



Lake Tahoe Basin Management Unit

Recreation Residence

Caldor Fire Rebuild Guidelines

Recreation residence permit holders have traditionally been partners with the Forest Service in caring for our forest. We encourage you to think of yourself as a forest steward, and to share with cabin co-owners and cabin users the overall objective of the recreation residence program:

Minimizing impact to the forest and providing a forest-related recreation experience.

Recreation Residence Program Objectives

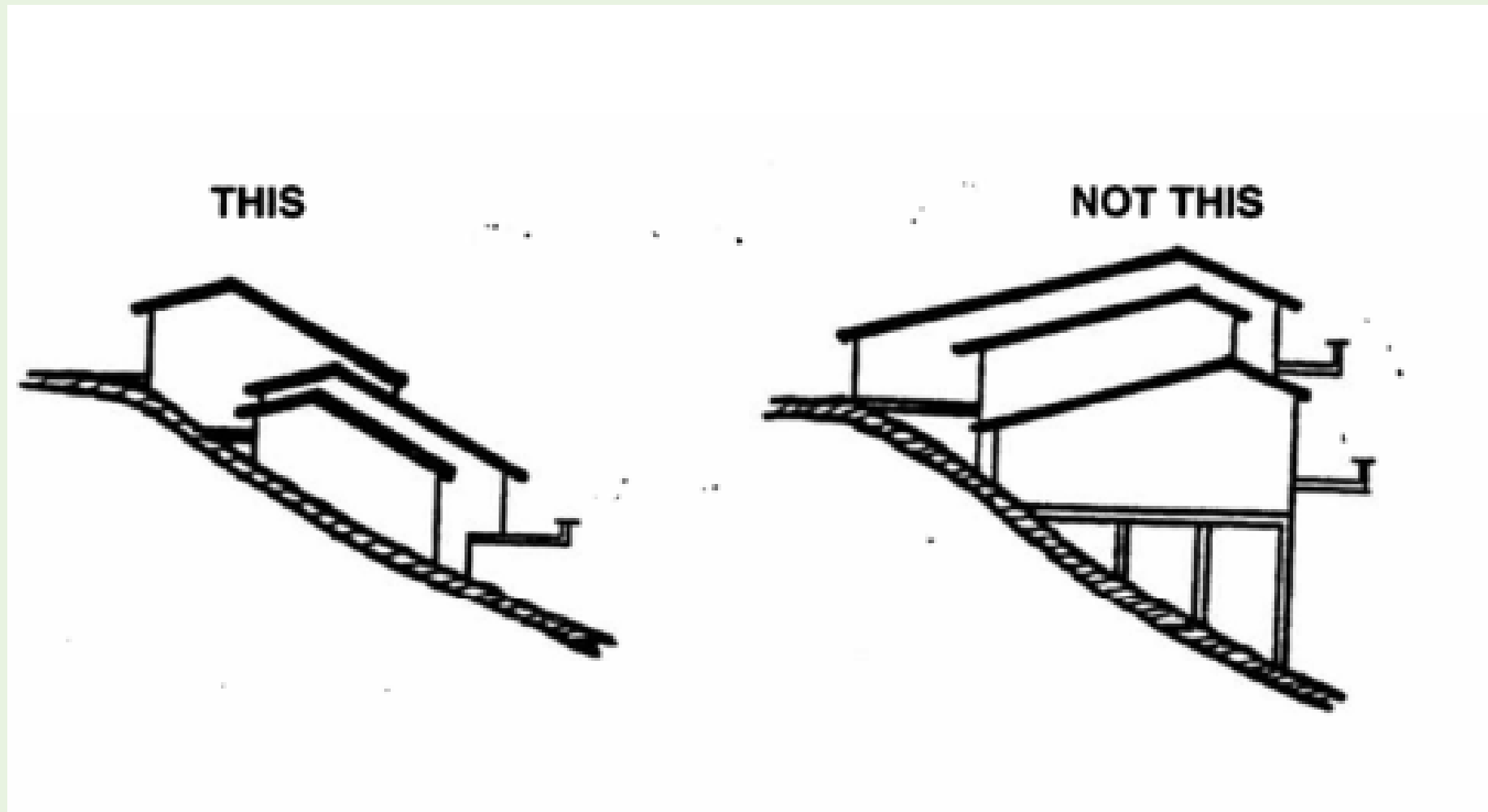
1. **Protect the forest environment** including soil, vegetation, water quality, wildlife, air quality and historic resources.
2. **Prevent urbanization** of recreation residence tracts.
3. **Help assure safety** of the general public and the permit holder.
4. **Maintain the natural forest setting.**
5. **Comply with the terms and conditions of the special use permit.**
6. **Comply with requirements for protection of threatened and endangered species, historic cabins and tracts, and archaeological properties.**

