

# POST FRAME ACCESSORY STRUCTURES RCO SECTION 324

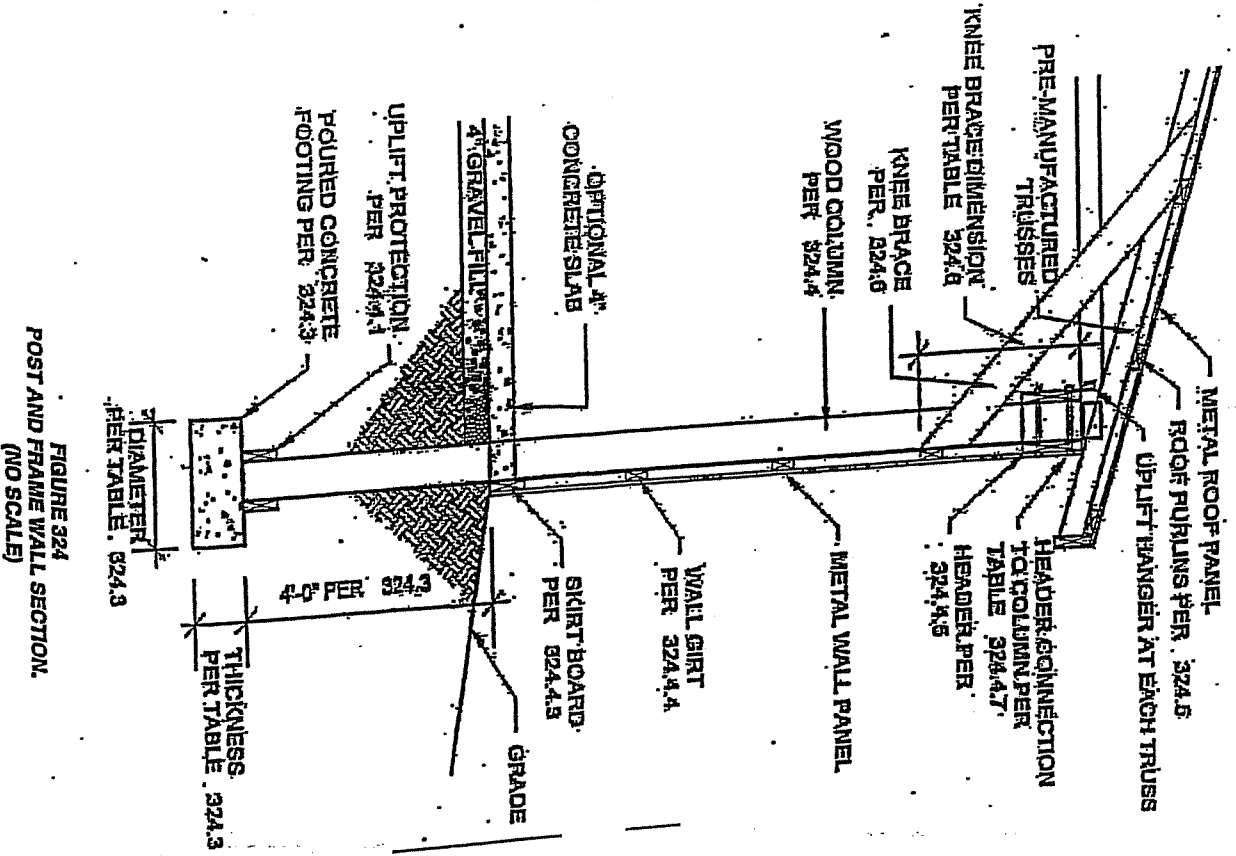


FIGURE 324  
POST AND FRAME WALL SECTION.  
(NO SCALE)

TABLE 324.3  
POST FRAME PIER FOOTING DIAMETERS<sup>a, b, c, d</sup>

	Building width (length of truss) including overhang (feet)			
	24	28	32	36
Diameter (inches)	18	20	22	22
20# roof snow load	18	20	22	22
Diameter (inches)	18	22	24	26
30# roof snow load	18	22	24	26

- a. Pier footing thickness shall be a minimum one-half of the diameter of the footing.
- b. Based upon 2000 PSF soil bearing capacity and truss loads of 20 or 30 PSF live or snow load top chord, 10 PSF dead load top chord, 5 PSF dead load on the bottom chord and no live load on the bottom chord.
- c. Fractional widths shall be rounded to the next higher pier footing diameter.
- d. Table not to be used in Ohio case study areas.

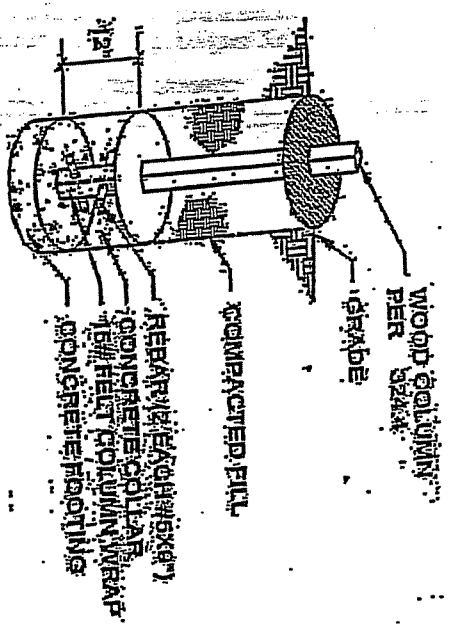


FIGURE 324.1  
COLUMN UPLIFT PROTECTION EXCEPTION  
(NO SCALE)

TABLE 324.7  
STRUCTURAL FASTENES

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS		
Description of Building Element	Number and Type of Fastener	Attachment type
Uplift blocking to column	5-16d Hot Dipped Galvanized	Each block
Skirt board to column	2-16d Hot Dipped Galvanized	Face nail
Wall girt to column	2-16d Hot Dipped Galvanized	Face nail
Diagonal bracing to column	2-16d Hot Dipped Galvanized	Face nail
Diagonal bracing to skirt board	2-10d	Face nail
Diagonal bracing to wall girts	3-16d Hot Dipped Galvanized	Face nail
Knee brace to column	3-10d	Face nail
Knee brace to top chord of truss or rafter	3-10d	Face nail
Knee brace to bottom chord of truss or ceiling joist	2-16d	Face nail
Roof purlin to truss or rafter with span of 2' or 4'	Mechanical fastener with uplift protection greater than 225 pounds	Per manufacturer installation manual
Roof purlin to truss or rafter with span of 8'		

TABLE 324.4.5  
GABLE END HEADER SIZES

Opening Width (feet)	10	12	16
Header Size (inches)	2-2 x 8	2-2 x 10	2-2 x 12

324.4.6 Bracing. Wall bracing shall be provided to resist all racking and shearing forces and must comply with the applicable provisions of Section 602.10 or by installing 2 x 6 diagonal braces between two adjoining columns at 8 feet on center or multiple spacings totaling a minimum 8 feet on

324.4.7.1 Number of fasteners. The minimum numbers of through bolts or other fasteners with minimum shears or withdraw values required per Table 324.4.7.

TABLE 324.4.7  
BEAM OR TRUSS CONNECTION AT COLUMNS MINIMUM FASTENERS OR TOTAL SHEAR OR WITHDRAW VALUES<sup>a, b, c</sup>

	Building Width (Length of Truss) Including overhang (feet)			
	24	28	32	36
Shear or withdraw (pounds) 20 lb. snow load	3360	3920	4480	5040
Number of Bolts, 20 lb. roof snow load	2	2	2	3
Shear or withdraw (pounds) 30 lb. roof snow load	4320	5040	5760	6480
Number of Bolts, 30 lb. roof snow load	2	3	3	3

a. Based upon truss loads of 20 or 30 PSF live or snow load top chord, 10 PSF dead load top chord, 5 PSF live load on the bottom chord and no live load on the bottom chord.

b. Based upon post spacing at intervals not exceeding 8 feet.

c. When beams are attached at each side of the column and fasteners do not extend through both beams such as through-bolts, the required values are one-half the amount shown above for each beam.

324.7 Attachment details. Structural fastener details for post and frame buildings shall comply with Table 324.7.

324.8 Rooftrusses. Engineered rooftrusses, where used, shall be accompanied by drawings sealed by the registered design professional responsible for their preparation and shall be submitted to the residential building official for approval prior to the framing inspection.

324.4 Column and wall construction. Columns shall be three (3) ply un-spliced, reinforced spliced or solid wood and shall not be less than 4 inch by 6 inch nominal size. Columns shall comply with the requirements of Section 319 and shall be restrained to prevent lateral displacement.

324.4.1 Uplift protection: Columns shall have uplift protection by the following methods:

1. Two 2 x 6 x 12 inch column uplift protection blocks attached to each side of the base of the column. The column uplift blocks shall be placed horizontally, attached per Table 324.7 and comply with Section 319;
2. 12 inch high, concrete collar poured on top of footing around the post, with 2-#5 x 9 inch rebar placed through the post at 3 inches and 9 inches from bottom

324.5 Roof purlins. Roof purlins shall be a minimum of 4 x 2 SPF#2 laid flat for spans up to 4 feet, and 4 x 2 SPF#2 laid on edge for spans up to 8 feet.

324.6 Knee bracing. A 2 x 6 brace shall extend from the column to the top chord of the truss or rafter adjacent to the post at a 45 degree angle. The vertical distance down from the bottom chord of the truss or ceiling joist to the point where the brace attaches to the columns shall be in compliance with Table 324.5 as shown on Figure 324. Trusses or rafters must be spaced such that they align with the column intervals. Attachment of knee brace shall be per Table 324.7.

TABLE 324.6  
KNEE BRACE VERTICAL DISTANCE

WALL HEIGHT	VERTICAL DIMENSION
8'-0" and 9'-0"	1'-6"
10'-0" and 11'-0"	2'-0"
12'-0" and 13'-0"	3'-0"
14'-0" through 16'-0"	4'-0"

