

MWPS-72679

Farrowing House

Outdoor Feed, 12 Sows.

CAUTION!

Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access. **Furthermore, any deviation from the given specifications may result in structural failure, property damage, and personal injury including loss of life.**

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Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
Farrowing House
Title Page
MIDWEST PLAN NO. 72679

Plan MWPS-72679

Farrowing House; Outdoor Feeding

This plan is for a 24' x 36' steel-frame building housing 12 sows in farrowing stalls. A variable speed fan provides forced ventilation. Use vent doors for natural ventilation when weather permits. A 12' x 24' outdoor feeding floor is provided. If stalls are longer than 7 ft, increase building width to 28'-0".

General Specifications

Fans: Select exhaust fans for the stated capacity at 1/2" static pressure.
 Concrete: Use 3500 psi concrete with 7% air entrainment.
 Use steel of at least 40,000 psi yield. Install steel and concrete curbside and accurately.
Heat:
 If building is to be bedded:
 • Desired building air temperature is about 65°F.
 • Provide one 250-watt heat lamp for each stall.
 • For winter farrowing, provide an 18,000 Btu furnace (1500 Btu/stall) with a thermostat set at 60°F.
 • Set the fan controller to provide about 240 cfm when room temperature is 65°F.

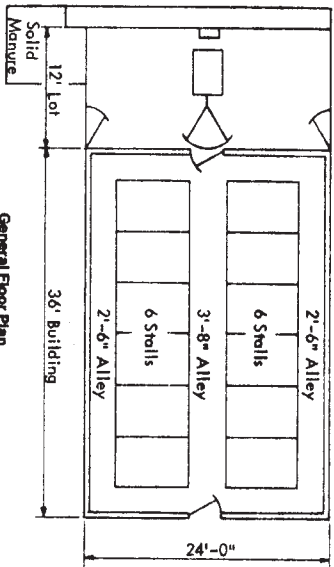
If building is not to be bedded:
 • Desired building air temperature is about 72°F.
 • Set the furnace (18,000 Btu) thermostat at 68°F. Set the fan controller to provide about 240 cfm at 72°F. A thermostat can shut down the fan at 54°F in case the furnace fails.
 • Provide 150 watts for 500 Btu of heat per stall in the floor or with heat mats on the floor; plus 250 watts for 900 Btu per stall with heaters above the creep areas for use during farrowing.
 • Or, with no floor heat, provide heat over creeps, of about 600 watts (2000 Btu) per stall with heatlamps or radiant heaters.

Protecting swine from fan failure.

We know of no device that will successfully ventilate a hog house automatically in the case of failure of one or more fans or the whole electrical system.
 • Install a loud automatic warning system to alert anyone at or near the farmstead.
 • Have someone baby-sit your animals if you are going to be away for more than a few hours. If there are storm warnings out, or if your herd is in an especially sensitive stage (a number of new-born litters, for example).
 • Post instructions on what to do in hot weather, mild weather, cold weather, who to phone for additional advice, etc.
 • Prepare walk-doors and perhaps summer ventilation panels to be propped open part, why or fully.
 • Consider a stand-by generator to augment hand-operated doors, operate pit fans and, in hot weather, circulating fans.
 • Consider automatic telephone that dials selected numbers when power fails.

Building space and production cycles.

Although many variations are successful, the following are typical neat hog production systems. Plan building capacity for some extra animals to allow for large litter size, or slow growth rate.
 Farrow during 3 weeks. Some stalls can be used twice:
 either
 a) Move sows and litters to sow-pig nursing pens at 1-3 weeks, depending on how soon the farrowing stalls are needed for the next sows.

