



This handout is intended only as a guide and is based in part on the 2015 Minnesota State Building Code, Robbinsdale 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 the Building Official at the City of Robbinsdale.

## ACCESSORY BUILDINGS

Please submit the following information in addition to the building permit application:

- 1) Two copies of a survey and scale drawing showing the following information;
  - a) The lot size and all adjacent streets,
  - b) Exact location and dimensions of all existing and proposed buildings on the lot,
  - c) Corner monument locations (to the satisfaction of the Building Official), and
  - d) Proposed garage floor elevation and driveway surface type.
- 2) A statement of elevations when elevations are not shown on the survey,
- 3) Information showing compliance with all zoning and building regulations, and
- 4) Two copies of construction plans showing the following information;
  - a) Elevation drawings indicating the height from finished grade to the top of the sidewalls and roof peak. Exterior views of the front, rear, and sides of the finished building,
  - b) Section drawing (side cutaway drawing showing the details of the footings, foundation, beam sizes, wall, and roof construction),
  - c) Plans of the garage floor showing the length and width of the garage, interior walls, the window and/or door locations, and the header sizes.

A zoning application may be required if a variance, Conditional Use Permit (CUP) or special evaluation is required. If the garage is for a use other than accessory storage to a dwelling, contact the Building Official for additional requirements.

Building permits will not be granted for the construction of any building or structure upon land which is not platted and described as a lot or a tract of a registered land survey, except as provided in Section 16-04 of the Robbinsdale City Code. Building permits will also not be granted on any lot that does not abut upon a public street.

### **ALL ACCESSORY BUILDINGS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:**

No accessory building shall be permitted on any lot prior to the time of the issuance of the building permit for the construction of a principal building.

Accessory buildings in the rear yard shall not be closer than 1-1/2 feet to any lot line.

Accessory buildings in a side yard shall not be any closer than five feet to the property line. If an accessory building is located in a corner side yard, then the required setback shall be the same as what is required for the principal building.

No accessory building shall be built within six feet of the principal building unless it is connected to the principal building by a living space.

No detached accessory building shall be placed in a front yard.

Accessory buildings shall be set back from any alley right-of-way a minimum of two feet.

Garages with vehicular access to and from an alley or street right-of-way and with the vehicular entrance fronting the street right-of-way shall be set back a minimum of 20 feet from the property line. Garages with vehicular access to and from an alley with the vehicular entrance fronting alley shall be set back a minimum of 16 feet from the property line.

In no case shall an accessory building exceed the height of the principal building.

Garages placed at an angle on a lot shall be set back a minimum of two feet for every additional ten degrees of angle from the alley right-of-way.

Accessory buildings shall not exceed 16 feet in height (measured from grade to midpoint on gable end).

No accessory building shall at any time be used as a dwelling unit (temporarily or permanently) or for a home occupation.

Attached garages shall be included in the calculation for the total amount of accessory building square foot coverage.

Any second accessory building that exceeds two hundred forty (240) square feet in size shall require a Conditional Use Permit (CUP).

In no case shall the floor area of an accessory building exceed 100% of the main floor area of the principal structure.

In R-1 and the R-2 zones, accessory buildings shall not occupy more than 25% of the rear yard area. Where a platted alley exists in the rear of the lot, ½ of the width of the platted alley may be include for the purpose of calculating rear yard coverage.

**THE FOLLOWING CHART SETS FORTH THE MAXIMUM SIZE FOR A SINGLE ACCESSORY BUILDING AND THE TOTAL OF ALL ACCESSORY BUILDINGS ALLOWED:**

<u>Lot Width</u>	<u>Maximum Size for a Single Accessory Building</u>	<u>Total Coverage of All Accessory Buildings Allowed on a Lot</u>
0' – 49'	800 sq ft	1000 sq ft
50' – 59'	860 sq ft	1060 sq ft
60' – 79'	920 sq ft	1120 sq ft
80' – 99'	1000 sq ft	1200 sq ft
100' +	1200 sq ft	1400 sq ft

