# Wisdom & Associates, Inc.

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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" 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° from the bottom exterior edges of the footing

## **402.5 Sanitation Requirements**

- Toilets 30" minimum width, 24" in front
- Lavs 24" 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" 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 BTU/h 6 inches from openings</li>
- 10,000 < 50,000 BTU/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"
- 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

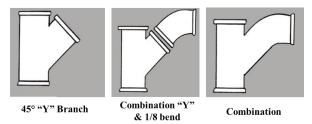
- No part of pipe trapped
- No part of pipe subject to freezing
- No threads on terminal end
- Cannot discharge into drain pan
- Must be equal to size of valve outlet
- Must point down
- Must be rated to the temperature of the system
- Must discharge though an air gap to drainage systems
- Discharge 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° wyes
- 60° 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° wye branches
- Combination wye and 1/8 bend
- Or equivalent



#### 707.4 Cleanouts

- Upper terminal of each horizontal drainage pipe
- Each run of more than 100 feet
- Changes in direction exceeding 135°

### **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

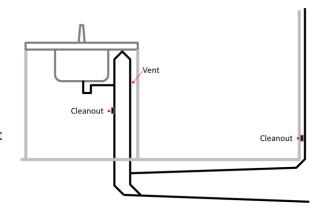
- Must rise 6" above flood rim level before horizontal offset
- If not possible structurally, then drainage fittings must be used

#### 906.7 Frost Closure

- Minimum 2" diameter
- Minimum 10" above roof

# 909.1 Island Venting

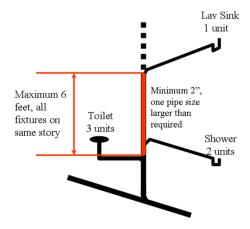
- Only for island fixtures
- Vent extends as high as possible
- Foot vent connects to closest vertical vent stack
- Accessible cleanout in vertical portion of foot vent

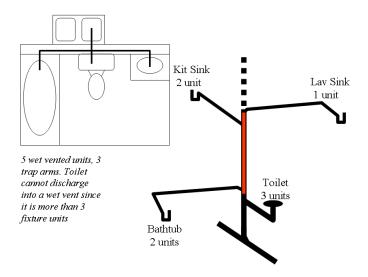


# 908.1-3 Vertical Wet Venting

- 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"

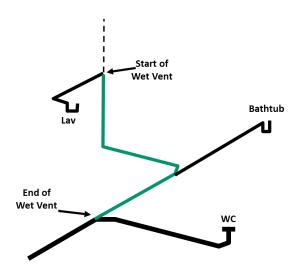
Less than four one or two unit
trap arms
discharging into
wet vented portion
of piping, serving
as a vent for a fifth
fixture. Toilet is
using wet vent, but
is not discharging
into wet vent.





#### 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	
Horizontal Lengths of Trap Arms  Except For Water Closets and Similar Fixtures <sup>1,2</sup>		
1.25	2.5	30
1.5	3	42
2	4	60
3	6	72
4	8	120
Exceeding 4	2X diameter	120
· · · · · · · · · · · · · · · · · · ·		
Maintain 1/4 inch per foot slope	ar fixture (measured from the top fo the cloet flange to the intter edge of the v	

## 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 Robert Moss Wisdom and Associates, Inc.

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