

ALTERNATE WALL CONSTRUCTION DETAILS

SCALE: 1/2" = 1'-0"
 12" 6" 0 1' 2'

FAN AND HEATER CAPACITY REQUIREMENTS

Ventilation and heating requirements vary with the size of the building and the number of calves to be housed. Fan and heater capacities for three building sizes are shown below. Other sizes can be determined from data below:

Building Size	No. Calves	Winter Fans, CFM		Summer Fans		Heater BTU/Hr. Output
		Min.	Normal	Total CFM		
22' x 40'	30	300	1000	6,000+	40,000	
22' x 60'	50+	500	1500	10,500+	60,000	
38' x 60'	100+	1000	3000	19,000+	120,000	

Sizes based on the following design data:
 Winter ventilation: 10 CFM per calf minimum
continuous and 30 CFM normal

Summer ventilation: 1 to 1 1/4 air change per minute total for the building

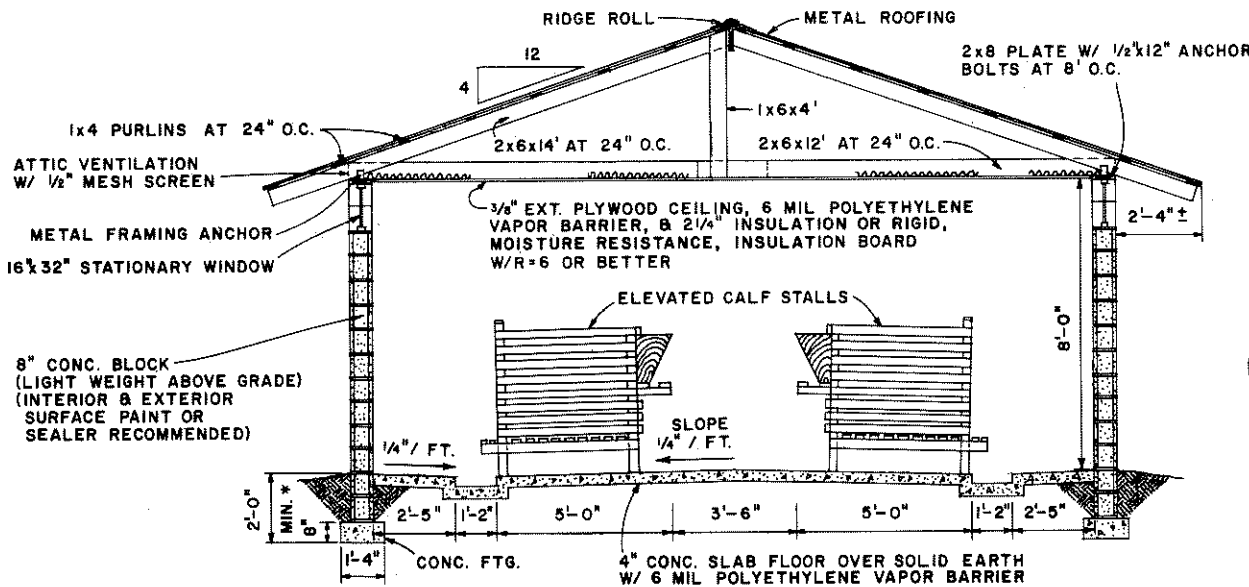
Supplemental heat: 50° temperature differential

THERMOSTAT SETTINGS

The thermostats should be located on a ventilation control board at eye level height near the center of the building.

