



City of Ham Lake

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Ham Lake, MN 55304

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BASEMENT FINISHING INFORMATION

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

REQUIRED PERMITS:

Basement finishing does require a Building Permit. A Plumbing Permit, Heating Permit and Fireplace Permit may also be required for a basement finish, each requires a separate permit.

An Electrical permit may also be required. The State of Minnesota issues electrical permits. Levi Stoy is the inspector covering the Ham Lake area. He can be reached at 763-607-2583 or by email at levistoy@gmail.com

PLAN REQUIREMENTS:

To obtain a building permit, two sets of plans showing the basement layout and indicating use of each room (including the total number of bedrooms within the dwelling), proposed walls, doors, windows, smoke detectors, sump baskets and mechanical. Combustion air to the furnace is also required.

GENERAL CODE REQUIREMENTS:

1. **Smoke alarms** are required in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms and on each story of the dwelling. Smoke alarms shall be hard wired in new construction and at a minimum, battery operated in existing areas.
2. **Carbon Monoxide Alarms** are required 10' from sleeping rooms per MS 299F.50.
3. **Basements and each bedroom shall be provided with an emergency escape** having a minimum net clear opening of 5.7 square feet and a finished sill height of not more than 44 inches above the floor (IRC-310.1) and provide a path not less than 36" in height to public way, yard or court (R310.5) For more information see the "**EMERGENCY ESCAPE HANDOUT**".
4. All wood in contact with concrete or masonry must be treated for direct contact or be wood or natural resistant to decay (IRC-319).
5. Enclosed closets under stairs must be entirely finished with ½" gypsum board (IRC-311.2.2).
6. Each water closet shall be centered in a clear space of not less than 30 inches in width and have a clear space in front of the water closet of not less than 21 inches.
7. An **approved anti-scald** (thermostatic or pressure balancing type) faucet must be installed in new shower or shower/bath installations.
8. Bathrooms shall be provided with an operable window with an aggregate glazing area of not less than 3 square feet, one half of which must be open-able. Or provide a powered exhaust fan (minimum ventilation rate of 50 cubic feet per minute) vented to the exterior. The last 3 feet of exhaust duct within conditioned space at its discharge must be insulated to a minimum R-3.3 with a separate vapor barrier (R- 303.3 and N 1103.2.1).
9. Showers must be capable of encompassing a 30-inch circle, measured at the height of the shower control handles. Bathtubs used as showers and showers in remodel (4715.1380 Subd 4) are exempt.

10. Dissimilar materials must not be attached directly to each other i.e. if PVC and ABS drain, waste and vent are to be glued, and the appropriate glue for that application must be used.
11. Furnaces shall have 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.
12. Combustion, dilution and ventilation air is required with gas burning appliances.
13. Gas burning appliances (furnace, water heater, etc.) must not be accessed through or located in, or obtain combustion air from a sleeping room or bathroom, toilet room or storage closets (IMC 303.3).
14. In warm air heating systems, an equal amount of air supply and return air shall be obtained in each habitable room and maintain a minimum of 68-degrees at 3-feet above floor and 2-feet from exterior walls (IRC 303.8).
15. Proper clearance from furnace flue shall be maintained (i.e.: **1-inch** clearance for a double wall **type "B"** vent and a **6-inch** clearance for a single wall flue pipe, minimum).
16. Provide access for water heater, water softener, water meter and other equipment to allow replacement or repair.
17. Do not locate electrical panel in closets and provide 3-feet of clear floor space for electrical panel.
18. **Minimum Ceiling Height** for habitable areas (living, sleeping, eating, cooking and basements) is **7-feet** measured from finished floor to lowest projection from the ceiling except beams and girders not less than 4-inch on center can project 6-inch below the required height (1309-0305.1).
19. **Gas lines** with mechanical joints must not be in concealed spaces. All gas lines require 2 tests at rough-in inspection to hold 25# for 12 hours. Final Inspection requires manometer test.
20. All hallways minimum width not less than 36" (R-311.3).
21. Foam plastic shall be separated from the interior of the building by minimum ½" gypsum or an approved finish material to limit temperature rise to less than 250-degrees after 15 minutes (R-314.4).
22. The number of bedrooms in the dwelling is used to size your septic system. Therefore adding additional bedrooms require resizing or reconstruction of your septic system.

REQUIRED INSPECTIONS:

1. Rough-in plumbing (before fixtures are set).
2. Rough-in heating.
3. Rough-in electrical (before wiring is covered). Contact your local electrical inspector Andy Sloth at 763-421-2360 (Calls taken Monday – Friday from 7:00 am to 8:30 am).
4. Framing – after all framing and ductwork is in place and the rough-in electrical and plumbing systems have been approved.
5. Insulation (after framing has been approved).
6. Final electrical, plumbing, and heating.
7. Final building – following approval of all other final inspections.

RECOMMENDATIONS:

1. To prevent possible condensation stains on the basement ceiling, insulate and cover with vapor barrier all cold water supply lines.