**SLAB**

Floating slabs must be a *minimum* of 4" thick and a *minimum* of eight inches 8" thick around the entire perimeter. Slabs cannot be installed on organic soils. Fill dirt must consist of granular compacted soils. The slab must be installed at a level that will provide a 6" separation from wood to earth. (One course of masonry block is recommended). The anchor bolts must be ½" x 9" 6'- 0" O.C. (On Center) w/Washer & Nut and within 12" of the ends of each plate or splice in the plate. The concrete shall be reinforced with 6' x 6' #10 woven wire mesh or fiber mesh concrete. Wire mesh must be installed and interconnected at the time the footing inspection is conducted.

## **FRAMING**

Base plates on concrete must be treated wood or of a durable species such as redwood or cedar.

Studs supporting floors must be spaced not more than 16" O.C. (On Center), 2 x 4 studs not more than 10' in length and, supporting ceiling and roof studs must be spaced 24" O.C. Where studs are spaced 24" O.C., the framing above must be centered over studs.

Signed engineered truss specifications will be required when installing trusses. Conventional roof framing must be detailed on plans.

### **HEADER SPANS FOR OPENINGS IN THE OUTSIDE IN THE OUTSIDE BEARING WALLS ON ONE-STORY FRAME BUILDINGS WITH CENTER BEARING WALLS ARE:**

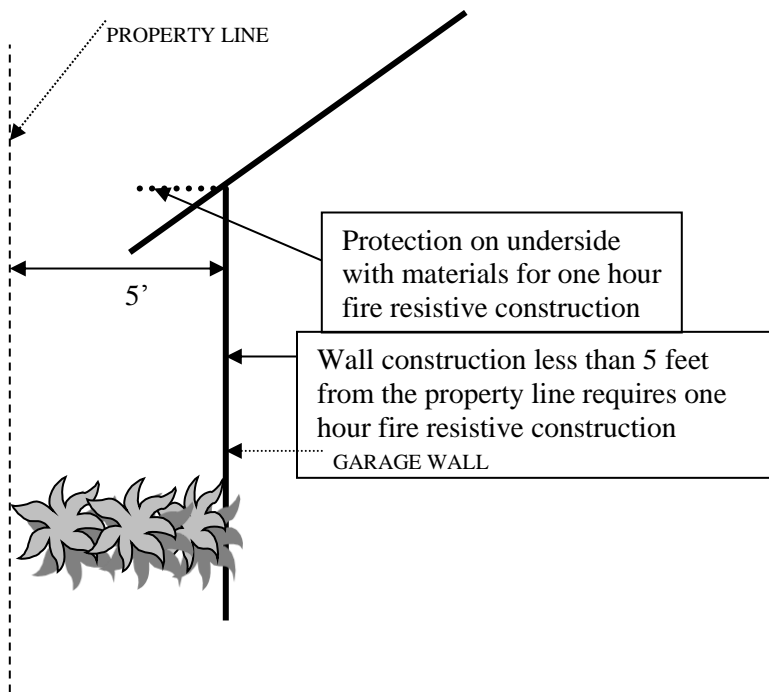
	20 FEET WIDE	28 FEET WIDE	36 FEET WIDE
(2) 2 x 4's	3'- 2"	2'-9"	2'-6"
(2) 2 x 6's	4'- 8"	4'-1"	3'-8"
(2) 2 x 8's	5'- 11"	5'-2"	4'-7"
(2) 2 x 10's	7'- 3"	6'-3"	5'-7"
(2) 2 x 12's	8'- 5"	7'-3"	6'-6"
(3) 2 x 8's	7'- 5"	6'-5"	5'-9"
(3) 2 x 10's	9'- 1"	7'-10"	7'-0"
(3) 2 x 12's	10'- 7"	9'-2"	8'-2"

## **FIRE PROTECTION**

Garages must be separated from living areas with approved materials such as ½ inch thick fire code gypsum board or equivalent, applied to the garage side. A tight-fitting solid wood door 1-3/8 inch in thickness or a 20 minute labeled fire door shall be provided where a doorway penetrates the firewall. No such doorway shall open directly into a room used for sleeping purposes.

