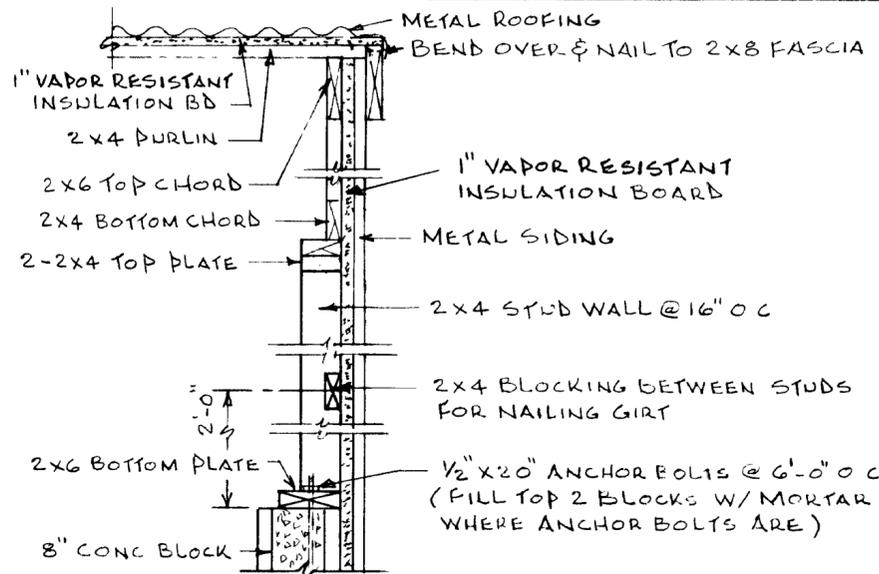


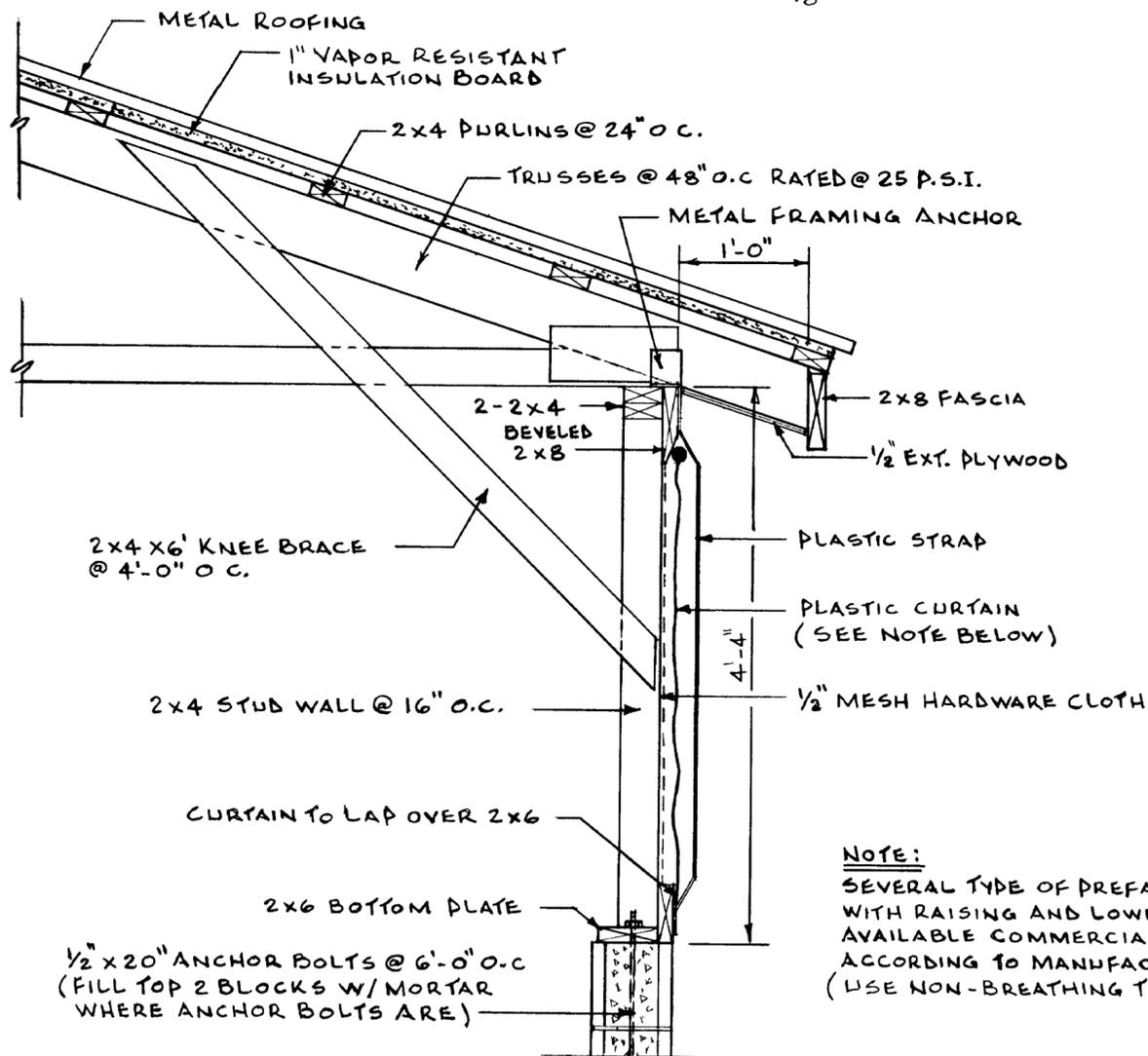
FOUNDATION PLAN

SCALE, 1/8"=1'-0"



END WALL DETAIL B

SCALE 1"=1'-0"

