# LARIMER COUNTY | COMMUNITY DEVELOPMENT

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# Conversion to Vacation Home Permit – Life Safety Survey

All dwellings used as short-term rentals (for not more than 30 days) in the Estes Valley Planning Area and outside the Town of Estes Park, shall obtain a Conversion to Vacation Home permit from Larimer County and pass an initial life safety survey and subsequent surveys as determined by the Chief Building Official.

At a minimum, the life-safety survey shall include, but may not be limited to, the following:

- 1. Address identification
- 2. No Unapproved/Unpermitted Uses/Work
- 3. Observable Structural Concerns
- 4. Emergency Escape/Rescue Openings
- 5. Window Wells
- 6. Smoke Alarms
- 7. Carbon Monoxide Alarms
- 8. Fuel Gas Appliances:
  - Approved Locations
  - Dedicated Spaces
  - Required Clearances
  - Combustion Air
  - Approved Venting Systems
  - Temperature/Pressure Relief Valves
  - Proper Condensate Disposal
  - > Rooms Fire-Blocked
  - No Ventless fuel gas appliances
- 9. Home/Garage Separation (Firewalls/Fire doors/Penetrations)
- 10. Environmental Air Duct Terminations (Bath/Laundry)
- 11. Handrails
- 12. Guards
- 13. Cook Stove Anti-Tip Devices
- 14. Wildfire Hazard Defensible Space
- 15. Fire Pits
- 16. Lighting at Exterior Stairs
- 17. Ground-Fault Circuit-Interrupter Protection
- 18. Private Septic Systems Approved by Health Department

(Note: Vacation homes within the Town of Estes Park must obtain a Life Safety Survey permit through the Town of Estes Park Building Department.)

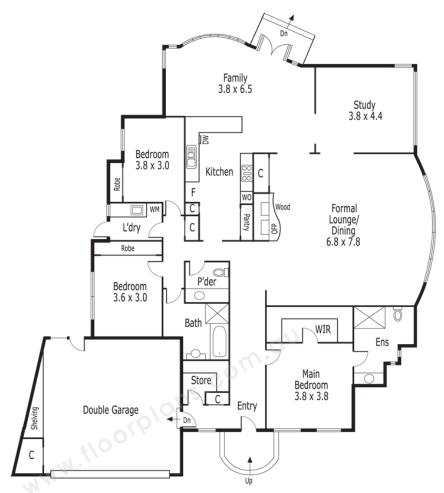
1. Address identification - R319.1 Address numbers shall be plainly visible and legible from the Right-of-Way (ROW). If the house cannot be seen from the ROW, the address numbers must be displayed at the driveway turnoff. Address numbers shall contrast with their background and be a minimum of 4" high with a minimum stroke width of ½".





# 2. No Unapproved/ Unpermitted Uses/Work

Property research done as part of, or prior to, issuing the Conversion to Vacation Home permit will determine if any work was done without permit. If so, a separate as-built permit and inspection approvals must be obtained. The county inspector will use the floor plan approved as part of the building permit to verify all rooms are used for their identified purposes, including the designated sleeping area(s) outside of bedrooms. If more unpermitted work is discovered during the Life-Safety Survey, additional permitting will be required.



Floor Plan Example (in metric #s)

3. Observable Structural Concerns – Such as hot tubs on decks not originally designed for hot tubs. Visual indicators such as missing point loads, inadequate deck connections or foundations shifting over time can also be concerns. Work not permitted may also be a structural or life safety concern.



Unsafe deck beams, posts, footings, and rails.



Unsafe connections to beam, ledger.



