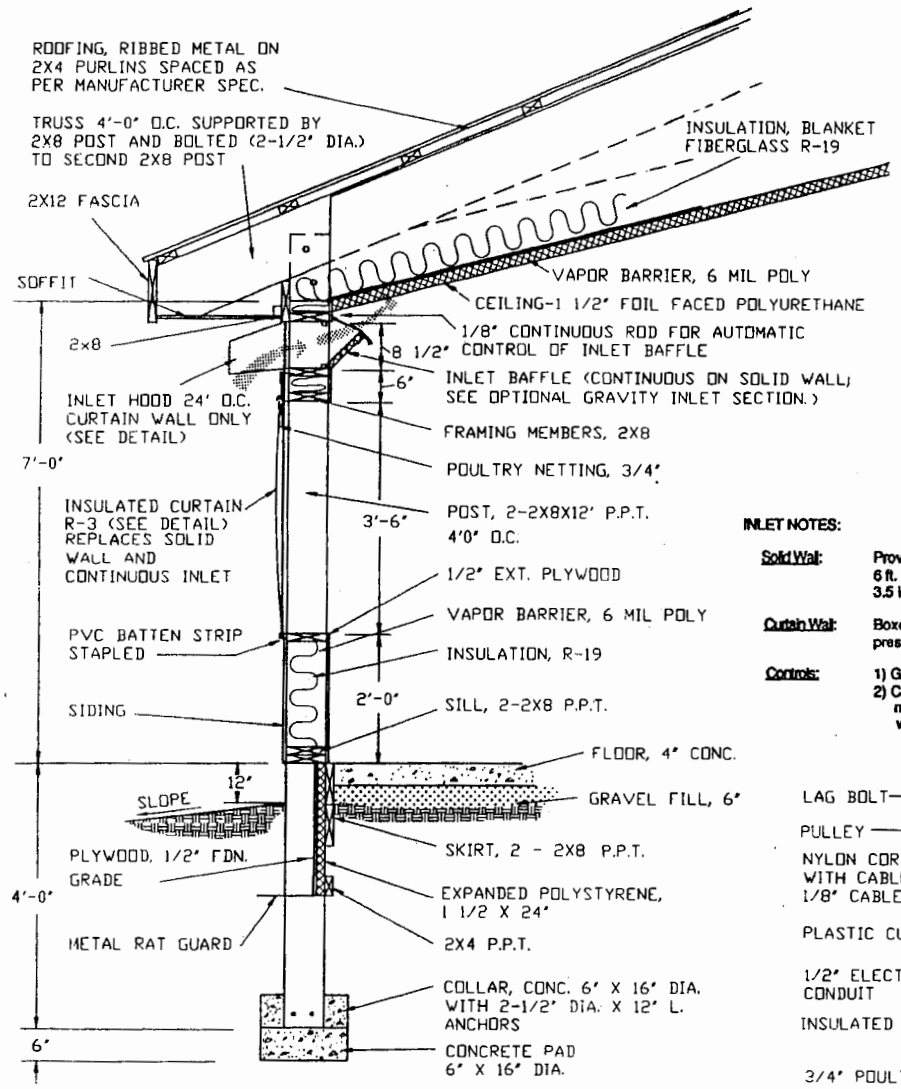
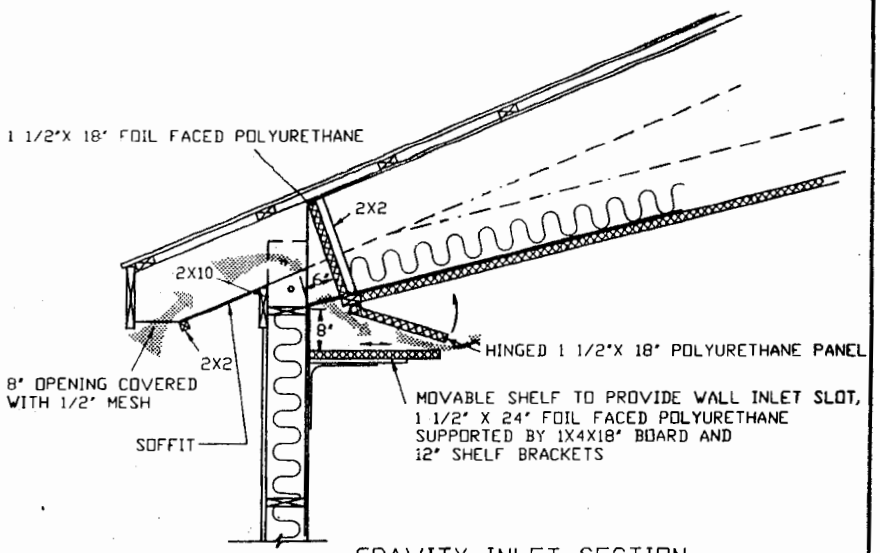


