

Basement Finish

Reference: City of Marion Ordinances and International Residential Code

Permit requirements:

A building permit is required when finishing any portion of a basement. A homeowner may perform the construction work on their own property where they reside without a contractor's license. Additional permits are required for any mechanical, electrical, or plumbing work to be completed. Contractors or installers doing mechanical, electrical, or plumbing work are to possess Iowa state licenses.

An owner/resident of a single-family dwelling may be issued a mechanical, electrical, or plumbing permit for work performed by the owner/resident on their own single-family dwelling.

Building Permits are issued for one 12-month period and can be renewed once for an additional 12 months. The sub-permits are issued for a 24-month period and may not be renewed. Projects must be completed prior to the expiration of the Permit, or you may be subject to Municipal Infractions as set forth in the Marion Code of Ordinances.

Applying for permits: (Submit digital copies of building plans for review and approval.)

- Complete the Building Permit Application and floor plans as described below
- Complete all applicable mechanical, electrical, or plumbing permit applications if applying as an owner/resident of a single-family home
- Email the application(s) and all completed plans to buildingpermits@cityofmarion.org or go to the City of Marion website for information about applying through the Online Permit Service portal
- Upon completion of the review, you will be notified by phone or email to secure your permit

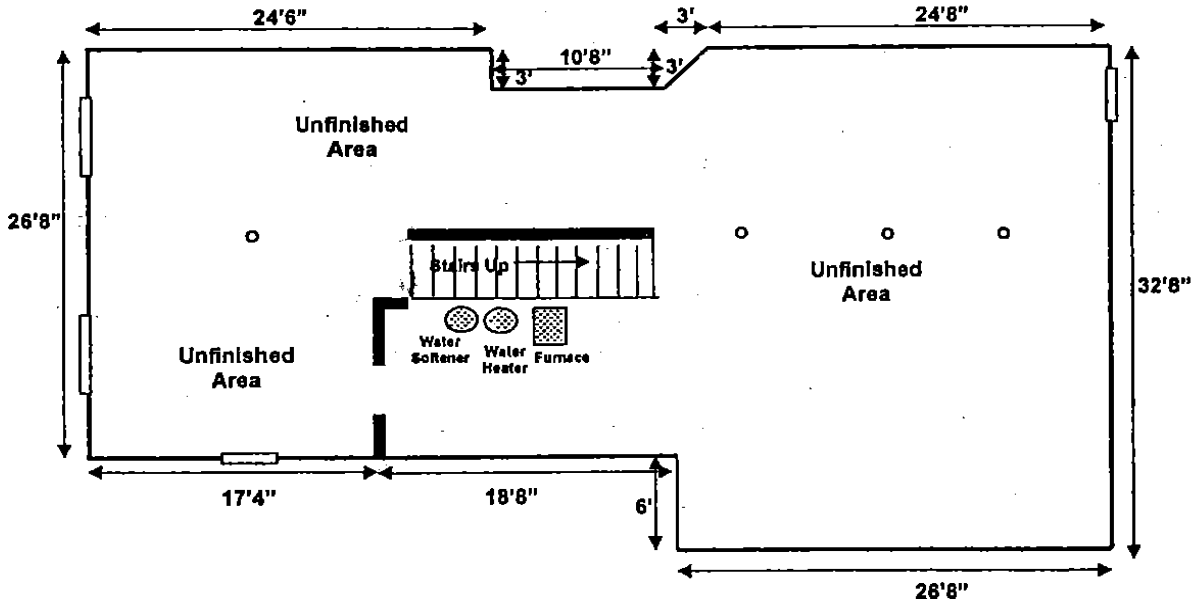
Construction Plans:

All construction drawings must be legible. Plans do not necessarily need to be drawn to scale but must be dimensioned clearly. The floor plan should be of the entire basement showing all details of existing walls, new walls, or walls to be removed. Please use the following check list when completing your plans for submittal with a building permit application.

