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## UPC Requirements

The state of Alaska has adopted the Uniform Plumbing Code. This is a list of common issues that we encounter during code inspections. This is not a full list of all requirement in the building code, contact us if you have questions.

### 312.9 Nail Plates

- Plastic or copper pipe protected within 1 " of exposed framing edge
- Minimum 18 gauge plates
- Plates extend $1.5^{\prime \prime}$ beyond outside of piping


### 312.10 Sleeves

- Piping through concrete or masonry walls or floors must be sleeved


### 312.10.3 Firewalls

- Annular space around piping passing though fire walls sealed (garage/house common walls)


### 314.1 Trenches

- Piping cannot be buried parallel to the footing within the "cone of compression"
- Piping must be above $45^{\circ}$ from the bottom exterior edges of the footing


### 402.5 Sanitation Requirements

- Toilets $30^{\prime \prime}$ minimum width, $24^{\prime \prime}$ in front
- Lavs $24^{\prime \prime}$ in front


### 408.6 Shower Compartments

- Minimum 1024 square inches
- Minimum 30 inch circle
- Minimum 70 inches in height


### 409.6 Whirlpool Access

- Whirlpool tubs must have removable panel for access


### 507.2 Seismic

- Seismic categories C, D, E, and F require earthquake strapping, including storage only tanks
- Straps on upper and lower third of tank
- $4^{\prime \prime}$ above controls


### 507.13 Garages

- Appliances in garages, appliances in spaces off of garage that are not part of the dwelling unit
- Burner must be elevated 18 " off of the floor
- Appliances protected from vehicular impact


### 509.8.1 Mechanical Draft Vents

- Mechanical draft vent systems must be at least 3 feet above any forced air inlet within 10 feet
- Must terminate 4 feet below, 4 feet horizontally from, or 1 foot above any openings into the building
- Must be 24 inches above grade


### 509.8.2 Direct Vent Appliances

- $<10,000 \mathrm{BTU} / \mathrm{h}-6$ inches from openings
- $10,000<50,000 \mathrm{BTU} / \mathrm{h} 9$ inches from openings
- >50,000 BTU/h 12 inches from openings
- Must be 24 inches above grade


### 603.4.4 Connections

- Direct connection between potable water piping and sewer not permitted
- Air gap twice outlet pipe diameter, no less than $1^{\prime \prime}$
- Direct connection to inlet side of trap allowed if vacuum breaker above flood rim level is installed (Dishwasher air gap)


## 608.4\&5 Pressure Relief Valves

- No part of pipe trapped
- No part of pipe subject to freezing
- No threads on terminal end
- Cannot discharge into drain pan
- Must be equal to size of valve outlet
- Must point down
- Must be rated to the temperature of the system
- Must discharge though an air gap to drainage systems
- Discharge between 6 " and 24 "
- Discharge cannot cause personal injury or structural damage
- Approved materials: galvanized steel, hard copper, CPVC


### 706.2 Horizontal Drainage to Vertical Drainage

- $45^{\circ}$ wyes
- $60^{\circ}$ wyes
- Combination wyes
- Sanitary tee
- Sanitary tapped tee
- Or equivalent
- Not more than one fitting on the same level unless discharge cannot travel across
- Double san tee may be used is largest inlet is 2 pipe sizes smaller than the barrel


## 706.3 \& 4 Horizontal \& Vertical Drainage to Horizontal Drainage

- $45^{\circ}$ wye branches
- Combination wye and $1 / 8$ bend
- Or equivalent

$45^{\circ}$ "Y" Branch


Combination " $Y$ " $\& 1 / 8$ bend


Combination

### 707.4 Cleanouts

- Upper terminal of each horizontal drainage pipe
- Each run of more than 100 feet
- Changes in direction exceeding $135^{\circ}$


## 712.2-3 Testing

- Water test - 10' head of water for 15 minutes
- Air test - 5 psi for 15 minutes


## 905.1-2 Vent Grading

- No drops of sags
- Graded back to drainage piping


### 905.3 Vent Rise

- Must rise 6" above flood rim level before horizontal offset
- If not possible structurally, then drainage fittings must be used


### 906.7 Frost Closure

- Minimum 2" diameter
- Minimum 10" above roof


### 909.1 Island Venting

- Only for island fixtures
- Vent extends as high as possible
- Foot vent connects to closest vertical vent stack
- Accessible cleanout in vertical portion of foot vent



## 908.1-3 Vertical Wet Venting

- Allowed if:
- Fixtures located on the same story
- Maximum 4-1 to 2 unit traps
- Developed length less than 6 feet
- Wet vented waste pipe sections 1 pipe size larger
- Wet vented waste pipe sections minimum 2"

Less than four one or two unit trap arms discharging into wet vented portion of piping, serving as a vent for a fifth fixture. Toilet is using wet vent, but is not discharging into wet vent.


### 909.1 Horizontal Wet Vent

- Allowed for bathroom groups if:
- Water closet trap arm downstream
- Only one wet vent fixture above the dry vent
- Minimum 2" for 4 DFUs, 3 " for 5 DFUs or more



### 1003.3 Trap Arm Lengths

|  | Table 1002.2 <br> Horizontal Lengths of Trap Arms <br> Except For Water Closets and Similar Fixtures ${ }^{1,2}$ |  |
| :---: | :---: | :---: |
| Trap Arm Pipe Diameter (inches) | Distance Trap To Vent Minimum (inches) | Length Maximum (inches) |
| 1.25 | 2.5 | 30 |
| 1.5 | 3 | 42 |
| 2 | 4 | 60 |
| 3 | 6 | 72 |
| 4 | 8 | 120 |
| Exceeding 4 | $2 X$ diameter | 120 |

### 1213.3 Gas Outlets

- Secured in place
- Not located behind doors
- Accessible to wrenches without straining pipe
- Minimum 1" unthreaded pipe through ceilings or walls
- Minimum 2" unthreaded pipe through floors or slabs


### 1210.9 Gas Testing

- Minimum 15 minutes
- Minimum 10 psi

This is not a complete list, please let us know if you have any questions!

Sincerely
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