



Garages

10801 Town Square Drive NE, Blaine MN 55449

Building Inspections Department

phone: 763-785-6170 | fax: 763-785-6111 | BlaineMN.gov

This handout is intended only as a guide and is based in part on the 2022 Minnesota State Building Code, Blaine City ordinances, and good building practice. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the applicable codes or contact your local Building Department.

REQUIRED SUBMITTALS

1. Site Plan – see site plan & zoning requirements below
2. Plans – see details below
3. Residential Remodel Application

SITE PLAN - Homeowners are responsible for locating and exposing their property line corner stakes to verify correct building setbacks prior to inspections.

1. Use property survey
2. Show locations /sizes of all existing structures, and proposed garage
3. Indicate all setback distances from property lines (do not measure from street)
4. Draw 8 foot required driveway access width on site plan – see zoning requirements

PLANS - Building plans (one copy) must be submitted with an application to construct a garage or garage addition. Plans must be neatly drawn and to scale (at least 1/8" = 1 ft. min.). They may be on 8 1/2 X 11 paper. Plans must include a floor plan, cross section and elevation. Plans should show the proposed size of the garage; location and size of window and door openings; size of headers over all window and door openings; size, spacing, and direction of rafters or trusses; rafter/truss connection method; size and spacing of studs; the grade and species of lumber to be used; the type of roof and wall sheathing used; information on siding and roofing; all other pertinent information.

ZONING REQUIREMENTS

- In the R-1 (Single Family) zoning district, only a maximum of 2 accessory buildings are permitted including attached garage, detached garage, carport, and shed. Some residential developments do not permit any detached garages or sheds. Please call 763-717-2748 to determine your property's development specific regulations.
- The combined total square footage of accessory structures (including attached garages), cannot exceed 1,000 square feet in the R-1 District, or as permitted in the residential development.
- Upper level storage floor area is added to lower for the total area permitted.
- An 8 foot paved driveway, from a public street, is required to garages used for vehicle access on a regular basis. An 8 foot driveway access is required to all other garages. Driveways must be set back a minimum of 3-5 feet off the property line depending on development.
- Ten foot maximum garage door height.
- Garage roof height cannot be above the elevation roof height of the home (regardless of grade).
- Setback requirements from property lines vary by development.
- A garage is only permitted to be located in a side or rear yard.

- The architectural style, roof material, pitch, and siding shall be compatible with that of the home.
- ★ It is the homeowner's responsibility to verify specific zoning requirements or neighborhood covenants, which could impact their proposed project.

EASEMENTS

Garages cannot be located in a drainage or utility easement (easements are shown on your property survey).

FROST FOOTINGS FOR ATTACHED GARAGES & ADDITIONS

The following applies to all areas in the City of Blaine that have corrected soil pads, or other areas with black organic type soils at the depth of the footings. Soils corrections must be designed by a licensed professional engineer, or provide an engineer's soils report to verify minimum bearing capacity of 1,500 PSF prior to issuance of the permit.

FOUNDATIONS

Detached garages may be constructed on a thickened-edge slab. Attached garages must be constructed on a foundation extending at least 42 inches below finished grade.

WALL CONSTRUCTION

Walls may be framed with minimum No. 3 grade studs spaced 16 or 24 inches on center. Utility grade studs may be used when supporting only a roof, spaced not more than 16 inches on center, and limited to 8 feet in height. All other studs shall be limited to ten feet in height. If a single top plate is used, rafters or trusses must be centered over studs. For walls over ten feet in height, see the Minnesota Residential Code.

ROOF TRUSSESS

Wood trusses may be used as long as they are designed to meet state snow load requirements (35lb live snow load). Trusses must be connected to walls with approved connectors. Truss design drawings must be provided.

