



City of
Columbia Heights
Community Development
Department

Basement Remodeling/Finishing Permit Requirements

The following information must be submitted to the Community Development Department before a building permit can be processed and approved. A more detailed description of items 1-3 is listed.

1. **Building Permit Application form.**
2. **Building Plans [two copies] and information sheet.**
3. **Miscellaneous as required.**

Note: Plumbing and Mechanical permits will be issued separately. Electrical permits are obtained from www.electricity.state.mn.us

1. Building Permit Application:

Complete and sign a building permit application form. Forms are available at the Community Development Department or on-line at www.ci.columbia-heights.mn.us under **permits**.

2. Building Plans [two sets] and information sheet:

Prior to beginning work for the finish of a lower level or basement, a building permit application must be completed and submitted to the Building Official along with two sets of construction drawings and proposed floor plan. The construction drawings must show what is existing such as window openings, framed walls, exterior wall insulation, and the location of the mechanical equipment, etc. The proposed floor plan must indicate the use of the rooms, the location of new walls to be constructed, door/window openings, etc. Any heating/mechanical work, plumbing work and/or electrical work will require separate permits. After a preliminary review additional information may be required.

3. Miscellaneous:

Permit Fees: Building permit fees will be determined after the application and required plans have been reviewed for compliance. Plan Review Fees are based on a percentage of the Building Permit fees. Fees must be paid in full before a permit can be issued or work can begin.

Stamped, Approved, Construction Plan and Site Plan: You will receive one set of plans back from the city staff that must be kept on the job site until the final inspection has been conducted.

Inspection Record Card: Must be posted on the construction site, preferably inside the front storm door for easy access by the Building Inspector.

Inspections: Call (763) 706-3678 between 8:00 AM and 4:45 PM Monday through Friday to schedule the inspections needed for your project. Please allow 2 to 3 days for scheduling.

GENERAL INFORMATION

ACCESS TO EQUIPMENT

Provide access for water heater, water softener, water meter and other equipment to permit replacement or repair.

BATHROOMS

Each bathroom shall be provided with an openable window or powered exhaust fan. The last 3 feet of exhaust duct at its discharge must be insulated (Minimum R-3). Showers must be capable of encompassing a 30" circle measured at the height of the shower control handles. Bathtubs used as showers are exempt. An approved anti-scald (thermostatic or pressure balancing type) faucet must be installed in new shower or shower/bath installations. Toilets must be 1.6 gallon or less flush volume.

DRAFT STOPPING

Draft stopping will be inspected with insulation. Areas in excess of 1000 square feet shall be draft stopped. Walls in excess of 10 feet shall be draft stopped in each stud space.

EGRESS (ESCAPE WINDOWS) AND WINDOW WELLS

New sleeping rooms and basements with habitable space shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Windows shall have 5.7 Square Feet of net clear opening with a 20" Minimum clear width, 24" Minimum clear height. Maximum sill height of 44" measured from floor to highest portion of sill. (See Access and Exit Emergency Escapes handout for window well requirements)

ELECTRICAL PANEL

Shall not be located in closets and provide 3 feet of clear floor space. Laundry facilities shall be on an independent circuit.

ENCLOSED AREA UNDER STAIRS

Enclosed accessible space under stairs shall have walls, under stair surface, and any soffits protected on the enclosed side with ½" (12.7mm) gypsum board. If the area is greater than 100 square feet, a heat run shall be provided to the area for ventilation.

FRAMING

Lumber must be grade stamped. The bottom wall plate in contact with the foundation or slab must be treated wood. When used as bottom plate for interior walls in contact with the slab they shall be securely fastened to the floor slab with nails/screw or construction adhesive. See cutting and notching section of this handout for details. Engineered floor trusses/beams must not be cut, notched, or altered without written approval from the manufacturer. Proper fastening of trusses to the plates shall be in accordance with applied loads and uplift shown on the truss drawings from the manufacturer.

FURNACE

Furnaces shall have an unobstructed working space of not less than 30 inches in front of them and shall be provided with outside combustion air. Provide minimum clearance for furnace per manufacturer's specifications. An equal amount of supply air and return air shall be obtained for each room serviced.

FURNACE AND WATER HEATER

May not be accessed through, or located in a bedroom or bathroom.

FURNACE AND WATER HEATER FLUES

Proper clearance from furnace and water heater flue shall be maintained. (IE: 1 inch clearance for a double wall type "B" vent and 6 inch clearance for single wall flue pipe).

GAS LINES

Gas lines with mechanical joints must not be in concealed spaces. (All gas work requires a licensed contractor).

HALLWAYS

Hallways shall be a minimum width of 36".

HANDRAILS

A handrail is required on one side of stairs with four or more risers. The handrail must be 34" to 38" high (measured vertically from the toe of the tread), be continuous and uninterrupted the full length of the stairs. The handgrip portion of the handrail shall be not less than 1-1/4 inches nor more than 2-5/8 inches in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The ends of the handrail shall be returned or terminate in a newel post or safety terminal. Edges shall have a minimum radius of 1/8"

INSULATION

Above grade walls require R-20 insulation, Ceilings R-49, and floors over unheated spaces R-30. Foundation walls require R-15 insulation. Rigid foam insulation with a flame spread greater than 75 and /or smoke density rating greater than 450 must be protected with 1/2" gypsum board or 1/4" plywood. Bathtub openings and other penetrations in the floor above must be filled with fiberglass or foam insulation (see plumbing code for more information on trap access). A vapor barrier (4 mil poly or equal) is required on the warm side of insulated exterior walls. This includes behind showers and tubs on exterior walls. Water resistive gypsum board cannot be applied over another vapor barrier (such as 4 mil poly) or on ceilings.