TYPICAL WALL SECTION
WITH CURTAIN OPTION

SCALE 3/4" = 1'-0"



GRAVITY INLET SECTION

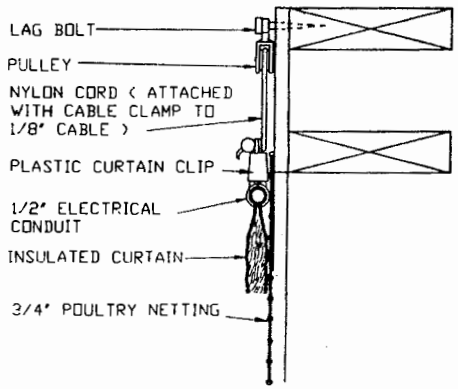
(OPTIONAL)
SCALE 3/4" = 1'-0"

INLET NOTES:

Solid Wall: Provide continuous slot along both side walls, break 6 ft. each side of fan banks. Minimum full opening of 3.5 in. (brood end) or 6.0 in. (grow out end).

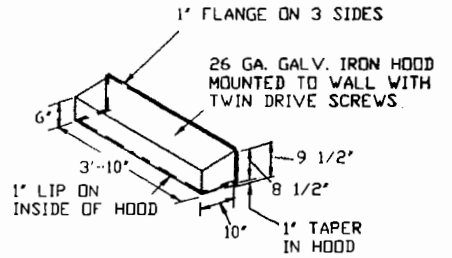
Curtain Wall: Boxed inlets 8 in. X 46 in. placed 24 ft. o.c. Use pressure setting of 0.10 in. water column all year.

Controls:
1) Gravity inlets require no controls.
2) Continuous hinged inlet automatically controlled to maintain negative inside house pressure of 0.10 in. water column (winter) or 0.05 in. (summer).



INSULATED CURTAIN DETAIL

NOT TO SCALE



AIR INLET HOOD DETAIL

NOT TO SCALE

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TURKEY BROODING AND GROW OUT FACILITY

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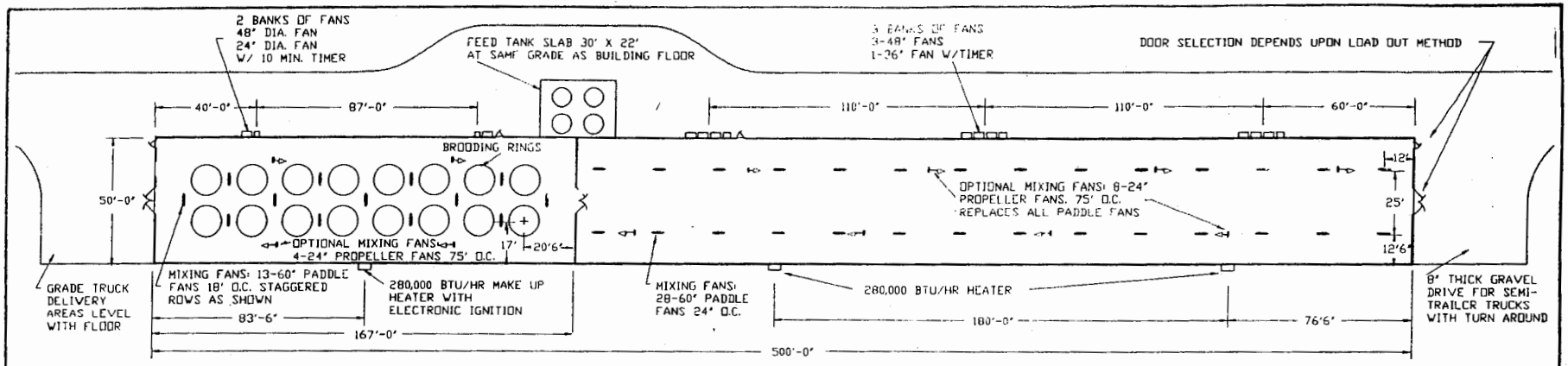


BROODING SECTION

PLAN VIEW

SCALE 1" = 30'

GROW OUT SECTION

VENTILATION AND HEATING CONTROL GUIDELINES

Moisture Control Ventilation: Moisture ventilation requirements will require 0.05 to 0.20 cfm per lb live weight, depending upon inside to outside absolute humidity differences. Provide necessary air exhaust rates by setting the on time of each timer controlled fan.