While developing your proposal,
please remember that unlike
traditional home construction,
cabins on National Forest Lands
should be designed to visually recede
into the landscape, enhancing the
environment around them.

FOREST SERVICE DESIGN STANDARDS

- Follow International Residential Code (IRC) standards; specific exemptions may be considered
- Cabin size: **maintain the previously permitted cabin footprint**
 - For small cabins, a modest increase may be considered
 - Additional Tahoe Regional Planning Agency (TRPA) review and permits may be required if concept plans increase the floor area, height, volume, or land coverage, change material type, or if the new structure does not remain in substantial conformance with the original structure.
- Conditionally accepted improvements described in the special use permit will need to be modified or removed in a proposed cabin design concept.
- The total combined footprint of decks, porches, & walkways may not exceed 60% of the cabin footprint
- Decks are preferred on only one side of the cabin; wraparound decks may be considered specific to the site
- Unpartitioned lofts may be allowed, however enclosed second stories will not be considered
- Cabin height may not exceed 26 feet when measured from lowest adjacent grade to the peak of the rooftop

EXAMPLES OF CABIN HEIGHT



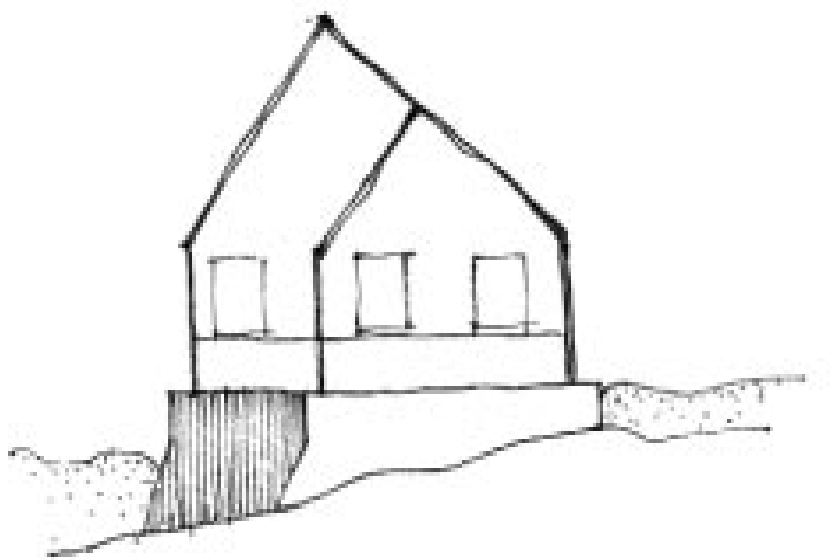
Recommended Materials

Materials that mimic nature and blend with the surrounding environment

- Heavy timber
- Battered stone & rock
- Paint and stain colors that align with the natural setting



Underpinning & Base



Environmental Considerations

- Recreation Residences should be built on strong bases, which help protect the cabin from snow.
- The area between the foundation and floor must be enclosed to comply with the fire safe guides for residential development in California.