Suggested Settings: Heat: Replacement Heifer: 45°-55°F
 Vealers: 60-65°F

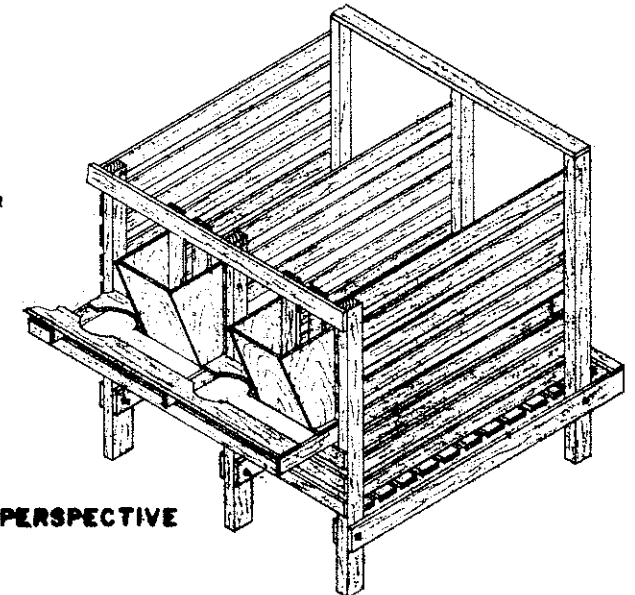
Summer Vent.: 70°-75°F



CROSS SECTION

SCALE: 3/8" = 1'-0"
 12" 6" 0 1' 2' 3'

* FOOTINGS TO EXTEND TO SOLID GROUND BELOW FROST LINE



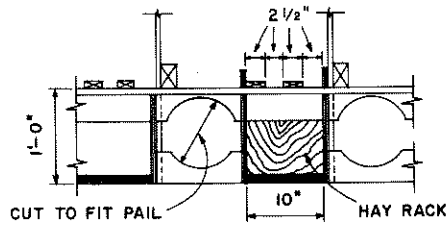
PERSPECTIVE

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

CALF BARN ENVIRONMENTALLY CONTROLLED

KY. '74 6186 SHEET 2 OF 3

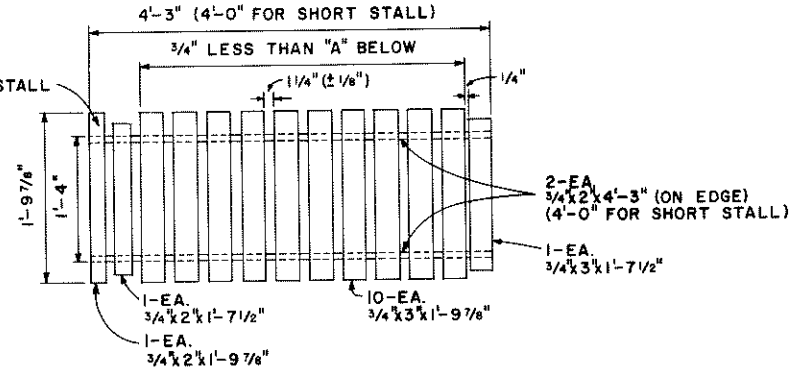


TOP VIEW

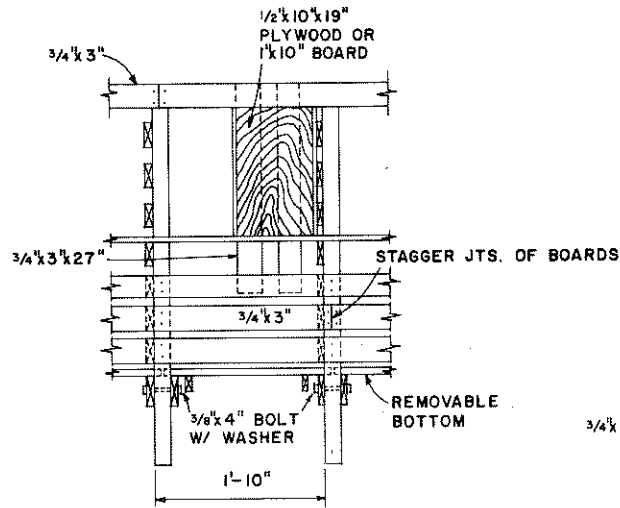
NOTE:
HAY RACK MAY BE OMITTED FOR VEAL CALVES AND 2 PAIL POSITIONS USED. THEN, USE ONE VERTICAL SLAT AT FRONT OPENING.

