Pole Buildings

Q: What is a pole building?
A: A pole building is a wooden structure supported by wooden posts in concrete footings in lieu of a continuous foundation wall. The primary difference between pole buildings and other structures is the use of poles as foundation points, and the walls are typically built vertically rather than horizontally.

Q: Do I need a permit for pole buildings?
A: Pole buildings follow the same regulations as other structures when it comes to permit exemptions. Please see Assistance Bulletin #74 for more information on permit exemptions with regard to structures.

Q: Can a pole building be a residence?
A: A standard pole barn structure serving as a barn or storage shelter is designed as Risk Category I, low risk to life because they are normally unoccupied by human life. Standard residences are a Risk Category II. So additional engineering would be required to make the structure safe for human habitation.

Q: Can I build a pole barn without engineering?
A: Yes, a Risk Category I pole building can be built without engineering. It has to follow all the specifications and design criteria on page 2. The building can go smaller but can not increase from the design shown. Please see page 2 for specifications and design.

Q: What specifications would require engineered plans?
A: 1. Using a pole barn design or structure as a residence
   2. Adding a mezzanine or 2nd story
   3. A building not meeting specifications or design criteria on page 2
Design Criteria for a Non-Engineered Pole Building
Includes:

- Snow Load: 25 LBS
- Wind Design: 110 MPH
- Seismic Zone: D2

Max Eave Height: 12'
Max Spacing on Post: 12'
Max Length of Building: 36'
Max Width of Building: 24'

Specs for Non-Engineered Pole Buildings:

- **Posts:** End Wall, Corner Post 6x6 PT. .60 retention
  Mid-span, Center wall post 6x8 PT.
  Spacing 12' O.C Max. / Height max. 12'

- **Embedment:** 48'' Deep, 24'' Diameter, 6'' Punch Pad
  Concrete backfill

- **Door Post:** 4x6 PT /Embedment 24'' Deep 18'' Diameter

- **Girts:** 2x6 DF#2 - 24'' Vertical O.C / Post 12'' O.C
  Face nail - Girt to Post 4 - 16d Galv.
  Bottom girt 2x10 PT.

- **Trusses:** Span 24' Max. With 25lb Snow load
  Provide engineering for trusses
  Fasten to post 5- 4 1/2'' SDS screws

- **Shear Blocks:** 2x Match post size 18'' Long
  Bolting 3/4'' Galv. A307 Bolt
  Option 6 - 4 1/2'' SDS screws

- **Purlins:** 2x6 DF#2 - 24'' O.C. Toenail to truss W/20d
  Lap purlins 24'' Min.
  Face nail 3/3 rows 16d @6'' O.C
  Face nail thru purlin to tie-block W/ (5) 16d

- **Floor:** 4'' Concrete Slab - Optional

- **Site plan:** Location - Address, Section, Township, Range
  Property size, Setbacks
  Grading and Drainage