Historic Considerations

- Battered stone, rock or concrete have been noted as durable materials for bases throughout cabin tracts.
- Cabin bases in the Sierras are often designed to give the appearance of being anchored to the ground, *comprising a large portion of the wall.*

Entryways



Environmental Considerations

- South facing entries allow optimal natural light and radiant heat which minimizes the impact of freezing temperatures
- North facing entries will keep your cabin cooler in the summer heat
- Covered eaves and extruded gables help shield and protect entrances
- Making overhangs shorter on the south side of an entry will maximize daylighting

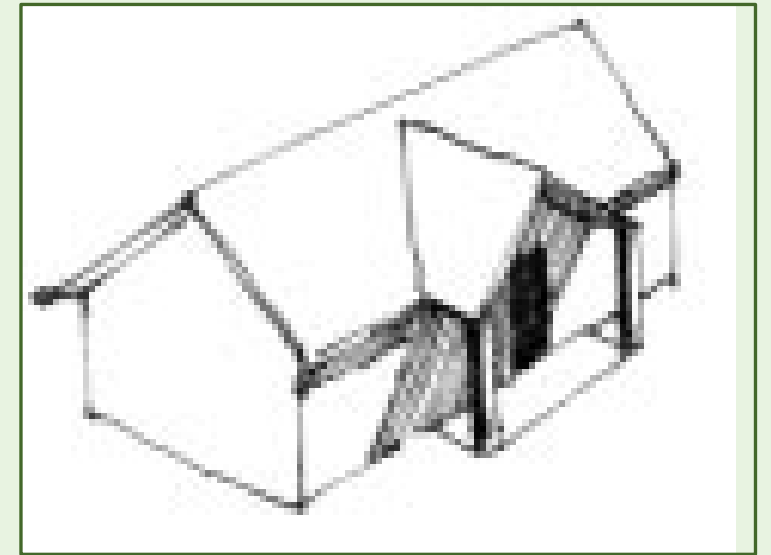
EXAMPLES OF PROTECTED ENTRYWAYS



Extruded Gable Porch



Continuous Eave Porch



Added Gable Porch

Roofing

Roofing must consist of fire resistant or fireproof composition tile, shingles, or metal roofing materials.

Metal roofing must have factory-applied color, brown or other dark shade.

Environmental Considerations

- Complex, flat and gambrel roofs can all trap snow and should be avoided
- A steeper pitch with shorter overhangs is ideal for heavy precipitation (Example: range from 6:12 to 12:12)
- Gutters, unprotected rafter tails and eave soffits can create maintenance problems when overloaded
- A minimum of 12-inch roof overhang allows for proper drainage

METAL ROOFING

LRV, or light reflective value, refers to the percentage of light a paint color reflects. To predict how light or dark a color will appear, light reflectance value is analyzed. LRV is measured on a scale from 0%, which is black and doesn't reflect any light to 100%, which is pure white and reflects all light.

Given the loss of vegetation in the Caldor Fire burn scar, high reflectivity from metal roofing is a significant concern. Acceptable Light Reflectance Value (LRV) for materials on National Forests is under 20%.

The Forest Service will accept product roofing that is similar in color and in LRV rating to the ASC examples listed in the previous slide.

Exterior Walls

Historically, cabins in the Sierras were built with walls smaller than the base and roof in order to mitigate the impact of snow in the winter.



Utilizing vertical and horizontal wall textures gives cabins a rustic feel.

Exterior Paint and Stain



Paint & Stain

It is important for the cabin colors to blend with the local environment. The Forest Service strongly encourages you to consider the particular surroundings of your lot when selecting paint colors.

Ideal paint colors will cause buildings to almost “disappear” when viewed from a distance. These are generally darker and muted shades of brown and green.

“Natural” or clear sealers are typically not approved for new bare wood because the result is a light, high contrast color that “pops out” in a forest setting.

Stain colors that have a red, yellow or orange tint are to be avoided. Most colors with the words “redwood” and “cedar” are not approved because they tend to have a red, yellow or orange tint.

Trim colors are lighter shades to be used only for the trim around windows and doors.