Garages built closer than 6' to an existing dwelling and/or dwelling additions, or built closer than 6' to an existing garage, shall have fire protection as required for attached garages. They must also comply with the zoning code as required for attached garages. The footings design shall distribute loading below the existing dwelling's foundation walls.

Detached garage walls closer than 5 feet to the property line will require a one-hour fire rated wall along the property line. One-hour fire rated walls generally consist of 5/8" fire code gypsum board on both the exterior and interior of the wall and there shall be no openings in the firewall.



## ROOFS

Valley flashing must be a minimum 28 gauge stainless steel extending at least 8" from the center line each way and shall have a ¼" rib at flow line formed as part of the flashing. Flashing is required over all exterior exposed openings. Composition shingles are not allowed on roofs with slopes less than 4:12 unless approved by the Building Official.

### SETBACK – MAX EAVE

1'	4"
2'	4"
2'-6"	6"
2'-7"	7"
2'-8"	8"
2'-9"	9"
2'-10"	10"
3'-0"	1'-0"
4'-0"	2'-0"
5'-0"	3'-0"

## SPAN TABLES FOR NO. 2 GRADE WOOD MEMBERS AND "I" JOISTS

### FLOOR JOISTS

40# LL + 10# DL L/360

	2 x 6			2 x 8			2 x 10			2 x 12		
	12"	16"	24"	12"O	16"	24"	12"	16"	24"	12"	16"	24"
	OC	OC	OC	C	OC	OC	OC	OC	OC	OC	OC	OC
Douglas Fir- Larch	10-9	9-9	8-1	14-2	12-7	10-3	17-9	15-5	12-7	20-7	17-10	14-7
Hem - Fir	10-0	9-1	7-11	13-2	12-0	10-2	16-10	15-2	12-5	20-4	17-7	14-4
Ponderosa Pine	9-2	8-4	7-0	12-1	10-10	8-10	15-4	13-3	10-10	17-9	15-5	12-7
Southern Pine	10-9	9-9	8-6	14-2	12-10	11-0	18-0	16-1	13-5	21-9	19-0	15-4
S-P-F	10-3	9-4	8-1	13-6	12-3	10-3	17-3	15-5	12-7	20-7	17-10	14-7
Western Cedars	9-2	8-4	7-3	12-1	11-0	9-2	15-5	13-9	11-3	18-5	16-0	13-0

Western Woods	9-2	8-4	7-0	12-1	10-10	8-10	15-4	13-3	10-10	17-9	15-5	12-7
TJI®/15	Flange Width = 1 ½"						18-9	17-2	15-1	22-4	20-5	15-1
TJI®/25	Flange Width = 1 ¾"						19-7	17-11	15-9	23-4	21-4	18-4
LPI™/ 32	Flange Width = 2 ½"						19-0	18-6	15-11	23-9	22-0	18-10

#### RAFTERS: FLAT CIELING ROOMS; ATTACHED GARAGES

40# LL + 7# DL L/180

	2 x 6			2 x 8			2 x 10			2 x 12		
	12"	16"	24"	12"O	16"	24"	12"	16"	24"	12"	16"	24"
	OC	OC	OC	C	OC	OC	OC	OC	OC	OC	OC	OC
Douglas Fir- Larch	12-8	11-0	9-0	16-1	13-11	11-5	19-8	17-0	13-11	22-9	19-9	16-1
Hem – Fir	12-6	10-10	8-10	15-10	13-9	11-3	19-4	16-9	13-8	22-6	19-5	15-11
S-P-F	12-8	11-0	9-0	16-1	13-11	11-5	19-8	17-0	13-11	22-9	19-9	16-1
Western Woods	10-11	9-6	7-9	13-10	12-0	9-10	16-11	14-8	12-0	19-8	17-0	13-11