LIGHT, VENTILATION, AND CEILING HEIGHT

All habitable room (rooms used for living, sleeping, eating and cooking) must be provided with natural light by means of exterior glazed openings (windows) with an area not less than 8% of the floor area of which half of such glazed opening shall be openable for natural ventilation. Windows shall open directly onto a street, public alley, yard or court located on the same lot as the building. To determine light and ventilation, any room may be considered a portion of an adjoining room when half of the area of the common wall is open and unobstructed, the opening must be greater than one-tenth of the interior room's floor area or 5 square feet, whichever is greater. Minimum ceiling height is 7'-0" in all habitable rooms, corridors, bathrooms, kitchens and similar spaces. Areas in a basement with less than 7'-0" headroom are considered crawl space.

MINIMUM CLEAR DIMENSIONS

Hall width 3'-0"; Ceiling height in all rooms (living, sleeping, eating and cooking, halls, bathrooms and closets) 7'-0"; Room with a ceiling height of less than 7'-0" are considered storage or crawl spaces; Width for toilet (Centered) 2'-6" with 24" clearance in front; Stairway width 3'-0".

REQUIRED INSPECTIONS

1. Under floor piping rough-in prior to backfill and placement of concrete.
2. Rough-in plumbing (before fixtures are set) and rough-in heating
3. Rough-in electrical (before wires are covered). Contact the electrical inspector Brian Nelson at (763) 434-4853.
4. Framing after all framing and ductwork is in place and rough-in electrical, heating, and plumbing systems have been approved.
5. Insulation after framing has been approved.
6. Final Electrical, plumbing, and heating
7. Final Building after receiving all other finals.

SAFETY GLAZING

Safety glazing is required in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathrooms, and showers. Safety glazing must be used in any portion of a building wall enclosing these compartments and where the bottom exposed edge of the glazing is less than 60" above a

walking surface. Safety glazing is required in walls enclosing stairway landings or within 60" of the top and bottom of stairways where the bottom edge of the glass is less than 60 inches above the walking surface. Safety glazing is required in all glazing in railings regardless of an area or height above a walking surface. Included are structural baluster panels and nonstructural in-fill glazing. Safety glazing is required in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a 24" arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60" above the walking surface.

SMOKE DETECTORS

When alterations, repairs or additions requiring a permit, or when one or more sleeping rooms are added or created in existing homes, the entire building shall be provided with smoke detectors as required for new homes. A smoke detector is required at a point centrally located in the hallway or area giving access to each separate sleeping area, on each story and in the basement, and in every sleeping room throughout the entire house. In areas and rooms being finished, the smoke detector shall receive their primary power from the building wiring and be equipped with battery backup and be interconnected. Smoke detectors may be battery operated when installed in additions or existing buildings where construction is considered closed.

STAIRWAYS

Minimum stairway headroom clearance is 6'8" (measured vertically from any plane parallel and tangent to the stairway tread nosing to above all points). Landing at the bottom of the stairway requires 36" of depth to the door or wall. The minimum width of a stairway is 36" inches in width. The maximum rise on stairs is 8". The minimum rise is 4". The minimum run of the treads is 9". The largest tread depth or riser height shall not exceed the smallest by more than 3/8". Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch-diameter sphere. Exception: The triangular opening formed by the riser, tread and bottom element of the guardrail may be sized so that a 6 inch sphere cannot pass through. All interior and exterior stairways shall be provided with a means to illuminate the stairs, including the landings and treads. Interior stairway illumination shall have controls located at both the top and bottom of the stairway. Exterior stairways shall be provided with an artificial light source located in the immediate vicinity of the top landing of the stairway. The illumination of exterior stairs shall be controlled from inside the dwelling unit. Exception: Lights that are continuously illuminated or automatically activated.

Information Sheet (submit with permit application)

1. Show size of area to be finished and all dimensions on plan.
2. Show location of all walls on plan.
3. Show use of rooms on plan. (i.e. Family Room, bedroom, Den)
4. Window information (show location on plan).

	Window Location	Glass Size of Operable Sash	Type (Casement, Slider, D.H., etc.)	Sill height from floor
Window A	_____	_____	_____	_____
Window B	_____	_____	_____	_____
Window C	_____	_____	_____	_____
Window D	_____	_____	_____	_____
Window E	_____	_____	_____	_____

5. Exterior wall construction
 - a. Size of studs/stripping _____
 - b. Spacing of studs _____
 - c. Type and thickness of insulation _____
 - d. Vapor barrier (i.e. 4 or 6 mil polyethylene) _____
 - e. Wall covering (i.e. 1/2" gypsum board) _____
6. Interior wall construction
 - a. Size of studs _____
 - b. Spacing of studs _____
 - c. Wall covering (i.e. 1/2" gypsum board, plywood paneling) _____
7. Ceiling covering (i.e. 1/2" or 5/8" gypsum board, lay-in) _____
8. Smoke detector location (also shown on plan) _____
9. Plumbing to be installed
 - a. _____ None
 - b. _____ 1/2 bath on existing rough-in
 - c. _____ 3/4 or full bath on existing rough-in
 - d. _____ 1/2 bath including new rough-in
 - e. _____ 3/4 or full bath on new rough-in
 - f. _____ Other (please specify) _____
10. Heating to be installed (check one)
 - a. _____ Extend supply and returns
 - b. _____ Use existing with no changes
 - c. _____ Other (please specify) _____
11. Fireplace _____ Yes _____ No