Temperature Control Ventilation: Room temperatures are maintained at the desired room temperature (DRT) by staging selected fans as temperatures exceed the DRT. Ventilation rates for temperature control are increased from minimum levels to maximum in stages as follows:

Brooding Section: Provide 3 stages of exhaust ventilation as follows: Stage 1 = continuous operation of the two 24 inch timer controlled fans (thermostat in parallel control with timer control) when room temperature exceeds (DRT); Stage 2 = activation by thermostat of (1) 48 inch fan at DRT + 3°F; and Stage 3 = activation by thermostat of 2nd 48 inch fan at DRT + 6 °F.

Grow out Section: Provide 4 stages of exhaust ventilation as follows: Stage 1 = thermostat activation of the three 36" timer controlled fans to continuous operation at or above the DRT; Stage 2 = activation of two 48 inch fans at DRT + 3°F; Stage 3 = activation by thermostat of three 48 inch fans at DRT + 6°F; Stage 4 = activation of remaining four 48 inch fans at DRT + 9°F. Use fans from different banks when possible at each stage.

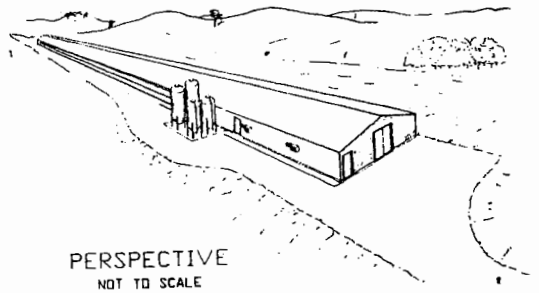
Air Mixing: Provide 2 cfm per square foot of floor space for interior air mixing. Use variable speed controllers to operate mixing fans in both brooding and grow out sections. Use a controller with a minimum of 3 speed selections. Adjust speeds to promote comfort, but avoid chilling of young poults. Wire mixing fans in each building section into 2 separate circuits with alternate fans on a single circuit.

Curtain Ventilation (Optional): Continuous side wall curtains can be used to replace all temperature control exhaust fans (not moisture control fans or mixing fans). Curtains should be controlled by mechanical winch activated by thermostat. Provide one thermostat for each side wall curtain. Set thermostat on leeward wall curtain at DRT and at DRT + 2°F on windward wall thermostat.

Heaters: Control each heating unit by a separate thermostat. Set thermostat at DRT - 2°F (Brooding Section) and at DRT - 2°F (Heater #1 Grow out section) and DRT - 4°F (Heater #2 Grow out section).

Micro-Processor Control: For tighter control of temperature spread between stages, commercial micro-processor controllers can be used, which maintain typical temperature ranges between heating and cooling of 3 to 4°F.

See sheet #3 for management and housing guidelines.