#### RAFTERS: VAULTED CEILINGS

40# LL = 15# DL L/240

	2 x 6			2 x 8			2 x 10			2 x 12		
	12"	16"	24"	12"O	16"	24"	12"	16"	24"	12"	16"	24"
	OC	OC	OC	C	OC	OC	OC	OC	OC	OC	OC	OC
Douglas Fir- Larch	11-9	10-2	8-4	14-10	12-11	10-6	18-2	15-9	12-10	21-1	18-3	14-11
Hem – Fir	11-5	10-0	8-2	14-8	12-8	10-4	17-11	15-6	12-8	20-9	18-0	14-8
S-P-F	11-9	10-2	8-4	14-10	12-11	10-6	18-2	15-9	12-10	21-1	18-3	14-11

Western Woods	10-1	8-9	7-2	12-10	11-1	9-1	15-8	13-7	11-1	18-2	15-9	12-10
TJI®/15	Low Slope: Roof Pitch 6:12 or less							17-4	15-1		20-11	17-1
TJI®/15	High Slope: Roof Pitch greater than 6:12							15-8	13-8		18-11	16-5
LPI™/ 32	Low Slope: Roof Pitch 6:12 or less						22-6	20-4	16-1	26-10	23-6	19-2
LPI™/ 32	High Slope: Roof Pitch greater than 6:12						22-0	19-7	16-0	26-1	22-8	17-7

#### RAFTERS: DETACHED GARAGES

30# LL = 7# DL I/180

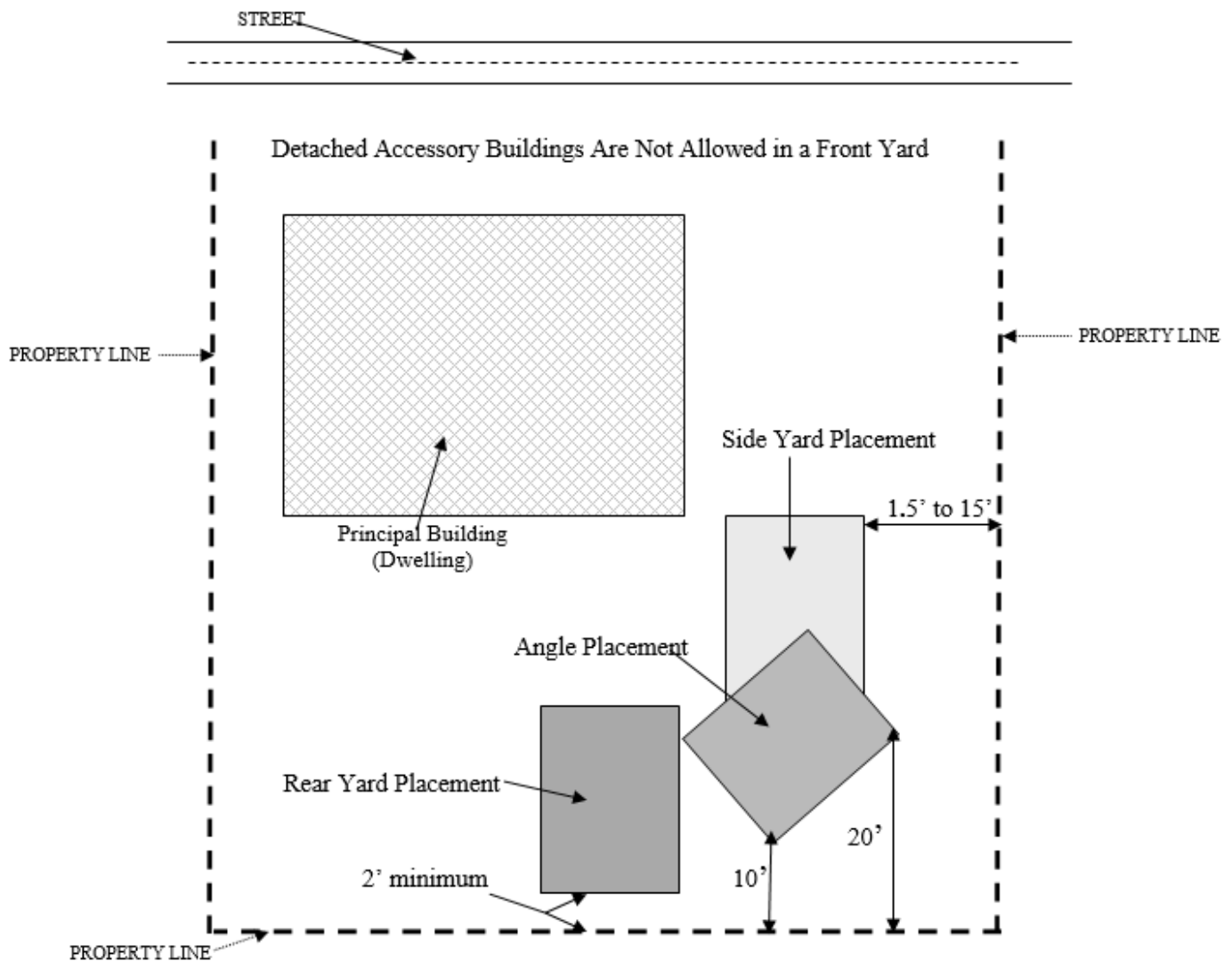
	2 x 6			2 x 8			2 x 10			2 x 12		
	12" OC	16" OC	24" OC	12"OC	16" OC	24" OC	12" OC	16" OC	24" OC	12" OC	16" OC	24" OC
Douglas Fir- Larch	14-4	12-5	10-1	18-2	15-8	12-10	22-2	19-2	15-8	25-8	22-3	18-2
Hem - Fir	13-10	12-3	10-0	17-10	15-6	12-8	21-10	18-11	15-5	25-4	21-11	17-11
S-P-F	14-4	12-5	10-1	18-2	15-8	12-10	22-2	19-2	15-8	25-8	22-3	18-2
Western Woods	12-4	10-8	8-9	15-8	13-6	11-1	19-1	16-6	13-6	22-2	19-2	15-8

