be equipped with a means to limit the maximum setting of the valve to 120°F which shall be field adjusted in accordance with the manufacturer's instructions.

In-line thermostatic valves shall not be utilized for compliance with this section.

Scald preventative valves are not required in dwelling units with individual water heaters set at 120°F.

SECTION 425 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS

425.1 Flushing devices required- Each water closet, urinal, clinical sink and any plumbing fixture that depends on trap siphonage to discharge the fixture contents to the drainage system shall be provided with a flushometer valve, flushometer tank or a flush tank designed and installed to supply water in quantity and rate of flow to flush the contents of the fixture, cleanse the fixture and refill the fixture trap.

Exception- waterless urinal

SECTION 425 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS

425.2 Flushometer valves and tanks- Flushometer valves and tanks shall comply with ASSE 1037 or CSA B 125.3.

Vacuum breakers on flushometer valves shall conform to the performance requirements of ASSE 1001 or CSA B64. 1.1.

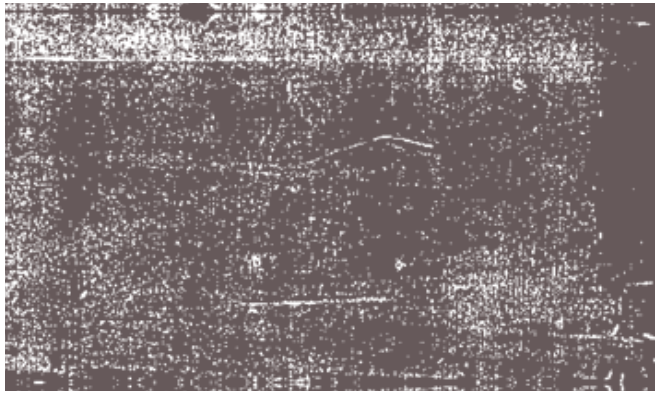
Access shall be provided to vacuum breakers.

Flushometer valves shall be of the water conservation type and shall not be used where the water pressure is lower than the minimum required for normal operation.

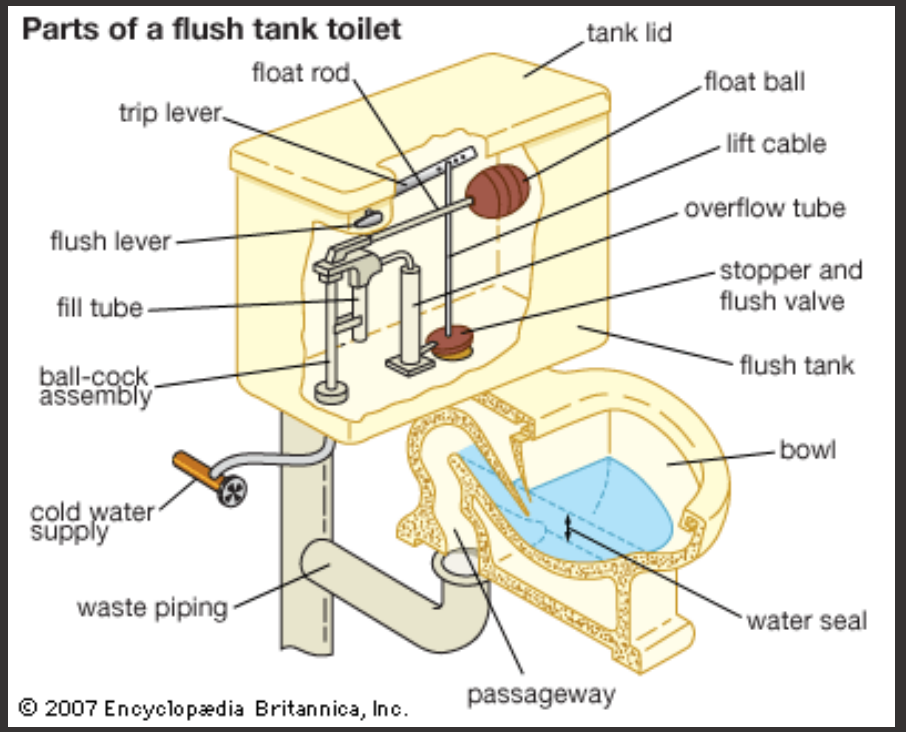
When operated, the valve shall automatically complete the cycle of operation, opening fully and closing positively under the water supply pressure.

Each flushometer valve shall be provided with a means for regulating the flow through the valve.

The trap seal to the fixture shall be automatically refilled after each flushing cycle.



SECTION 425 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS



425.3 Flush tanks- Flush tanks equipped for manual flushing shall be controlled by a device designed to refill the tank after each discharge and to shut off completely the water flow to the tank when the tank is filled to operational capacity.

The trap seal to the fixture shall be automatically refilled after each flushing.

The water supply to flush tanks equipped for automatic flushing shall be controlled with a timing device or sensor control devices.

425.3.1 Fill valves- Flush tanks shall be equipped with an antisiphon fill valve conforming to ASSE 1002 or CSA B 125.3.

The fill valve backflow preventer shall be located not less than 1 inch above the full opening of the overflow pipe.

425.3.2 Overflows in flush tanks- Flush tanks shall be provided with overflows discharging to the water closet or urinal connected thereto and shall be sized to prevent flooding the tank at the maximum rate at which the tanks are supplied with water according to the manufacturer's design conditions.

The opening of the overflow pipe shall be located above the flood level rim of the water closet or urinal or above a secondary overflow in the flush tank.

425.3.4 Access required- All parts in a flush tank shall be accessible for repair and replacement.

SECTION 426 MANUAL FOOD AND BEVERAGE DISPENSING EQUIPMENT

426.1 Approval. Manual food and beverage dispensing equipment shall conform to the requirements of NSF 18 .

REMEMBER BACKFLOW CONNECTIONS

SECTION 427 FLOOR SINKS

427.1 Approval- Sanitary floor sinks shall conform to the requi1·ements of ASME A 112.6.7.

THANKS…. QUESTIONS, COMMENTS?

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