

NATURAL RESOURCES CONSERVATION SERVICE
Wyoming
CONSTRUCTION SPECIFICATIONS
FOR
LIVESTOCK SHELTER STRUCTURE

(Owner/Operator)

(Project Title)

GENERAL

Installation shall be in accordance with an approved design and plan. Details of construction shown on the drawings but not included herein are considered as a part of this specification. Construction activities shall be in accordance with applicable OSHA regulations.

MATERIALS

Plywood. Plywood for use in exposed above ground construction shall be exterior grade, meet Product Standard PS-1 and shall conform to the requirements shown on the drawings.

Treated plywood for use above ground shall meet Product Standard PS-1 and be pressure treated with waterborne preservatives (Arsenicals) to a retention level of at least 0.4 pounds per cubic foot except as shown on the drawings.

Treated plywood that is to be in permanent contact with water or earth must meet Product Standard PS-1 and be pressure treated with waterborne preservatives (Arsenicals) to a retention level of 0.6 pounds per cubic foot, except as shown on the drawings.

Structural wood poles, posts, and lumber. All wood material shall be sound, new wood free from decay and disease damage, shall be straight, not cracked, and shall meet the requirements shown on the drawings. Structural timber and lumber shall be structural grade or better.

Unless otherwise specified, all poles, posts, and all nominal lumber sizes 2X10 or larger shall be pressure treated by one of the following preservatives:

Creosote

Pentachlorophenol

Waterborne Preservatives (Arsenicals) treated to 0.4 pounds per cubic foot retention

Unless otherwise specified, all nominal lumber sizes 2X8 or smaller shall be pressure treated using waterborne preservatives (Arsenicals). Wood for use above ground shall be treated to a retention level of at least 0.4 pounds per cubic foot. Wood for use in permanent contact with water or earth shall be treated to a retention level of at least 0.6 pounds per cubic foot.

Hardware. Bolts, rods, nuts, washers, and other hardware shall be an appropriate grade of steel and shall be galvanized except as shown otherwise on the drawings.

Structural Steel. Except as shown on the drawings, steel shall be malleable, weldable, carbon steel.

Galvanizing of Steel. Except as otherwise specified, items shown on the drawings to be galvanized, shall be galvanized according to ASTM A123, except bolts, screws, and other fasteners 0.5 inch or less in diameter may be coated with electro-deposited zinc cadmium coating following ASTM B766 or B633.

Zinc Painting of Steel. For items specified to be painted with zinc paint, the surfaces shall be cleaned and painted as follows:

Cleaning – Surfaces to be painted must be clean and dry. Remove oil and grease using a solvent. Clean surfaces to be painted using sand blasting, power disk sanding, or wire brushing.

Paint – Apply two coats of zinc-rich cold galvanized compound using brush, or aerosol application (example: Rust-Oleum Professional Galvanizing Compound) or zinc dust – zinc oxide primer ASTM D79, D520, or D4146.

INSTALLATION

Structures shall be installed accurately to the dimensions shown on the drawings.

Nails and spikes shall be driven in wood with just sufficient force to set the heads flush with the surface of the wood.

Bolt holes shall be drilled for snug fit. Holes for lag screws shall be bored with a bit not larger than the body of the screw at the base of the thread.

Washers shall be used in contact with all bolt heads and nuts that would otherwise be in contact with wood.

Steel welds shall have a strength equal to the strength of the structural steel.

ADDITIONAL SPECIFICATIONS