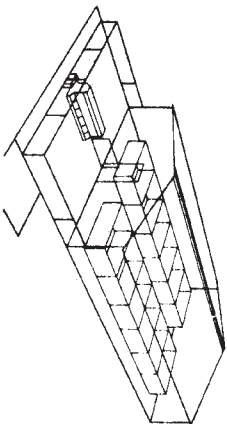
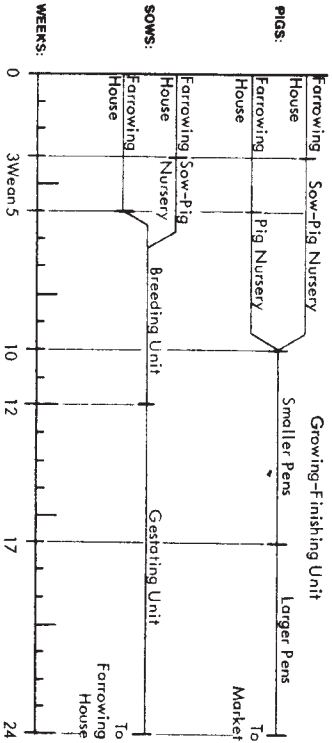


General Floor Plan

Wean pigs at 3-6 weeks, putting 3-4 litters together.
 Return sows to breeding and gestation facilities.
 Or
 b) Wean pigs at 4-6 weeks (20-25 lb).
 Move pigs to nursery.
 Return sows to breeding and gestating facilities.

Move pigs to finishing unit at 10 weeks (60 lb). (As farrowing intensifies to more than 6 times per year, pigs may be moved at about 8 weeks.) Put into smaller pens if you have two pen sizes. Put more pigs per pen if you have only one pen size.
 Move pigs to larger pens, or reduce number of pigs per pen at about 17 weeks (125 lb).
 As they approach market weight, and if the finishing unit is crowded, larger hogs can be marketed early.
 Sows are often rebred during the first or second heat period after weaning, and farrow about 16 weeks later.

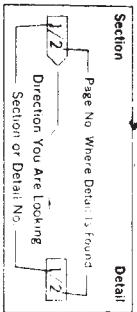
TYPICAL HOUSING CYCLES



Solid floor farrowing stalls with outdoor feeding.

LUMBER SPECIFICATIONS

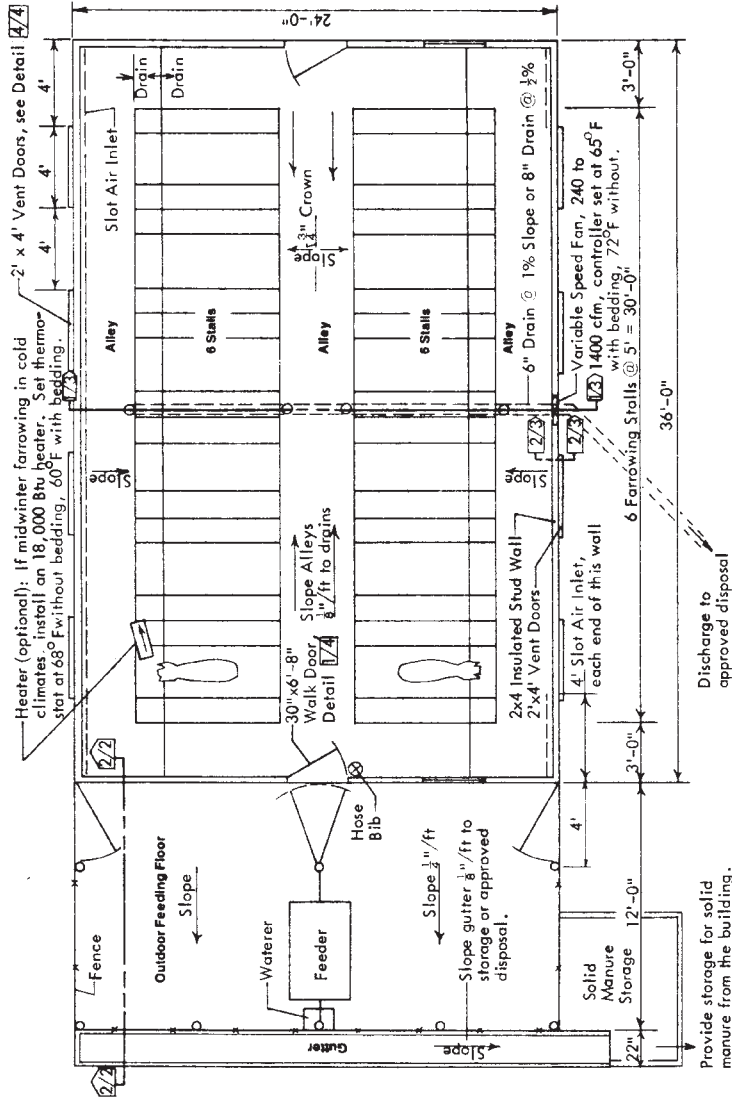
Roof Purlins and Studs
 Construction Grade (Doug Fir, Southern Pine or Hem Fir)
 Trusses
 See Truss Page
 Plywood
 Roof Sheathing—3/4" C-C-Ext (Identical to Sheathing and Wall Lining)—3/4" or 1/2" C-C-Ext with Medium Density Overlay
 FRP Plywood is a composite material using plywood overlaid with a layer of plastic. It is moisture resistant and more durable and easier to clean than plywood.
 Sills and Fascia
 Pressure Preservative Treated (Southern Yellow Pine or equivalent) Creosote—8 pct. Pentachlorophenol (PCP)—0.25 pct. ACA or CCA (Type A or B)—0.23 pct.
 P. T. means lumber pressure preservative treated against insect and fungus attack.