#### CEILING JOISTS

20# LL + 10# DL I/240

	2 x 4			2 x 6			2 x 8			2 x 10		
	12" OC	16" OC	24" OC	12"OC	16" OC	24" OC	12" OC	16" OC	24" OC	12" OC	16" OC	24" OC
Douglas Fir- Larch	9-10	8-9	7-2	14-10	12-10	10-6	18-9	16-3	13-3	22-11	19-10	16-3
Hem - Fir	9-2	8-4	7-1	14-5	12-8	10-4	18-6	16-0	13-1	22-7	19-7	16-0
S-P-F	9-5	8-7	7-2	14-9	12-10	10-6	18-9	16-3	13-3	22-11	19-10	16-3
Western Woods	8-5	7-7	6-2	12-9	11-1	?	16-2	14-0	11-5	?	17-1	14-0

## ACCESSORY BUILDING SETBACKS



Setbacks are measured from the property line, not the alley surface, street surface, or curb.

Accessory buildings in the rear yard shall not be closer than 2 feet to the property line or 1-1/2 feet with a firewall.

Accessory buildings shall be set back from any alley right-of-way a minimum of 2 feet.

Accessory buildings in a side yard shall not be any closer than 5 feet to the property line. If an accessory building is located in a corner side yard, then the required setback shall be the same as what is required for the principal building.

Garages placed at an angle on a lot shall be set back a minimum of two feet for every additional ten degrees of angle from the alley right-of-way.