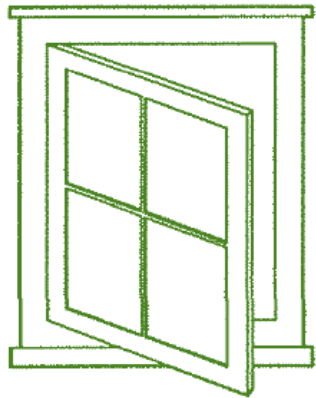
Windows & Doors



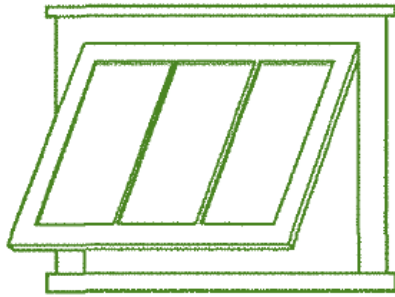
WINDOWS

- Utilize windows to take in views, warmth, and sunlight.
- Avoid extensive horizontal bands of windows to limit glare.
- Follow historical precedent and scale to preserve a rustic appearance.
- Removable screens can be attached to the outside of windows so that they can be opened without admitting bugs.
- Removable or operable shutters can cover windows in the winter to prevent breakage from accumulated snow.
- *Consider adding skylights for additional natural lighting.*

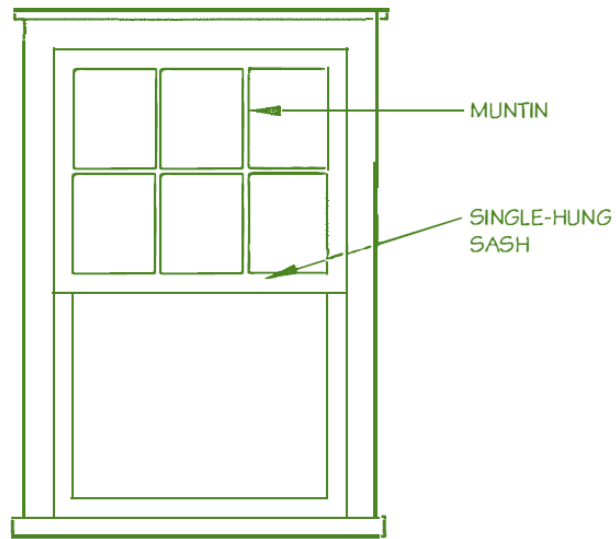




CASEMENT WINDOW



AWNING WINDOW



SIX-OVER-ONE
WINDOW

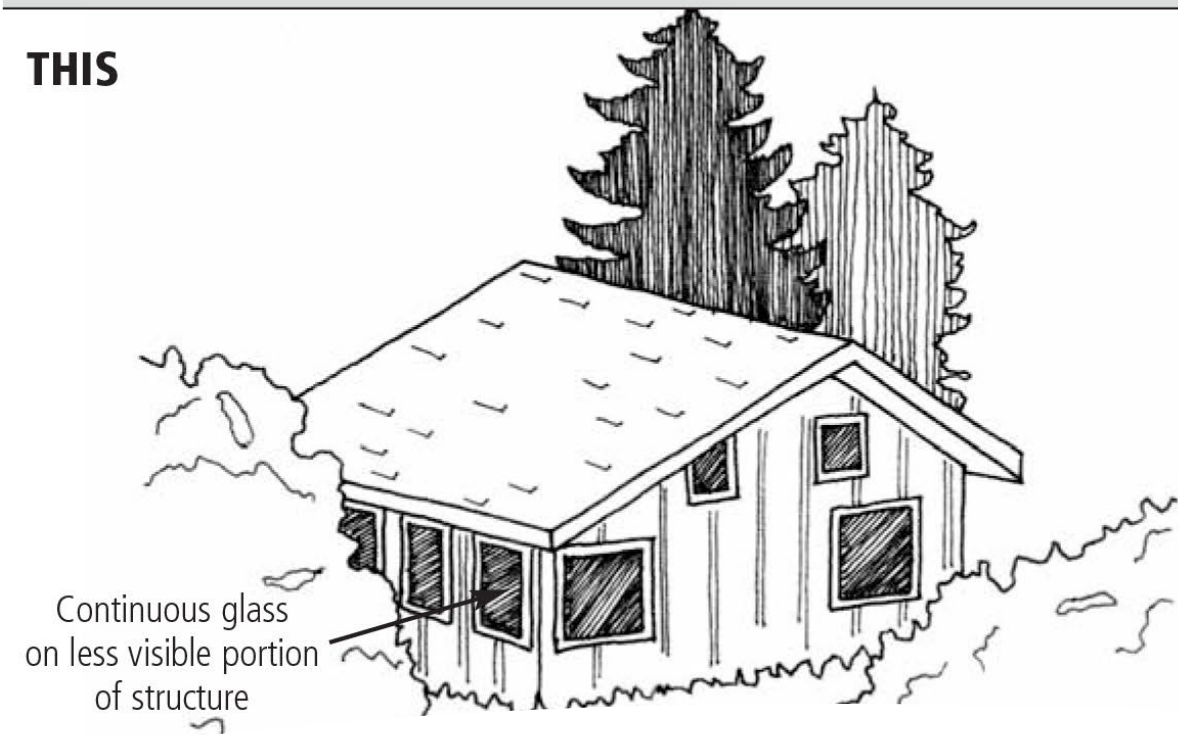
The original windows in many historic recreation residences are true divided lite windows, which means that the window is composed of several small panes of glass (lites), separated by muntins.

