CITY OF TROY
BUILDING DEPARTMENT
500 W BIG BEAVER
TROY, MI 48084
248-524-3344

GARAGE CONSTRUCTION

REGULATIONS GOVERNING GARAGE CONSTRUCTION

THE FOLLOWING ARE THE CONSTRUCTION REQUIREMENTS FOR GARAGES:

FOOTINGS: For attached building and detached buildings larger than 600 square feet – 12" wide x 42" deep below existing ground level. Based on adequate soil bearing capacities.

RATWALL: For wood-framed detached buildings 600 square feet or smaller – 4" wide x 24" deep, below existing ground level.

CONCRETE: 3,000 pounds per square inch load capacity at 28 days – minimum 5 bags of cement per yard – maximum 5 to 5-1/2 gallons water per bag. 3.5" minimum floor thickness and sloped to overhead door opening.

PREPARING SITE: Remove all sod and organic material. Fill material and forms must be in place and ready for pour for first inspection.

BOLTS: 8" long x ½" diameter galvanized anchor bolts set at maximum of 6' apart or approved strap anchors spaced per manufacturer's requirements. Set bolts so that there is 2" above concrete. Nuts and washers to be placed on bolts.

FRAMING: 2" x 4" framing set 16" on center.

WALL PLATES: Top plate - double top plates are required. Bottom plate - use material pressure treated to resist decay when in contact with the ground or concrete (use only hot dip galvanized or stainless nails and connectors in contact with pressure treated material.)

SIDING: All materials approved for exterior use.

WIND BRACING: Provide at each corner, in both directions. Provide a 1' x 6" at 45° let into studs or 4' x 8' sheathing if the wall is 8' or less in heights.

HEADERS OVER OPENINGS: Indicate size and span of door headers. Engineered laminated beam if in bearing wall.

RAFTERS: Must meet the 2015 Michigan Residential Code, Chapter 8 - #2 or better lumber. Hip rafters shall be tied both ways. Jack rafters in hip roof construction shall not be less than the depth of the cut end of the rafter.

RIDGE BOARD: 1-1/2" nominal material minimum. Depth of the ridge board must be at least as deep as the cut end of the rafter.

TRUSS & RAFTER UPLIFT RESISTANCE: See Section R802.11.1.1 and R802.11.1.2 of the 2015 Michigan Residential Code.

CROSS TIES: Provide cross ties on rafters at 48" o.c. maximum.

PRE-ENGINEERED ROOF TRUSSES: Provide a copy of sealed engineering design drawings for the trusses at the time of inspection. Install and brace the trusses according to the design.

ROOF SHEATHING: ¾" minimum structural panel with 24/0 span rating (edge clips required when using 3/8" sheathing and 24" o.c. spaced framing).

SHINGLE INSTALLATION: Install shingles per manufacturer's specifications.

INSPECTIONS REQUIRED

Foundation Inspection: Open trench for footings and ratwalls and sand inspection for slabs (ready for placement of concrete).
Rough Framing Inspection: (If interior sides of walls are to be covered).
Final Inspection: When the building is complete but before it is occupied.

ZONING

See Section 40.55.00 through 40.58.00 of Chapter 39 of the Troy City Code.

OTHER PERMITS

Separate permits are required for the installation of any electrical or mechanical equipment.

BUILDING SUBMITTAL REQUIREMENTS

Submit: Two copies of a plot plan (mortgage survey), drawn to scale showing size of garage, location of garage, distance to property lines. Also, show location and size of all easements and other existing buildings on the property.

Two (2) copies of construction plans, showing foundations, roof and wall framing, materials, spacing, elevation, etc.

NOTE: APPLY FOR SOIL EROSION AT THE ENGINEERING DEPARTMENT. An additional copy of the plot plan is required for the soil erosion permit application.