

City of Inver Grove Heights
8150 Barbara Avenue
Inver Grove Heights MN 55077
Inspections Department
Phone: 651-450-2550
Fax: 651-450-2502
www.invergroveheights.org

GARAGES

A Building Permit is required for all garages and accessory **buildings over 200 square feet in floor area.**
The permit fee will be based on the job valuation.
Separate permits are required for Plumbing, Mechanical and Electrical work (if applicable).

APPLICATION AND PLAN REQUIREMENTS:

1) Completed Building Permit Application (available at City Hall or online)

2) Two copies of survey or site plan showing the following:

- a) Lot size and all adjacent streets
- b) Location of existing building(s), proposed building, and known easements. Indicate the setbacks from property lines of the existing and proposed structure, including septic system area and wells if applicable.

3) Two sets of construction plans to include:

- a) Floor plan showing proposed design and materials.
Plan needs to be drawn to scale and should include:
 - Proposed size of garage
 - Location and size of window and door openings
 - Size of headers over all doors and window openings
 - Type of lumber to be used
- b) Elevations should include the following:
 - Height of structure from grade
 - Size and depth of footings
 - Floor design and material
 - Wall and roof construction. If truss roof system is to be used, submit copy of stamped pre-engineered truss design from manufacturer.

Setbacks from property lines vary depending upon the zone in which your home is located. Contact the Planning and Zoning Department at 651-450-2569 for further setback information.

BUILDING CODE REQUIREMENTS:

FOOTINGS:

Call Gopher State One Call at 651-454-0002 at least two working days before you dig to verify utility locations. Footings must extend below frost depth for all attached garages. Frost footings must be a minimum of 42" deep. A "floating slab" may be used for the foundation support of detached garages on all soils except peat and muck. If a floating slab is used, sod and root structures must be removed and replaced with 4 inch sand fill. The perimeter of the slab must be thickened to a minimum vertical dimension of 12 inches below grade at the edge. The bottom of the thickened edge must be at least 12 inches wide and then may be sloped upward to meet the bottom of slab at a 45 degree angle. The minimum slab thickness must be 3 ½ inches. The minimum concrete strength required is 3500 pounds per square inch. In cold weather, protect concrete from freezing until cured.

ANCHOR BOLTS:

Foundation plates or sills must be bolted to the foundation with not less than ½ inch diameter steel bolts embedded at least 7 inches into the concrete and spaced not more than 6 ft. apart. There must be a minimum of two bolts per piece with one bolt located within 12 inches of each end of each piece. Washers must be 2" minimum diameter or/and countersunk 1/4".

SILL PLATE:

All foundation plates or sills and sleepers on a concrete or masonry slab, which is in direct contact with earth, and sills which rest on concrete or masonry foundations must be of approved treated wood, foundation cedar or redwood, having a width not less than that of the wall studs.

WALL FRAMING:

Studs must be placed with their wide dimension perpendicular to the wall, and not less than three studs must be installed at each corner of an exterior wall. Minimum stud size is 2 x 4 and spaced not more than 24 inches on center.

TOP PLATE:

Bearing and exterior wall studs need to be capped with double top plates installed to provide overlapping at corners and at intersections with other partitions. End joints in double top plates must be offset at least 24 inches.

SHEATHING, ROOFING AND SIDING:

Approved wall sheathing, siding, roof sheathing and roof coverings must be installed according to the manufacturer's specifications.

WOOD AND EARTH SEPARATION:

Wood used in construction located closer than 6 inches to earth shall be treated wood or wood of a natural resistance to decay (cedar, redwood).

ROOF FRAMING:

Size and spacing of conventional lumber used for roof framing depends upon the roof pitch, span, the type of material being used, and the loading characteristics being imposed. Attached garages must be designed for the appropriate snow load. Detached garages need to be designed for a 35 pound per square foot snow load. Rafters need to be framed directly opposite each other at the ridge. A ridge board at least 1 inch thick and not less in depth than the cut end of the rafter is required for hand framed roofs. At all valleys and hips, there also needs to be a single valley or hip rafter not less than 2 inches thick and not less in depth than the cut of the rafter. Rafters must be nailed to the adjacent ceiling joist to form a continuous tie between exterior walls when the joists are parallel to the rafters. Where not parallel, rafters must be tied to a minimum 1 inch by 4 inch cross tie spaced a minimum 4 foot on center. If manufactured trusses are to be used, submit copy of truss plans signed by a registered engineer.

