



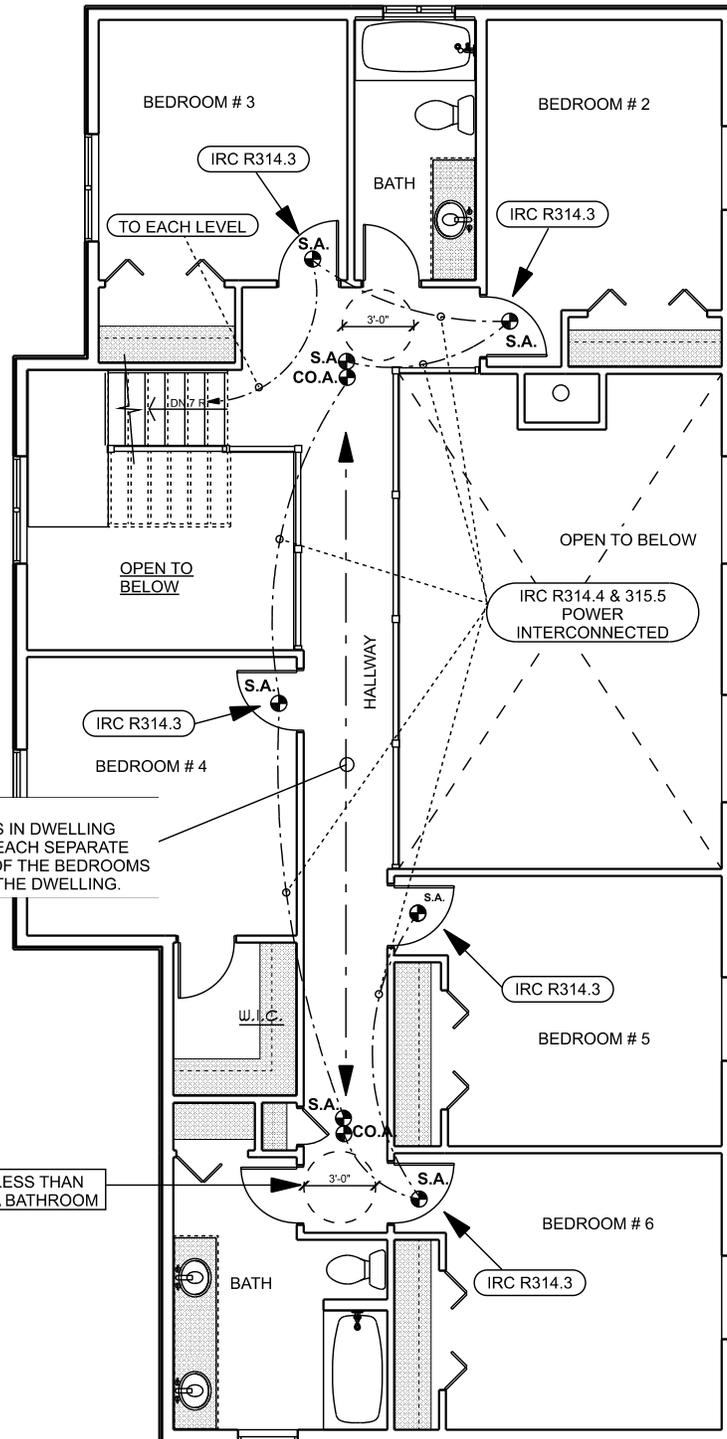


# SMOKE & CO ALARM FLOOR 2

2015 WASHINGTON STATE BUILDING CODES

City of Tukwila  
Building Division/Permit Center  
6300 Southcenter Blvd. #100  
Tukwila, WA 98188  
(206) 431-3670

## SECOND FLOOR



IRC R314.3 & 315.3  
SMOKE AND CARBON MONOXIDE ALARMS IN DWELLING  
UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE  
SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS  
ON EACH BEDROOMS ON EACH LEVEL OF THE DWELLING.

LOCATE NO LESS THAN  
3 FEET FROM A BATHROOM



City of Tukwila  
Building Division/Permit Center  
6300 Southcenter Blvd. #100  
Tukwila, WA 98188  
(206) 431-3670

# SMOKE ALARM CODES

## 2015 WASHINGTON STATE BUILDING CODES

### IRC SECTION R314 SMOKE ALARMS

**R314.1.1 Listings.** Smoke alarms shall comply with NFPA 72 and Section R314.

Smoke alarms shall be listed in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034.

