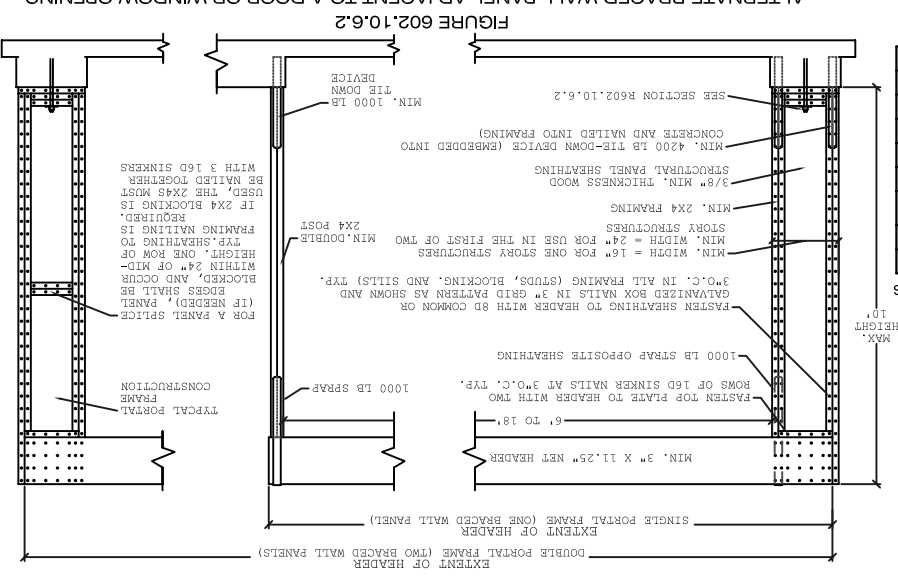


SEISMIC DESIGN CATEGORY AND WINDSPEED	HEIGHT OF BRACED WALL PANEL		Sheathed Width		Sheathed Width	
	8 ft. 2'-4"	10 ft. 11 ft. 12 ft.	2'-8"	3'-2"	3'-0"	3'-6"
SDC A, B, and C Windspeed < 110 mph	1800	1800	3000	3000	3000	3600
	3000	3000	3000	3000	3000	3600
SDC D and D Windspeed > 110 mph	1800	1800	1800	1800	1800	1800
	3000	3000	3000	3000	3000	3000

For S1: 1 inch = 25.4 mm, 1 foot = 304.8 mm.  
a. Not permitted because maximum height is 10 feet.

TABLE 602.10.6  
MINIMUM WIDTHS AND TIE-DOWN FORCES OF ALTERNATE BRACED WALL PANELS

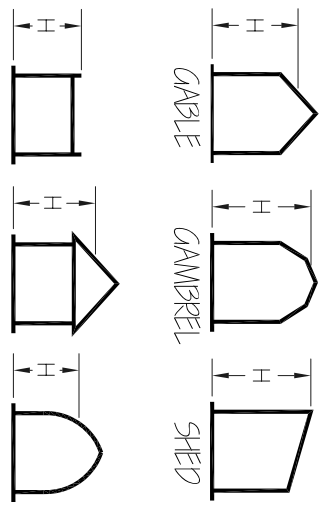
WHERE A 4' BRACED WALL PANEL DESCRIBED IN R602.10.4 THE ALTERNATE BRACED WALL METHOD (AS ILLUSTRATED ON THIS PAGE) MUST BE USED



### MAXIMUM SIZES BY ZONE

MAXIMUM SIZES FOR ACCESSORY BUILDINGS BY ZONE		MAX. AREA	MAX. HEIGHT
ZONE	BUILDING TYPE		
R1, R2, R3, R4	SHED, ETC.	300 SF	10 FT
	GARAGE	960 SF	15 FT
	SHED, ETC.	480 SF	20 FT
RE	GARAGE	960 SF	20 FT

\* FOR R4 MULTIFAM DEVELOPMENT IN AN R4 ZONE, PLEASE CONTACT BLDG. DEPT. FOR ADDITIONAL REGULATIONS.



ROOF HEIGHT IS MEASURED AS THE MIDPOINT FROM THE TOP PLATE TO THE RIDGE FOR ALL ROOF TYPES OTHER THAN SHED, FLAT, AND GAMBEL. SHED AND FLAT ARE MEASURED FROM GRADE TO THE HIGHEST POINT OF THE ROOF, WHILE GAMBEL IS THE MIDPOINT IN ELEVATIONS OF THE HIGHEST SLOPE OF THE ROOF, FROM GRADE.

TABLE 602.3.1  
MAX. ALLOWABLE LENGTH OF WOOD STUDS

HEIGHT (feet)	O.C. SPACING (inches)
>10	2 X 4
12	2 X 6
14	2 X 6
16	2 X 6

TABLE NOT VALID AND DESIGN REQUIRED IF:  
SLOPES OF ROOF < 4/12  
SOUTHERN PINE IS USED  
ROOF DIMS ARE >6' IN A TRIANGULAR AREA, OR 12' MAX SPAN  
EAVES EXCEED 2'  
NO EXTERIOR SHEATHING  
UTILITY STANDARD, STUD AND NO. 3 GRADE LUMBER NOT PERMITTED