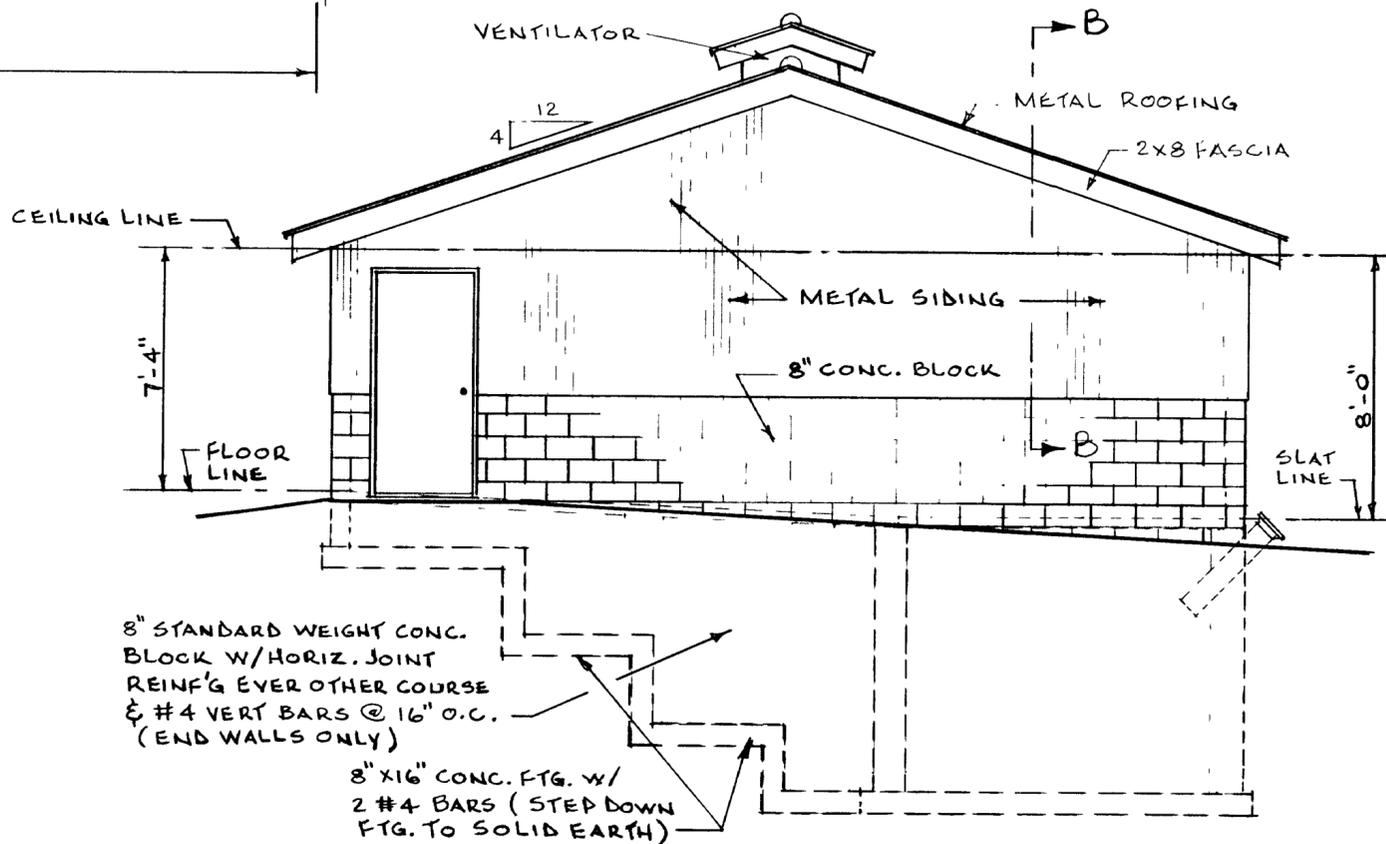


DETAIL A

SCALE: 1"=1'-0"

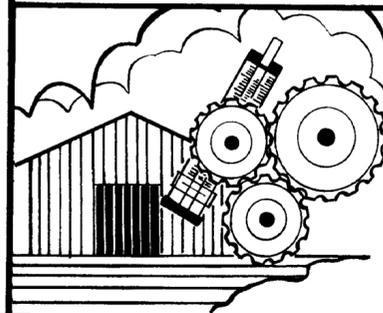
**NOTE:**

SEVERAL TYPE OF PREFABRICATED CURTAINS WITH RAISING AND LOWERING DEVICES