**R314.2 Where required.** Smoke alarms shall be provided in New Construction of dwelling units.

Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

**Exceptions:**

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing, electrical or mechanical systems are exempt from the requirements of this section.

**R314.3 Location.** Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Smoke alarms shall be installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section R314.3.
5. In napping areas in a family home child care.

**R314.3.1 Installation near cooking appliances.** Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section R314.3.

1. Ionization smoke alarms shall not be installed less than 20 feet horizontally from a permanently installed cooking appliance.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet horizontally from a permanently installed cooking appliance.
3. Photoelectric smoke alarms shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance.

**R314.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

**Exception:** Interconnection of smoke alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.

**R314.5 Combination alarms.** Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms.

**R314.6 Power source.** Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

**Exceptions:**

1. Smoke alarms shall be permitted to be battery operated where installed in buildings without commercial power.
2. Smoke alarms installed in accordance with Section R314.2.2 shall be permitted to be battery powered.

**R314.7 Fire alarm systems.** Fire alarm systems shall be permitted to be used in lieu of smoke alarms and shall comply with Sections R314.7.1 through R314.7.4.

**R314.7.1 General.** Fire alarm systems shall comply with the provisions of this code and the household fire warning equipment provisions of NFPA 72. Smoke detectors shall be listed in accordance with UL 268.

**R314.7.2 Location.** Smoke detectors shall be installed in the locations specified in Section R314.3.

**R314.7.3 Permanent fixture.** Where a household fire alarm system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner.

**R314.7.4 Combination detectors.** Combination smoke and carbon monoxide detectors shall be permitted to be installed in fire alarm systems in lieu of smoke detectors, provided that they are listed in accordance with UL 268 and UL 2075.



City of Tukwila  
Building Division/Permit Center  
6300 Southcenter Blvd. #100  
Tukwila, WA 98188  
(206) 431-3670

# CARBON MONOXIDE ALARMS

## 2015 WASHINGTON STATE BUILDING CODES

### IRC SECTION R315 CARBON MONOXIDE ALARMS

#### **R315.1.1 Listings.**

Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.

#### **R315.2 Where required.**

Carbon monoxide alarms shall be provided in accordance with Sections R315.2.1 and R315.2.2.

#### **R315.2.1 New construction.**

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units and on each level of the dwelling in accordance with the manufacturer's recommendation.

**R315.2.2 Alterations, repairs, and additions.** Existing dwellings shall be equipped with carbon monoxide alarms in accordance with Section R315.2.1. An inspection will occur where alterations, repairs, or additions requiring a permit occur, or where one or more sleeping rooms are added or created.

#### **Exceptions:**

1. Work involving only the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, is exempt from the inspection requirements of this section.
2. Installation, alteration or repairs of nonfuel burning plumbing or mechanical systems or electrical systems are exempt from the inspection requirements of this section.
3. Owner-occupied single-family residences legally occupied before July 26, 2009. RCW 19.27.530 (2)(b).

#### **R315.2.2 Alterations, repairs and additions.**

Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

#### **Exceptions:**

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, is exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

#### **R315.3 Location.**

Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms on each level of the dwelling and in accordance with the manufacturer's recommendations. Where a fuel burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

#### **R315.4 Combination alarms.**

Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.

#### **R315.5 Power source.**

Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

#### **Exceptions:**

1. Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power.
2. Carbon monoxide alarms installed in accordance with Section R315.2.2 shall be permitted to be battery powered.

#### **R315.6 Carbon monoxide detection systems.**

Carbon monoxide detection systems shall be permitted to be used in lieu of carbon monoxide alarms and shall comply with Sections R315.6.1 through R315.6.4.

#### **R315.6.1 General.**

Household carbon monoxide detection systems shall comply with NFPA 720. Carbon monoxide detectors shall be listed in accordance with UL 2075.

#### **R315.6.2 Location.**

Carbon monoxide detectors shall be installed in the locations specified in Section R315.3. These locations supersede the locations specified in NFPA 720.

#### **R315.6.3 Permanent fixture.**

Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy and owned by the homeowner.

#### **R315.6.4 Combination detectors.**

Combination carbon monoxide and smoke detectors shall be permitted to be installed in carbon monoxide detection systems in lieu of carbon monoxide detectors, provided that they are listed in accordance with UL 2075 and UL 268.