OMIT FOR SHORTER STALL

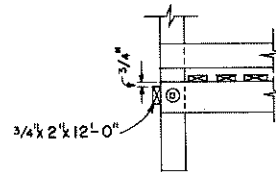
NOTE:
ALTERNATE FLOOR CAN BE SPECIALLY CONSTRUCTED:
METAL ROD FLOOR (3/8" RODS, 1" O.C.) WELDED TO 1/4" I" METAL STRAP ON EDGE OR 1" SQ. METAL TUBING.



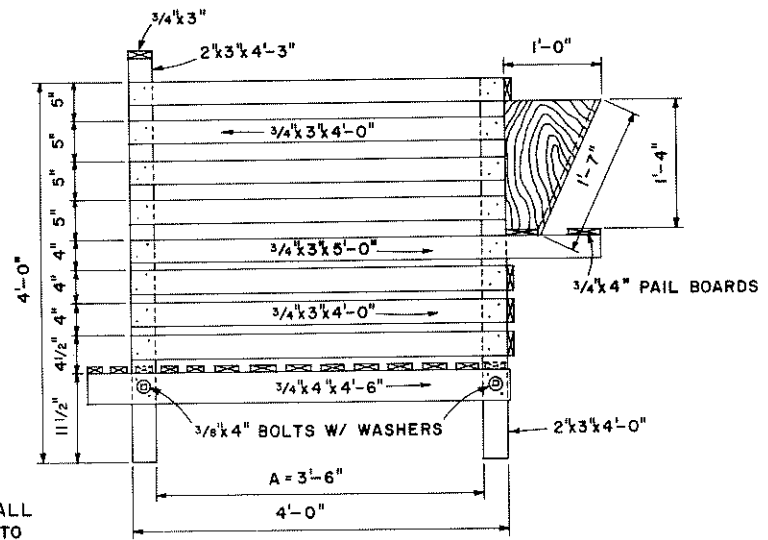
TOP VIEW-REMOVABLE BOTTOM



FRONT VIEW



ALTERNATE SHORT STALL
OPTIONAL FOR CALVES TO
200# OR 8 WEEKS OLD.



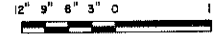
SIDE VIEW

LIST OF MATERIALS

(All Sound Quality Planed Hardwood Lumber Having Good Resistance to Decay.)

SIZE*	LENGTH	QUANTITY	SIZE*	LENGTH	QUANTITY	SIZE*	LENGTH	QUANTITY	
3/4" x 2"	19 1/2"	1 per Stall	2" x 3"	4'-3"	1 per Stall	NAILS: 1 1/2" (Common or Hardened)			
"	21 7/8"	1 per Stall	"	4'-0"	1 per Stall		1/10 lb. per Stall		
"	4' 3"	2 per Stall	3/4" x 2"	12'	1 per 6 Stalls	2" (Common or Hardened)			
3/4" x 3"	19 1/2"	1 per Stall	3/4" x 3"	12'	5 per 6 Stalls	1/3 lb. per Stall			
"	21 7/8"	10 per Stall	3/4" x 4"	12'	2 per 6 Stalls	3/8" x 4" Mach.	2 per Stall		
"	27"	2 per Stall	1/2" ply. or			WASHERS: 3/8" Flat			
"	4'-0"	7 per Stall	3/4" Bd.	10" x 19"	1 per Stall		4 per Stall		
"	5'-0"	1 per Stall	1/2" ply.	12" x 16"	2 per Stall				
3/4" x 4"	4'-6"***	2 per Stall				*All wood sizes "Actual"			
2" x 3"	11 1/2"	1 per Stall				***4'-6" for veal calves to 300 #, Only 4'-0" for calves to 200 #.			

SCALE: 1" = 1'-0" UNLESS OTHERWISE NOTED



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AGRICULTURE AND HOME ECONOMICS

AND
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CALF BARN
ENVIRONMENTALLY CONTROLLED

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