

RESIDENTIAL ADDITIONS

Construction Permit Tips For Home Owners

This publication provides guidelines for constructing an addition to a detached single-family home. The code requirements herein are not all inclusive and should not be construed to represent all code requirements for your project and are representative of all conditions that you may encounter.

You must obtain permits for the construction of a residential addition. Listed below are the types of permits required depending on the complexity of the project. Apply for your permits at the Grand Ledge City Hall – Building Department, located at 310 Greenwood Street.

- **Building permit** for all architectural and structural elements.
- **Electrical permit for** all electrical installations.
- **Mechanical permit for** all heating, cooling and ventilation systems.
- **Plumbing permit for** all installations of plumbing and gas piping systems.

Helpful Hint: As the property owner, you may obtain permits in your own name; however, if a contractor is to perform the work, it is **required** that the contractor secure the permit and be listed as the responsible party. In this way, the city will be in a better position to assist you in gaining compliance with codes if the work is defective. A contractor must be properly licensed in order to obtain a permit.

PERMIT PROCESS

- Bring the construction documents described herein to the Grand Ledge City Hall Building Department where your permit process will begin. Here you will complete a **Building Permit Application**. Permit applications are also available on the City of Grand Ledge website **grand-ledge.com**.
- A building permit is issued when all required approvals have been obtained and applicable fees have been paid. Once your permits are issued, you must post a copy on the job site until the project has received final approval.
- A building permit must be issued within 6 months of the application date or the application will be cancelled.
- Permits that have no activity for 6 months or more will be cancelled.

FEES

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- For information on the related fees for a residential garage or shed, contact the Grand Ledge Building Department located in the Grand Ledge City Hall at 310 Greenwood Street, or call 517-622-4756
- Fees may be paid by cash or check made out to the **City of Grand Ledge**.

BUILDING CODE

Your project is required to comply with the 2009 Michigan Residential Code (MRC), effective March, 2011 which incorporates the 2009 International Residential Code (IRC) for residential construction. You may purchase the MRC through the State of Michigan Bureau of Construction Codes, ph. 517-241-9302, or by visiting their website at <http://www.michigan.gov/bccfs>

MINIMUM SUBMISSION REQUIREMENTS

All submissions for a residential garage or shed must include the following:

- Two sets of building plans or manufacturer's plans for prefabricated structures (see below for requirements).
- Two copies of the building location survey or grading plan.

HOUSE LOCATION SURVEY

If you do not have a copy of your house location survey, review your loan closing documents or contact your mortgage lending institution to obtain one. You may also contact the City of Grand Ledge Building Department 517-622-4756. However surveys are not available for all properties. If you are unable to locate a copy of your survey through these sources, you will be required to hire a certified land surveyor or civil engineer to have one prepared, **provided zoning deems unnecessary**.

House location surveys must meet the following requirements:

- No reduced, enlarged or faxed copies.
- The area of the garage or shed drawn to scale.
- Provide the square footage or overall dimensions of the garage or shed.

BUILDING PLAN

Building Plans must meet the requirements or show the items listed below.

- Minimum scale of ¼" = 1'-0". All dimensions must be shown.
- Minimum sheet size: 8 ½" x 11". No pencil sketches.
- Edition of the code used for the design.
- Name, address and phone number of the building designer, if not noted on the permit application.

- If plans are prepared by a Michigan licensed design professional, at least one set of plans must bear the **original** seal, signature and date in accordance with Public Act 299 of 1980. This set will be retained by the City of Grand Ledge.
- List of material specifications including, but not limited to, grade and species of lumber, concrete strength and steel strength.
- List of design load criteria: live load, snow load, wind load and bearing capacity. In Grand Ledge, the minimum design ground snow load is 30 PSF and wind speed is 90 mph.
- Foundation plan and footing details. The minimum footing depth is 42"; however, a footing depth of 12" is permitted for detached garages or sheds that are under 600 square feet.
- Sill plate anchor bolt type, size and locations.
- Structural framing plans of the floor and roof accurately detailing all members, sizes, span lengths and spacing. Truss shop drawings for pre-engineered floor or roof trusses may be submitted directly to Grand Ledge Building Department after the building permit has been issued, but prior to any truss erection.
- Structural details of connection.
- Evaluation report from an approved testing laboratory and load calculations for all adjustable columns.
- Typical wall section showing wall bracing and sheathing thickness (special products or devices require and evaluation report from an approved testing laboratory).
- Elevations (front, sides and rear) indicating window and door location and dimensions.
- Any pre-engineered or pre-constructed shed purchased from a home center store, lumber company or similar, requires detailed drawings and complete plan review, if over 200 square feet, requiring a building permit.

