# **Pole Building**

# Residential Accessory Structure

Pole Building Residential Accessory Structure (Post-Framed)-An engineered structure constructed with large, solid sawn posts or highly engineered, prefabricated laminated poles (columns) in lieu of wood studs, steel framing, or concrete/masonry units, accessory to and incidental to that of the dwelling and is located on the same lot. Engineered structural components consists of footing size, post/pole spacing, post/pole burial depth, wall girt size and spacing, roof truss connections, roof purlin size and spacing, wall/roof bracing, and exterior wall/roof coverings.

Note: Residential dwellings designed and built utilizing the pole building method will be required to follow the criteria within this handout but will be classified as a Residential 1 and 2 Family Dwelling permit. Dwellings will also have to meet all the necessary residential energy, plumbing, and mechanical code requirements along with complying with all the prescriptive items throughout the residential code. Refer to the Residential 1 and 2 Family permit information on Scott County's website.

New Construction and Alteration of Pole Building Structures requires plans to be designed, prepared, and sealed by a MN Licensed Structural Engineer. MN Rule 1309 section 301.1.3 indicates that if construction does not conform to the applicable code, the structural elements shall be designed in accordance with accepted engineering practice. Since the code does not address the construction of pole style construction, engineering is required.

To review a complete list of submittal requirements for Pole Building permits and obtain necessary forms, go to the Scott County Building Inspections website. https://www.scottcountymn.gov/Faq.aspx?QID=344

# **Building Design Criteria**

Engineered structural design plans shall be with all new pole /post frame building structures and alterations affecting the structural elements of existing building pole/post frame building structures.

**Layout with Building Dimensions** Floor plans for each floor level Footing locations and sizes Header sizes over all openings

Cross-section with details

Wall girts

Wall and roof bracing

Size and spacing of rafters/trusses

Roof purlin details

Exterior elevations all sides

**Cross Section** 

**Fastening Schedule** 

**Garage Door Specifications** 

Frost protection for conditioned building, slab edge and under slab

or perimeter.

Soils: Where the design indicates soil testing is required, the permit applicant is responsible to ensure all soils testing is completed. Soils across Scott County are typically clay which have a bearing capacity of 1500 psf. Designs based on other than 1500 psf soil or prepared building pads will require soil testing. Ultimately, the soil type identified in the design shall be consistent with what is identified on site during the inspection.

### 2020 MRC TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

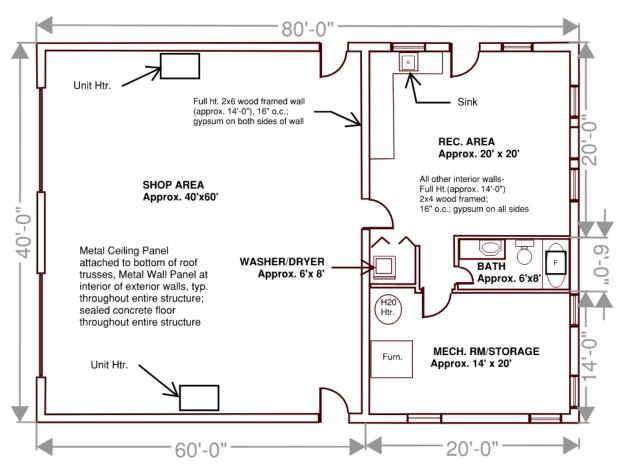
		, ,								
ROOF	WIND DESIGN		SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	FLOOD	AIR	MEAN
SNOW	Speed	Topographical	DESIGN	Weathering	Frost	Termite	DESIGN	HAZARDS	FREEZING	ANNUAL
LOAD	(mph)	effects	CATEGORY		line		TEMP		INDEX	TEMP
		(R301.2.1.5)			depth		(°F)			(°F)
35	115	Yes	Α	Severe	42"	Slight-	-15	See MR	3,000	43.9
						Moderate		Chapter		
								1335		