Missing point loads in the crawl space



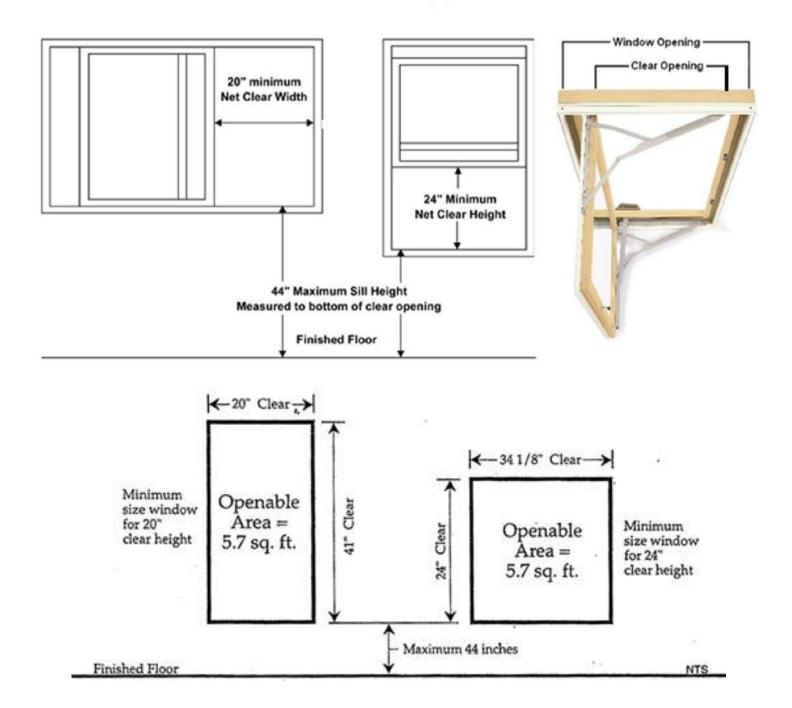
Stair-step cracking

## 4. Emergency Escape/Rescue Openings (EE&RO) in all spaces used for sleeping purposes

**R310.1** Emergency escape and rescue openings shall be openable from the inside without the use of a tool, key or special knowledge. Windows requiring sash removal or manipulation do not comply.

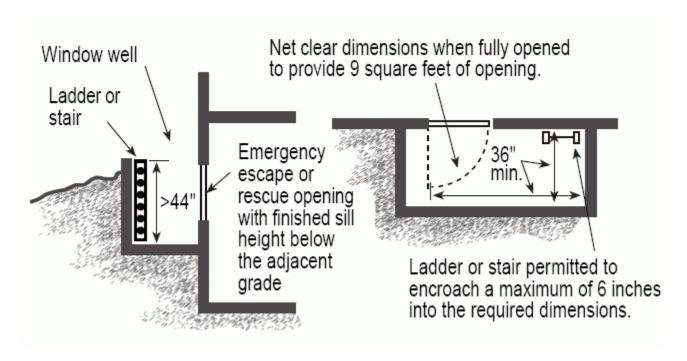
**R310.2.1** All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 sq. ft. (820.8 square inches), a minimum clear width of 20" AND a minimum clear height of 24". [Using minimum width AND height will yield a window opening less than the minimum allowed. A 20" wide opening must open 41" high, and a 24" high opening must open 34 3/16" wide to make 5.7 sq. ft.]

R310.2.2 The EE&RO sill shall be no higher than 44" above the finished floor.



## 5. Approved Window Wells at below-grade emergency escape and rescue openings

R310.2.3 The horizontal area of the window well shall be not less than 9 sq. ft. with a horizontal projection and width of not less than 36". Casement windows shall not encroach into the required window well dimensions.





#### 6. Approved Smoke Alarms at all required locations

R314.1 Smoke alarms shall comply with NFPA 72 and be listed per UL 217.

(Combination smoke/CO alarms are permitted and must be listed per UL 217 and UL 2034.) Installation manuals must be on site. Smoke alarms must be functional and interconnected.

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

- In each sleeping room or space;
- Outside each separate sleeping area in the immediate vicinity of sleeping rooms;
- On each additional story, including basements and habitable attics.

Smoke alarms shall not be located within 3' horizontally from a door or opening of a bathroom containing a bathtub or shower unless this would prevent placement of the required smoke alarm. They must be located at least 3' from diffusers & vents.

R314.3.1 Installations near permanently installed cooking appliances:

- Ionization smoke alarms shall not be installed within 20' horizontally from such appliances.
- Ionization smoke alarms with an alarm-silencing switch shall not be installed within 10' horizontally.
- Photoelectric smoke alarms shall not installed within 6' horizontally.