In most cases, at least half of each window slides open either horizontally or vertically or swings open on hinges.

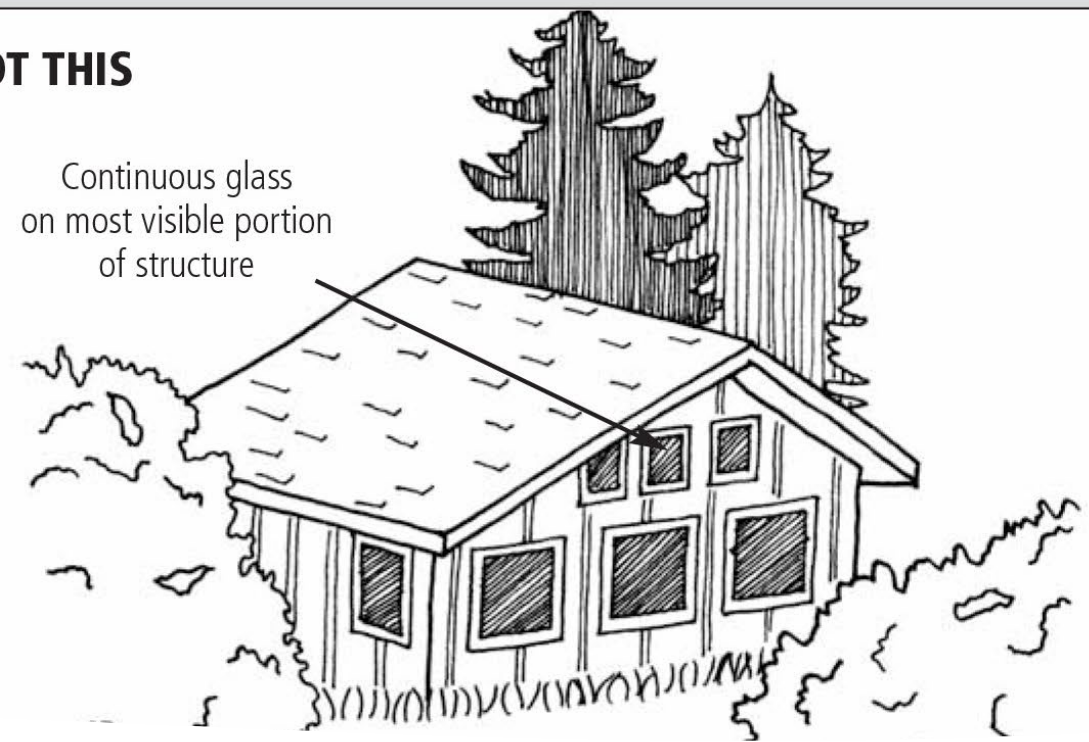
Vertically opening windows usually were single hung (only half of the window moves), but some were double hung (each of the two halves of the window open).