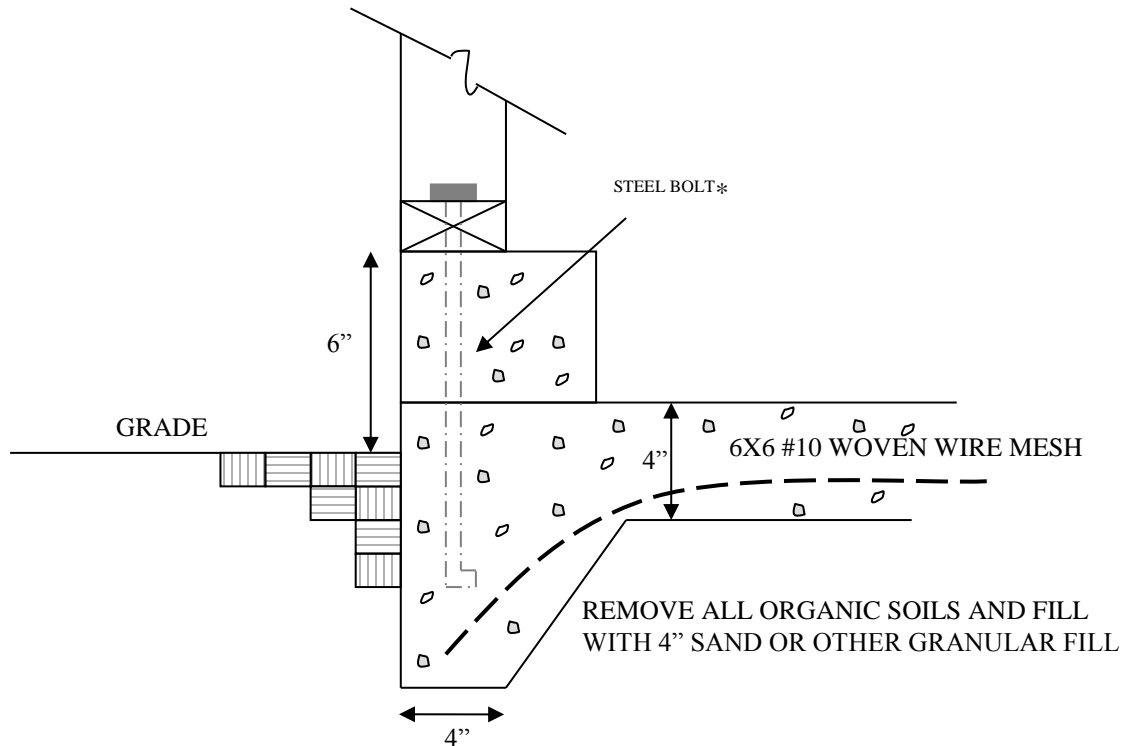
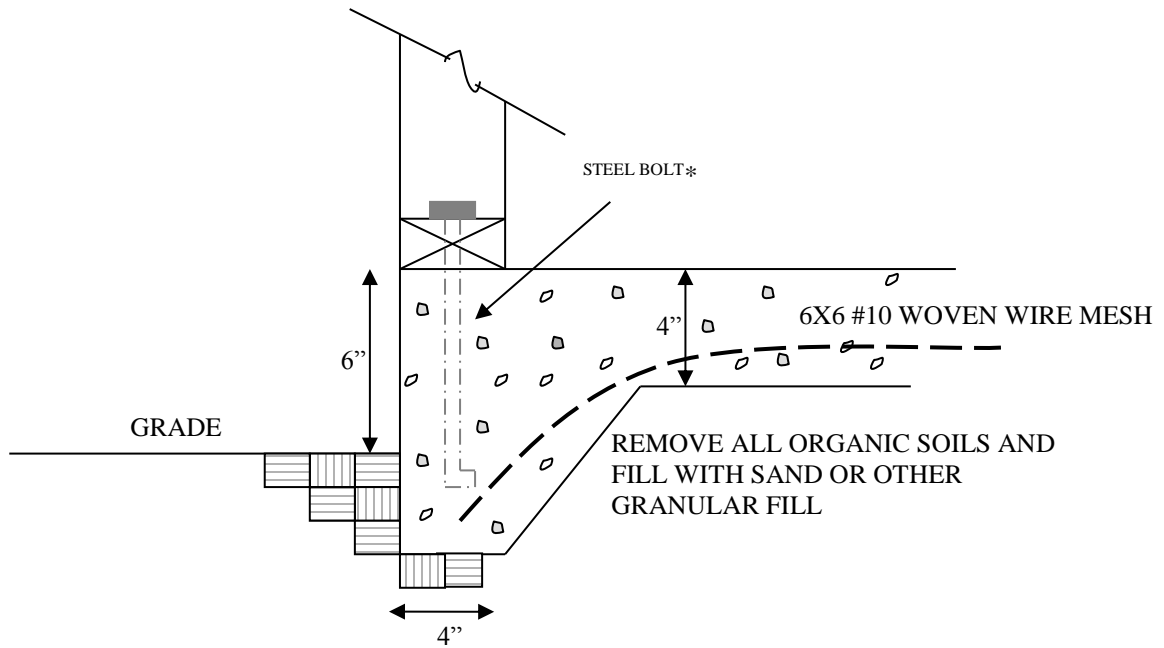
No accessory building shall be built within 6 feet of the principal building unless it is connected to the principal building by a living space.