Non-structural design plans for residential projects do not require professional preparation but must include all code compliance details showing the proposed work activities will meet or exceed the minimum requirements of the residential codes (energy, plumbing, mechanical, electrical). Non-structural plans are required when any level of interior finish is being proposed within the building and shall include the following details:

Floor Layout plans with rooms labeled Interior non-structural framing Floor, Wall, Ceiling Insulation Wall and ceiling covering

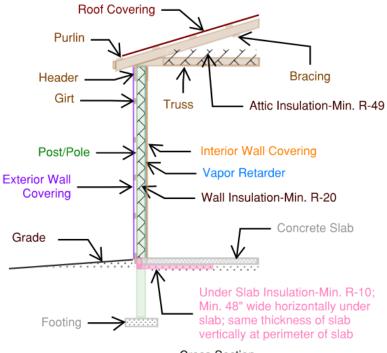
Plumbing fixtures or equipment Mechanical Equipment

Energy Code design. Full energy code compliance is required for all new buildings and alterations to existing buildings that increase the demand for fuel or electricity. Non-structural design plans shall include all energy code compliance details.



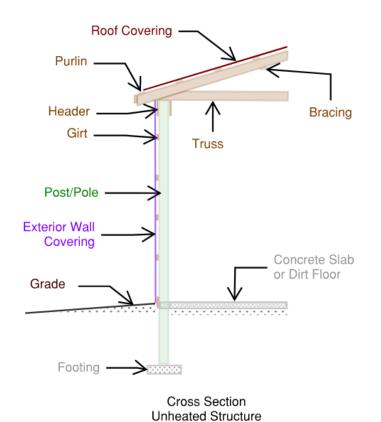
Non-Structural Floor Plan

#### **EXAMPLES of REQUIRED DETAILS**



Cross Section Proposed & Future Heated Structure

Hydronic or other in floor heating see MN Energy and Mechanical Codes for under-slab insulation requirements.



#### **Pole Building Residential Accessory Structure Permit**

When applying for the Pole Building permit through the ePermit portal, Step 3 requests the applicant select all Work Items applicable to the project.

**Important:** Permit applications submitted without selecting all appropriate work items will result in permit application acceptance delays.

# Work Items ☐Building Structure □Concrete Floor - Interior ☐Insulate and Interior Wall Covering Living Area - Conditioned

#### Selecting Work Items for your project

**Building Structure:** 

Use when the building structure is New, Addition, or Alteration/Repair

Concrete Floor - Interior:

- Use when the concrete floor is being installed with the New, Addition, or Alteration/Repair permit.
- If the concrete floor is not installed at the time building constructed, it shall be by separate Pole Building Alteration/Repair permit.

Insulate and Interior Wall Covering:

Use when these items are being installed with the New, Addition, or Alteration/Repair permit

Living Area - Conditioned

Use when area within the building is going to be finished similar to living space with heating and/or cooling.

#### **Separate Permits Required**

Plumbing, Sewer, Mechanical, Gas Lines, Electrical

o Prior to installation

Other agencies, such as DNR, Natural Resources

As required

#### **Required Inspections**

During plan review the reviewers identify all required inspections. The required inspections will be listed on the permit posting card which is available at permit issuance.

# **Approved Permit Documents on Project Site:**

- 1. When the permit is issued all permit documents are available in the ePermit portal.
- 2. All approved plans and permit documents shall be printed in color, full document design size and shall be retained on site and available to all project participants.
- 3. Permit applicant and property owner are responsible for complying with Scott County ordinances, Minnesota building codes, manufacturer's specifications, building permit details, and "approved" plans. Review the approved permit documents for specific requirements prior to beginning construction.

#### Important:

"Approved" plans and specification shall not be changed, modified, or altered without prior approval from the Building Inspection Department.

#### **Permit Expiration:**

Expiration occurs 180 calendar days after permit is issued or inspection with a positive outcome. Reactivation fees will be incurred for expired permits. If the project is expected to go beyond the 180 days, submit completed Request for Extension form along with explanation of cause for delay to buildinginspections@co.scott.mn.us prior to expiration.