Residential Detached Garage Info & Application Packet

This packet provides basic information for one story light wood framed detached residential garage construction. It does not address pole buildings, multi-story buildings, buildings with interior partitions, buildings with basements or buildings constructed for uses other than a private garage.

No permit is required for buildings 200 sf or less, but building and zoning setback requirements do apply.

Checklist
All plans must be drawn to scale in black or blue ink with the scale noted on the plans. Do not use pencil (it does not photocopy well). Clearly designate proposed work and existing conditions. Provide complete structural information.

☐ Site Plan
Drawn to scale and indicating:

- Legal description and north arrow.
- Location and dimensions of all existing structures.
- Dimensions of lot and survey monuments on which the site plan is based (example: found property corner pins placed according to a recorded survey or plat.)
- Distance from proposed garage to property lines, to dwelling and to other structures.
- Driveway location.

☐ Wall Section & Garage Plan

- Use the attached form. Indicate whether you will use a frost footing or an engineered slab.
- Where walls exceed 10 feet, analysis by an engineer is required with documentation submitted.

☐ Header Design Information
Must be indicated on the attached form.

As a general rule, the following header sizes are acceptable:

- For openings not exceeding 3'–6”, (2) - 2x4s on edge (one cripple stud each end.)
- For openings not exceeding 5’–0”, (2) - 2x6s on edge (one cripple stud each end.)
- For openings not exceeding 9’–0”, (2) - 2x12s on edge (two cripple studs each end.)
- For openings exceeding 9’–0”, an LVL header is required. For information on LVL headers, contact an LVL supplier.

☐ Truss Design Plans

- Must be available on site at framing inspection.
**Foundations**

Must be indicated on the attached form.

- 5 inch reinforced slab on grade with 60 inch drop footings, poured concrete or core-filled block or, for garages up to 1,500 sf, pre-engineered floating slab with thickened edges, reinforced as detailed. Slabs for larger garages must be designed and plans certified by a Minnesota licensed structural engineer.

**Setback Requirements.** Setbacks are required distance from property lines and other buildings of the same or adjacent lot. Construction must comply with the 2010 Duluth *Unified Development Chapter* (UDC), including overlay district requirements, and *Minnesota State Residential Code* (MSRC) requirements for location on lot. The following is a summary of setback requirements.

**Zoning Setback Requirements**

(UDC 50-14 and 50-21.3)

- **Rear property line**  5 feet from rear property line.
- **Front property line**  As required for the dwelling. Site specific.
- **Side property line**  3 feet. Building code requirements are more restrictive. See UDC for corner lots.
- **Adjoining Property**  10 feet from the principal structure on the adjoining property.

**Building Code Location on Lot Requirements**

- **Exterior Walls**

  Required distance from property lines:  5 feet, except when exterior wall has a fire resistance rating of one-hour from both sides and no openings.

  Required distance from dwelling units on the same lot: Garages located less than 3 feet from a dwelling unit on the same lot shall be protected with not less than $\frac{1}{2}$ inch gypsum board applied to the interior side of exterior walls that are within this area. Openings in these walls shall be regulated by Section R302.1. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall.

- **Overhangs**

  Required distance from property lines:  5 feet, except when exterior wall has a fire resistance rating of one-hour from both sides and no openings, then 2 feet.

  Required distance from other buildings on the same lot:  5 feet, except when eave has a fire-resistive rating of one-hour on the underside and no openings, then $\geq 2 \text{ to } < 5 \text{ feet}$.
**Height.** Maximum 20 feet from front grade to highest point of a flat roof or the average height of the highest gable.

**Attic Storage Area.** May not exceed 1/3 of floor area and must be open to area below. If greater than 1/3 of the area is used or the attic area is enclosed, it is considered a second story. Garages with a second story need to conform to the Minnesota Residential Code and will be reviewed by a plans examiner. If the mezzanine is closed in and a second story is established, a Minnesota licensed structural engineer must design the foundation or the applicant may use Construction Services’ frost protected shallow foundation handout.

**Maximum Allowed Area.** Any single accessory structure may not exceed 30% of the rear yard. All accessory structures on a lot may not occupy more than 60% of the rear yard area.

