

300 Bushels... Plywood Beef

SELF FEEDER



A self feeder will permit the full feeding of cattle with a minimum of labor. It will also protect your feed from the weather. This self feeder is designed with a widened bottom to permit the feeding of coarse materials such as rolled grain or chopped ear corn with a minimum of plugging. Self feeders must be checked frequently to make sure they are feeding properly.

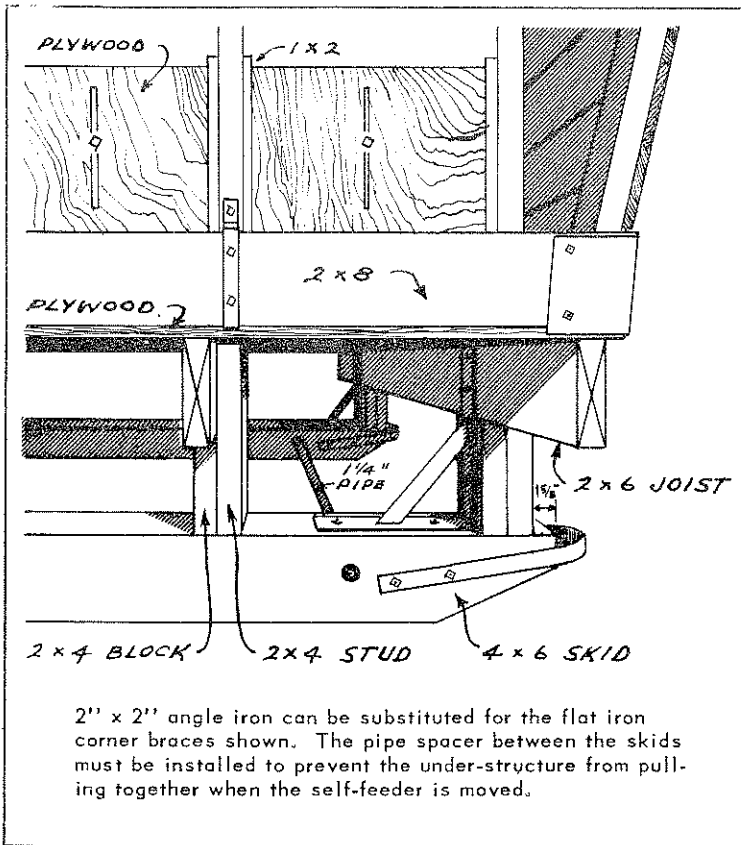
Plywood is suggested in this plan to insure rigid construction; however, matched boards can be used. For best construction, glue and nail all of the plywood gussets to the framing members. More rigid construction will result if all of the plywood is glued to the framing members.

The picture shows a roof with roofing over board roof sheathing. The plan shows an exterior plywood roof with no roofing. It is not necessary to use a roofing material over the exterior plywood roof; simply add the batten strips over the joints between the plywood sheets.

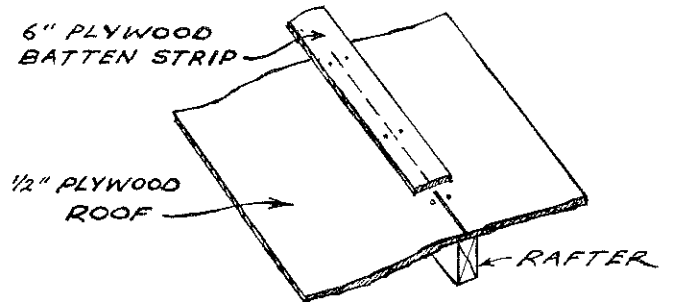
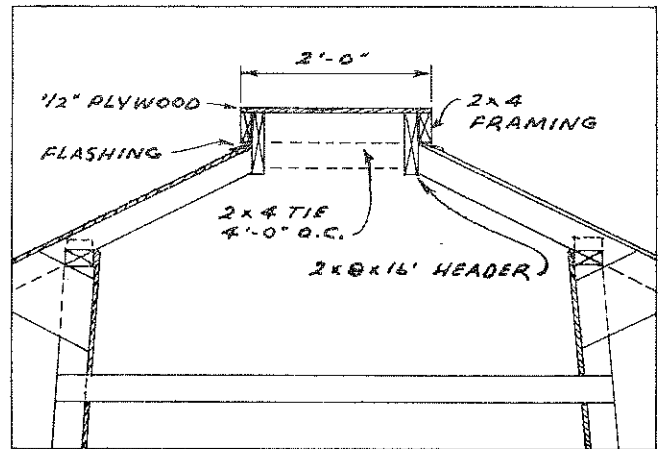
Allow 3 to 4 inches of self feeder bunk space per animal for cattle on full feed. This 16 foot self feeder will feed about 125 head of feeders to finish weights.