Smoke alarms must be powered by the home electrical system with a battery backup.

When using smoke detectors as part of a fire alarm system, they must be listed per UL 268. Combination smoke/CO detectors must be listed per UL 268 and UL 2075.

NFPA 72 (2007 edition) gives further guidance on the placement of smoke detectors, including: Smoke alarm rough-ins for flat ceilings are at least 4" from adjoining walls.

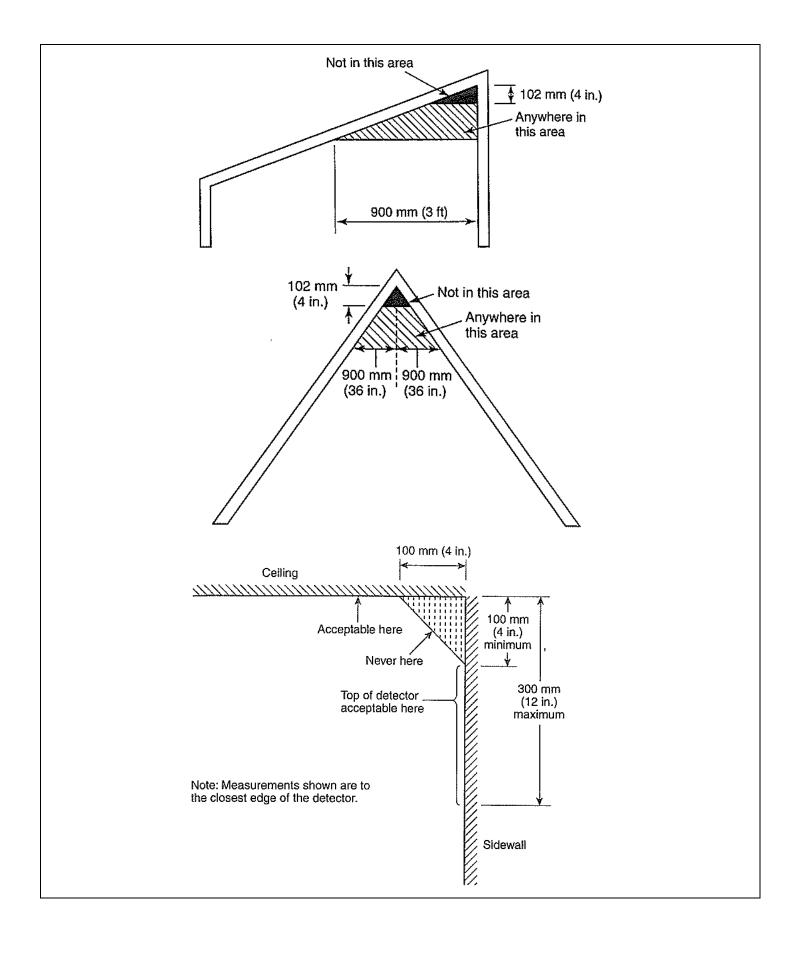
Smoke alarm rough-ins for peaked or sloped ceilings are at least 4" from the ceiling peak and are within 36" horizontally of the ceiling peak.

Smoke alarms shall not be located within three feet of the supply registers of a forced air furnace. In unfinished construction, alarms should be mounted on the bottom of the floor joists.

Smoke alarms in a room with a ceiling sloped greater than one foot vertical in eight feet horizontal are to be located on the high side of the ceiling.







## 7. Approved Carbon Monoxide Alarms at all required locations -

R315.1.1 Carbon monoxide (CO) alarms shall be listed per UL 2034.

R315.2.1 CO alarms shall be provided where either or both of the following conditions exist:

- The dwelling unit contains a fuel-gas or solid fuel appliance;
- The dwelling unit has an attached garage with a communicating opening to the dwelling unit.

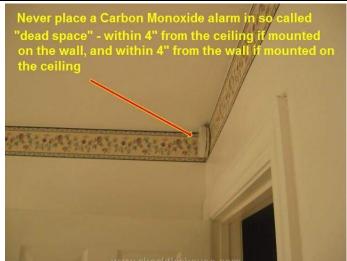
R315.3 CO alarms shall be located outside of each separate sleeping area in the immediate vicinity of bedrooms and within 15' of the door of each bedroom.