**CITY OF PAPILLION  
BUILDING DEPARTMENT**  
122 East Third Street  
Papillion, NE 68046  
www.papillion.org



8/08

# HOW To Design A Garage/Shed



INSPECTION HOTLINE (402) 597-2072

CITY OF PAPILLION  
122 EAST THIRD ST.  
PAPILLION, NE 68046  
WWW.PAPILLION.ORG

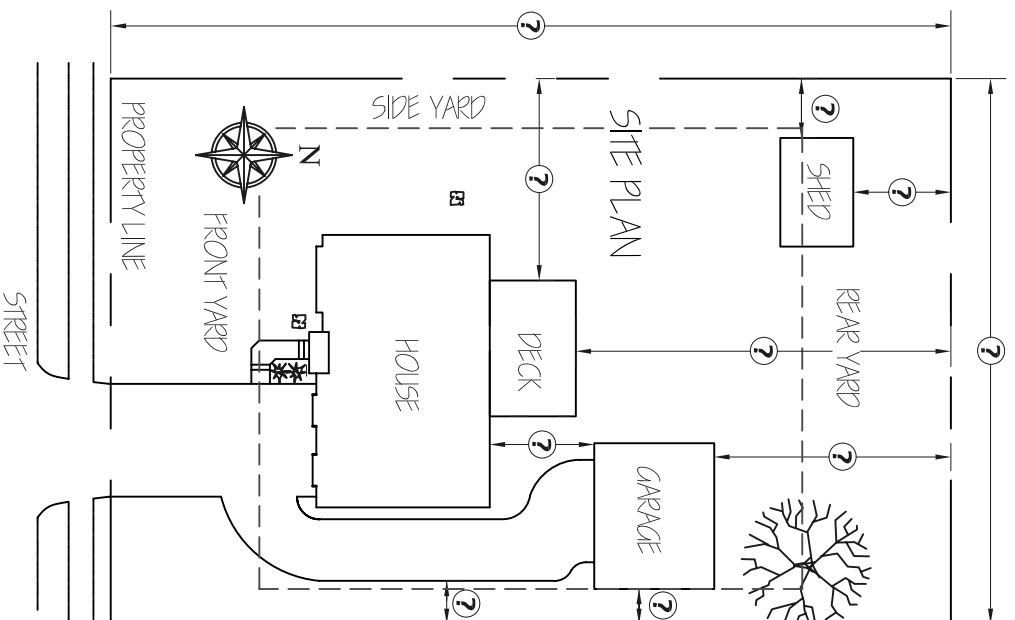
DIGGERS HOTLINE 811

## Building Requirements

- 1) All exterior footings shall have a minimum depth below grade of 12 inches (R403).
- 2) The wood sole plate at exterior walls on masonry slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet on center. There shall be a minimum of two bolts per plate section with one bolt located no more than 12 inches or less from less than seven bolt diameters from each end of the plate section (R403.1.6).
- 3) All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from the exposed ground shall be treated to prevent decay (R319.1).
- 4) All Accessory Buildings using pre-engineered trusses shall provide truss details at time of Framing inspection.
- 5) Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. (R806.1)
- 6) Ice protection is required at all eaves to a point 24 inches inside the exterior wall line of the building. Detached accessory buildings that contain no conditioned space are not required to provide ice protection (R905.2.7.1).
- 7) All Pre-engineered Accessory Buildings shall provide full engineering by a Professional Engineer.:
- 8) All one story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 sf. (R105.2), shall not be required to meet building codes. All zoning regulations remain applicable.
- 9) All floor systems accessed by means of a fixed stairway shall be designed with a minimum 50 psf design load (R502.3.1).
- 10) Design Criteria Requirements (Table R301.2(1)):

## Distances required on Site Plan

Distance minimums are dependent on the zoning. Additional neighborhood covenants and easements are the responsibility of the builder or homeowner.



All question mark symbols ( ? ) ( seen in site plan above ) are required for plan submittal.

### DESIGN CRITERIA REQUIREMENTS ( Table R301.2 (1) ):

2006 IRC / IBC			
GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	FROST LINE DEPTH
20, 30,	90	A	42

K. Slopes equal to or greater than 4 in 12. Soil bearing = 1500psf  
L. Slopes less than 4 in 12.

## Zoning Requirements 205:220

- 1) Accessory Buildings may be located a minimum of 5 ft. from the side property line and 8 ft from the rear property line ( 15' if alley ), if it is located between the rear building line and the rear property line.
- 2) Accessory Buildings cannot be located closer than 20 ft to any street right of way line.\*
- 3) Accessory Buildings cannot be located between the rear building line and the front property line.
- 4) Accessory Buildings cannot be located within an easement. All easement locations shall be verified by homeowner with Sanjny County register of deeds.
- 5) Accessory Buildings shall be located no closer to any other accessory or principal building, on the same or adjacent property, than as provided in the local building code, contact B.I.D. for requirements.
- 6) Accessory Buildings cannot be built until construction of the principal structure has commenced.
- 7) Shed length cannot be more than 2 times its width.
- 8) If the accessory building is attached to the principal structure then the setbacks for the principal structure will apply.
- 9) Total square footage of all floors for a detached garage shall not exceed 960 sf.\*
- 10) Building materials for Accessory Buildings in excess of 120 sf. Must be constructed of materials that are consistent in type, color, and scale of the primary building on site, including roof materials.
- 11) The number of Accessory Buildings allowed in an R1, R2, R3, & R4 district shall be limited to two per lot, except for multi-family developments in the R4 district, and schools in any district.\*
- 12) If lots back up to a main street, refer to Building Department for exceptions.

\* FOR ALL DEL. FRONTAGE LOTS AND ALL R4 MULTIFAMILY DEVELOPMENTS CONTACT BUILDING DEPARTMENT FOR ADDITIONAL REGULATIONS