WALL BRACING

All walls are required to be braced at each end of each wall by one of the following methods:

- Nominal 1X4 continuous diagonal braces let in to top and bottom plates and the intervening studs or approved metal straps installed in accordance with the manufacture's specifications. Braces must be installed at an angle not to exceed 60 degrees or less than 45 degrees.
- 4X8 wood structural panel sheathing not less than 5/16 inch for 16-inch stud spacing and not less than 3/8 inch for 24-inch stud spacing. Sheathing must be attached with a minimum of 6d nails at 12 inches on center.
- 4X8 structural fiberboard sheathing not less than 1/2 inch thick applied vertically on studs spaced 16 inches on center. Sheathing must be attached with 1 1/2 inch galvanized roofing nails, 6d common nails, or 16 ga 1 1/2 inch staples spaced 3 inches on center around the perimeter and 6 inches on center on intermediate studs.

When garages are fully sheathed with wood structural panel sheathing, wall segments on either side of garage openings that support light frame roofs only with roof covering

dead loads of 3 psf or less shall be permitted to have a 4:1 aspect ratio. For narrower wall segments, see page 7 of this handout.

GENERAL

Any portion of garage less than 5 feet from the property line shall be fire protected. All garages require a weather-resistive barrier over the exterior sheathing.

GARAGE DOOR STANDARDS & GARAGE DOOR OPENERS

Garage doors must meet minimum wind resistance standards and must come with a **label** indicating the door complies with ANSI/DASMA 108 (designed for 115 mph wind). State law requires that all automatic garage door openers sold and installed be equipped with an automatic reversing device. This means that the door must have a means to reverse the closing function if something is detected in the path of the door.

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:

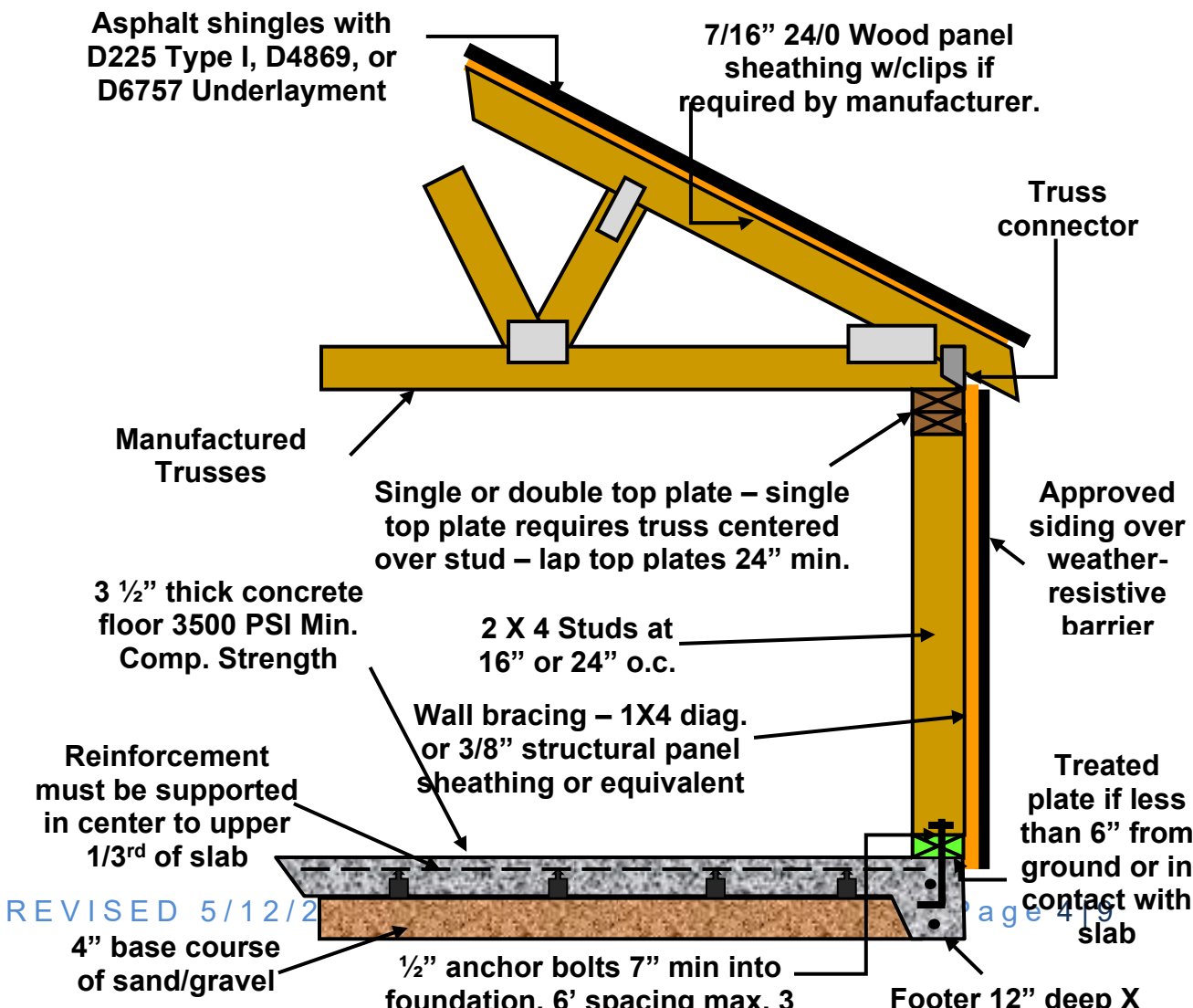
- Footing and foundation inspection (attached garages only) - after form work is in place but prior to pouring concrete. Property pins must be exposed.
- Slab Inspection (detached garages) – after all formwork and reinforcing is in place but prior to the pouring of concrete. Property pins must be exposed.
- Framing Inspection – after all framing and bracing is complete, rough electrical (if any) is approved, roof and weather barrier installed but prior to the application of siding.
- Final Inspection – after completion of the garage and grading (The architectural style, siding and roofing shall be compatible with the principal structure).