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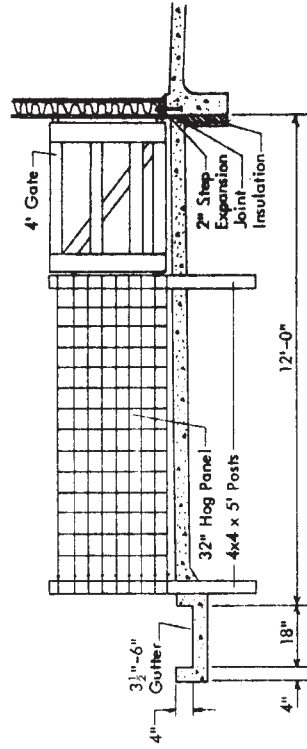
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FARROWING HOUSE			
Outdoor Feeding 12 Sows			
4 Pages plus	Plan No.	Page	
24' Truss Sheet	mwps-72679	1 of 6	



FLOOR PLAN—1/2

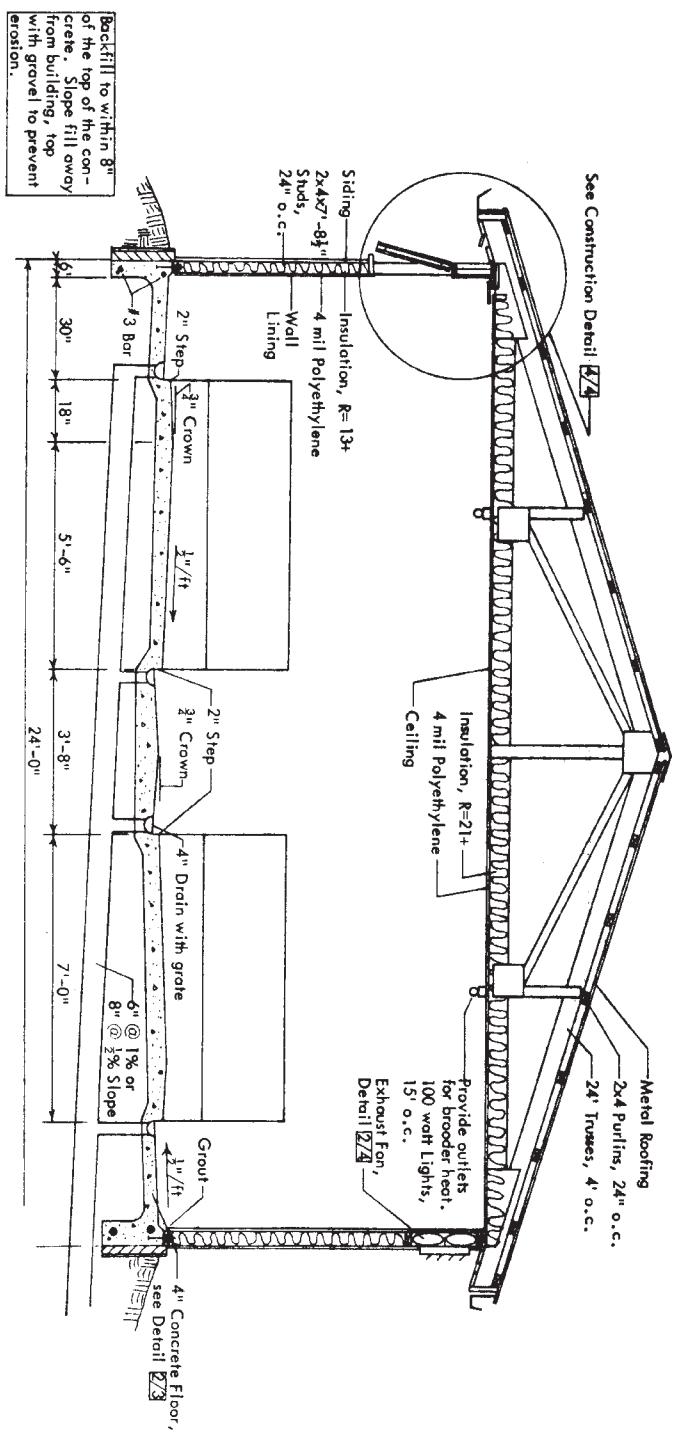
Solid floor farrowing stalls with outdoor feeding.
