

This handout has information about permits and specifications for remodeling the interior of a residential dwelling. Not all city code guidelines and requirements are covered. Contact the city before beginning any project.

General Details

A building permit is required for any interior remodeling of residential dwellings. All remodeling must comply with the requirements of the Minnesota Energy Code. In addition, specific permits are required for all of the following:

- Any replacement, altering, converting, or moving of appliances and fixtures, such as:
 - water heaters gas ranges furnace
 - air conditioners gas fireplaces mechanical vents
- All mechanical, electrical, plumbing, water and sewer work, including:
 - replacement/moving of fixtures wires and circuits
 - new hook-ups drain, waste, and vent
 - draintile & sumps electrical repair, replace and new

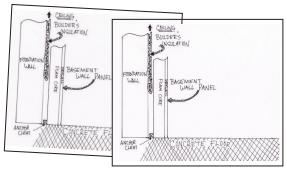


Required Documents to get a Permit:

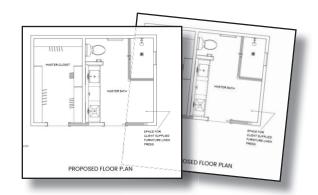


 City of Crystal building permit application.

- Two copies of a floor plan, drawn to scale, showing the existing walls and structures, specifics of the remodeling and type of materials being used, including:
 - Size, location, and spacing of studs, posts, joists, and rafters.
 - Size of headers.
 - Size, location, and type of window and door openings.
 - Type of lumber to be used.



- Two copies of a wall cross-section for all wall additions detailing:
 - stud spacing. interior finish.
 - type and insulation location.



Building Code Requirements

Stairways

- If a stairway is to be provided, the minimum clear width is 36". Maximum tread rise is 7-3/4", and minimum tread run is 10".
- The dimensions of any one tread run or riser may not vary from the dimensions of any other tread run and rise by more than 3/8".

Guardrails and Handrails

- All decks, landings, ramps, balconies and porches which are more than 30" above grade must be protected by a guardrail at least 36" in height. Open guardrails and stair railings must have intermediate rails or an ornamental pattern that a 4" sphere cannot pass through.
- A handrail shall be provided at all stairways having 4 or more risers.
- Handrails shall be placed not less than 34" or more than 38" above the nosing of the treads. They shall be continuous the full length of stairs from a point directly above the top riser of a flight to a point directly above the lowest riser of the flight.
- Handrail ends must be returned or terminated in posts.
- Handrails shall have a grippable cross section of not less than 1-1/4" or more than 2" in cross-sectional dimension or the shape shall provide an equivalent gripping surface.
- The handgrip must have a smooth surface with no sharp corners and edges shall have a minimum radius of 1/8".
- Handrails adjacent to a wall shall have a space of not less than 1-1/2" between the wall and the handrail.



Emergency Escape and Rescue Egress Windows

 Basements with habitable space and every sleeping room must have an emergency escape/rescue egress window (see "Specifications for Emergency Escape and Rescue Egress Windows" handout).



- Smoke alarms must be installed in all sleeping rooms and in all areas giving access to sleeping rooms.
- Each story, including the basement, must have a smoke alarm.
- Primary power for required smoke alarms shall be from building wiring and equipped with battery backup. Smoke alarms in existing portions of the dwelling may be solely battery operated.
- Smoke alarms must be audible in all sleeping rooms.
- Effective Aug. 1, 2008, all existing single family homes shall be equipped with approved carbon monoxide alarms.







Basement Finish Information Sheet

every 12' along walls and 6' from door openings.

Insulate basement exterior walls a minimum R-5.

Moisture Barrier on/against block wall prior to framing.

Construct all walls on treated or redwood plates. Hem-fir or Doug-fir plates not allowed.

> GFI outlet required in bathroom and for mechanical equipment.

Smoke detectors:

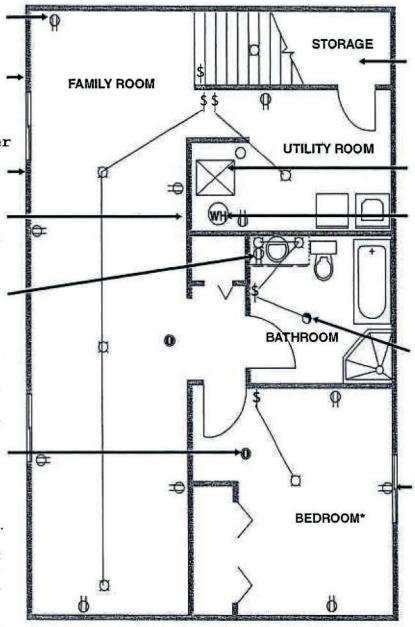
Electronically-operated detectors in new basement finish and all bedrooms. Install battery-operated detectors in existing bedrooms and floors not equipped with smoke detectors.

Label uses of each room.

Minimum ceiling height is 7' with 6'-6" allowed for projections such as beams and ducts.

> Gas-fired furnace or water heater cannot be in a bedroom, bathroom or closet.

Creation of a full kitchen in the basement of a single family home must be reviewed for conformance with zoning regulations.



Protect storage under stairs on enclosed side with 1/2" gypsum board.

Provide combustion air to furnace and clear 30" working space in front of furnace.

A water heater must be able to be removed with the furnace intact.

Supply and return air is required for all habitable rooms.

A bathroom fan is required unless there is an openable window. Insulate the fan duct a minimum of 4' from the outside of the house rim.

Show window sizes. Egress window required in each bedroom. Egress size: 5.7 sq. ft. of openable area with 20" min. width and min. height of 24". Sill no more than 44" above floor.

* All bedroom wiring must be protected by arc-fault circuit breakers (AFCB).

Note: Electrical boxes/panels are NOT allowed in bathrooms or closets,

This information is a guide to the most common questions. It is not intended, nor shall it be considered, a complete set of requirements.