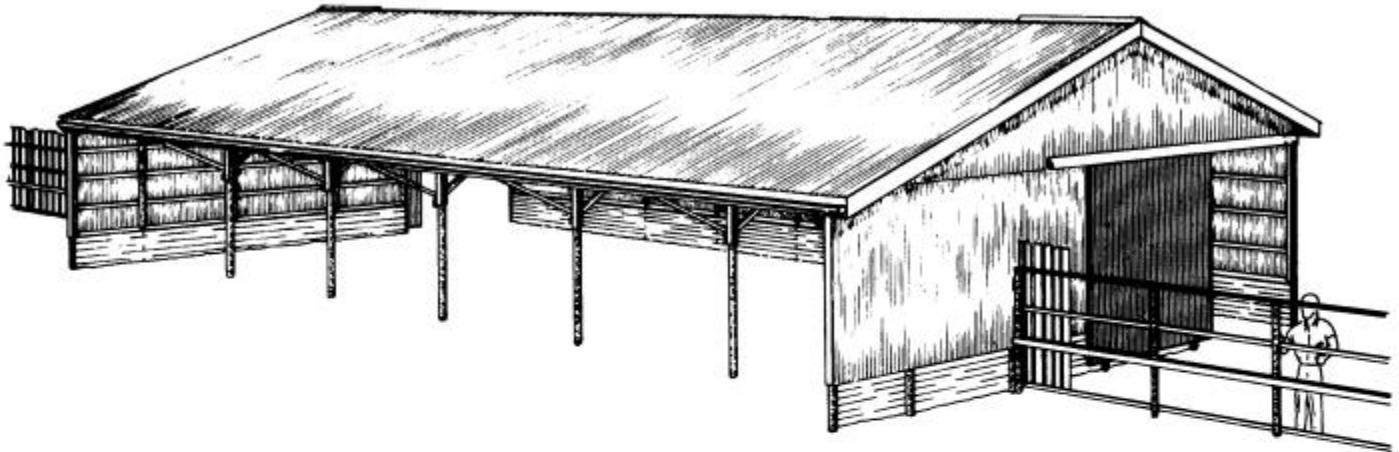




OPEN-FRONT, CLEAR-SPAN POLE BARN



NEW 11:76

This plan consists of four sheets giving details for building a pole barn with optional clear spans of 28 ft, 32 ft, 36 ft or 40 ft. Other spans may be used but the end-wall pole spacings will not be modular unless the size of the end doors is changed. Added roof overhang at the open front gives another 5 ft of roof protection to livestock or general storage. This plan replaces previous Beef plans 1156, 1158 and 1159.

The barn is designed primarily as a shelter for the bedded area in a cattle or sheep feedlot. Clear height to the underside of the trusses is 11 ft 4 in. to give clearance for accumulating a deep manure pack and for a tractor and manure loader when cleaning out. Back and end walls are strongly framed with treated wood poles spaced 8 ft on center and planked on the inside for easy cleaning. An alternate detail shows how to close the bottom of the walls by placing concrete infill panels between the poles.

Either round or square poles may be used. Poles must be accurately notched for the plate beams that carry the roof trusses. To start the walls, dig or auger the footing holes about 5 ft deep, then pour a concrete footing in each hole; using a surveyor's level and a tamping rod marked at the height of the levelling instrument, tamp these footings to an exact, level line 4 ft below the floor datum; this way the poles can be measured and notched at the top before erecting.

A continuous nailed plate beam system at back and front eliminates the need for complicated longitudinal knee bracing used in older plans of this type.

Metal-clad livestock buildings can sweat inside unless good ventilation is provided. In addition to the open front, an open ridge slot lets out moist air at the top. An adjustable soffit under the back eave lets in some fresh air under the roof; this soffit opening should be left fully open under all conditions except drifting snow. In summer, open the two endwall sliding doors as well.



The Canada Plan Service prepares detailed plans showing how to construct modern farm buildings, livestock housing systems, storage; 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.