Casement windows swing open on side hinges and awning windows swing open on top hinges.

THIS



NOT THIS



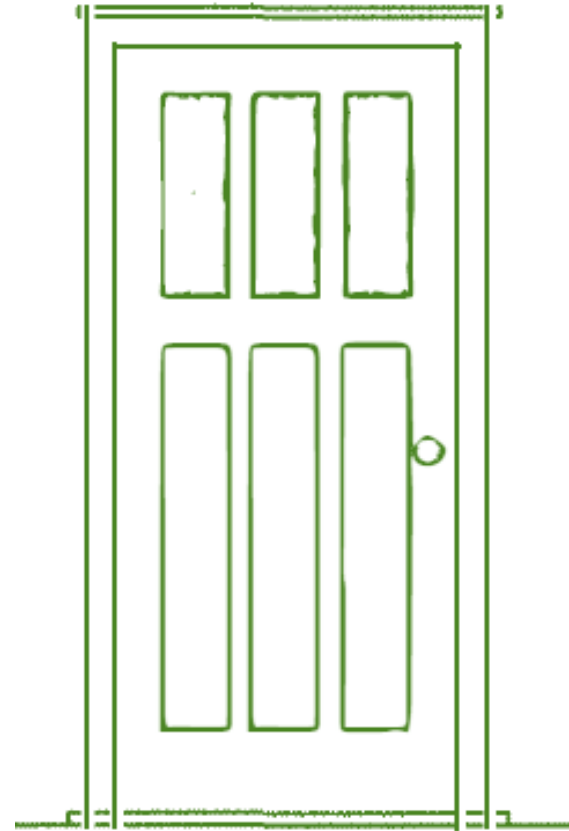
Continuous glass creates large, high glare surfaces, which stand out in a forest setting.

Excessive glare can be avoided in the following ways:

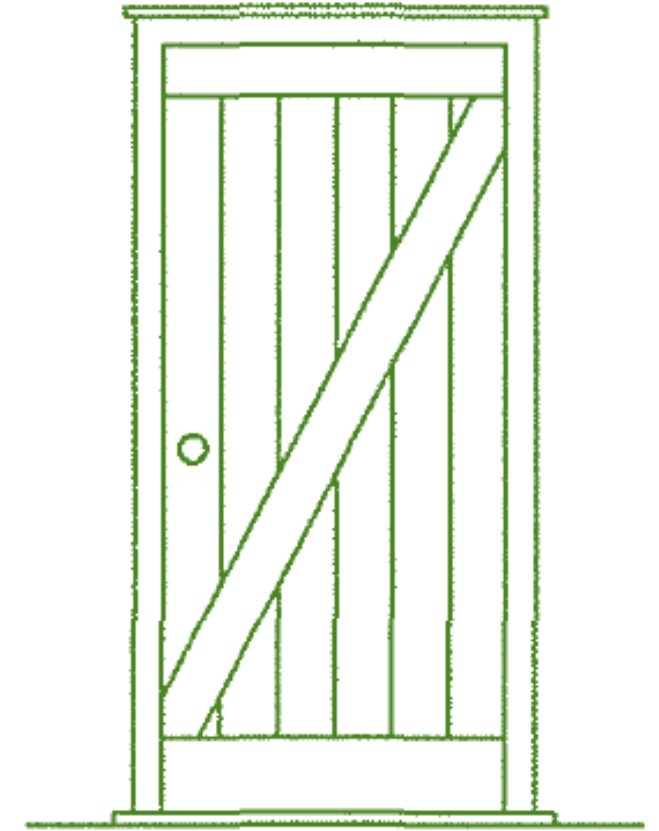
- Space windows out
- Reduce the number of windows on the most visible parts of the cabin, where reflectivity may be seen from greater distances
- Use topographic or vegetative screening (consider how you may be able to angle your cabin on your lot to take advantage of slopes or hillsides that can visually conceal windows)