ARE AVAILABLE COMMERCIALY. INSTALL ACCORDING TO MANUFACTURER RECOMMENDATIONS. (USE NON-BREATHING TYPE CURTAIN)



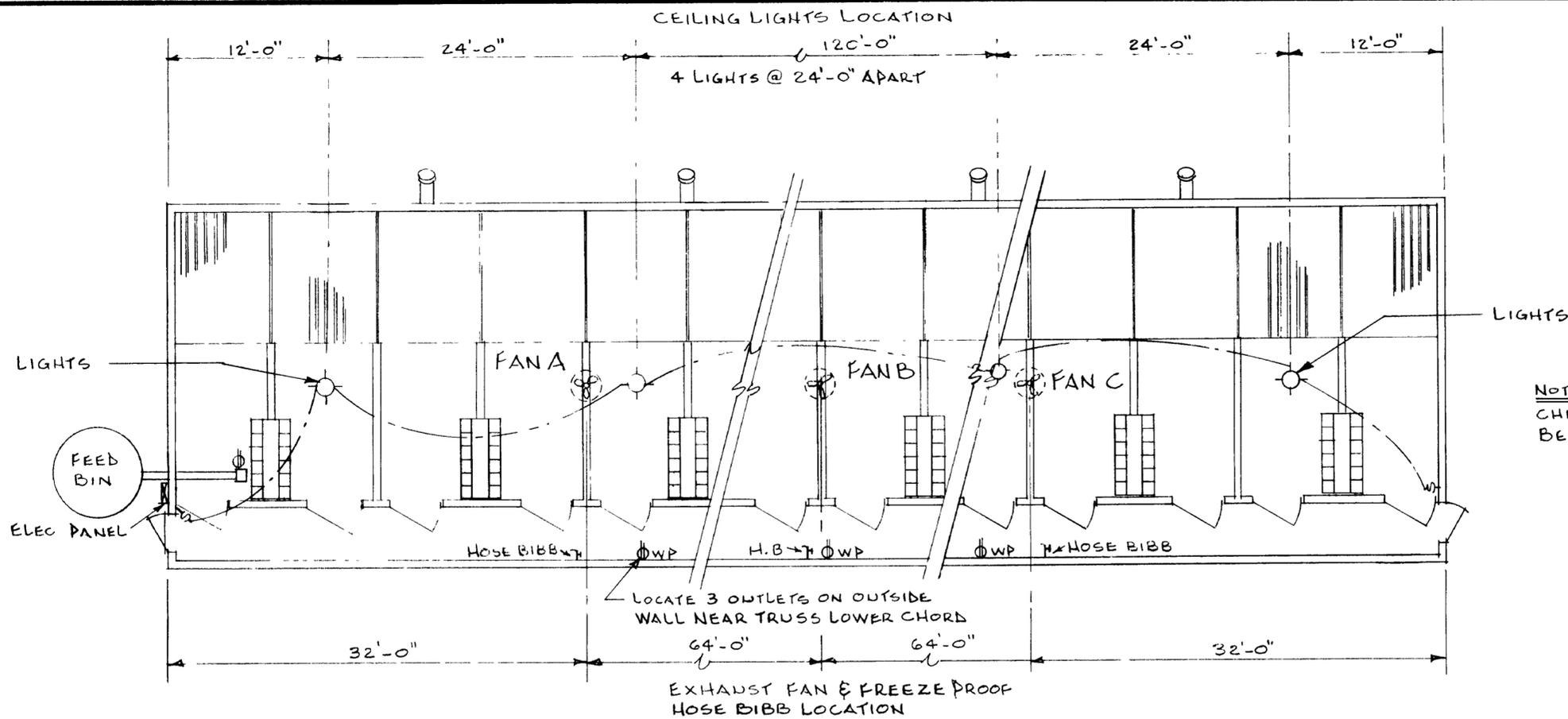
END ELEVATION SCALE, 1/4"=1'-0"