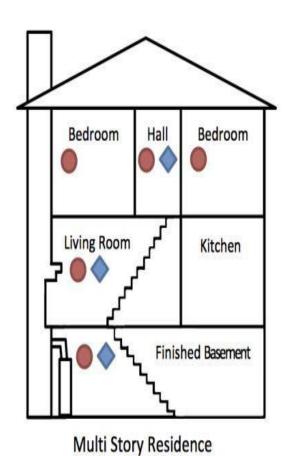
CO alarms are installed within bedrooms that contain a fuel gas appliance or where a fuel gas appliance is located in a bathroom attached to the bedroom.

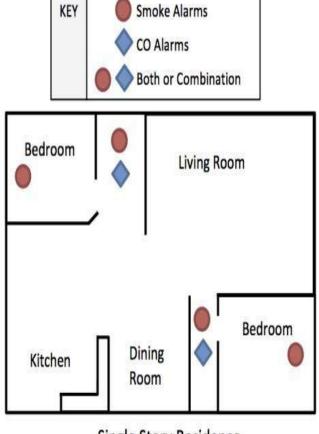
CO alarms must be powered by the home electrical system with a battery backup.











**Single Story Residence** 

**8. Fuel Gas Appliances -** The manufacturers' installation instructions must be available on site for review to verify the appliance has been installed in accordance with the manufacturer including but not limited to location, protection, clearances to combustibles, clearances for servicing, volume of combustion air available, venting, shut off valves, and proper gas piping.



G2406.2 Prohibited Locations (Amended): Appliances shall <u>not</u> be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, <u>except</u> where the installation complies with one of the following:

- 1. The appliance is a direct-vent appliance installed in accordance with the conditions of the listing and the manufacturer's instructions.
- 2. Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that have a volume of at least 50 cubic feet per 1,000 Btu/h of the appliance input rating.





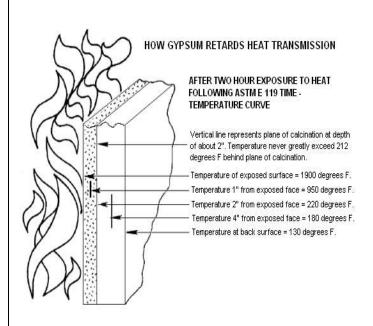


Table G2427.10.5 Clearances from the vent or connector to combustibles shall be as listed for the B vent connector and a minimum of 6" from a single-wall connector.

R602.8; R302.11 Fireblocking of openings and penetrations within the mechanical room or closet is required.

#### 9. Home/Garage Separation (including attic access)

R302.6 Dwelling/garage fire separation. An attached private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (15.9 mm) Type X (fire-resistant) gypsum board applied to common walls on the garage side.





(Data from Underwriters Laboratories, Inc.)

Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X (fire-resistant) gypsum board or equivalent.





Door openings between a private garage and the dwelling unit shall be equipped with either solid wood or solid or honeycomb-core steel doors not less than 1-3/8 inches thick, or minimum 20-minute rated fire doors in compliance with Section 716.5 of the International Building Code. Doors shall be self-closing and self-latching.

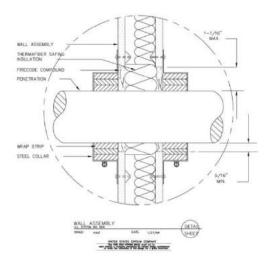
Dwelling unit separations will be inspected to verify compliance with fire resistance requirements in duplexes, townhomes and mixed occupancy spaces (IRC Section R302).





Some penetrations will be easy to remediate.





Some separations may require more extensive remediation. Fire-rated walls separating duplexes, townhouses, and different occupancies must be continuous from top of foundation to underside of roof decking, and from exterior wall to exterior wall, and any penetrations must be fire-protected. In this case, a contractor was hired to finish the drywall installation on the exposed side in the photo and install fire collars on both sides of the wall at the pipe penetrations.