SMOKE ALARMS, CARBON MONOXIDE ALARMS, FIRE WALLS

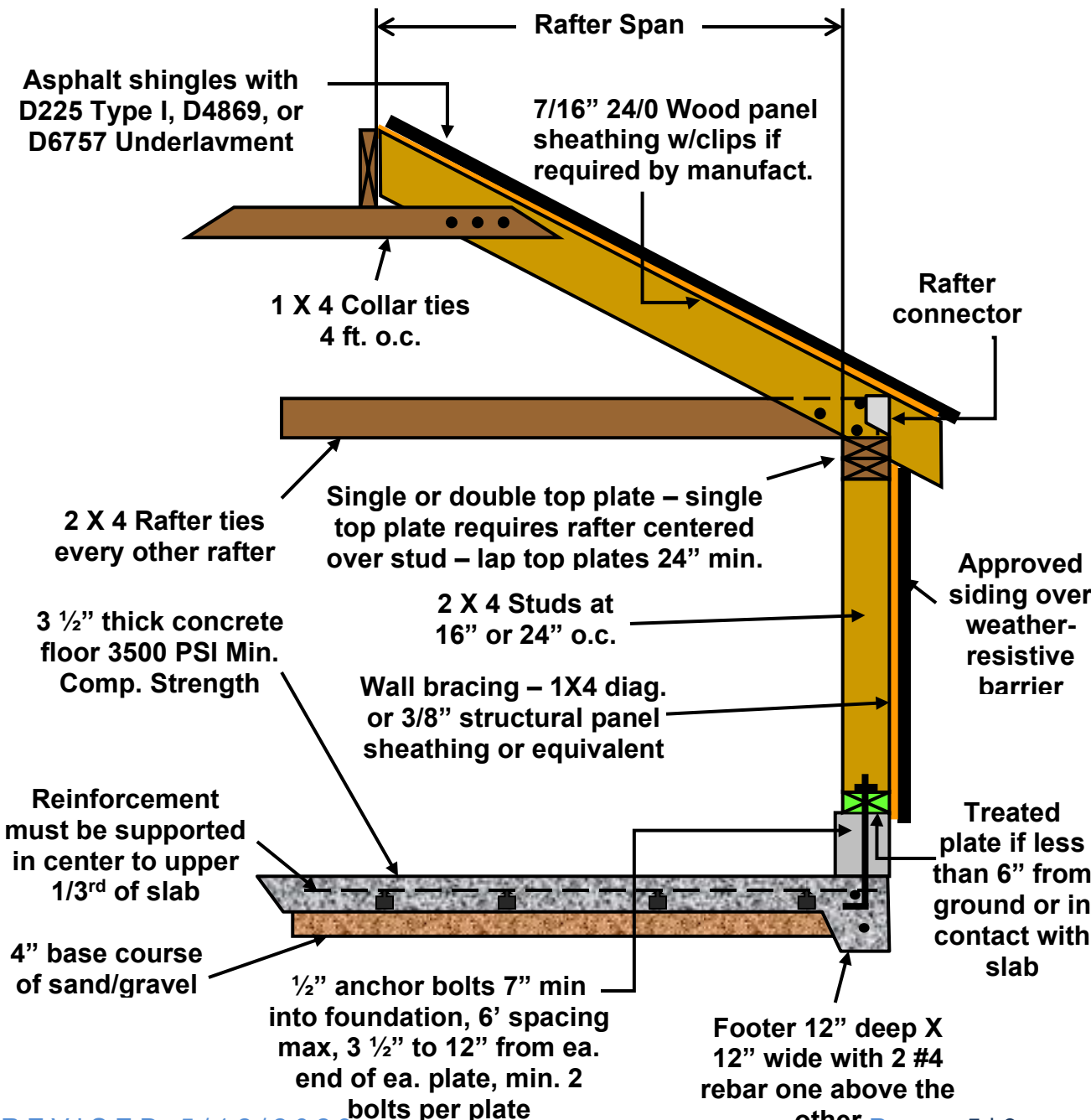
Smoke alarms are required to be installed in the dwelling when an attached garage is constructed or an existing attached garage is expanded. Carbon monoxide alarms must be installed in a dwelling when any work requiring a permit occurs. A fire wall must be created between a dwelling and a garage if an attached garage is constructed or, in some cases, when an existing attached garage is expanded. Contact the Building Department for specifics.