SWINE FINISHING BUILDING



COOPERATIVE EXTENSION SERVICE  
 AGRICULTURE AND HOME ECONOMICS  
 DEPARTMENT OF AGRICULTURAL ENGINEERING  
 COLLEGE OF AGRICULTURE  
 UNIVERSITY OF KENTUCKY  
 AND  
 U.S. DEPARTMENT OF AGRICULTURE COOPERATING

DESIGNED BY R.F. D.O.	SHEET 3 OF 4
CHECKED BY J.N.W.	PLAN NUMBER
DRAWN BY B.E.P.	<b>KY. II. 726-34</b>
DATE 6-78	REVISIONS 1-79



NOTE:  
CHECK LOCAL ELECTRICAL CODE REQUIREMENTS  
BEFORE CONSTRUCTION BEGINS

## ELECTRIC, PLUMBING & VENTILATION LAYOUT

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

### FAN TYPE AND RATING

FAN	TYPE	CFM RATING AT 1/8 INCH STATIC PRESSURE
A	SINGLE SPEED	2000
B	SINGLE SPEED	2000
C	SINGLE SPEED	2000

### THERMOSTATS

THERMOSTAT TYPE (FOR LINE VOLTAGE APPLICATIONS)

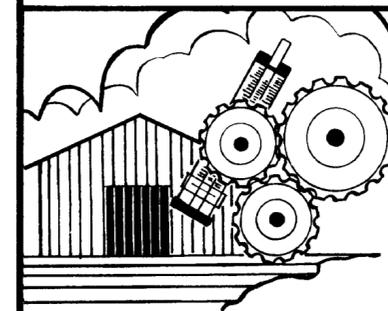
FAN A	CLOSE ON RISE
FAN B	CLOSE ON RISE
FAN C	CLOSE ON RISE

THERMOSTAT LOCATION. NEAR CENTER OF BUILDING AS LOW AS POSSIBLE BUT OUT OF ANIMAL REACH.

### FAN OPERATING SEQUENCE

INSIDE TEMPERATURE	FAN A	FAN B	FAN C
ABOVE 35°	ON	ON	ON
35°-30°	ON	ON	OFF
30°-25°	OFF	ON	OFF
BELOW 25°	OFF	OFF	OFF

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SHEET 4 OF 4

CHECKED BY J.N.W.

