DESIGN FEATURES

"Buildings with Integrity"

Our goal is to provide you with the highest quality pre-engineered pole building available that meets your specific wants, needs, budget, and style. With our in-house custom design system and 30+ years of post frame experience, we can quickly and accurately give you all the information you need to make the best-informed decisions.

Each Sherman Pole Building is specifically designed for the geographical location of construction and is backed by **THE SHERMAN 30 YEAR WARRANTY.** Please refer to warranty sheet for details.

DESIGN CRITERIA:

Agricultural use buildings, unclassified buildings, exempt buildings, and buildings erected in areas where codes are not enforced are all designed and erected by Sherman Pole Buildings using the Minnesota or Wisconsin RESIDENTIAL STRUCTURAL CODE GUIDELINES as our *minimum design criteria*. Example: The AG CODE allows for a 20 lb snow load, but the RESIDENTIAL CODE calls for a 35 lb snow load, we will follow the RESIDENTIAL CODE of 35 lbs even if the building is intended for AG use.

The two main reasons why we believe our *minimum design criteria* is important: 1) the snow weighs the same on the roof of a residential building as it does on the roof of an agricultural building, 2) the items kept inside an agricultural building are just as important as the items kept inside a residential building.

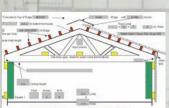
KEY DESIGN FEATURES:

FOOTING & FOUNDATION PLAN

- **Engineered Footing** systems range from pre-cast concrete pad footings to custom poured concrete footings, set 48" to 60" below grade.
- **Post Types** range from solid sawn timbers to multi-ply engineered laminated columns. Posts and columns are treated to a minimum retention of .60 CCA-C preservative per cubic foot of wood.
- Common bearing wall **Post Spacing** ranges from 4' to 8' on center. Spacing flexibility allows us to combine your building needs with the most economical and structurally sound design.
- Common **Truss Spacing** ranges from 2' to 8' on center. Truss and post spacing are normally equal to each other in cold storage buildings. However buildings that are going to be finished inside may have posts 8' on center and trusses 2' or 4' on center depending on ceiling material type and other design criteria.



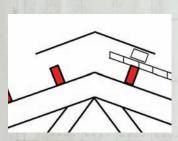
• Wall Systems typically start with a 9" non-arsenic treated baseboard system and continue up with 2 x 4 MSR (Machine Stress Rated) wall girts. MSR lumber is mechanically tested and graded for strength and integrity.



• Engineered Roof Systems include 1650# MSR purlins and engineered trusses set on notched columns. Notching the columns allows the weight of the roof system to be directly transferred to the columns and footings. Standard trusses include a 7 lb ceiling load for the installation of a steel ceiling.



• Steel Roofing and Siding product is a 29-gauge, G60 panel with a 45-year siliconized polyester paint warranty. Upgrade options include: G90, G100, 26-gauge, and Kynar paint finish. Steel siding and roofing are typically fastened with gasket-mounted screws. A more economical option is available using G40 panels.



• **Ventilation** design includes continuous ridge venting mesh at the peak of the building and unobstructed ribs at both eaves with a roof steel overhang of 6". This unique design allows for maximum, non-mechanical, "free air movement" of fresh air into the building's attic airspace at the eaves, and the escape of warm humid air out at the ridge, while effectively restricting rain and snow from entering the building.

• Ridge Cap is a 20" wide metal cap running the length of the building at the peak of the roof. For cold storage buildings, polycarbonate ridge cap is a "clear as glass" economical lighting solution rated 20 times stronger than fiberglass.

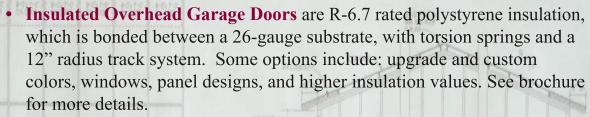


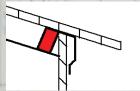
Windows are commercial grade, horizontal sliding, maintenance free, and pre-finished in an aluminum frame. Some options include: custom colors, fixed light picture windows, single-hung windows, vinyl, and insulated glass.



- Walk-in Doors are a white commercial grade, maintenance free, pre-finished, steel-frame, and steel-panel service door. Some options include: Upgrade and custom colors, cross buck and 6 panel designs, glass, deadbolts, and closer hardware. See brochure for more details.
- Non-insulated Overhead Garage Doors are a nominal 24-gauge raised short panel steel door with torsion springs and a 12" radius track system. Some options include: Upgrade and custom colors, windows, and panel designs. See brochure for more details.







• **Roof-to-eave Detail** allows roof steel to extend beyond the eave wall approximately 6". **Roof-to-gable** detail includes steel corner trim to finish off the transition from the roof steel to the wall steel.



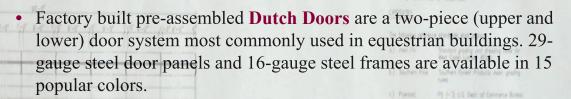
• Upgraded Roof to Eave or Gable Detail, called Boxed Overhangs typically extend 12" to 24" out from the building walls and are enclosed with color-matched metal soffits and fascia. Boxed overhangs can be added to one or more walls as aesthetically desired. (Our standard roof to eave or gable design creates a fully-ventilated structure making boxed overhangs an option, not a necessity.)



ROOF FRAMING PLAN

• **Wainscoting** is an aesthetic upgrade that allows the lower portion of the building walls to be a different accent color. Wainscoting can be applied to one or more walls and can help reduce the cost of repairs to damaged wall steel.

• Sliding Doors are custom designed to the exact door dimensions you need. When installed on the gable end, sliding door height can equal the ceiling height of the building. This means you can get a taller door with sliding doors than you can with overhead doors. (Overhead doors typically require 16" of headroom clearance between the top of the door and the ceiling.)



 Roof Cupolas with color matched steel walls and roof are available in 24", 36" and 48" sizes. Cupolas include your choice of 10 different weather vanes.

• Interior Finish Package includes wall and ceiling insulation, vapor barrier, and liner steel.

The most important feature in every building we design... "customer satisfaction."







ROOF FRAMING PLAN





SHERMAN LUMBER, INC. SINCE 1976

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