## Stairs

## One and Two Family Residential Dwellings

This brochure describes the code requirements for new residential stairs. Each situation has unique conditions, so please call or visit the Building Department with any questions.

| Project | Requirement |
| :--- | :--- |
| Existing stairway that leads to existing finished living <br> space that was created with a building permit | Is grandfathered in - no changes are required |
| Existing stairway that leads to existing unfinished space <br> (basement, attic or garage) that you plan to convert to <br> living space | May be allowed to remain without changes if it meets <br> the alternative requirements in our brochure <br> Converting Attics, Basements or Garages to <br> Living Space |
| Build a new stairway | Building permit and inspections to current Code |

## Stair width

- New stairways must be at least 36 inches wide from wall to wall above the handrail (except spiral stairs which must be at least 26 inches wide from center post to outside edge of tread).


## Risers and treads

- If you are building a new standard residential stairway (not a spiral), each step (or riser) can't be more than 8 inches high.
- Treads are the flat surfaces that you step onto. For new stairs, the treads have to be a minimum of 9 inches deep from front to back (not counting the part underneath the nosing of the tread above). The exposed edge of the tread is called the nosing, and the nosing must stick out at least $3 / 4$ inches, but not more than $11 / 4$ inches.
- The steps in a flight of stairs have to be even so that people don't trip. The code allows only $3 / 8$ inch difference between the largest and the smallest rise, and only $3 / 8$ inch difference between the largest and smallest tread measured from front to back.


## Headroom

- Headroom is the distance, measured vertically (plumb, straight up and down), between the ceiling or any projection from the ceiling, such as a beam, and a sloped line formed by placing a straight-edge along the nose of the stair treads.
- New stairs must have headroom of at least 6 feet 8 inches (except spiral stairs which may have headroom of 6 feet 6 inches).



## Winder stairs

- Stairways that turn a corner, with treads that are narrow on one end and wider at the other, are called winder stairs. You may build winder stairs, but the treads must be at least 6 inches deep at their narrowest point. Also, all of your treads must be at least nine inches wide, measured 12 inches from where they are the narrowest.

- Although the tread size varies on winder stairs, there still may not be more than $3 / 8$ inch variation between the largest and smallest rise.


## Spiral stairs

- Spiral stairway treads must be at least $71 / 2$ inches deep measured 12 inches out from where they are the narrowest. The risers can't be more than nine and one half inches high.
- The minimum width of a spiral stairway from the center pole to the outside edge of the tread is 26 inches.
- Each spiral stair tread must be identical.



## Landings

- Any exterior entry/exit door must have a landing at least 3' x 3' inside the door before there can be a step. The interior landing must not be more than $11 / 2$ inches lower than the top of the threshold. On the outside of the door, the step down may be eight inches before you need another 3' x 3' minimum landing, providing the door does not swing over the stairs. After the landing there may be additional steps.



## Handrails

- Stairways must have a handrail if the stairway has more than three risers.
- Handrails may project over stairs by $41 / 2$ inches maximum on each side of the stairway.
- Handrails must be continuous for the full length of the stairs. They must turn back into the wall or butt into a post so that purse straps and clothing won't get caught behind them and cause a fall.
- Handrails attached to the wall must have a space between the wall and the rail of at least $11 / 2$ inches to provide a grippable surface.
- Handrails on the open side of a stairway must meet guardrail requirements.
- The height of handrails is measured straight up from the nosing of the treads to the top of the handrail. A handrail along a wall must be between 30 inches and 38 inches high.
- A round handrail must have a diameter no smaller than $11 / 4$ inches and no larger than 2 inches, so that it can be easily and securely gripped. Other handrail shapes are allowed, if the perimeter dimension is at least 4 inches and not more than $61 / 4$ inches, with a cross section dimension not more than 21/4 inches.


## Guardrails

- A guardrail is required to prevent someone falling from a balcony, deck,
 landing, etc. that is more than 30 inches above the floor or ground below. Guardrails must be at least 36 inches high, except that they may be 34 inches (measured straight up from the nosings) at the open sides of stairways.
- Guardrails on stairs must have some kind of a pattern, so that a 5 inch sphere can't pass through. However, all guardrails along raised floors, landings, porches, decks and balconies must have intermediate rails or ornamental closures that do not allow passage of a 4 inch sphere.
- At the bottom edge of a guardrail along a series of steps, the space between the tread, riser and the guardrail must be small enough to prevent a 6 inch sphere from getting through.


## Guardrail with vertical pattern



## Guardrail with horizontal pattern

must not allow
passage of a


## Who can do the work

For work that requires a permit, the owner of a single family home or duplex may hire a licensed contractor to do the work, or in some cases, do the work themselves. This means that you, the owner, will be responsible for doing the work; not a friend, neighbor, tenant or relative, unless they hold an appropriate contractor's license. The permit requirements for an owner doing their own work are the same as those for a contractor doing the work.

## Resources

Other handouts that provide helpful information about other residential projects include:

- Wood Stoves, Fireplace Inserts and Chimneys
- Converting Attics, Basements and Garages to Living Space
- Fences, Decks and Outdoor Projects

These handouts and others as well as permit applications and code guides are available at Boardman City Hall.

## Helpful Information

City of Boardman, Oregon
Building Department
200 City Center Circle
Boardman, Oregon 97818
Office hours are:
Monday through Friday, 8:00 am to 5:00 pm.

## Permits are issued:

Monday through Friday, 8:00 am - 5:00 pm

## Important Telephone Numbers

City of Boardman:
Building codes, inspections, permits and Planning $.541-481-9252$

## Scheduling an inspection

- Call 541-481-9252 to request an inspection
- There must be an adult over age 18 to let the inspector inside


## Visit our Web site

 www.cityofboardman.com