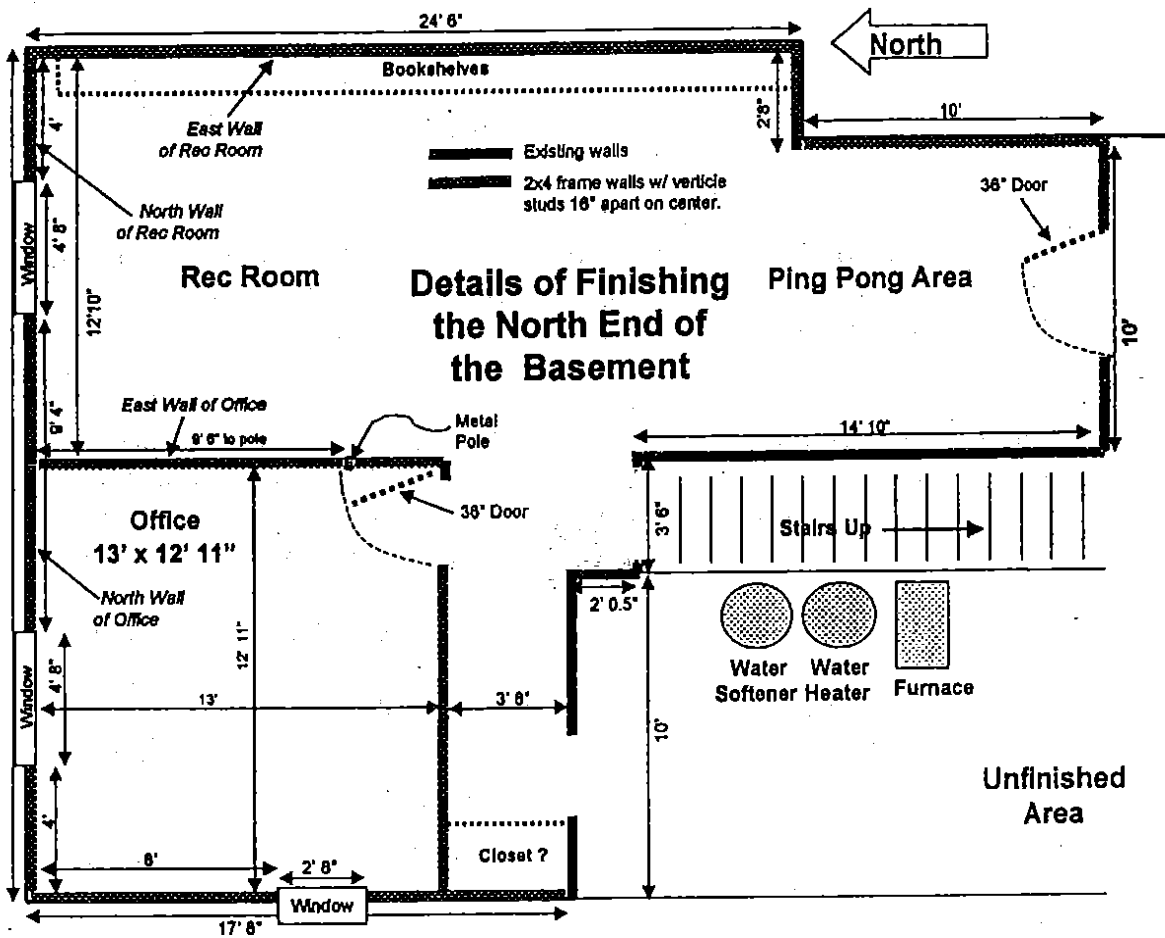
➤ **FLOOR PLAN**

- _____ 1. Label all rooms and show all dimensions
- _____ 2. Show location and sizes of all windows, doors, and stairs
- _____ 3. Location of furnace, water heater, or boiler
- _____ 4. Fireplace or stove location, if applicable
- _____ 5. Electrical fuse or breaker panel location, if located in the basement
- _____ 6. Escape window location and size if required (See Page 3 EERW)
- _____ 7. Existing smoke alarm locations if present
- _____ 8. Location of existing or future plumbing fixtures

Example: CURRENT UNFINISHED BASEMENT



Example: NEW PLANS FOR BASEMENT



Construction Requirements:

- All plumbing, electrical, mechanical, and framing is to be installed to current codes and ordinances.

- **FRAMING**

All wood furring strips or other wood framing members attached directly to the concrete walls or floors must be pressure treated or a decay-resistant wood unless separated from the concrete by an impervious moisture barrier.

- **EMERGENCY ESCAPE & RESCUE WINDOW (EERW)**

Every bedroom is required to have at least one operable window or door for emergency escape or rescue. These shall open directly into a public street, public alley, yard, or exit court. The window or door shall be operable from the inside to provide a full, clear opening without the use of special tools. (See "ESCAPE WINDOWS" brochure.)

Escape windows for bedrooms are to meet the following guidelines:

- a. Minimum net width 20"
- b. Minimum net height 24"
- c. Total minimum opening 5.7 square feet
* Grade level windows may be 5.0 square feet
- d. Finished sill height 44" maximum from floor

Exception for existing Window: An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m²) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).

Marion Ordinance states that basement escape windows required for remodeling or finish of rooms in existing buildings may have the windowsill height measured from an elevated landing not less than 36 inches wide, not less than 18 inches out from the interior finish of the exterior wall and not more than 24 inches in height. The landing shall be permanently affixed to the floor and the wall under the window it serves.