A. H. Schulz
Extension Agricultural Engineer

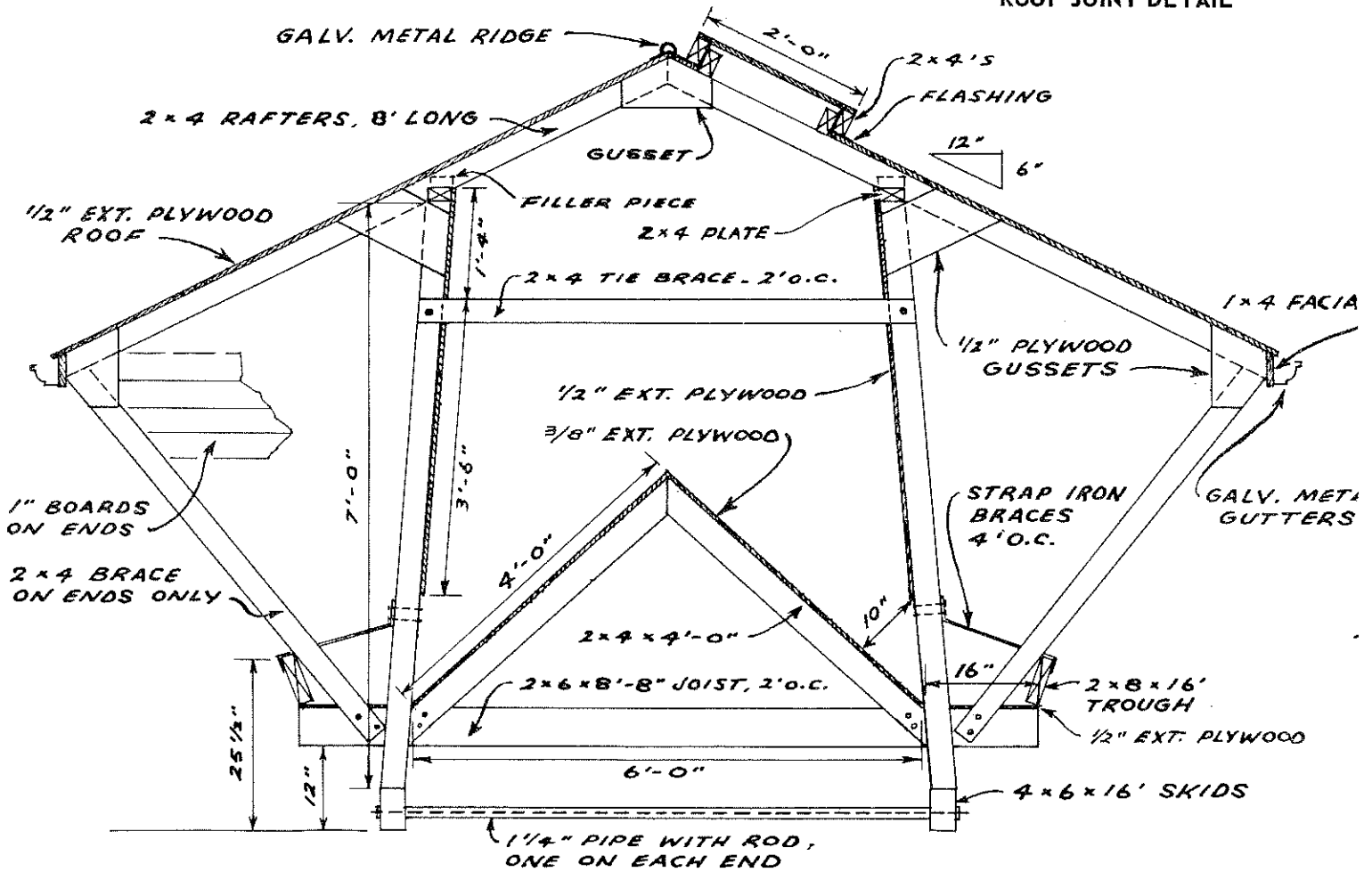
EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE



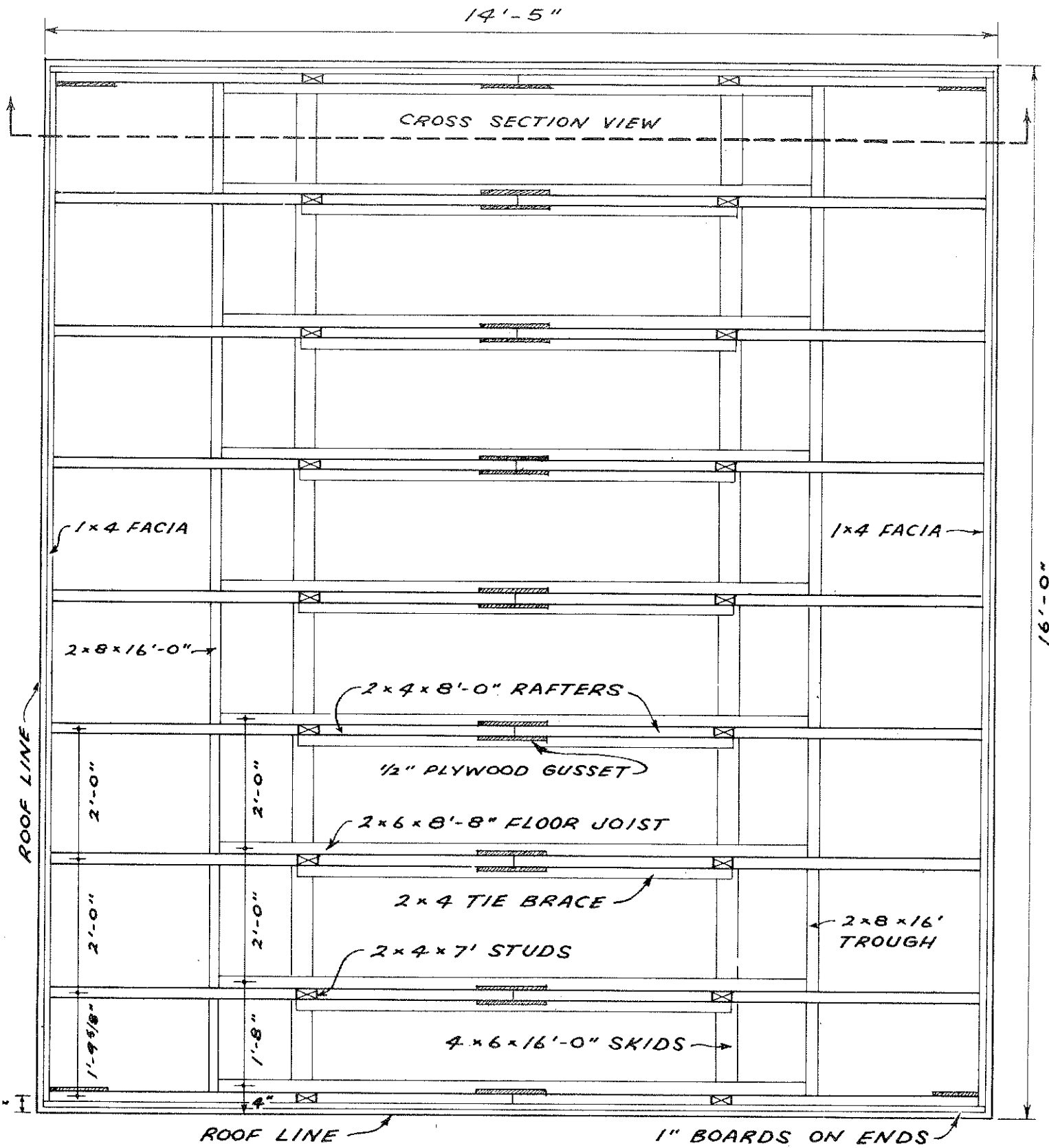
ALTERNATE TOP DOOR DETAIL



ROOF JOINT DETAIL



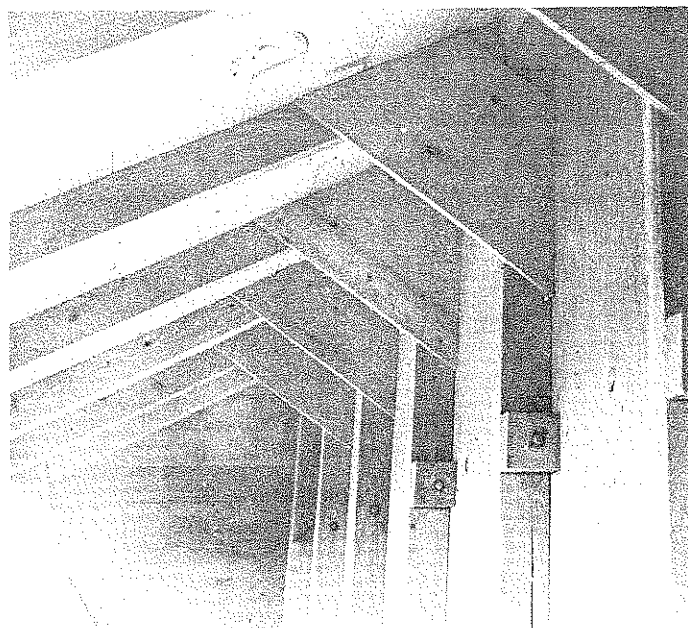
CROSS SECTION VIEW



PLAN



Adjustable plywood doors permit adjusting the opening to the feed being fed.



Plywood gussets insure a rigid roof structure. A plywood roof is suggested in the plan instead of the lumber roof sheathing shown.

BILL OF MATERIALS . . .

<u>Pieces</u>	<u>Size</u>	<u>Use</u>
2	4" x 6" - 16'	Skids
9	2" x 6" - 9'	Floor Joists
1	2" x 4" - 16'	Floor Joist Supports
9	2" x 4" - 14'	Studs
9	2" x 4" - 16'	Rafters
2	2" x 4" - 12'	End Braces
2	2" x 4" - 16'	Plates
9	2" x 4" - 8'	Divider Joists
7	2" x 4" - 6'	Tie Braces
2	2" x 8" - 16'	Trough
4	2" x 4" - 16'	Top Door and Door Framing
2	2" x 4" - 16'	Filler Pieces
2	1" x 4" - 16'	Facia
100 bd. ft.	1" x 6" - drop siding	End Sheathing
24 lin. ft.	1 x 2	Adjustable Door Guide
17 sheets	4' x 8' x 1/2" cc Exterior Plywood	Roof, Walls, Adjustable Doors, Filler Door, Gussets, Battens
4 sheets	4' x 8' x 3/8" cc Exterior Plywood	Center Divider
2 quarts - Resorsinal resin glue or		
5 # aircraft grade (type AAA-125 or equivalent) casein glue.		

HARDWARE

2 - 1/2" x 7' threaded rods	6 - 1/4" x 1 1/2" x 24" strap iron braces
13 feet - 1 1/4" galvanized pipe	36 - 3/8" x 4" machine bolts
48 lin. feet - galvanized flashing	18 - 3/8" x 4 1/2" machine bolts
16 lin. feet - galvanized ridge roll	6 - 3/8" x 2 1/2" machine bolts
32 lin. feet - 4" galvanized gutters	8 - 3/8" x 1 1/2" machine bolts
4 - end skid braces	8 - 1/2" x 6" machine bolts
4 - trough corner metal reinforcing	118 - 3/8" washers
5 lb. - 16d galvanized nails	
10 lb. - 8d galvanized nails	
3 lb. - 6d galvanized nails	