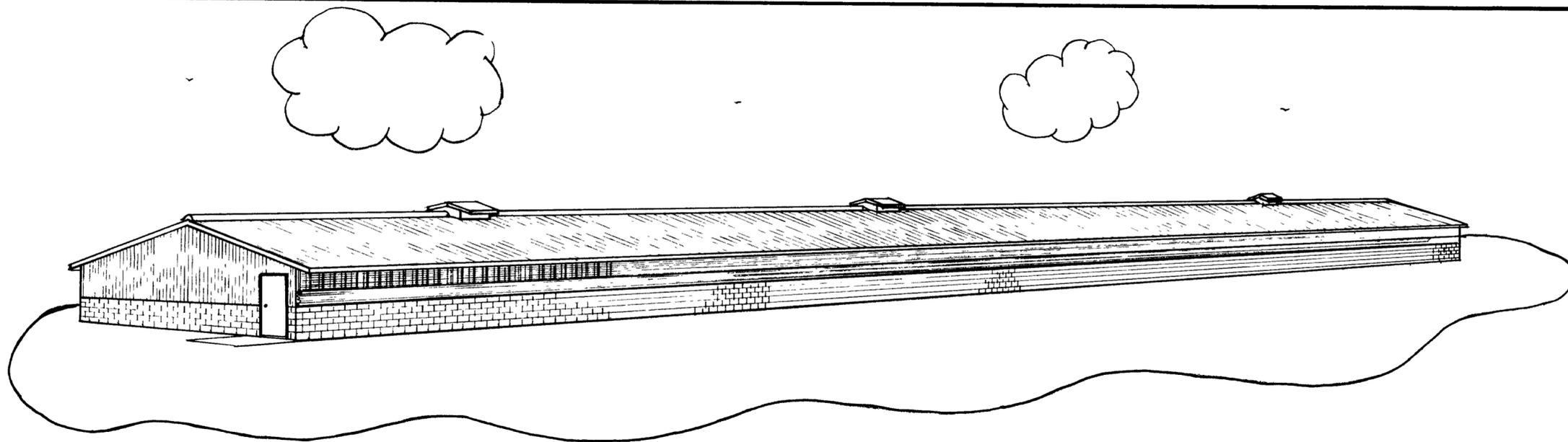
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PLAN NUMBER

**KY. II. 726-34**



THIS PLAN IS FOR A 28' X 192' BUILDING HOUSING 600 HOGS FOR 12 WEEKS FROM 100 POUNDS TO MARKET. THE BUILDING IS PARTIALLY SLATTED WITH NATURAL VENTILATION, CONTROLLED BY CURTAINS ON BOTH SIDEWALLS.

THE CEILING IS INSULATED TO CONSERVE ANIMAL HEAT IN THE WINTER AND REDUCE THE RADIANT HEAT LOAD ON THE PIGS DURING THE SUMMER. MANURE IS STORED AS A LIQUID IN A DEEP PIT BENEATH THE SLATTED AREA.

THIS PLAN IS ALSO USEFUL FOR THE PRODUCER PURCHASING FEEDER PIGS. WE WOULD NOT RECOMMEND THE INTRODUCTION OF PIGS WEIGHING LESS THAN 70 POUNDS DURING SEVERE WINTER WEATHER. PRODUCERS WHO CANNOT SCHEDULE AROUND THIS LIMITATION MAY WISH TO CONSTRUCT A GROWER UNIT (UK PLAN NO. KY, 11 726-33) OR PROVIDE SUPPLEMENTAL RADIANT HEAT FOR THE YOUNG PIGS.

THIS PLAN IS ONE OF A COMPLETE SWINE PRODUCTION SYSTEM WHICH INCLUDES PLANS 11 726-31, FARROWING BUILDING; 11.726-32, NURSERY BUILDING; 11 726-33, GROWING BUILDING; 11 726-34, FINISHING BUILDING; 11 726-35, GESTATION BUILDING; 11.726-36, BREEDING BUILDING.

#### SIZING YOUR FINISHING HOUSE TO FIT YOUR PRODUCTION SYSTEM

LITTERS FARROWED PER GROUP*	CAPACITY IN HEAD
10	325
12	400
14	450
16	525
18	600
20	650
22	725
24	800

\*GROUPS FARROW EVERY THREE WEEKS; CAPACITY FOR 4 GROUPS. MARKET HOGS AT 220 TO 240 LBS. AT 180 TO 190 DAYS OF AGE.

#### WATER LINES

THE INSTALLATION OF WATER LINES IS DEPENDENT ON THE TYPE OF WATERER YOU USE. MOST WATERER MANUFACTURERS PROVIDE WATER LINE INSTALLATION INFORMATION.

#### THERMOSTAT ADJUSTMENT

THE THERMOSTAT SETTINGS GIVEN BELOW ALLOW THE BUILDING TEMPERATURE TO REACH A MINIMUM OF 25° F IN THE WINTER UNDER CERTAIN OUTSIDE CONDITIONS.

THERMOSTAT	NORMAL SETTING
FAN A	30°
FAN B	25°
FAN C	35°

NOTE: IF THIS BUILDING IS NOT FILLED WITH ANIMALS DURING THE WINTER, REDUCE THE NUMBER OF FANS OPERATING IN PROPORTION TO THE CAPACITY OF THE BUILDING BEING USED.