WALL OPENING PROTECTION:

The common wall between attached garages and a dwelling must be fire rated on the garage side of the wall with ½ inch sheetrock run from the floor to the roof deck. Sheetrock joints must all be tight or must be taped. Doors through this wall must be 20 minute fire doors or 1 3/8 inch solid. There may not be any windows or openings in this wall.

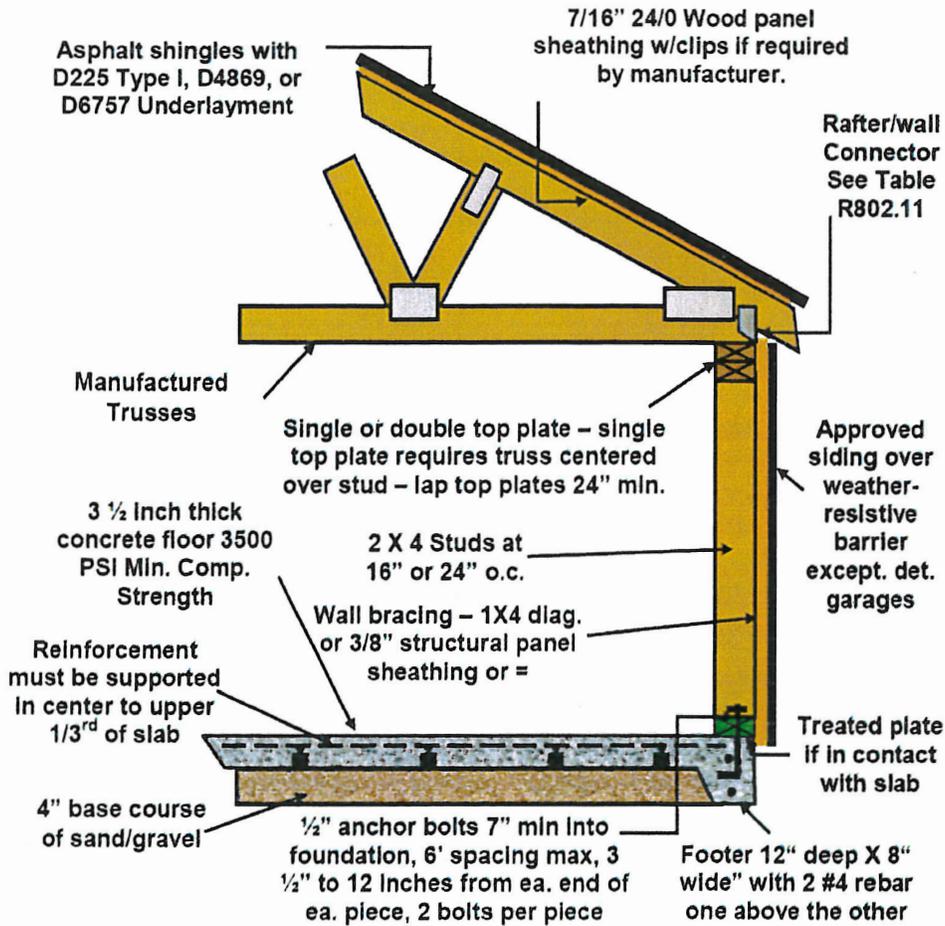
Note: The above outlines only **general** code requirements with regard to garage construction. For specific code requirements, please contact the Inspections Department at 651-450-2550 between 8am and 4:30pm M-F.