HEADER SIZES FOR GARAGES 20, 24, AND 28 FT WIDE						
	20 Ft WIDE		24 Ft WIDE		28 Ft WIDE	
Span	Header Size	# Jack Studs	Header Size	# Jack Studs	Header Size	# Jack Studs
Up to 3 ft	2-2X4	1	2-2X4	1	2-2X6	1
Up to 4 ft	2-2X6	1	2-2X6	1	2-2X6	1
Up to 6 ft	2-2X8	2	2-2X10	2	2-2X10	2
Up to 7 ft	2-2X10	2	2-2X12	2	2-2X12	2
Up to 8 ft	2-2X12	2	3-2X10	2	3-2X10	2
Up to 9 ft	3-2X10	2	3-2X12	2	3-2X12	2
Up to 10 ft	3-2X12	2	4-2X12	2	4-2X12	2
Up to 12 ft	4-2X12	2	*EWPR		*EWPR	
Over 12 ft	*EWPR		*EWPR		*EWPR	

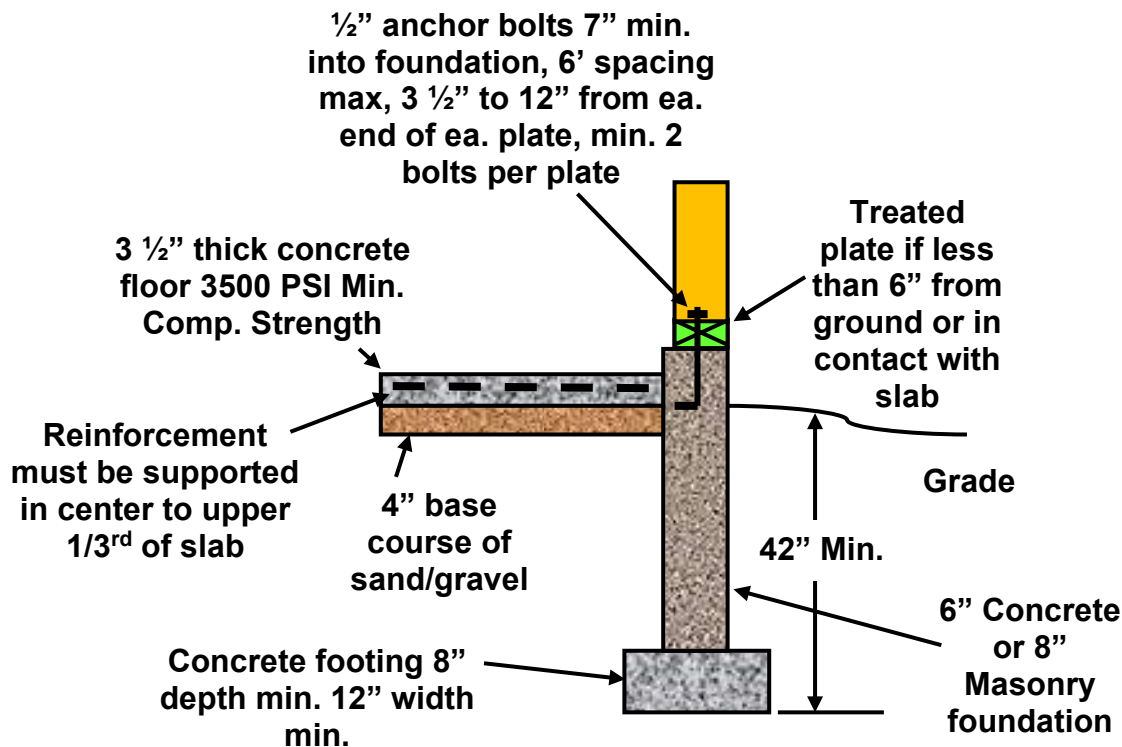
*Engineered wood product required



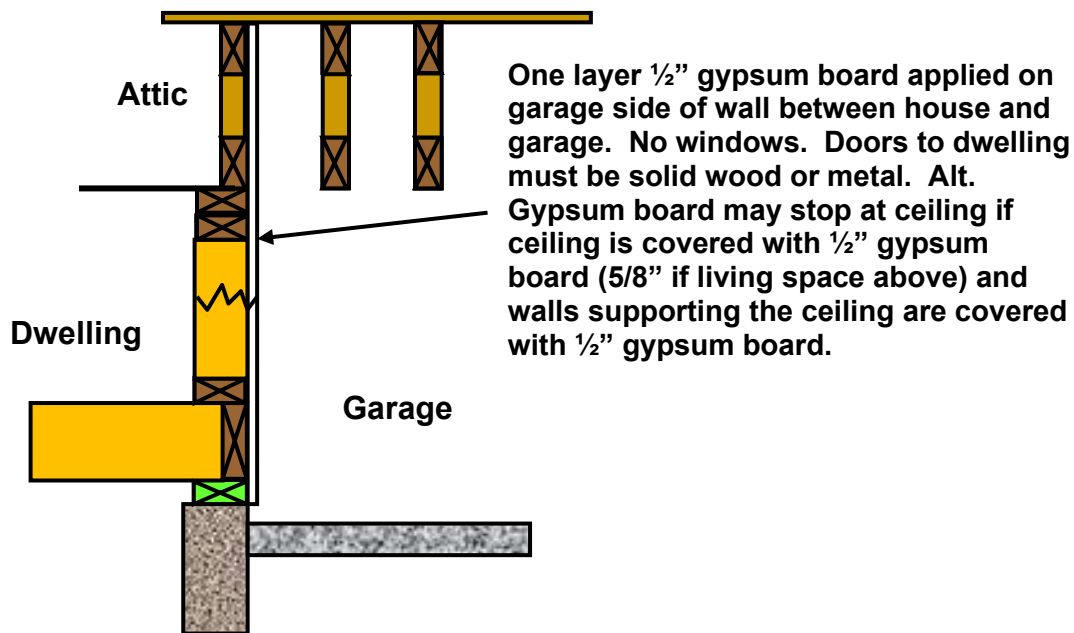
RAFTER SPANS FOR #2 HEM FIR AND SPF					
		2 x 4	2 x 6	2 x 8	2 x 10
12"	Hem Fir	7'5"	11'1"	14'0"	17'2"
	SPF	7'8"	11'3"	14'3"	17'5"
16"	Hem Fir	6'7"	9'7"	12'2"	14'10"
	SPF	6'8"	9'9"	12'4"	15'1"
24"	Hem Fir	5'4"	7'10"	9'11"	12'1"
	SPF	5'5"	7'11"	10'1"	12'4"