Doors

- Historic recreation residence doors usually were constructed from several pieces of wood—a frame of vertical stiles and horizontal rails holding raised or flat panels in place, referred to as "rail and stile" or "frame and panel". One or more windowpanes were sometimes used instead of panels in the upper part of the door.
- "Ledge and brace" or "plank and batten" doors were made from several vertical boards tied together by horizontal boards at the top and bottom and sometimes included a diagonal bracing board to keep the door square.
- Metal storm or screen windows or doors with a painted or baked-enamel finish in colors matching the color guidelines may be approved on a case-by-case basis.



RAIL AND STILE DOOR
WITH WINDOWS



PLANK AND BATTEN DOOR

Become Bear Resistant



PREVENTATIVE MEASURES

Consider implementing:

- Outward opening doors that prevent the door from being pushed in by a bear
- Quality round door knobs that bears struggle to pull
- Sturdier fully threaded hanger bolt screws on doors instead of nails
- Factory colored rolling steel shutters that limit access to potential entrances
- Removable electric fencing on doors, windows and railings
- Heavy-gauge steel mesh over ventilation holes in the cabin underpinning



Electric fencing along windows



Round Doorknobs



Rolling steel shutters

**EXAMPLES OF PREVENTATIVE MEASURES THAT HELP
DETER BEARS FROM ENTERING YOUR CABIN**



Recreation Residence Lots

Driveways

- The total area used for driveways and parking areas should be limited to minimize compaction, erosion, sedimentation, vegetation removal.
- Keeping your driveway/parking area as small as possible also reduces the potential for local and off-site pollution by auto fluids, and improves visual quality.
- Driveways may not be managed to restrict public access.
- Graveling can control erosion and material should be locally sourced.
- Asphalt and similar manufactured materials may be considered case by case.



OUTDOOR LIVING AREAS

Porches, Deck, Stairs, Railing, etc.

- All improvements are required to be built to code, in safe and good condition
- Porches and/or decks cannot be enclosed.

Outdoor Lighting

- Outdoor lighting must be minimal and non-decorative
- Outdoor lighting should be dark sky compliant
 - Fully shielded and emit no light above the horizontal plane, no sag or drop lenses, side light panels, uplight panels, etc.

Chimneys, Pipes etc.

- All exposed metal pipes and supports should be painted the appropriate color to blend with the building or roof

National Forests are public lands, the following items are prohibited:

- Fencing or gates restricting access on lots
- Permanent recreation improvements such as volleyball courts, basketball courts or swimming pools etc.
- Any item attached to a tree such as ziplines, hammocks, swings, string lights etc.
- Yard decorations, signs or water features
- Bird, squirrel or any other animal feeder/device intended to attract wildlife
- Landscaping, paved walkways or trails may be considered for revegetation and erosion control purposes