A vehicular entrance to a garage fronting an alley shall have a minimum setback of 16 feet from the property line.

A vehicular entrance to a garage fronting a street shall have a minimum setback of 16 feet from the property line.

**DRAWINGS ARE NOT TO SCALE**

## FOOTING AND CONCRETE SLAB DETAILS



1/2" MIN STEEL BOLT EMBEDDED 7" MINIMUM (15" INTO UNREINFORCED, GROUTED MASONRY) SPACED 6' (MAX). MINIMUM 2 BOLTS PER PIECE WITH ONE BOLT LOCATED WITHIN 12" OF EACH END.

**THIS DOCUMENT WAS WRITTEN AS A GUIDE TO THE MOST COMMON QUESTIONS AND PROBLEMS. IT WAS NOT INTENDED NOR SHALL IT BE CONSIDERED A COMPLETE SET OF REQUIREMENTS**

*These requirements may change without notice*



GA FILE NO. WP 8105

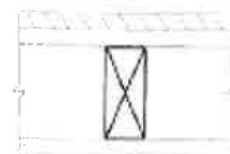
GENERIC

1 HOUR  
FIRE

**GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS**

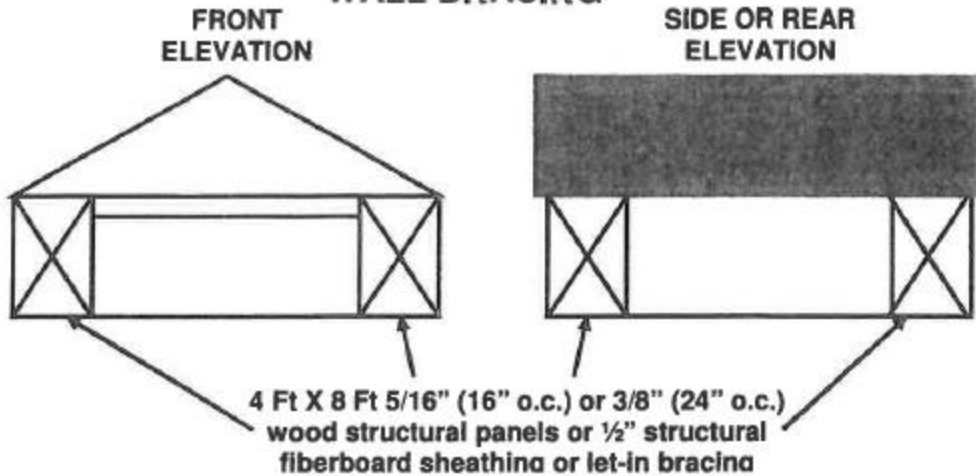
**EXTERIOR SIDE:** One layer 48" wide  $\frac{5}{8}$ " type X gypsum sheathing applied parallel to 2 x 4 wood studs 24" o.c. with  $1\frac{3}{4}$ " galvanized roofing nails 4" o.c. at vertical joints and 7" o.c. at intermediate studs and top and bottom plates. Joints of gypsum sheathing may be left untreated. Exterior cladding to be attached through sheathing to studs.