Feed and water sows outdoors as shown, or install feeders and waterers in each farrowing stall.



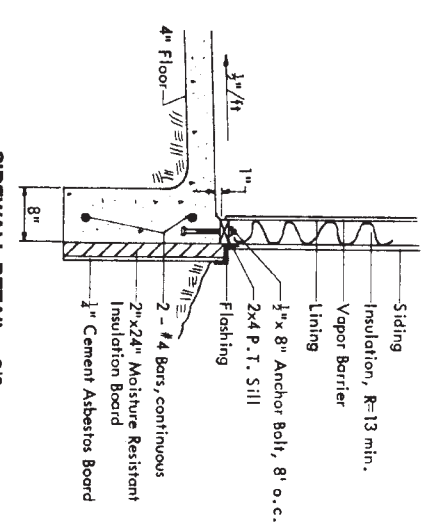
OUTDOOR FEEDING AREA—2/2

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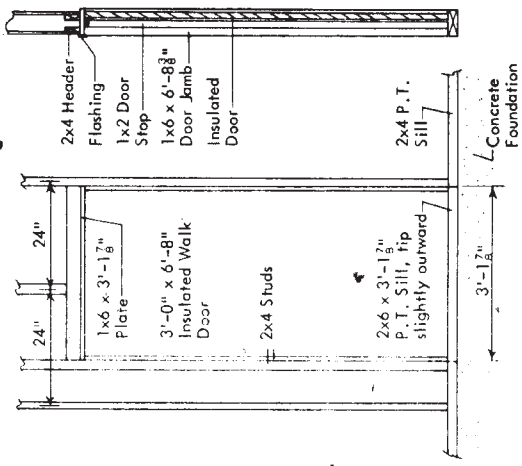
CROSS SECTION—1/3
Solid floor farrowing stalls with outdoor feeding.