- **INSULATION**

Minimum R-19 insulation is required on all basement cavity framed walls.

- **LANDINGS**

Provide a landing at the top and bottom of stairs a minimum depth of 36" x the full width of the stairs.

- **CEILING HEIGHT**

Habitable rooms, kitchens, halls, bathrooms, and toilet compartments shall have a minimum ceiling height of 7'-0". Under beams, 6' 6" will be allowed. Every effort shall be made to provide the most headroom possible. Do not remove any basement support post or walls without approved design modifications

➤ **ELECTRICAL**

Tamper resistant electrical receptacles are required in dwellings for all receptacles below 5'-6". They are not required if a receptacle is located behind an appliance in a dedicated space and is not easily moved

Arc Fault Breaker protection is required on all branch circuits that supply electricity to living space. All electrical outlets (lights, receptacles, fans, smoke detectors, etc.) are required to be protected. Arc fault protection is not required in bathrooms or unfinished basements.

Exterior receptacles are to be identified as "weather resistant and tamper resistant".

GFCI protection is required on all receptacles in the basement. The sump is to be on a GFCI receptacle and a minimum of a 20-amp dedicated circuit. A GFCI protected receptacle is required within 25' of the furnace.

Exposed wires in unfinished areas must be protected from damage. Apply wall coverings over or provide an adequate means of protection.

➤ **SMOKE ALARMS**

Smoke alarms must meet current code in the entire home (A/C powered, battery back-up, dual sensor, interconnected, on all floors, inside and outside sleeping rooms.)

➤ **CARBON MONOXIDE DETECTORS**

Carbon monoxide detectors shall be installed outside each separate sleeping area of the dwelling unit where fuel-fired appliances are installed and/or that have attached garages. These alarms can be a separate alarm or combined with the smoke alarms, or a battery alarm.

➤ **STAIRWAY FIRE PROTECTION**

If the area under the stairs is used for storage or is partially enclosed, the walls and underside of the stairs shall be covered with a minimum of one layer of 1/2" gypsum board. Seams and joints are to be taped with a minimum of one coat of drywall compound.

➤ **HEATING AND RETURN AIR**

All habitable rooms shall have a heating source capable of maintaining a room temperature of 70 degrees F. at a point 3' above the floor. Unfinished or storage areas do not need to be heated.

Bathroom exhaust fans are to be vented directly to the exterior of the building.

➤ **PLUMBING**

Toilets cannot be set closer than 15" from its center to any side walls or partitions and needs to be at least 21" from a wall or partition to the front of the toilet.

➤ **COMBUSTION AIR**

When a fuel-burning furnace, water heater or gas dryer is enclosed with walls, it may be necessary to provide combustion air (air from outside the enclosed room). Potential sources of combustion air are from inside the home, ducts directly to the outside, or a combination. Should this situation arise, check with your heating contractor.

Fuel fired appliances shall not obtain combustion air from any of the following rooms or spaces, such as sleeping rooms, bathrooms, and toilet rooms.

➤ **CLEARANCES**

- a. Electrical service panel: A minimum space of 30" wide and 36" deep shall be maintained. Panel shall not be located in a bathroom or clothes closet.
- b. Furnace: 3" side and back and top with the total width of the enclosing space being at least 12" wider than the furnace. A furnace having a firebox open to the atmosphere shall have a minimum of 6" front clearance to a combustible. Minimum width door or access to utility area shall be 24" and large enough to remove the largest appliance. Service space of not less than 30" deep and the height of the appliance (space can be through an open door. Verify clearances with listing of appliance. Minimum access of 30" by 30" shall be provided in front of the furnace and water heater.
- c. Water heater: For clearances to combustibles, check the nameplate on the appliance.
- d. FIREPLACE OR STOVE: Install to the manufacturer's listing for each appliance.

Inspections required:

Most basement finish projects require only 3 inspections: the rough-in inspection, drywall nail inspection, and the final inspection. No inspections will be made unless the proper permits have been obtained. A good rule of thumb is that you should not cover up any construction work that has not been inspected.

When all of the subcontractors have completed all rough-ins, the general contractor or homeowner may call and request an appointment for a certain time of day.

Call **319-743-6330** to request an inspection.

Inspection hours are 9:00 a.m. to 11:00 a.m. and 1:30 p.m. to 3:00 p.m., Monday thru Friday.

- **Rough-In Inspection** – all rough framing, plumbing, electrical and mechanical work is completed, but nothing is covered yet
- **Drywall Nail Inspection** – gypsum board installed with screws or nails complete before taping (See [Drywall Nailing](#) brochure)
- **Final inspection** – after all work is completed and prior to use