# LIVING QUARTERS in BARN /POLE BUILDINGS

Must comply with the adopted 2018 International One and Two Family Dwelling Code and the following;

## **BUILDING PLANNING**

**Design Loads**: Roof live load – 20 PSF Ground snow load – 20 PSF Wind speed – 115MPH Seismic design category – C Soil minimum bearing capacity – 2500 PSF

**ENGINEERING REQUIREMENTS:** An Illinois licensed design professional is required to design for the following;

- Other loads such as loft areas, hoist or other attached loads require a design for the footings/piers and structure
- All wood trusses

**POSTS:** Wood posts are required to be a minimum 6" X 6" ACQ treated.

**FOOTING REQUIREMENTS:** Footings are required to extend to the exterior wall side of the supporting post on a pole type structure.

- Continuous footing throughout the perimeter of the structure, this includes the attached garage, storage area. Pier or post foundations are not allowed for residential structures.
- Bottom of footing is required to be a minimum of forty (40) inches below finish grade.
- The top of the footing or foundation shall extend above grade where the finish backfill or yard grade is a minimum of six (6) inches below the top of the finished floor level.
- If placing the structure on concrete foundation the footings shall be a minimum of twenty-four (24) inches wide, eight (8) inches thick with two (2) rows of #4 or 'A inch rebar in place before the concrete is poured. Rebar is to be supported a minimum of four (4) inches from the bottom of the footing, lapped and tied together.

### WALLS and CEILINGS:

- All interior walls shall be fastened to the concrete with anchor bolts and shall extend a minimum of 7" into concrete, spaced a maximum of six (6) feet on centers. Fasteners to be hot dipped galvanized. (POWER NAILING IS NOT ACCEPTED)
- All walls on the interior of the exterior walls around the living area and the wall between the barn/pole structure and living area are to be insulated and covered with approved wall covering from the floor to the ceiling or roof.
- The wall between the living area and the barn/pole structure is required to be covered with a minimum of 1/2" gypsum board applied to the barn or garage side.
- The area over the living area is required to be insulated. The ceiling of the living area is required to have a minimum of 1/2" gypsum board applied to the bottom of the ceiling.

### EGRESS:

• At least one (1) egress door must exit directly to the exterior of the living area. The required door shall be a side-hinged door not less than thirty-six (36) inches in width and six feet-eight inches (6' 8") in height.

- All egress doors are required to be opened from the egress side without the use of a key.
- All areas used for sleeping rooms must have one (1) direct egress to the exterior of the structure, either a window or door.

#### Windows in a sleeping room shall be as follows;

- 1. The unit must be operable from the inside to a full clear opening without the use of a key, tool, or special knowledge.
- 2. The sill height is not to be more than 44 inches above the floor.
- 3. The net clear opening requirement is to be obtained by normal operation of the window form the inside.
- 4. Minimum net clear opening shall be 5.7 square feet or <u>821 square inches</u> for windows located more than 44 inches above the finished grade adjacent to the window. Windows with the sill height 44 inches or less to the finished grade adjacent to the window shall be a minimum net clear opening of 5 square feet or <u>720 square inches</u>.
- 5. Minimum window opening height is <u>24 inches</u> and the minimum opening width is 20 inches. EXAMPLE: A window with a height of <u>24 inches</u> would require a width greater than 20 inches to meet the required opening and a window with a width of 20 Inches would require a window with a height greater than <u>24 inches</u> to meet the required opening.

### **OPENINGS BETWEEN LIVING AREA AND BARN/POLE STORAGE**

- No door or window can open into the sleeping area from the barn/pole structure.
- A door from the barn/pole structure opening into the living area (*not allowed <u>in sleeping area</u>*) must be a solid wood door a minimum of not less than 1 3/8 inch in thickness, solid or honeycomb steel door no less than 1 3/8 inch thickness or a 20- minute fire rated door. <u>Panel doors do not have the required rating or thickness</u>.
- Windows are not allowed between the living area and barn/pole structure.

### SMOKE ALARMS:

- Required in all sleeping areas and outside of sleeping areas.
- Smoke alarms are required to receive their primary power source from the building wiring and have battery back-up power.
- Smoke alarms are to be interconnected so all alarms will activate when one alarm is activated.

### **ELECTRIC**: Must comply with adopted 2017 National Electric Code.

### HEATING/AIR CONDITIONING, and GAS SERVICE:

• Must comply with the adopted 2018 International One and Two Family Building Code and Amendments.

### PLUMBING:

- Must comply with the adopted 2017 Illinois Plumbing Code
- Must comply with the Illinois Passive Radon Act