**10. Environmental Air Duct Terminations -** R101.3, M1502.3 Dryer exhaust vent is terminated on the outside of the building, located a minimum of 3' from openings, provided with a backdraft damper only and is not located over a public sidewalk. No screens cover the exhaust termination.









M1502.1 Clothes dryers shall be exhausted in accordance with the manufacturer's instructions. M1502.4.1, M1502.4.2 The clothes dryer exhaust duct is 4" in diameter, a minimum of 28 gage rigid metal, with a smooth interior, joints running in direction of air flow and no fasteners protruding inside the duct. Flexible transition duct is allowed in the laundry room only, before entering any walls, floors or ceilings. Dryer duct run length is restricted by code (35 feet minus duct fittings) and the manufacturer's installation instructions, whichever is more restrictive.

#### 11. Handrails and 12. Guards

R311.7 Handrail projection permitted up to 3 ½" into stair width with 1 ½" clearance behind handrail.

R311.7.8.1 Handrails are located between 34" and 38" above tangent of nose of treads.

R312.1 Guards are located along open-sided walking surfaces, including stairs, ramps and landings that are more than 30" to the floor or grade below at any point within 36" horizontally to the edge of the open side.

R312.1.2 Required guards are not less than 36" in height.

Exception: Guards used as handrails are between 34" and 38" above tangent of nose of treads.

R312.1.3 Openings in required guards between rails or ornamental closures do not allow 4" diameter sphere to pass through.

# Exception:

- 1. Maximum 6" sphere cannot pass through at riser/tread triangle along open stairs.
- 2. Guards along the open side of stairs do not allow a 4 3/8" sphere to pass through openings.



**13. Cook Stove Anti-Tip Device –** R106.1.2 The anti-tip device for the free-standing oven has been installed as per the manufacturer's installation instructions.



Anti-tip brackets have been required since 1988; however they require special installation procedures which homeowners and/or non-certified installers may disregard.

Please, check all ranges to see that they can not tip over Anti-tip kits are cheap and easy to install







#### 14. Wildfire Hazard Defensible Space

R325.13 Maintenance. Defensible space areas created as required by this chapter or other referenced documents within the Larimer County Wildfire Mitigation Plan are to be maintained by the property owner. No replanting or new planting of trees, shrubs or other vegetation that would violate the defensible space requirements of this section shall be permitted.

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# **15. Exterior Fire Pits –** excerpt from Estes Park Municipal Code section 804.075 (1):

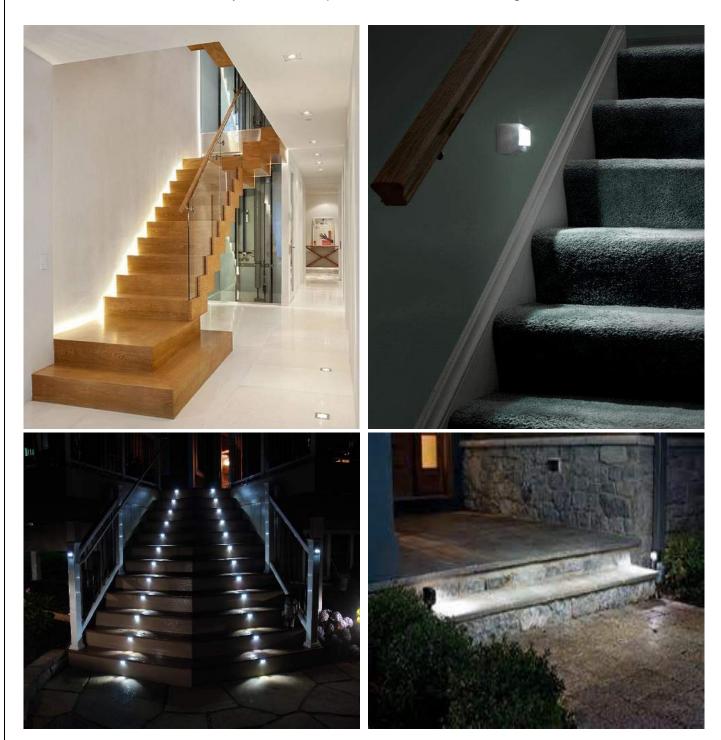
- 1. Open fires used for noncommercial cooking of food for human beings. An open fire shall not be built in any area which constitutes a *fire* hazard, such as near trees, brush or any flammable structure. Such open fire shall be attended at all times by a responsible person who is at least eighteen (18) years of age. Said person shall have available at all times a fire extinguishment method for use in connection with the fire. The means of extinguishment shall be located at the site of the burn. The flame height of any open burning shall not exceed two (2) feet at any time. Said fire shall be contained in one (1) of the following:
- a. A self-contained cooking grill, commonly known as a barbecue grill;
- b. A built-in barbecue pit; or
- c. A cooking fire contained in a fire ring of not more than three (3) feet in diameter made of stone or other noncombustible material.