PROHIBITED OUTBUILDINGS



Additional Sleeping
Quarters



Outhouses



Garages



Water Systems

WATER SYSTEMS

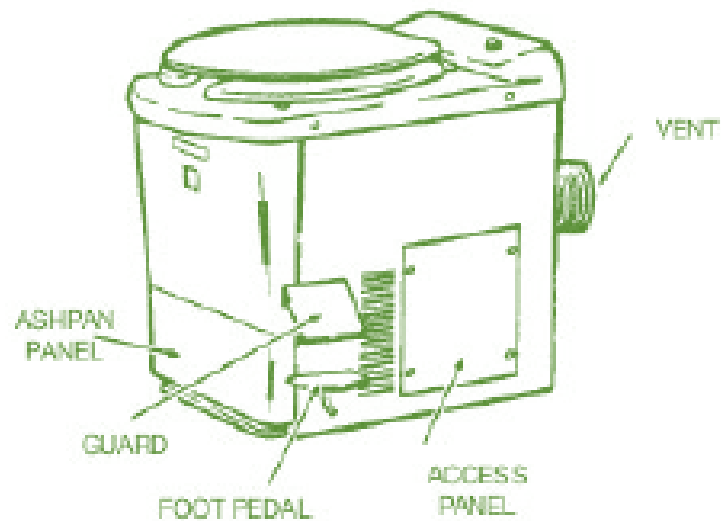
Septic Systems

- Forest Service authorization and El Dorado County permit is needed to remove a previous septic and install a new one
- Permit fee waivers may be available through the El Dorado County Building and Planning Department for those impacted by the Caldor Fire

Incinerator Toilets and Composting Toilets

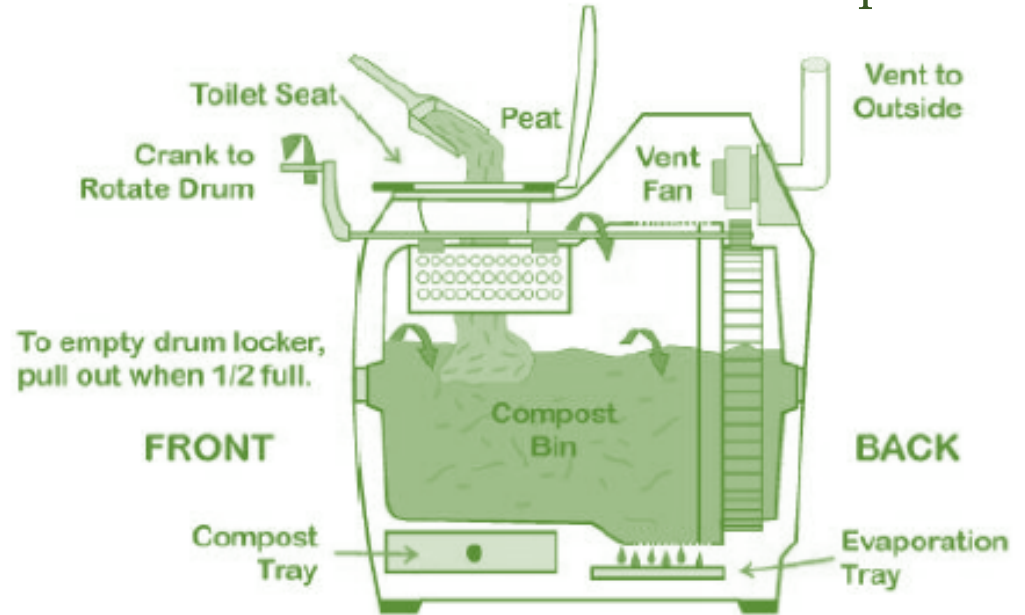
- Require a permit for installation from the El Dorado County Building and Planning Department
- Are great alternatives for cabins near lakes, streams and rivers

Examples of Septic System Alternatives



Incinerator Toilet

Compost Toilet



GRAY WATER

Follow the California Plumbing Code setback guidelines outlined in (Chapter 15 Section 1502.4 on page 311 and Table 1502.4 on page 312)

Systems are permitted by El Dorado County Community Development Agency Development Services Division (CDADSD) under a plumbing permit. CDADSD will consult with CDAEMD as necessary. An OWTS is designed for a specified wastewater strength and quantity. Permit holders should be aware that the use of a gray water system may have an impact on an OWTS in use at a site. OWTS owners need to be sure that the Qualified Professional and CDAEMD staff are aware that a gray water system may be constructed, or consider a Supplemental Treatment system, such as a drip dispersal system, allowing OWTS liquid waste to assist in watering vegetation at the site. **CDAEMD does not allow a reduction in the size of an OWTS when a gray water system is proposed at a site.**



The Recreation Residence program exists to provide the public with access to comfortable amenities while enjoying the natural beauty of the wilderness.

As cabin owners, you have the unique opportunity to inspire and add to the story of the National Forests for generations to come.

