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Building Code Clarification Handout, #2013.03, Mandatory January 1, 2014 (Updated 6/3/2014)  
**POLE BARN PROJECTS; POST AND FRAME STRUCTURES**

**2013 Kentucky Residential Code, Second Edition February 2014**

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**Disclaimer:** This is not a listing of all code sections involving building or utilities which involve this subject, but only the sections most often questioned. Refer to the 2013 Kentucky Residential Code book for information not listed in this handout and for other requirements of the building code. (This is not a guide to building pole building projects for commercial projects. For commercial projects you may be required to contact an architect or engineer for help with your design, depending on the project's size.)

**Design Criteria:**

The following minimum design criteria apply to Pole Building Structures requiring building permits in Hardin and Larue County as specified in the appropriate tables of the 2013 Kentucky Residential Code, Second Edition, February 2014.

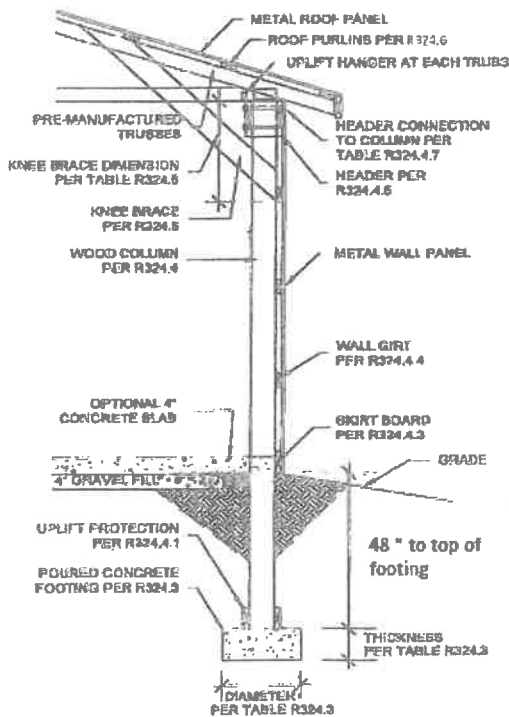


Figure R324.4  
 Post and Frame Wall Section  
 No Scale

Bracing not shown

There have been some code changes involving Accessory Structures which may be new to homeowners, builders, and suppliers in this area. This document addresses code requirements for Pole Building Structures as accessory structures.



**Clarification #1:** For building code purposes most structures which are pole building type structures, and which are commonly used for open sided carports, shelters, garages, workshops, small agricultural animal barns and shelters, equipment sheds, storage buildings, etc., are determined to be residential Accessory Structures per the 2013 Kentucky Residential Code.

Agricultural buildings, barns, carports, fences not over 7 feet in height, livestock shelters, private garages, retaining walls, sheds, and stables are determined to be occupancy Use Group-U in the

2013 Kentucky Building Code (Sec. B312, Utility and Miscellaneous Group U). Many pole building structures are commonly referred to as "pole barns" locally.

**Clarification #2:** Accessory structures, larger than 200 square feet in size, are required to have a building permit prior to starting any type of construction on the project. (R105.2), (R108.1)

**Clarification #3:** Each pole building structure/pole barn is required to have the owner to obtain a building permit; and to obtain the specified footing, framing, and final inspections; and to build it to meet the Kentucky Residential

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Code (for accessory structures); or the *Kentucky Building Code* (for Use Group U utility structures); and to meet the property line setbacks and the utility setbacks required by the *Hardin County, Kentucky Development Guidance System. (HCDGS)*. When in Larue County use the Land of Lincoln Planning & Zoning guidelines for the setbacks.

1. The building must be built in compliance with the *2013 Kentucky Residential Code for Post and Frame Structures Section 324, Second Edition February 2014*.
2. **Openings for doors, windows etc.** shall not be permitted in the exterior wall of an accessory structure with a fire separation distance of less than 3 feet. (Table R302.1(2))

Properties receiving an agricultural assessment in Hardin County, and completing an **Agricultural Certification Form** granted in writing through the Hardin County PVA Office are exempted from the requirement to obtain a building permit. The building or structure must be used in the operation or maintenance of the farm. The signed form must be presented to our office to avoid the permit requirement. This does not apply to the house located on a farm.

**SECTION 324 (KRC)  
POST AND FRAME STRUCTURES**

**R324.1 Post and frame structures.** The following requirements serve as minimum standards for post and frame structures within all of the following structural limitations:

1. Residential accessory structures
2. Single story
3. Metal roof on purlins with bracing and metal wall panels on girts, with bracing as shown in Figure R324.1 or in lieu of bracing provide solid exterior structural sheathing.
4. No attic storage
5. Maximum building width of 48 feet including the overhang.
6. Maximum wall height of 16 feet
7. Maximum mean (average) roof height of 20 feet
8. Maximum post spacing of 8 feet.
9. **Size limitation: An accessory structure may be no larger than 3,000 SF (KRC R202).**
10. **Columns (posts) shall be not less than 6 inch by 6 inch nominal size.**
11. **Maximum wall girt spacing: 2 x 4 at 2' o.c.; or 2 x 6 at 3' o.c.** Attached per Table R324.7. (see Pg. 7)
12. **Maximum roof purlin spacing: 2 x 4 at 2' o.c.**
13. **Column uplift protection.** Columns shall have uplift protection by one of the following methods:
  1. Two 2x6 12 inch column uplift protection blocks attached to each side of the base of the column, placed horizontally.
  2. 12 inch high, concrete collar poured on top of footing around the post with 2 #5x9 inch rebar placed through the post at 3 inches and 9 inches from bottom of post in opposite directions. The rebar ends shall be installed in accordance with ACI 332 for the specified distance in inches from contact with the soil. See Figure R324.3. This concrete collar is required for method 2 only.
14. **Footings. Poured in-place concrete footings below all posts. The top of the footing shall be minimum of 48 inches below finished grade. Pier footing thickness 1/2 the required diameter of the footing in compliance with Table R324.3.**

Post Frame Pier Diameters Chart			Table R324.3					
Building width incl. overhang	Pier depth min. in inches	Pier diameter in inches	Pier footing thickness 1/2 diameter of footing	Soil Bearing Capacity Minimum	Column Spacing max. feet	Wall Eave Height max.	Mean Roof Height max.	Attic Storage
up to 25'	48	18	9	2000 PSF min.	8	16	20	No
up to 28'	48	22	11	2000 PSF min.	8	16	20	No
up to 32'	48	24	12	2000 PSF min.	8	16	20	No
up to 36'	48	26	13	2000 PSF min.	8	16	20	No
up to 40'	48	28	14	2000 PSF min.	8	16	20	No
up to 44'	48	28	14	2000 PSF min.	8	16	20	No
up to 48'	48	30	15	2000 PSF min.	8	16	20	No

15. **Skirt boards.** Skirt boards shall be pressure treated lumber. Minimum 2" by 6" p/t board required.