INSPECTIONS:

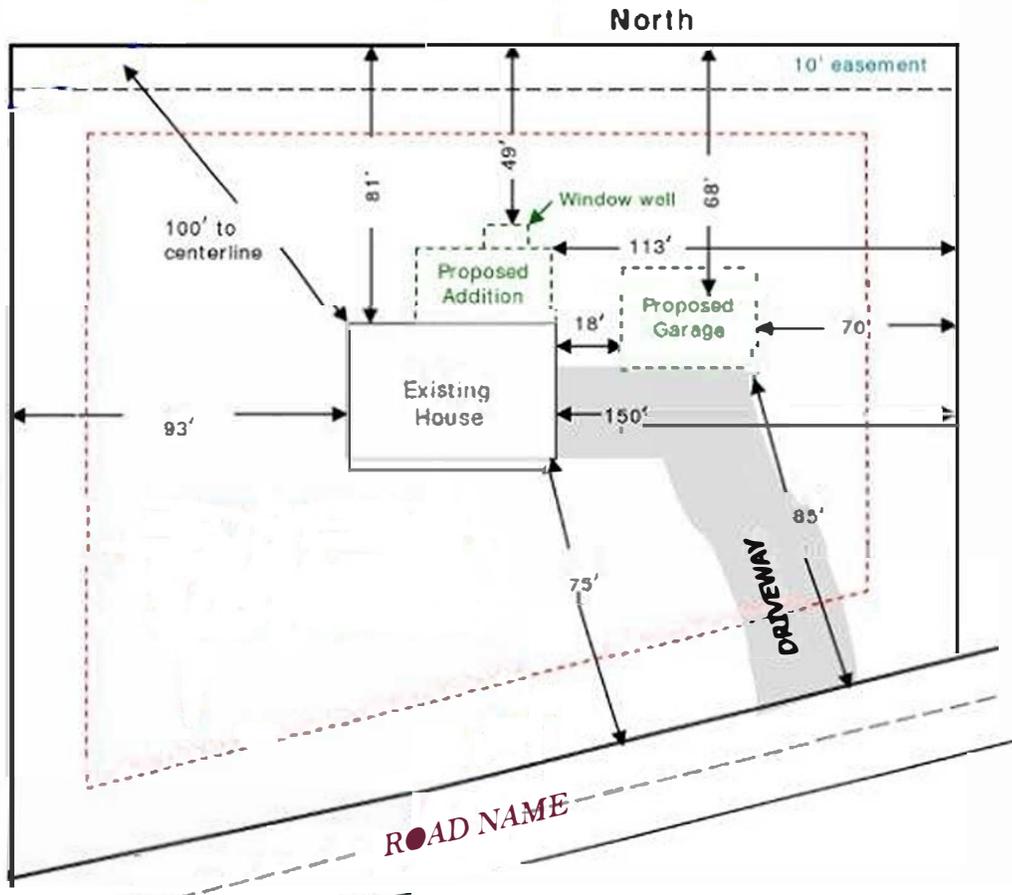
It is the responsibility of the permit applicant to call the Building Department to arrange for the inspections. 24-hour advance notice is required. Inspections typically required for the construction of a garage are:

- Footing and foundation inspections (attached garages only) after form work is in place but prior to pouring concrete.
- Slab inspection - To be made after all form work and reinforcing is in place but prior to the pouring of concrete.
- Framing inspection - To be made after all framing and bracing is complete, rough electrical (if any) is approved, but prior to the application of siding or roofing.
- Final Inspection - To be made upon completion of the garage and grading is complete.

