

- An access panel must be provided for all plumbing traps that have slip joints. Example would be for bathtubs. This includes any existing plumbing traps that may have their access from an unfinished basement.

HOSEBIB SHUTOFF ACCESS: Access shall be maintained on all water control valves.

CRAWL SPACE ACCESS: All crawl spaces shall have a minimum 18" x 24" unobstructed opening.

FOAM INSULATION: Foam plastic insulation shall be protected on the interior by not less than 1/2" gypsum board.

POLY VAPOR BARRIER: Insulation must be covered on the interior by not less than 4 mil poly vapor barrier. If the poly vapor barrier is going to be left exposed it must be a fire retardant type of poly.

WATER-RESISTANT GYPSUM BOARD: Water-resistant gypsum board (green board) shall not be used over a vapor retarder, areas subject to continuous high humidity, such as saunas, or on ceilings where frame spacing exceeds 12 inches on center.

MINIMUM CEILING HEIGHT: All habitable spaces shall have a ceiling height of not less than 7'-6". Kitchens, halls and bathrooms may have a ceiling height of not less than 7'-0".

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 manufacture specifications. Furnaces may not be accessed through, or located in a bedroom or bathroom.

FURNACE FLUE CLEARANCE: All proper clearances from the furnace flue shall be maintained. (i.e.: 1 inch clearance for a double wall type "B" vent and a 6 inch clearance for single wall flue pipe).

EQUIPMENT ACCESS: Access for water heater, water softener, and other equipment shall be maintained.

GAS PIPING: Joints or fittings in gas piping may not be concealed within the wall or ceiling construction.

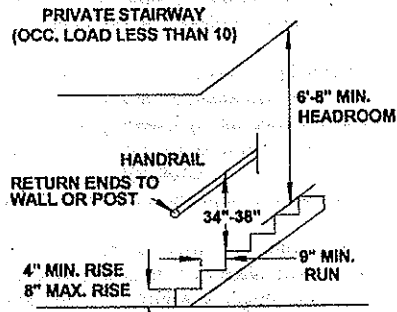
FIREPLACES: All gas fireplaces shall be listed and approved type of appliance and installed according to the manufacture specs. Also show all fireplaces on the building plans and indicate if they are a gas fireplace or a wood burning fireplace.

SEPTIC SYSTEMS: If you have an onsite sewage treatment system and you are adding more bedrooms to your home you will need to provide information that the septic system was designed for the additional bedroom(s) or the septic system will have to be updated.

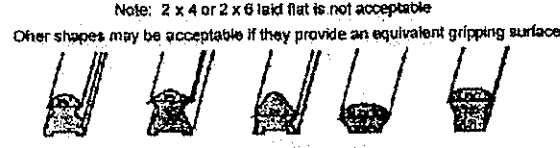
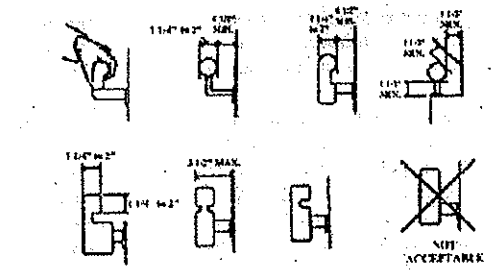
ELECTRICAL: A separate permit is required for any electrical work being done. For information regarding electrical permits call the State Board of Electricity at 651-642-0800.

NOTE: The above outlines only general code requirements with regard to basement finish and/or room finish construction. For specific code requirements, please refer to the Minnesota State Building Code or call your local Building Inspector.

STAIR DETAIL INFORMATION



ACCEPTABLE HANDRAIL DETAILS



REQUIRED INSPECTIONS:

- 1. PLUMBING ROUGH IN:** To be made after all drain, waste, and vent piping and all water lines have been installed. All plumbing pipes must remain exposed for inspection.
- 2. FRAMING AND MECHANICAL ROUGH IN:** To be made after all framing, insulation and ductwork are in place and the rough electrical, and plumbing systems are approved. prior to closing the construction so as to make it accessible for inspection. (This inspection can be done at the same time as the plumbing rough in inspection.)
- 3. INSULATION:** To be made after insulation materials and vapor barrier has been installed. (This inspection can be done at the same time as the framing inspection.)
- 4. FIREPLACE:** To be made after all venting and framing is completed but before any finish materials have been installed.
- 5. FINAL:** To be made upon completion of the basement and/or room finish. Note: Electrical final inspection is to be completed before scheduling a final inspection.
- 6. OTHER INSPECTIONS:** In addition to the inspections above, the inspector may make or require other inspections to ascertain compliance with the provisions of the code or to assist you with your questions or concerns during the construction process.