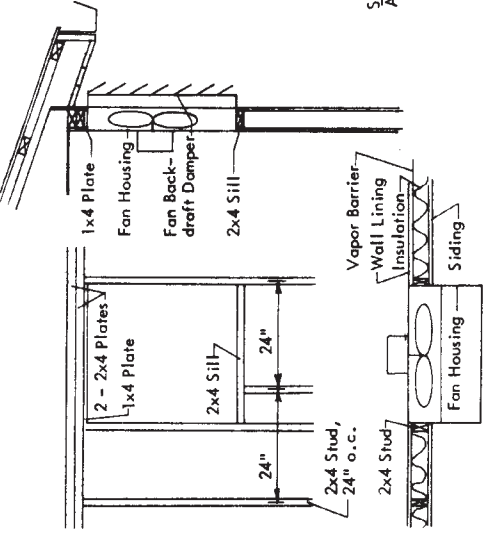
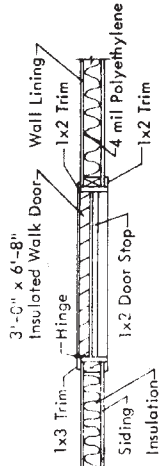
SIDEWALL DETAIL—2/3

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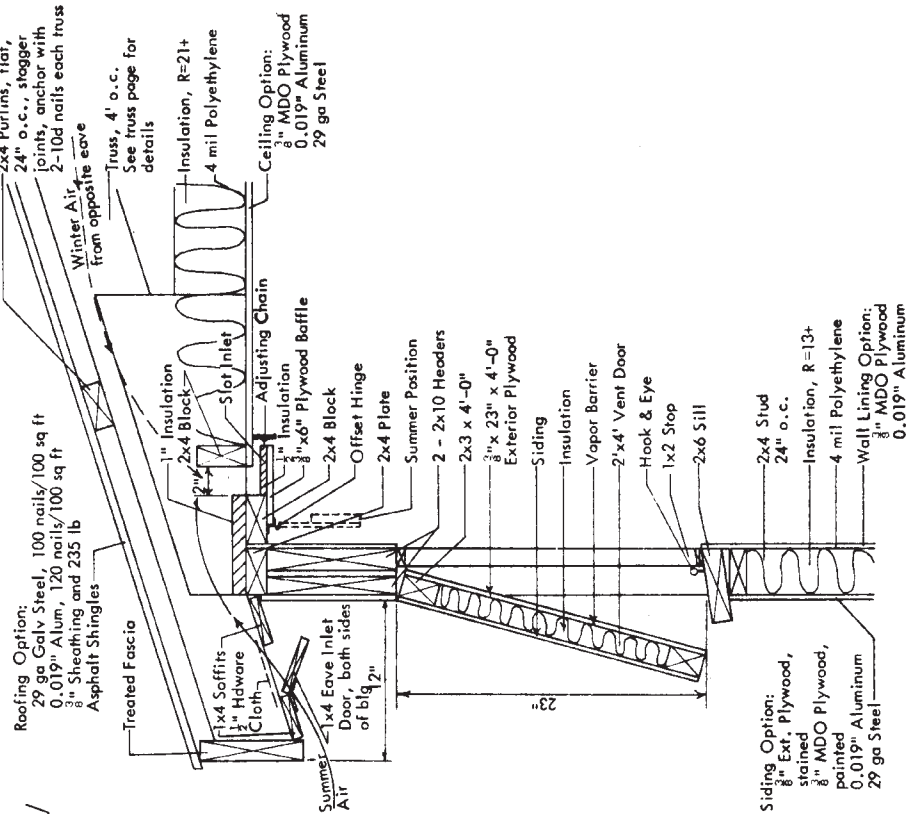


WALK DOOR DETAIL—1/4



FAN HOUSING—2/4

Locate fan to allow for hood or louvers.



CONSTRUCTION DETAIL—4/4

Install eave inlet along both long walls. Install slot inlet along the long wall toward the prevailing winter winds. Install fans, and 4' of slot inlet near the corners, along the other long wall.

Summer: Open eave inlet next to slot inlet to draw air directly into building. Close eave inlet along far wall. Drop slot inlet baffle. Winter: Close eave inlet next to slot inlet. Open eave inlet along far wall to draw air across attic and through slot inlet. Fasten slot inlet baffle in "up" position to force cold air across ceiling.

Hold vent doors and baffles in position with hooks and eyes. Slot Opening: "y". Other ventilation systems are shown in MWPS-5, Swine Housing and Equipment Handbook.

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