**Floor.** Garage surface may be concrete, asphalt, sand, gravel, crushed rock, or natural earth.

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**Engineered Floating Garage Slab Detail**

No Scale

Minimum standards for one story detached garages over 400 sf and less than 1,500 sf

1. **NOTES:**
   1. TREATING OIL RECOMMENDED
   2. USE 1/2” DIA. ANCHOR BOLTS EMBEDDED MIN. 7” INTO CONCRETE. MAX. 6” SPACING
   3. FOUNDATION PLATES ON A CONCRETE SLAB SHALL BE TREATED WOOD OR FOUNDATION REDWOOD

2. **6” WELL COMPACTED GRAVEL**

3. **PREPARED SUBGRADE (REMOVE SOD AND UNSUITABLE MATERIALS AND REPLACE WITH STABLE MATERIALS)**

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Building Section

Provide information as indicated

Type of Roof: 
- Gable
- Hip
- Gambrel
- Flat
- Attic Trusses
- Shed

Garage Door Width ___ ft ___ in

NOTE: Doors in the wall carrying the roof load over 9' wide require the use of an engineered lumber product. Supplier’s design info must be submitted with permit application.

Size of Header: ____ x __________

Under eave
Under gable

5" Engineered Slab

NOTE: Which type of foundation are you constructing?
- Engineered Floating Slab
- Frost Footing

Which type of foundation are you constructing?
- Engineered Floating Slab
- Frost Footing

Call for form inspection before pouring:
Call inspector’s number on sign off card
- Allow 24 Hours Notice

Roofing ______
Sheathing ______
Trusses @ ____ o.c.
Mfg. By ______

Min live load design = 42 psf.
Truss manufacturer must design to site specific exposure category.

____ x ____ Studs
@ ______ " o.c.

6" Min. Wood To Fin. Grade

6" Min. Wood To Fin. Grade

6" Gravel Base

Typical Frost Footing
Foundation
____" Core-filled
Concrete Block
8" x (W) ________"

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Call inspector’s number on sign off card
- Allow 24 Hours Notice

NOTE: Construction of a Retaining Wall greater than 4' high either as part of garage foundation or to create the building site requires a certified design by a MN licensed structural engineer. Is a Retaining Wall part of this project?
- Yes
- No

W

60" Min.
• SHOW HOW THE SLAB WILL BE DRAINED. EX. DRAW DRAIN OR INDICATE WITH ARROWS SLOPE TO OVERHEAD DOOR:

• DRAW IN ALL DOORS & WINDOWS WITH THIS SYMBOL:

• WRITE DISTANCE FROM CORNER TO WINDOW & DOOR OPENINGS:

• INDICATE DIRECTION/SPAN OF TRUSS LAYOUT:

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GARAGE PLAN WORKSHEET
EXAMPLE NOT FOR CONSTRUCTION

Date: 3/24/2019
Job No.: GARAGE WORKSHEET
Drawn By: RDA
Revised: 3/25/2019
Approved By: DWN
Sheet:
Sample Site Plan

Don't use this sheet - create your own drawing.

SCALE: 1" = ______ FEET

Provide dimensions where indicated with this symbol and as required to describe existing and proposed conditions.

- Detached accessory buildings which are less than 200 sf do not require a building permit but must meet setback requirements.
- Setback requirements are site specific.
- Always check with Construction Services during the planning stage of your project.
Site Plan Instructions

Provide two copies

1. If the footprint of the building will not be changed, the site plan must be drawn to scale and must include the following:

   - Dimensions of lot. Property lines must be consistent with the legal description of the property.
   - All buildings existing on the lot, their exterior dimensions, distances to property lines.
   - Include all projections and any accessory structures (decks, garages, sheds, etc.).
   - The legal description of the property.
   - Scale.
   - North arrow.

2. If the footprint of the building will be changed, in addition to the above:

   - Dimensions of lot and survey monuments on which the site plan is based (example: found property corner pins placed according to a recorded survey or plat).
   - Complete exterior dimensions of all proposed structures, projections and additions and dimensions to all property lines.
   - Adjacent streets or alleys with right-of-way widths shown, if known.
   - Any known easements on the property (existing utility or access) with dimensions.
   - Existing and proposed drainage patterns.
   - Setback distances (front, rear and side) required by applicable codes.
   - Indicate the location of any utilities in the vicinity of the proposed work.
   - Attach all prior Planning Commission or Council approvals.

Other information may be required for certain sites and will be requested during the plan review process.
North arrow required
Scale: 1" = ______ feet

SITE PLAN

Grid is 4 squares per inch
DO NOT USE PENCIL

Site Address ____________________________________________________________

Owner's Name _________________________________________________________

This site plan is an accurate and complete representation of the footprint(s) of all existing and proposed structure(s) and their location(s) on the subject property

Applicant's Signature ___________________________  Date ____________________________