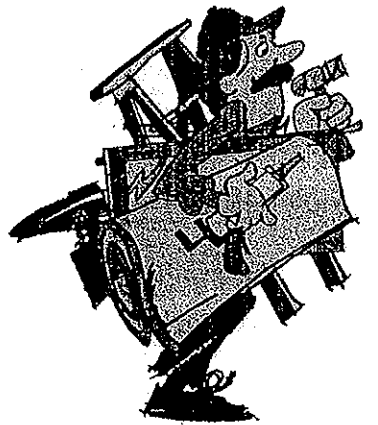
24 - 48 HOUR NOTICE IS REQUIRED FOR ALL INSPECTIONS

CALL INSPECTIONS DEPARTMENT AT (763) 479-1720



Be sure your contractor is licensed
It's the law in Minnesota

**BUILDING PERMITS
MADE EASIER
FOR BASEMENT
AND/OR ROOM
FINISHES**



Buffalo

CITY OF BUFFALO, MINNESOTA

BOX 248 Loretto MN 55357

METRO WEST INSPECTION SERVICES, INC



Main Office (763) 479-1720
Fax (763) 479-3090
Buffalo Office (763) 684-0383
e-mail address mtrowstbut@aol.com

BUILDING PERMITS FOR BASEMENT AND ROOM FINISHES

PERMIT REQUIREMENTS: Building permits are required for all basement and/or room finishes.

PERMIT FEES: The building permit fee is based on the project's construction costs for building materials and labor and is designed to cover the cost of a plan review and the field inspections that will be done during construction. The plan review is done by the building inspector in order to spot potential problems or pitfalls that may arise. The inspector will make notes on the plan for your use. Construction inspections will be done during the project to insure code compliance and the materials you use are installed safely. The plan review and inspections are not designed to be a guarantee of the work but are done to provide a reasonable degree of review and observation so the project will be successful, safe and long lasting. Permits for a basement finish average about \$140.00.

INFORMATION NECESSARY WHEN APPLYING FOR A PERMIT: Information necessary for the Inspections Department to do a proper job of plan review and to help the project go smoothly are as follows:

1. Completed building permit application
2. 2 copies of floor plan

Remember the purpose of the plan review is for the inspector to use his or her experience to inform you of potential problems or make suggestions, so the more information shown on the plans the more likely your project will be successful.

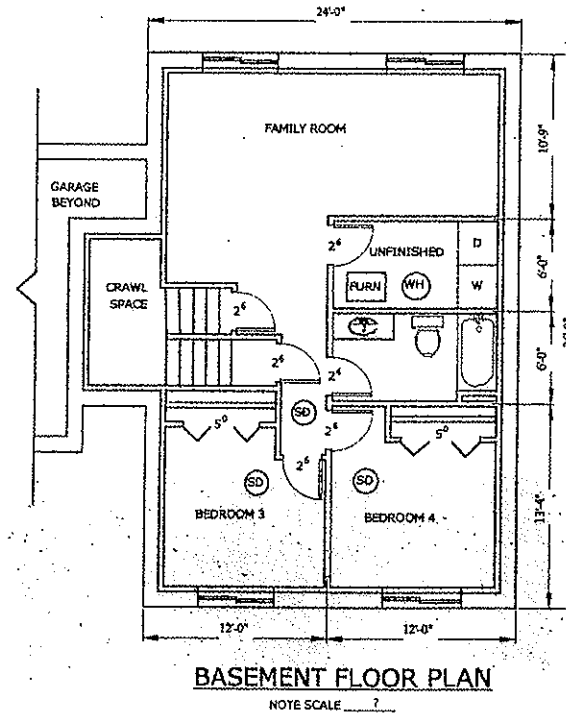
MINIMUM PLAN DETAILS NECESSARY FOR A PROPER REVIEW: The following text and sample drawing shows the minimum detail expected so the permit process can proceed smoothly. Plans do not need to be professionally drawn but should include all of the information requested. The application for permit can be filled out at the time you drop off your plans. Permits can be handled by stopping in at city hall or by mail.

SUBMIT 2 COPIES OF THE FLOOR PLAN SHOWING PROPOSED DESIGN AND MATERIALS: All drawings need to be drawn to scale and the scale must be shown on the drawing. Floor plans shall include the following:

1. Location of lower level or basement exterior walls.
2. Location of all existing and proposed walls of lower level or basement.
3. Name of each existing and proposed rooms.

