

## Horse Barn

This two-stall horse barn has a simple, yet flexible design—one that could be expanded easily if more stalls are required. In addition to the two box stalls, there are tack and feed rooms. A covered breezeway in front provides protection from the sun and rain while saddling and grooming the horses.\*

The barn is built with 16- and 18-foot long poles, set on concrete pads. Posts set on concrete piers could be substituted. The barn has an L-shaped foundation, with concrete slabs for the tack and feed rooms and clay floors for the stalls.

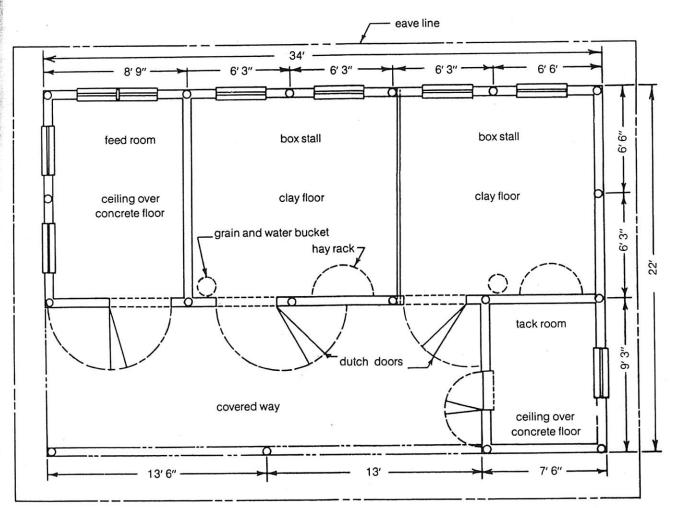
The walls are tied together with 2 x 10 splash boards and 2 x 6 girts. Also, 2 x 8 and 2 x 10 girts support the 14-foot long 2 x 6 rafters. According to the plan, the rafters are spaced 2 feet o.c.; in northern climates with heavy snow loads, reduce the spacing to 18 inches o.c.

Two different roofing options are presented. You can use 2 x 4 purlins, spaced 2 feet o.c. and aluminum or galvanized-steel roofing. Another option would be ½-inch plywood, covered by shingles.

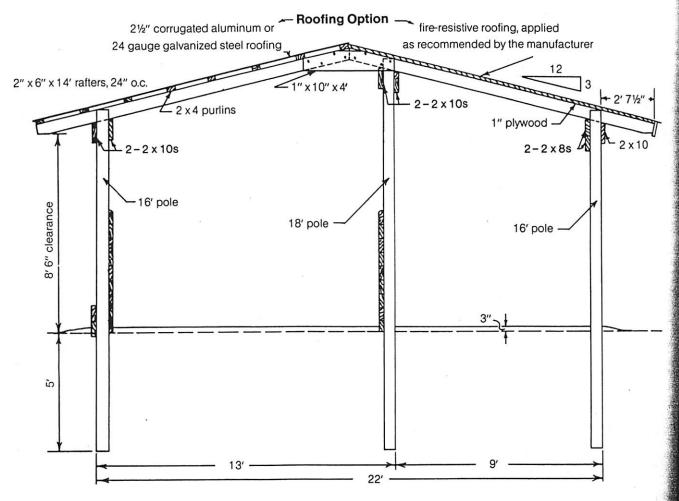
Asphalt roll roofing could also be used, and would be more durable and water tight in harsh climates. To keep the rafters from spreading, use double plywood gussets at the ridge.

<sup>\*</sup> The Grambrel, General and Horse Barn plans were developed by the United States Department of Agriculture Cooperative Extension Service. Copies of these plans are available through your state university Extension Service office.

Dutch doors, 4 foot wide, are the entrances to the two stalls and feed room. The tack room has a smaller 30-inch Dutch door. Eight windows provide light and ventilation, including two 36-inch wide windows in each of the stalls. These are needed for ventilation in warm climates; for cold climates, use only one window to reduce winter heat loss. Ventilation is also achieved through two gable-end louvers and a cupola. Cupolas may be home built or purchased pre-assembled.



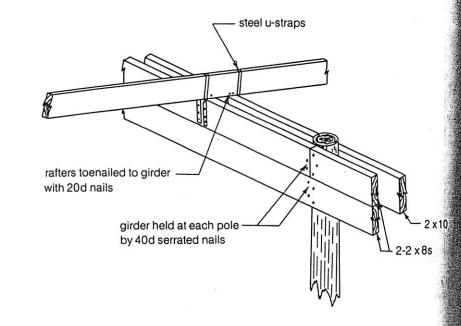
The floor plan shows the covered way, as well as the feed and tack rooms and two box stalls. There's a door to each room.

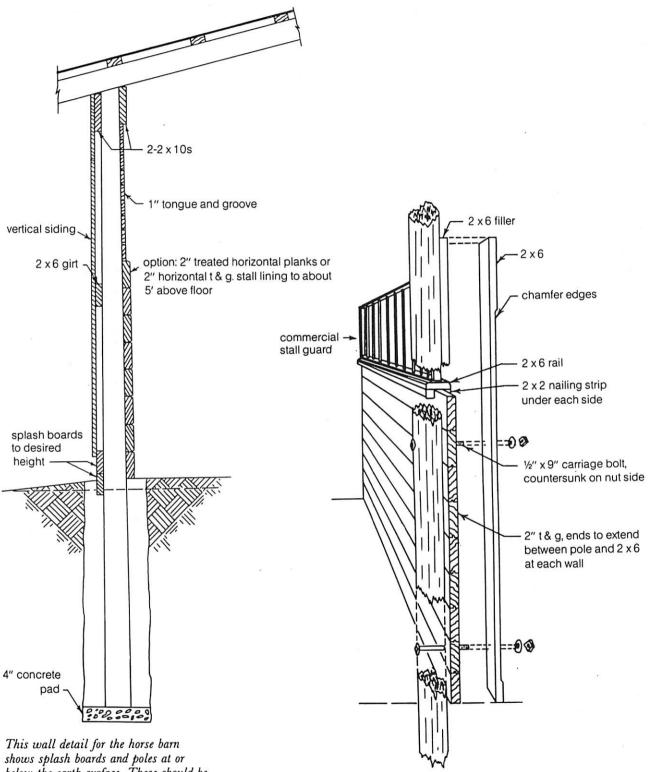


This horse-barn cross section shows two roofing options: at left, there are rafters and purlins, along with metal roofing; and, at right, there are also rafters, along with a fire-resistant roofing of your choice.

Rafters may be secured to the upper

girders this way.





This wall detail for the horse barn shows splash boards and poles at or below the earth surface. These should be pressure treated or treated with preservatives.

Here's a cutaway section, showing details of a stall partition, suitable for pole barns.