**INTERIOR SIDE:** One layer  $\frac{5}{8}$ " type X gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails,  $1\frac{7}{8}$ " long, 0.0915" shank,  $\frac{1}{4}$ " heads, 7" o.c. (**LOAD-BEARING**)

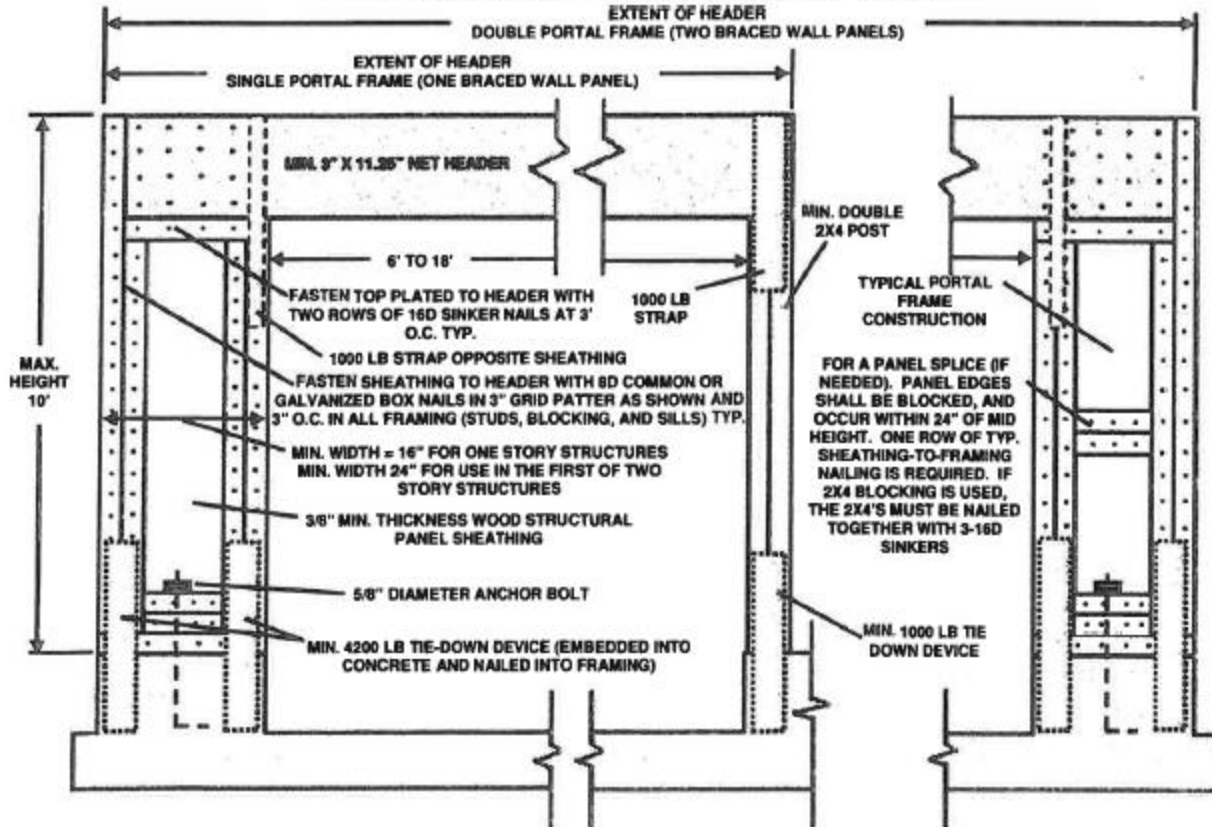


Thickness: Varies  
Approx. Weight: 7 psf  
Fire Test: See WP 3510  
(UL R3501-47, -48, 9-17-65,  
UL Design U309;  
UL R1319-129, 7-22-70,  
UL Design U314)

## WALL BRACING



## WALL BRACING FOR NARROW WALLS



**ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING**