4. Location and size of windows and doors.
5. Wall construction materials.
6. Location of existing or proposed plumbing fixtures, furnace and water heater.
7. Location of stairway, fireplaces, etc.
8. Location of smoke detectors.
9. Note any other information that pertains to the project.

SAMPLE FLOOR PLAN



NOTE: Some items are not shown on sample floor plan for clarity.

ZONING REQUIREMENTS:

Zoning requirements vary depending upon the city and zoning district your home is located in. Some communities have zoning provisions that may apply basement and/or room finishes. Such as if you are planning to run a business out of your home or make it into apartments. Contact the Building or Planning Department in your community for the requirements in your location. **This is an important first step in the planning for any building project.**

BUILDING CODE REQUIREMENTS:

BOTTOM PLATES: Bottom plates for new walls shall be of an approved type of treated wood that are in contact with the concrete floor.

BEAMS AND HEADERS: Properly sized beams and headers must be used in structural bearing conditions. Specify intended sizes of such beams and headers on plans.

FIRE BLOCKING: Fire blocking and draftstopping shall be installed to cut off all concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors. Fire block all soffits, under bathtub(s) and other locations such as holes for pipes and similar places which could afford a passage for flames. Fire block material shall be solid wood blocking or gypsum board. Fire blocking may be solidly packed fiberglass insulation or equal where other materials is not possible.

DRAFT STOPPING: When there is usable space above and below the concealed space of a floor-ceiling assembly in a single-family dwelling, draft stops shall be installed so that the area of the concealed space does not exceed 1,000 sq. ft. Draftstopping shall divide the concealed space into approximately equal spaces

STAIRS: The minimum width is 36 inches for all stairs and hallways. The Maximum riser height is 8 inches and the minimum riser height is 4 inches. The minimum run is 9 inches. The largest tread width or riser height shall not exceed the smallest by more than 3/8 inch. (See stair detail information).

SPACE UNDER STAIRS: Enclosed usable space under stairs must be protected with a minimum of 5/8" gypsum wallboard underside of stairs and walls under stairs.

HANDRAILS: Stairways having four or more risers shall have at least one continuous gripable handrail. The top of all handrails going down stairs shall be placed not less than 34 inches or no more than 38 inches above the nosing of the treads. Handrail ends shall be returned or terminated into the wall and/or newel post. The handrail shall not be less than 1 1/4" or more than 2 inches in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handrail shall have a smooth surface with no sharp corners. (See detail on acceptable handrails).

GUARDRAILS: Open sides of landings and stairs which are more than 30 inches above grade or floor below must be protected by a guardrail not less than 36 inches in height. Open guardrails and stair railings require intermediate rails or an ornamental pattern such that a ball 4 inches in diameter cannot pass through.

EGRESS WINDOW: Every bedroom and/or sleeping room shall have an egress window.

- The minimum net clear opening shall be no less than 5.7 square feet.
- The minimum clear height is 24 inches.
- The minimum clear width is 20 inches. (note: the minimum clear height and/or width needs to be larger to meet the 5.7 square feet of clear opening).
- The maximum sill height shall be not more than 44" from the finished floor. If window is below grade a window well of 9 sq. ft. net clear opening with window fully opened must be provided.
- A permanent ladder is required if the window well is greater than 44" from top of well to the ground inside of well. Window well must be "upsized" to accommodate the ladder. (See also handout for egress windows).

SMOKE DETECTORS: Smoke detectors shall be installed in all bedrooms, in all hallways to bedrooms and one on each floor. They must be hard wired with battery backup. When alterations are made to existing homes costing \$1000 or more all smoke detectors must be brought up to current code requirements. One in all bedrooms, one in hallway to bedrooms, and one on each floor. They may be battery operated. (See also handout for smoke detectors).

BATHROOMS/PLUMBING: All plumbing must meet MN State Plumbing Code requirements. For example:

- If you live in a city over 5,000 in population the plumber must be a licensed master plumber in the State of Minnesota. (Note: If you own and occupy the home you may do your own plumbing work).
- Each water closet shall be centered in a clear space of not less than 30 inches in with and have a clear space in front of the water closet of not less than 24 inches. The water closet shall be a 1.6 gallon flush.
- Dissimilar materials must not be attached directly to each other, i.e.: PVC must not be glued to ABS waste and vent.
- An approved anti-scald (thermostatic or pressure balancing type) faucet must be installed in new shower or shower/bath installations.
- Each bathroom shall be provided with an openable window or powered exhaust fan venting to the outside. The last 3 feet of exhaust duct at it's discharge must be insulated (minimum R-3.3).
- Showers must be capable of encompassing a 30 inch circle measured at the height of the shower control handles (bath tubs used as showers not included).