#### WASTE STORAGE REQUIREMENTS

0.2 CUBIC FEET OF STORAGE PER DAY PER PIG  
THIS FACILITY PROVIDES 15 DAYS OF MANURE STORAGE PER USEFUL FOOT OF PIT DEPTH; 90 DAYS STORAGE TOTAL.

NOTE: TWO FEET OF PIT DEPTH IS GENERALLY NOT CONSIDERED USABLE STORAGE VOLUME, BECAUSE SOME OF THE SOLIDS ARE NOT REMOVED DURING CLEANING AND THE LIQUID LEVEL SHOULD NOT BE ALLOWED WITHIN ONE FOOT OF THE BOTTOM OF THE SLATS.

#### DESIGN VENTILATION RATES

10 CFM PER PIG

#### FEED AND WATER REQUIREMENTS

FEED: 8# PER PIG PER DAY - 33,600# TOTAL PER WEEK  
WATER: 2.5 GAL PER DAY PER PIG  
1,500 GAL PER DAY TOTAL  
MINIMUM PUMPING RATE 12 GAL PER MINUTE

#### PEN AREA REQUIREMENTS

7 FT<sup>2</sup> PER PIG.

NOTE: THIS VENTILATION SYSTEM WAS DEVELOPED TO PROVIDE MOISTURE CONTROL DURING WINTER VENTILATION. A COMPLETE EVALUATION OF THIS SYSTEM HAS NOT BEEN COMPLETED AT THIS TIME. TO AID IN OUR EVALUATION, IF YOU CONSTRUCT THE VENTILATION SYSTEM AS SHOWN, PLEASE INFORM YOUR COUNTY AGENT.

THIS IS A COLD BUILDING DO NOT ATTEMPT TO KEEP IT WARM BY ADJUSTING THE THERMOSTATS UPWARD.

#### SPRINKLER SYSTEM

A SPRINKLER SYSTEM PROVIDES AN EFFECTIVE WAY TO PROTECT HOGS FROM HEAT STRESS DURING HOT WEATHER. USE SPRINKLERS--NOT FOG NOZZLES--WHICH DELIVER 1 TO 1.5 GALLONS OF WATER PER MINUTE PER PEN WHEN OPERATING. THE SPRINKLERS SHOULD COVER ONE-FOURTH TO ONE-HALF OF THE FLOOR AREA. THE NOZZLES SHOULD BE OVER THE SLATTED PORTION. THE SPRINKLERS SHOULD BE THERMOSTATICALLY CONTROLLED TO START AT TEMPERATURES ABOVE 83 DEGREES, AND SHOULD BE SET WITH A TIMECLOCK TO OPERATE ONE OR TWO MINUTES OUT OF TEN. ALL VENTILATION CURTAINS SHOULD BE COMPLETELY OPEN. AS TEMPERATURES DROP, SPRINKLERS SHOULD STOP AT ABOUT 80 TO 83 DEGREES TO KEEP HOGS FROM CHILLING. SPRINKLERS SHOULD NOT BE USED FOR VERY YOUNG PIGS.

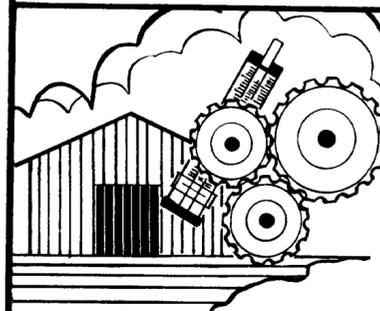
#### ESTIMATED MATERIAL LIST

LUMBER (EXCLUDING TRUSSES)	7470 B.F.
28' TRUSSES (4/12 PITCH)	49
8" LIGHT WEIGHT CONCRETE BLOCK (PEN PARTITIONS)	900
8" SOLID CONCRETE BLOCK (PEN PARTITIONS)	224
8" LIGHT WEIGHT CONCRETE BLOCK	2300
12" STANDARD WEIGHT CONCRETE BLOCK	3675
CONCRETE (FLOOR, FOOTINGS & BLOCK FILL)	160 YDS.
SLATS	1920 SQ.FT.
1" INSULATION BOARD	6144 SQ.FT.
METAL ROOFING & SIDING	6500 SQ.FT.
4" HIGH PLASTIC CURTAIN	384 L.F.
1/2" MESH HARDWARE CLOTH 4' HIGH	384 L.F.
1/2" EXT PLYWOOD	16 PC.

#### SLATS:

SLOT OPENING: 1 INCH

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