SECTION VIEW EXAMPLE



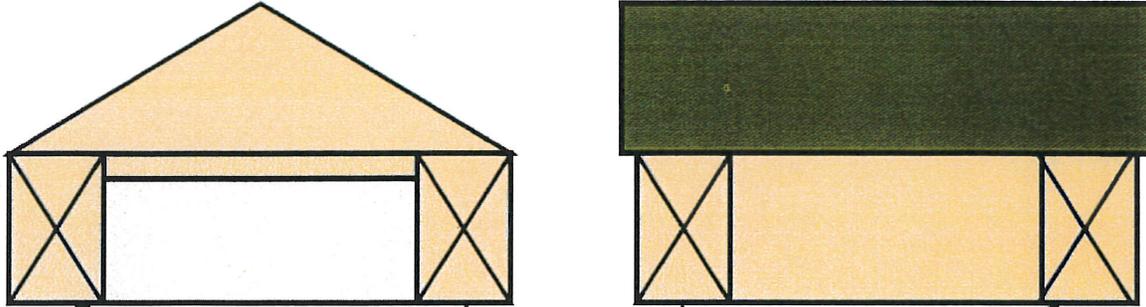
SITE PLAN EXAMPLE



WALL BRACING

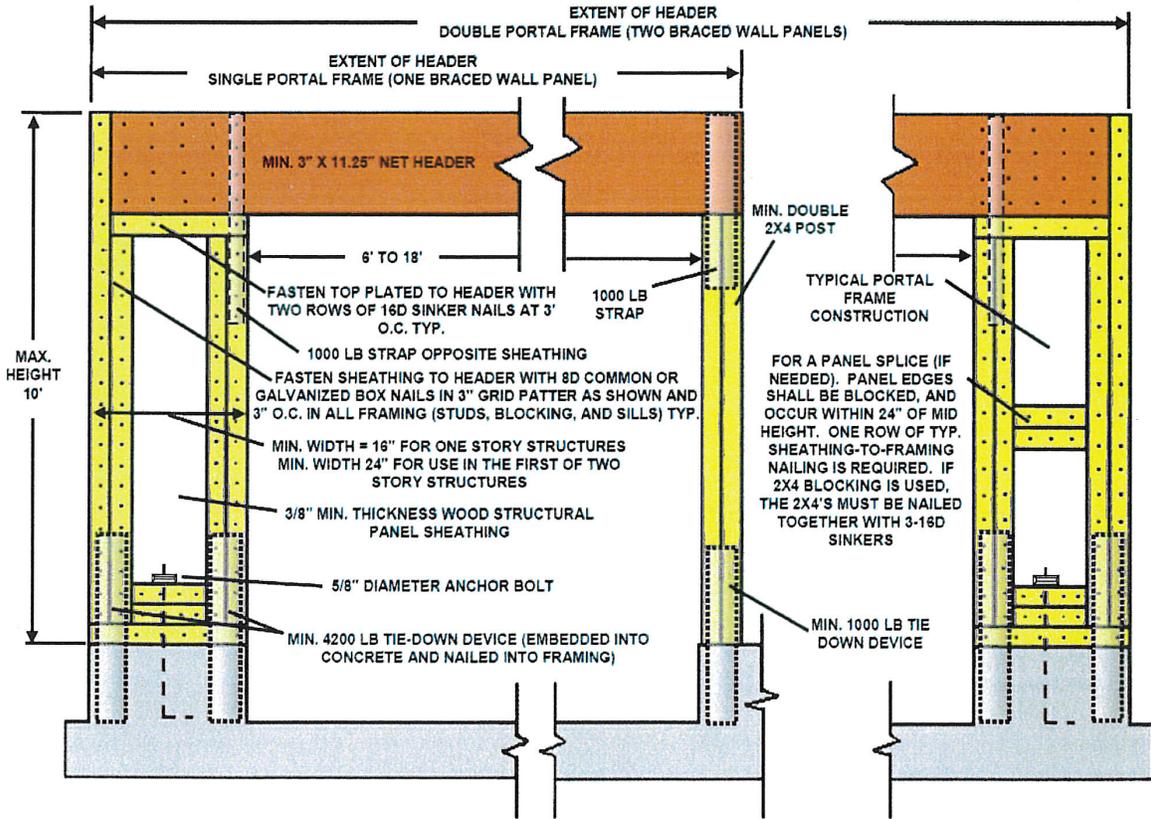
FRONT ELEVATION

SIDE OR REAR ELEVATION



4 Ft X 8 Ft 5/16" (16" o.c.) or 3/8" (24" o.c.) wood structural panels or 1/2" structural fiberboard sheathing or let-in bracing

WALL BRACING FOR NARROW WALLS



ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING