## SECTION 324 POST FRAME ACCESSORY STRUCTURES

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

::	Building width (length of truss) including overhang (feet)					
	24	28	· 32	36		
Diameter (inches) 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. Basedupon 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 younded to the next higher pier footing diameter.
- d. Table not to be used in Ohto case study areas.

TABLE 324.4.5 GABLE END HEADER SIZES

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

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

- Two 2 × 6 × 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 × 9 inch rebar placed through the post at 3 inches and 9 inches from bottom

of post in opposite directions. The rebar ends must be  $1\frac{1}{2}$  inches from the soil. See Figure 324.1; or

3. Each truss or rafter must have an uplift hanger as per Figure 324.

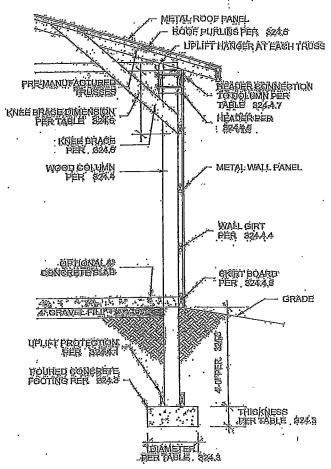
324.4.2 Column spacing. The maximum spacing for columns shall be (eight) 8 feet on center (unless truss sits directly on post).

324.4.5 Load bearing beams and headers. Load bearing beams and headers shall comply with Table 502.5(1).

## Exceptions:

- 1. Bearing beams are not required if the trusses or ceiling joists and rafters bear directly on the columns.
- 2. Openings on the gable end walls supporting a door or roof total load not exceeding 5 square feet per lineal feet of wall area that require beams or headers must be sized per Table 324.4.5.

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



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>,, b, c</sup>

	Building Width (Length of Truss) including overhang (feet)			
	24	28	32	36
Shear or withdraw (pounds) 30 lb. roof snow load	4320	5040	<i>5760</i>	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.

324.4.7 Beams supporting trusses or rafters and ceiling joists attachment to column. Bearing beams supporting roof trusses or rafters and ceiling joists shall be connected to the columns by one of the following methods:

- 1. Bolts that are ½ inch diameter through-bolted to the side of the column;
- Bolts that are ½ inch diameter, directly attached to a 3-ply column notch, enclosing the truss or rafter at the top of column; or
- 3. Other fasteners with minimum shear or withdraw values stated in Table 324.4.7.