MINIMUM CODE REQUIREMENTS

- All sheds and playhouses are required to be detached from the house. Sheds attached to the house are considered additions. See the "Additions" publication for more information.
- Sheds with an area of 200 Square feet or less do not require a building permit, however, they must comply with the setback requirements of the City of Grand Ledge Zoning Department.
- Attached garages must be separated from living areas with a minimum of 1/2" gypsum board or equivalent applied to the interior side of the exterior walls. Garages beneath living areas must have 5/8", Type X gypsum board or equivalent applied to the garage ceiling. The structure supporting the ceiling with a living above shall be covered with 1/2" Gypsum board.
- Doors between and attached garage and adjacent living areas must be a 1-3/8" solid wood core door, a 1-3/8" honeycomb core steel door or a 20-minute fire-rated door.
- Garage floors must be 3 1/2" minimum thick concrete slab with a compressive strength of 3,500 PSI and shall be air-entrained. The site shall be prepared with a 4" base course of clean graded sand, gravel or crushed stone.
- A vapor retarder shall be provided between the concrete floor slab and the base course.
- All attached garages and all detached garages with electricity must have at least one GFCI, 125 volt, single-phase, 15- or 20-ampere outlet. All additional outlets must meet the same requirements except for inaccessible outlets such as those serving garage door openers.
- At least one wall switch controlled light must be installed in all attached garages and all detached garages with electricity.

- Fuel-fired appliances and equipment, such as hot-water heaters and furnaces, must be elevated such that the ignition source is a minimum of 18" above the garage floor.
- Fuel-fired appliances and equipment must also be protected from vehicle impact or shall be elevated a minimum of 6 feet above the garage floor.
- NO WOOD FIRE APPLIANCES.

SOILS

- Footings shall bear on undisturbed soils, at a minimum depth of 42" below grade.
- Problem soils are soil types which may have a high water table, organic material, expansive clays or other behavioral problems. If your property contains a problem soil, you may need to hire a registered design professional to design the foundation system.

ELECTRICAL, MECHANICAL AND PLUMBING PERMIT PROCESS

Electrical, mechanical and plumbing permits are issued after the building permit is approved, but may be processed at the same time.

In most cases they do not require a plan submission. Code compliance will be determined at the time of the inspection.

REQUIREMENTS FOR PUBLIC UTILITIES

You must call the **MISS DIG** system, a free service, at **811** or 800-482-7171, at least 3 full working days before excavating to ensure that the construction does not interfere with underground utility lines. The MISS DIG system member utilities will mark the approximate location of their underground public utility lines at no charge. MISS DIG system, Inc. **DOES NOT MARK!** If you fail to contact MISS DIG and damage occurs, you may be liable for all cost of repair.

INSPECTION REQUIREMENTS

A copy of the approved permit, plat or grading plan and building plans must be on the job site and must be available to the inspector during each inspection. Approval must be obtained prior to proceeding with the next applicable element.

- **Footing:** The footing trench or formwork prepared, steel reinforcement in place, and ready for placement of concrete. The bottom of the footing must bear on solid ground, free of water and loose soil. If problem soil exist, inspection must be made by geotechnical engineer.
- **Slab:** The area must be prepped for concrete with reinforcing steel and vapor barrier in place.
- **Electrical, Mechanical and Plumbing Rough:** Rough inspection required prior to or completed and approved at the same time as the building rough inspection.
- **Building Rough:** Concrete or masonry walls and slabs must be approved. Sill plates must be installed and secured to the foundation. Structure must be weather tight. Wall and roof sheathing must be installed. Windows and doors must be installed. Electrical rough inspection must be approved or completed at the same time as the rough building inspection.
- **Electrical, Mechanical, and Plumbing Final:** Final inspection required prior to or completed and approved at the same time as the building rough inspection.

- **Building Final:** Any electrical, mechanical or plumbing permit final inspections must be approved or completed at the same time as the final building inspection. The structure must be complete and ready for use and occupancy.

SCHEDULING AN INSPECTION

PROVIDE A MINIMUM 24 HOURS NOTICE WHEN YOU REQUEST A FOOTING, SLAB, ROUGH OR FINAL INSPECTION. INSPECTION REQUEST MAY BE MADE BY CALLING (517) 622-4756.

It is the responsibility of the permit holder or the permit holder's representative to notify the city when the stages of construction are reached that requires an inspection. Ladder, scaffolds and testing equipment are required to complete an inspection and inspection must be provided.