For more information on outdoor fires/fire pits, contact the Estes Valley Fire Protection District at 901 N. St Vrain Ave, Estes Park, CO 8517, 970-577-0900 or info@estesvalleyfire.org. See also IFC 307.



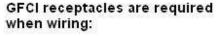


16. Interior and exterior stairways should be provided with an artificial light source.

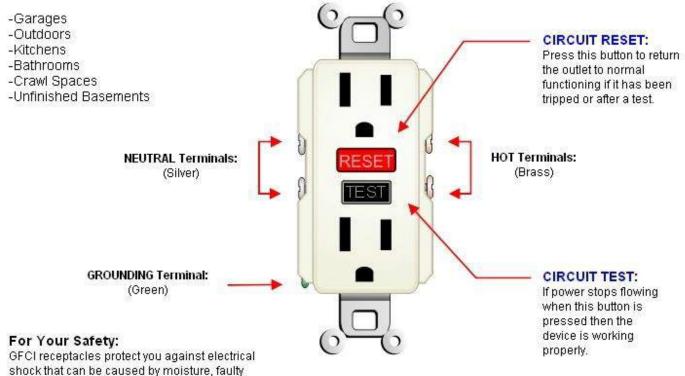


17. Ground-Fault Circuit-Interrupter (GFCI) Protection - A GFCI monitors the amount of current flowing from hot to neutral. If there is any imbalance, it trips the circuit. If electricity flows from hot to ground through you, it could be fatal. The GFCI can sense the current flowing through you because not all of the current is flowing from hot to neutral as it expects -- some of it is flowing through you to ground. As soon as the GFCI senses that, it trips the circuit and cuts off the electricity.

# GFCI Receptacle (Ground Fault Circuit Interrupter)

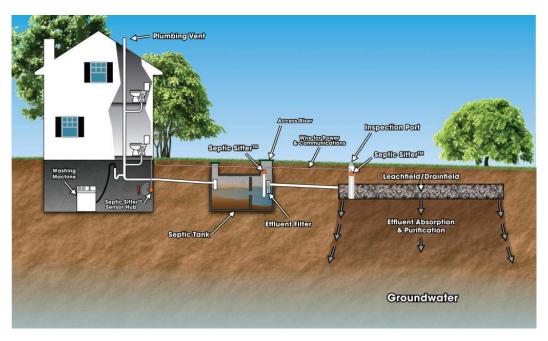


electrical equipment and cords.



#### 18. Private Septic Systems Approved by Health Department

A septic System or OWTS (On-site Wastewater Treatment System) is a self-contained, underground wastewater treatment system, most often utilized in rural areas. State/county laws require a permit be issued by the county Health Department prior to constructing or making repairs to a septic system.



Septic system size is based on the number of bedrooms. Increasing the occupant load without addressing the septic system's capacity may result in system failure.



For information regarding OWTS permits, guideline documents and resources, please reference http://Larimer.org/health/ehs/isds.asp.

**Other –** During the inspection some conditions may be identified as needing correction. These observations are not arbitrary but are based on existing State, Fire, Municipal or Building Codes.



A blocked bedroom egress window. (2015 IRC sec. R310 Amend)



A refrigerator that has a mechanical latch with no ability to open the door from the inside. (EPMC 8.04.060)



An accessible exposed electrical box.



An approved egress window now blocked by furniture.