FOUNDATION DETAIL FOR ATTACHED GARAGE



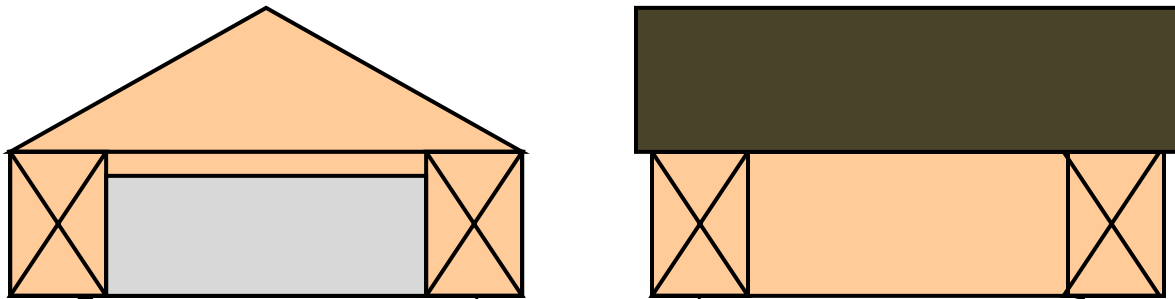
SEPARATION WALL DETAIL FOR ATTACHED GARAGE



WALL BRACING

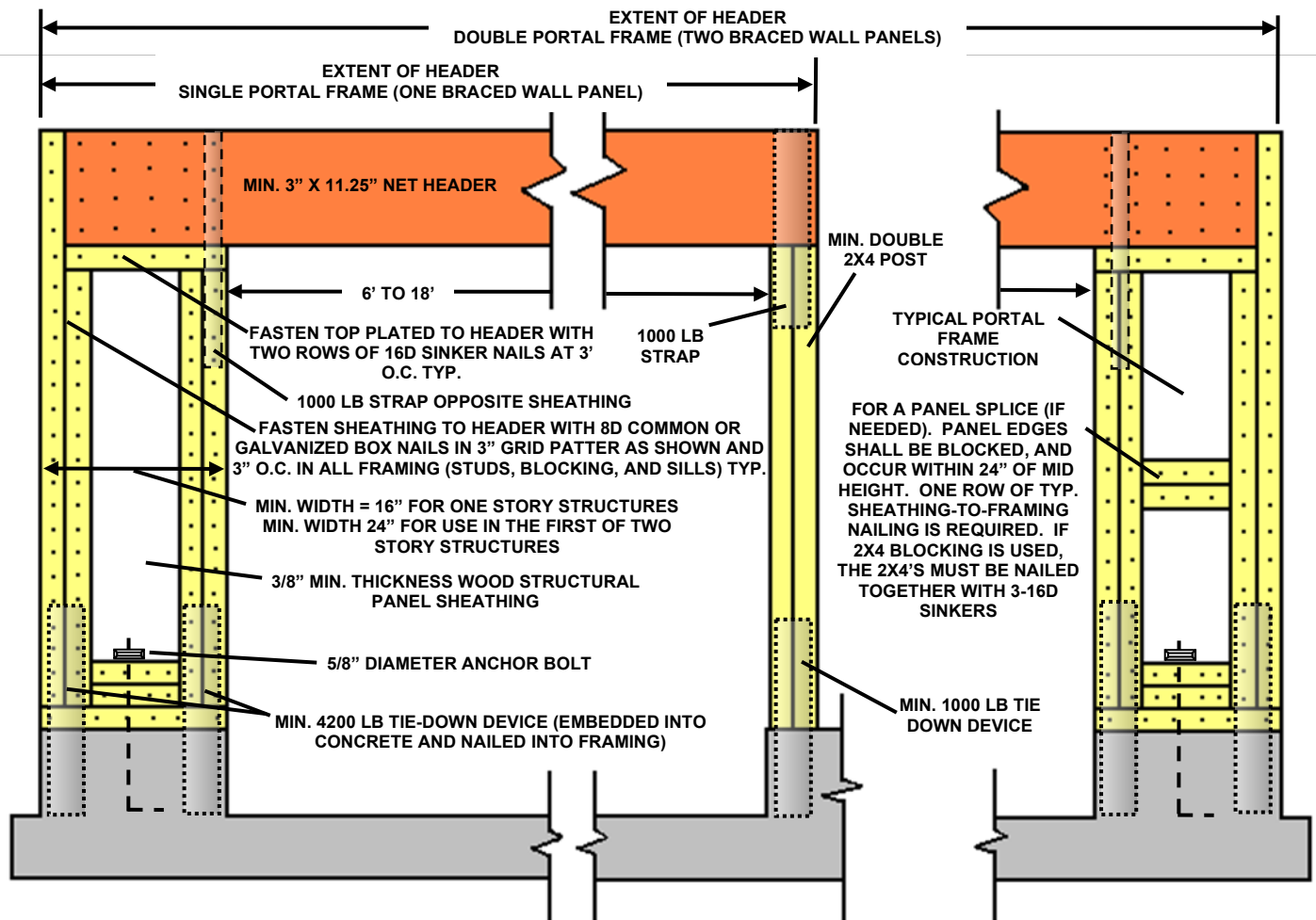
FRONT ELEVATION

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

How to Find Your Property Markers

An existing fence or structure cannot be used to verify property lines.

Property markers, or boundary monuments, are metal pins placed at every corner of the property, including any angle or change of direction of the boundary line. Each pin is shown on the survey of each property. Property markers are required to verify property lines when obtaining permits for certain projects in the City of Blaine, such as fences, shed, and additions. when construction is close to required setbacks or the line itself. Knowing where the property markers are is also important information to avoid legal and neighborhood disputes. Property lines, or boundary lines, are the defined points where one person's land ends and the neighboring land begins.

Step 1

To ensure you can dig for your property markers safely, call Gopher State One at 651-454-0002 to locate utility lines. They will need a 48 hour notice. This is a free service.

Step 2