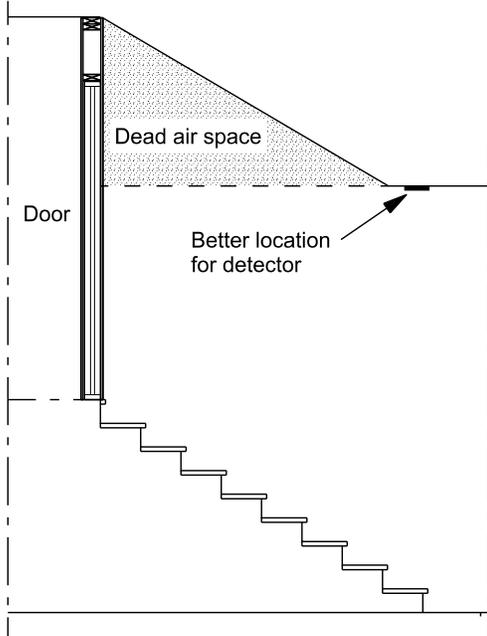
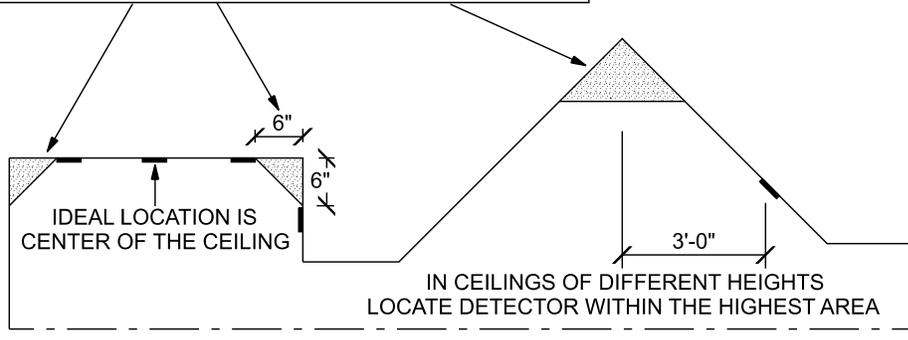


City of Tukwila  
 Building Division/Permit Center  
 6300 Southcenter Blvd. #100  
 Tukwila, WA 98188  
 (206) 431-3670

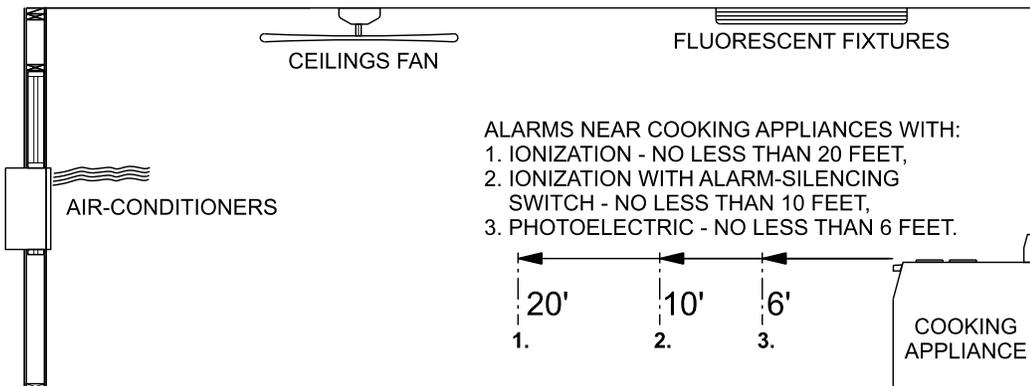
# ALARM LOCATIONS

## 2015 WASHINGTON STATE BUILDING CODES

DO NOT PLACE DETECTORS IN LOCATIONS CONSIDERED TO BE POTENTIAL DEAD AIR SPACES WHERE DETECTORS MAY BECOME INEFFECTIVE.



REFER TO BUILDING CODES FOR MORE SPECIFIC CODE REQUIREMENTS FOR INSTALLATION OF SMOKE AND CARBON MONOXIDE ALARMS (SEE PAGES 3 AND 4)



**AVOID PLACING DETECTORS IN THESE LOCATIONS**