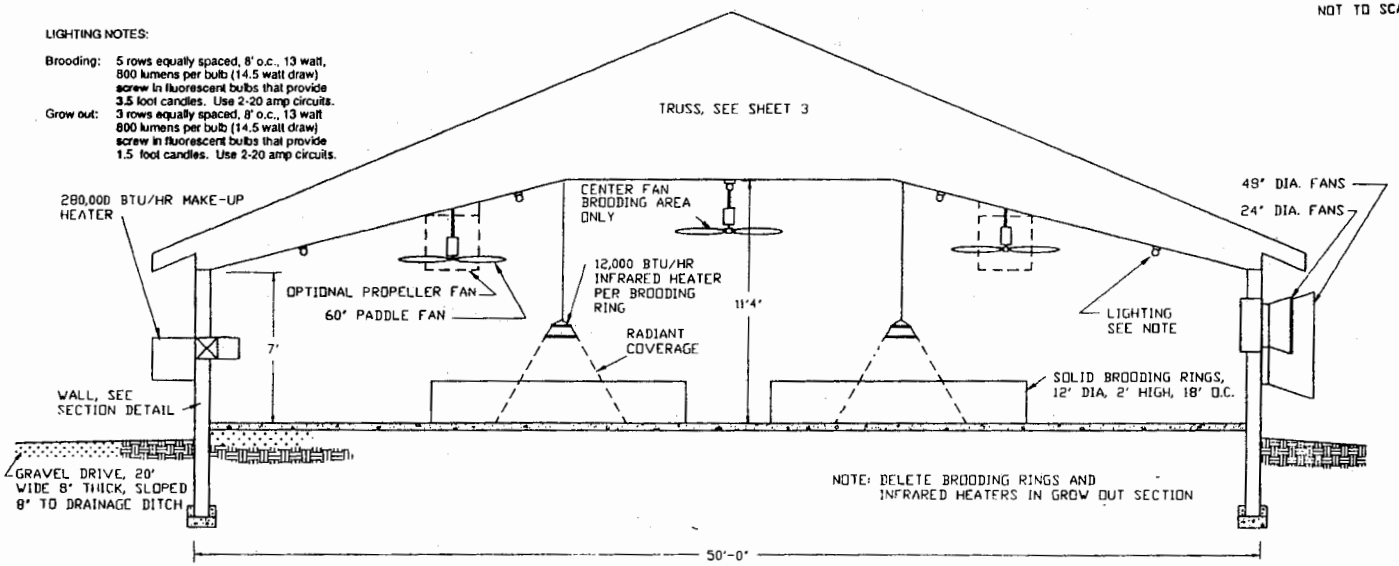
PERSPECTIVE

NOT TO SCALE

LIGHTING NOTES:

Brooding: 5 rows equally spaced, 8' o.c., 13 watt, 800 lumens per bulb (14.5 watt draw) screw in fluorescent bulbs that provide 3.5 foot candles. Use 2-20 amp circuits.

Grow out: 3 rows equally spaced, 8' o.c., 13 watt 800 lumens per bulb (14.5 watt draw) screw in fluorescent bulbs that provide 1.5 foot candles. Use 2-20 amp circuits.



TYPICAL CROSS SECTION

SCALE: 1/4" = 1'-0"

GENERAL RECOMMENDATIONS:

1. Determine if water supply is pure and sufficient.
2. Check with electric utility about easements and service.
3. Check with local governments about zoning and building restrictions or required permits.
4. Check dimensions of manufactured equipment to be installed before starting construction.
5. All lumber in contact with manure or soil should be pressure preservative treated (P.P.T.).
6. All electrical fixtures should be moisture resistant industrial grade and U.L. approved.
7. All doors to be well fitted inside frames with positive stops and essentially air tight. All wall and ceiling construction to be air tight.

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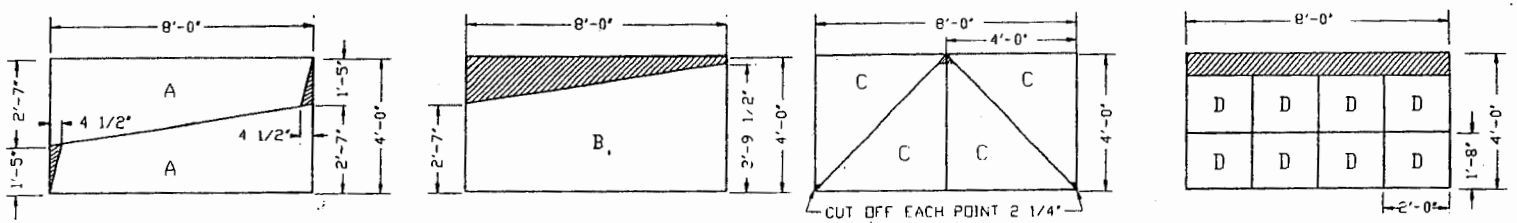
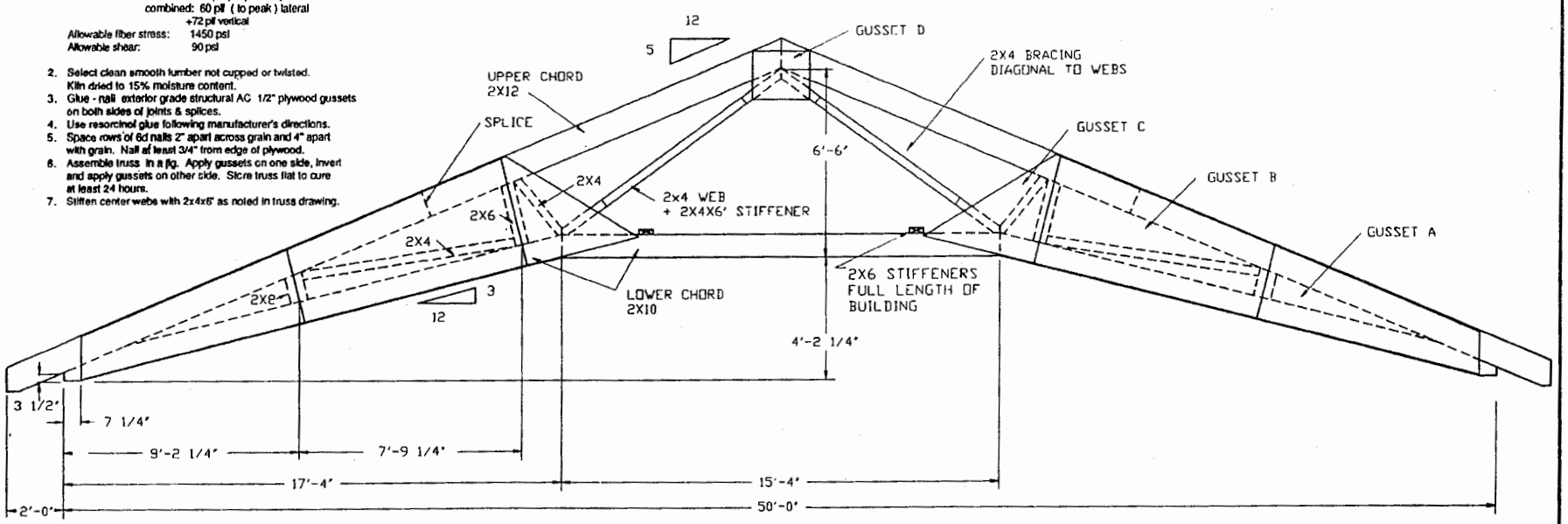