Obtain a survey of your property which may be available on our web-site www.blainemn.gov. A box will come up that says Lookup Property Surveys online, click on this and enter your address and click the search button in the lower right hand corner. Print out your survey. If you cannot locate a survey on-line go to: <http://maps.ci.blaine.mn.us/geomoose2/geomoose.html> (make sure the "roads" and "parcels" buttons are selected on the left side of the screen).

Step 3

Gather materials you will need to locate your property markers.

1. Survey
2. Tape measure
3. Metal Detector can be used if you are having difficulty finding your stakes.
4. Shovel

Step 4

Property markers are typically 14.5 feet in from the curb. Go to your front curb and measure back about 14.5 feet in the area you think your marker should be. Use a metal detector and then start digging. The marker should be about 6-10 inches below the surface. It may have a colored cap with numbers on the top.

Step 5

Use your survey to see what distance the back stake is from the front stake and use your tape measure to measure that distance, then use the metal detector and dig. Continue doing this until all stakes are found.

Step 6

Put a marker of some type on the uncovered stake. This will need to remain visible until an inspection is done. Do not remove your property stakes.

Step 7

If you are unable to find your stakes and/or need to have property markers installed, contact a licensed Professional Land Surveyor. You can look in a phone directory "Yellow Pages" for local area land surveying firms.

