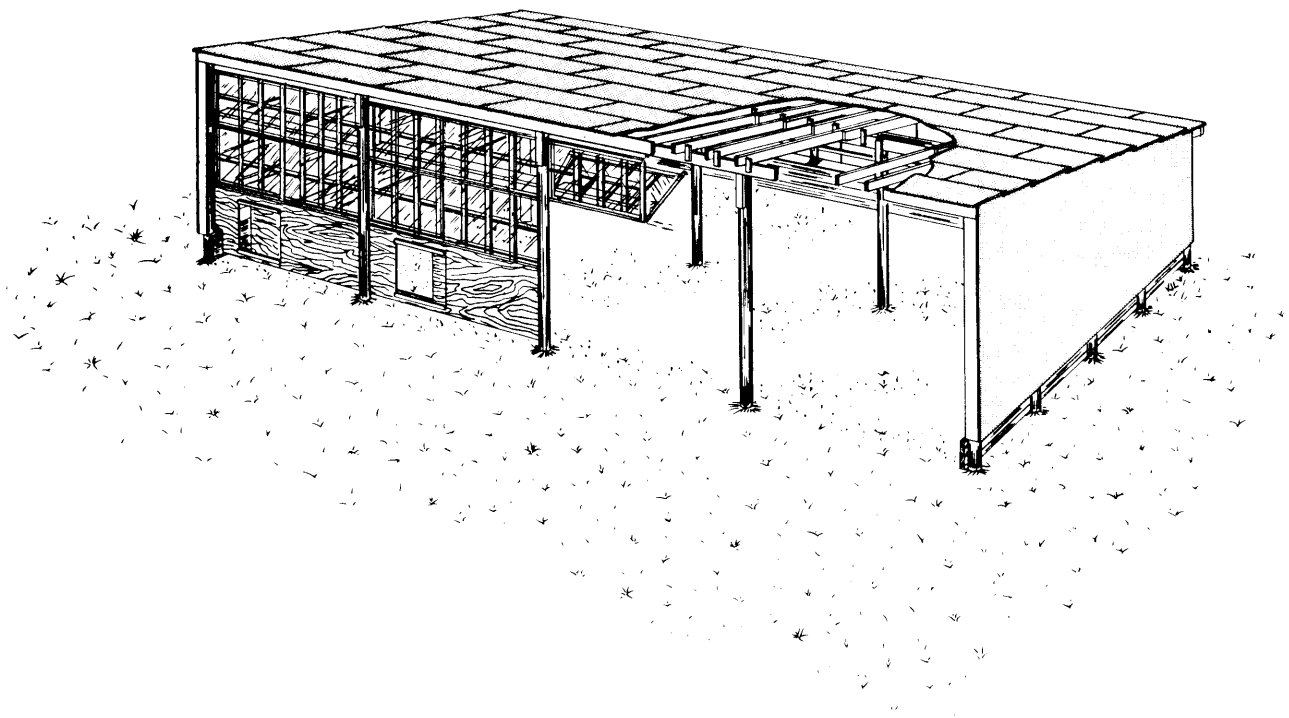


POLE FRAME SHEEP SHED



The Canada Plan Service prepares detailed plans showing how to construct modern farm buildings, livestock housing systems, storages and equipment for Canadian Agriculture.

This leaflet gives management information and describes one of these detailed plans. To obtain a copy of the Canada Plan Service detailed plan, contact your local provincial agricultural engineer or extension advisor.

POLE FRAME SHEEP SHED

PLAN M-4111 NEW: 80.08

Plan M-4111 gives complete details for building a pole shed suitable for sheep feedlots. A low-pitch shed roof drains all runoff water and snow towards the rear; this is very important to minimize wet conditions in the heavy traffic area of the feedlot at the open front.

This shed is 8.4 m from open front to back wall, and it can be built to any length multiple of 4.2 m (12.6, 16.8, 21.0, 25.2 m, etc.). Each 4.2 m length gives 36.5 m² of floor space, enough bedded resting area for about 25 pregnant ewes or 65 feeder lambs. Vertical clearance is 2.4 to 3.6 m for operating a tractor and front-end manure loader.

STARTING TO BUILD WITH POLES

To resist windstorms and frost heaving, this shed is framed on round pressure-treated wood poles set deep on concrete footings poured into the post holes. The poles are located on a 4.2 m grid to take best advantage of 4.2 and 4.8 m roof and wall framing members.

Pour the concrete pole footing exactly level at 1050 mm below the finished earth floor level. This way a level datum is established at the start of construction; pole tops can then be measured and accurately pre-cut on the ground, ready to receive the roof members immediately after the poles are erected and lined up. This is much easier than cutting and notching poles while working from a ladder.

WALL

The back and end walls are solidly planked at the bottom with 4.2 m lengths of pressure-treated tongue-and-groove lumber. Planking is spiked to the inside face of the wall poles, for easier cleaning with a tractor and manure loader. Arrange the planks with end butt joints staggered 2.1 m on alternating poles, for a straighter, stiffer wall.

Walls above the treated planking may be closed with a variety of durable materials, such as exterior plywood, Aspenite, sawn boards, or even sawmill slabs trimmed to a uniform width.

For excellent summer ventilation, the rear wall has a continuous row of panels, hinged to drop open; these panels are swung closed and secured for winter protection. A small hinged soffit board under the back roof overhand provides another ventilation control; this can be dropped open to give a 150 mm eave slot for normal winter ventilation, or closed to a 50 mm slot when drifting snow becomes a problem. Do not close these slots completely.

CLOSING THE FRONT FOR WINTER

This plan shows optional front panels which may be added for winter protection. These are removable framed plywood panels with sliding sheep doors, plus hinged-up window panels covered with clear polyethylene plastic. The more-durable reinforced plastic lasts longer when exposed to wind and weather. The plastic stops wind and snow but lets in winter sunshine. For easier replacement of damaged plastic, secure it with double-head nails driven through plywood strapping.

ROOF

This plan reduces lumber and eliminates the complicated knee bracing used in other shed designs. A special laminated-plank center beam is combined with rafters overlapped and double at the point of maximum bending stress. To take advantage of this improved design, follow nailing details carefully. Lap-joining the rafters also eliminates most of the on-site cutting to length. The plan shows a single-skin roof of exterior sheathing plywood or Aspenite. This is nailed directly to the rafters, with all joints caulked and horizontal joints lapped for waterproofing. This economy roof is suitable only in the dry cold regions of western Canada; for humid regions, lay the roof sheathing without laps and cover with asphalt roll roofing or low-slope asphalt shingles.