



This plan gives construction details for a farm storage building 9, 12, 15, 18 or 21m (30, 40, 50, 60 or 70 ft) wide. The roof is supported on clear-span nailed lumber trusses, making it convenient to arrange machines in storage. Prefabricated commercial wood trusses can be substituted for the site-built nailed trusses.

The plan shows an uninsulated storage area that can be built any length in multiples of 2.4 m (8 ft). The clear height from floor to truss may be 4.2 or 4.8 m (14 or 16 ft), depending on your requirements. Check the height of your tallest machines such as tractors or combines.

MACHINERY STORAGE AREA. A wide, clear-span storage works best with access doors approximately centred in both end walls. Machines that are more difficult to move should be parked first along both walls, leaving a passage down the centre. If this centre space is reserved for self-propelled machines such as trucks, tractors and combines, it will not be

wasted and can easily be cleared for access to the machines along the walls.

End doors are easier to frame than sidewall doors because the end roof truss can support the door track without the heavier head beam required in load-bearing sidewalls. Side doors are therefore more expensive and are not recommended with the centre passage arrangement. For those rare farmsteads where a side door is unavoidable, the plan includes details for optional sidewall doors up to 4.8 m (16 ft).

End doorways have several widths as shown. Doorways over 4.8 m (16 ft) wide should have two sliding doors, or the doors become too heavy for one person to roll and stop them easily. Access doors for workers may be framed into the wall beside the sliding door, or into the sliding door itself. With pole construction, it is easier to frame these into a corner of the larger sliding door.

COMPLETE INSTRUCTIONS

Canada Plan Service, an inter-provincial organization, promotes the transfer of technology through factsheets, design aids, and construction drawings that show how to plan and build modern farm structures and equipment.

For more information, contact your provincial agricultural engineer or extension advisor.

POLE FRAME CONSTRUCTION. Wood poles, factory pressure-treated with CCA, allow strong and rapid construction for machinery storage walls. This plan gives required sizes of rectangular poles for walls 4.2 or 4.8 m (14 or 16 ft) in height. Round poles of equivalent cross section could be used, but most builders prefer to spend a little more money for rectangular-sawn poles, to reduce construction time.

When building pole-frame walls, one of the awkward and dangerous jobs is cutting and fitting at the tops of the poles to make the roof level. Spending a little extra time to make the concrete pole footings exactly level when they are being poured into the ground easily solves this problem. Then the tops of the poles can be cut and notched to exact length before standing them in the holes.

This plan requires the use of roof trusses, spaced as per manufacturer's instructions. The trusses require permanent X-bracing and perlins to form a diaphragm roof to generate the structural strength for the building.

FROST FLOOR SLAB. Frost may heave the soil under the floor of an unheated structure like this machinery storage. A concrete floor is optional with this building. If there is a concrete floor slab, it must be isolated from the wall planking so that heaving does not lift the wall and roof. This is why a small space is left between the bottom of the treated wood splash planking and the soil beneath. If a gravel floor is used instead of a floating slab, add a floating plank resting on edge between the poles, to keep out wind and drifting snow at the ground line.