
GARAGES and SHEDS



City of East Lansing

Planning Building Development
410 Abbot Road, Second Floor
East Lansing, MI 48823
Ph. 517-319-6871 or 517-319-6810
Website: cityofeastlansing.com

This publication provides guidelines for constructing detached residential garages, tool sheds, storage sheds and similar accessory structures. 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 garage, shed and a similar accessory structure. Listed below are the types of permits required, depending on the complexity of the project. Except as noted below, apply for your permits Apply for your permits at <https://www.cityofeastlansing.com/1979/21068/Apply-for-a-Permit-Online>.

- **Building permits** for all architectural and structural elements of all garages and similar structures greater than 200 square feet in area. .
- **Electrical permit** for all electrical installations in all garages and similar structures, regardless of size.
- **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 providing you will be doing the work and not hiring someone to perform the work. If a contractor is to perform the work, it is required that a licensed contractor secures the permit and 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.*

PLANNING AND DEVELOPMENT

Prior to issuance of any building permit, an approval of your proposed garage, shed or accessory structure is required from City of East Lansing Planning and Development to ensure compliance with all applicable zoning requirements. This office is in the East Lansing City Hall, 2nd floor, 410 Abbot Road; phone 517-319-6930.

PERMIT PROCESS

- You must submit an application and attach supporting documents online at: <https://www.cityofeastlansing.com/1979/21068/Apply-for-a-Permit-Online>. The application will be converted to permit and will then advance to the plan review process.
- A building permit is issued when all required approvals have been obtained and applicable fees have been paid. Once your permits are issued (email), you must post a copy on the job site until the project has received final inspection.
- A building permit must be paid for in order to issue within 6 months of the application date or the application will be canceled.

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.

FEES

- The fee schedule is located at <https://www.cityofeastlansing.com/DocumentCenter/View/2772/Building-Division-Fees-PDF?bidId=>
- Fees may be paid by cash/check, debit or credit card (Discover, Visa or MasterCard), online (Invoice Cloud).

HISTORIC PRESERVATION

A *Certificate of Appropriateness application* is required for new construction, additions, alterations, moving, demolition and repairs of property in any East Lansing Historic District. Questions regarding a *Certificate of Appropriateness* should be directed to the Community Development Analyst at 517-319-6828. The Historic Preservation Code applies to:

- Exterior changes such as additions, alterations (adding or changing windows, doors, etc.) to buildings (including garages and sheds) in designated Historic Districts.
- All sides of a structure visible from the street (generally the front and sides).
- Features protected by the Code include, but are not limited to: a building's general shape; gables, dormers and other roof features; cornices, brackets and eaves; size, shape, arrangement, number and size of window panes and muntins (exterior grids); beveled, leaded and stained glass; door and window trim; ornamental moldings; distinctive siding, such as stone, stucco, brick or patterned shingling; distinctive roofing, such as false thatch, slate and Spanish tile.

BUILDING CODE

Your project is required to comply with the 2015 Michigan Residential Code (MRC), effective February 8, 2016, which incorporates the 2015 International Residential Code (IRC) for residential construction. You may purchase the MRC through the State of Michigan Bureau of Construction Codes, ph. 517-241-9313, or by visiting their website at <http://www.michigan.gov/bcc>.

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 East Lansing office of Planning & Community Development.
- Attached garages must be separated from living areas with a minimum of 1/2" drywall applied to the garage side.
- Garages beneath living areas must have 5/8", Type X drywall applied to the garage ceiling. The structure supporting the ceiling with a living area above shall be covered with 1/2" drywall.
- Doors between an 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 a 3½" minimum thick concrete slab with a compressive strength of 3,500 PSI and shall be air-entrained. The site shall be prepared with 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.

MINIMUM SUBMISSION REQUIREMENTS

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

- Electronic set of building plans or manufacturer's plans for pre-fabricated structures (see below for requirements).
- Electronic copy of the house location survey or grading plan (see page 3 for requirements).

BUILDING PLANS

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

- Minimum scale of $\frac{1}{4}'' = 1'-0''$. All dimensions must be shown.
- Minimum sheet size: $8\frac{1}{2}'' \times 11''$. No pencil sketches.
- Edition of the code used for the design.
- Name, address and phone number of the building designer.
- 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.
- 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, dead load, snow load, wind load and bearing capacity. For East Lansing, 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 400 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 CENC after the building permit has been issued, but prior to any truss erection.
- Structural detail of connections.
- 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 an 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 a complete plan review, if over 200 square feet, requiring a building permit.
- Location of smoke alarms and carbon monoxide detectors if garage is attached.

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. 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. 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.

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. The maximum assumed soil bearing capacity shall be 1500 psf unless a soil bearing report is provided.

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. If you fail to contact Miss Dig and damage occurs, you may be liable for all costs 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 exists, inspection must be made by a 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

It is the responsibility of the permit holder or their representative to notify the city when the stages of construction are reached that requires an inspection. Ladders, scaffolds, and testing equipment required to complete an inspection must be provided. Inspection requests may be made by calling our main office number or your inspector directly.

Administrative Secretary	517-319-6871
Administrative Secretary	517-319-6810
Plan Reviewer	517-319-6803
Building Inspector	517-319-6921
Electrical Inspector	517-319-6807
Plumbing Inspector	517-319-6816
Mechanical Inspector	517-319-6983
Building Official	517-319-6878