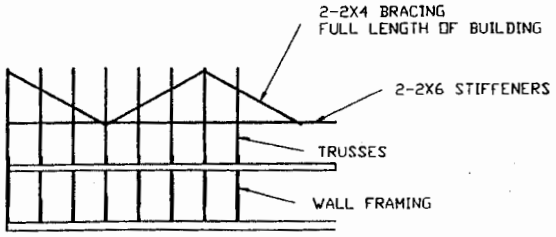
PLYWOOD GUSSET CUTTING DIAGRAM (7 1/4 SHTS/TRUSS)

SCALE: 3/8" = 1'-0"

TRUSS NOTES:

1. Design loads: (Truss spacing 4' o.c.)
   vertical: 160 pll (40 psf x 4')
   combined: 60 pll (to peak) lateral
   +72 pll vertical
   Allowable fiber stress: 1450 psi
   Allowable shear: 90 psi
2. Select clean smooth lumber not cupped or twisted. Kiln dried to 15% moisture content.
3. Glue - nail exterior grade structural AC 1/2" plywood gussets on both sides of joints & splices.
4. Use resorcinol glue following manufacturer's directions.
5. Space rows of 6d nails 2" apart across grain and 4" apart with grain. Nail at least 3/4" from edge of plywood.
6. Assemble truss in a jig. Apply gussets on one side, invert and apply gussets on other side. Store truss flat to cure at least 24 hours.
7. Stiffen center webs with 2x4x6' as noted in truss drawing.





WIND BRACING DETAIL

NOT TO SCALE

MANAGEMENT AND HOUSING GUIDELINES

DENSITY:	1-10 DAYS	0.33 ft^2 PER POULT PROVIDED WITH RINGS (300 to 400 POULTS PER 12 FT RING)
	TO 8 WEEKS	0.85 TO 1.5 ft^2 PER BIRD OR 1.0 ft^2 PER HEN OR 0.17 ft^2/lb 1.2 ft^2 PER TOM OR 0.14 ft^2/lb
	GROW OUT	2.0 ft^2 PER HEN OR 0.13 ft^2/lb 3.0 ft^2 PER TOM OR 0.12 ft^2/lb
HEATING:	BROOD TEMP. SCHEDULE	95° F FOR FIRST WEEK LESS 5° F/WEEK UNTIL GROW OUT TEMP IS REACHED.
	GROW OUT TEMP. SCHEDULE	68° F OR AMBIENT TEMPERATURE
WATERERS:		FOUR 8 ft TROUGH OR TEN ROUND HANGING WATERERS PER 1,000 BIRDS (ALL AGES). ADD 8 GALLON DRINKERS IN EACH BROODING RING.
FEEDERS:		14 TURKEY TYPE PANS PER 1,000 BIRDS. 10 to 12 POULT FEEDERS PER RING (25 to 30 PER 1,000 POULTS) FOR FIRST 10 DAYS.
SAFETY:		PROVIDE STANDBY POWER GENERATOR (20 to 30 kW UNIT) AND AUTOMATIC SWITCHING AND AUTOMATIC-DIAL ALARMS.

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This site makes available conceptual plans that can be helpful in developing building layouts and selecting equipment for various agricultural applications. These plans do not necessarily represent the most current technology or construction codes. They are not construction plans and do not replace the need for competent design assistance in developing safe, legal and well-functioning agricultural building system. The LSU Agriculture Center, the Mid-West Plan Service, the United States Department of Agriculture and none of the cooperating land-grant universities warranty these plans.