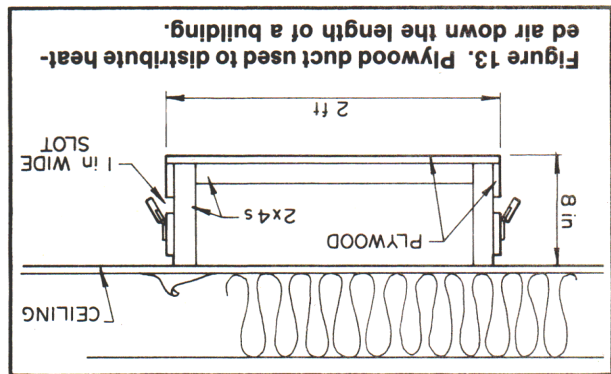


Sufficient air distribution will result if the slots or holes are evenly spaced along both walls. One must place header boards in the attic to protect inlets from plugging with insulation or hay. Additional inlet area is required for warm weather operation. As before, provide an 18-in. long 1-in. wide slot for every 100 cfm of added summer fan capacity. This additional inlet area may be located in the ceiling, adjacent to the winter inlets, or it can be provided by outside ventilation doors (old converted windows) or eave openings. All other windows should be permanently closed and covered with insulation. The outside inlets should be located on the north or east sides since this is the coolest air available.

Management of these inlets can be done automatically with static pressure-sensitive devices or manually. Generally, only two basic settings are necessary; one for winter and one for warm temperature conditions. Any time that inlets are placed in the ceiling, louvers or vents must be provided in the attic to allow air to enter that space. Louver area should be 1½ times larger than the ceiling inlet area.

Heating

A remodeled farrowing building will generally require more supplemental heat than a new facility. For cold climates, use 5,000 BTU per sow to determine heater size and 3,000 BTU per sow for milder climates. Hot air furnaces are often used to provide this supplemental heat. To obtain even heating, a plywood distribution duct like that shown in Figure 13 works well. Caution should be used in the thermostat settings of the fans and the heater so that they do not conflict. The continuous running (minimum) fan should be the only one operating when the heater comes on. The thermostat on the next larger fan should be set high enough so it does not turn on while the heater is operating. Besides maintaining a proper air temperature (supplemental heat), creep heat is necessary for maintaining warm surface temperatures for baby piglets.



Summary

Remodeling of existing farmstead buildings into farrowing facilities can sometimes be a feasible approach to starting or expanding a hog operation. However, the building under consideration must meet certain cost, location, and upkeep criteria to qualify for remodeling. Should these criteria not be met, then the decision to remodel that building should definitely be reconsidered.

The following PIH fact sheets contain information related to remodeling and should be consulted before entering into construction.

- PIH-10 Swine Farrowing Units
- PIH-32 Building Materials and Equipment for Swine Facilities
- PIH-57 Supplemental Heat for Swine
- PIH-60 Mechanical Ventilation of Swine Buildings

Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may be similar. Persons using current directions of the manufacturer.

Figure 10. Detail of a 1-inch wide slot cut in the ceiling along both walls.

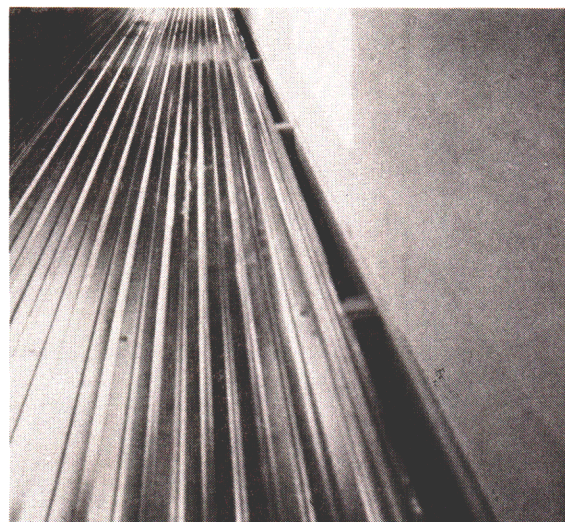
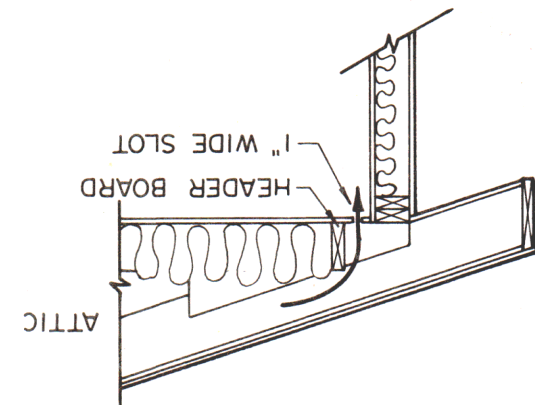


Figure 11. A continuous 1-inch wide slot in a farrowing unit.



Figure 12. Two-inch diameter holes drilled in a ceiling to approximate a slot inlet.