

Consult with Equipment Supplier before building Milking Center

Before you build this barn consult with and get the approval of the health authorities having control of the sale of your milk.

**FLOOR PLAN**

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

Provide Separate Youngstock Facilities.

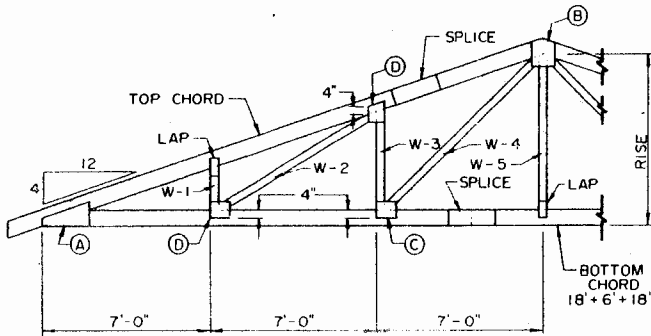


**FREE STALL DAIRY BARN**  
40 COW

MINN. '78 6292 SHEET 1 OF 7



42' span, 4 - web



4/12 SLOPE

4' TRUSS SPACING

42' SPAN,  
4 - WEB

GUSSET SIZES, in.

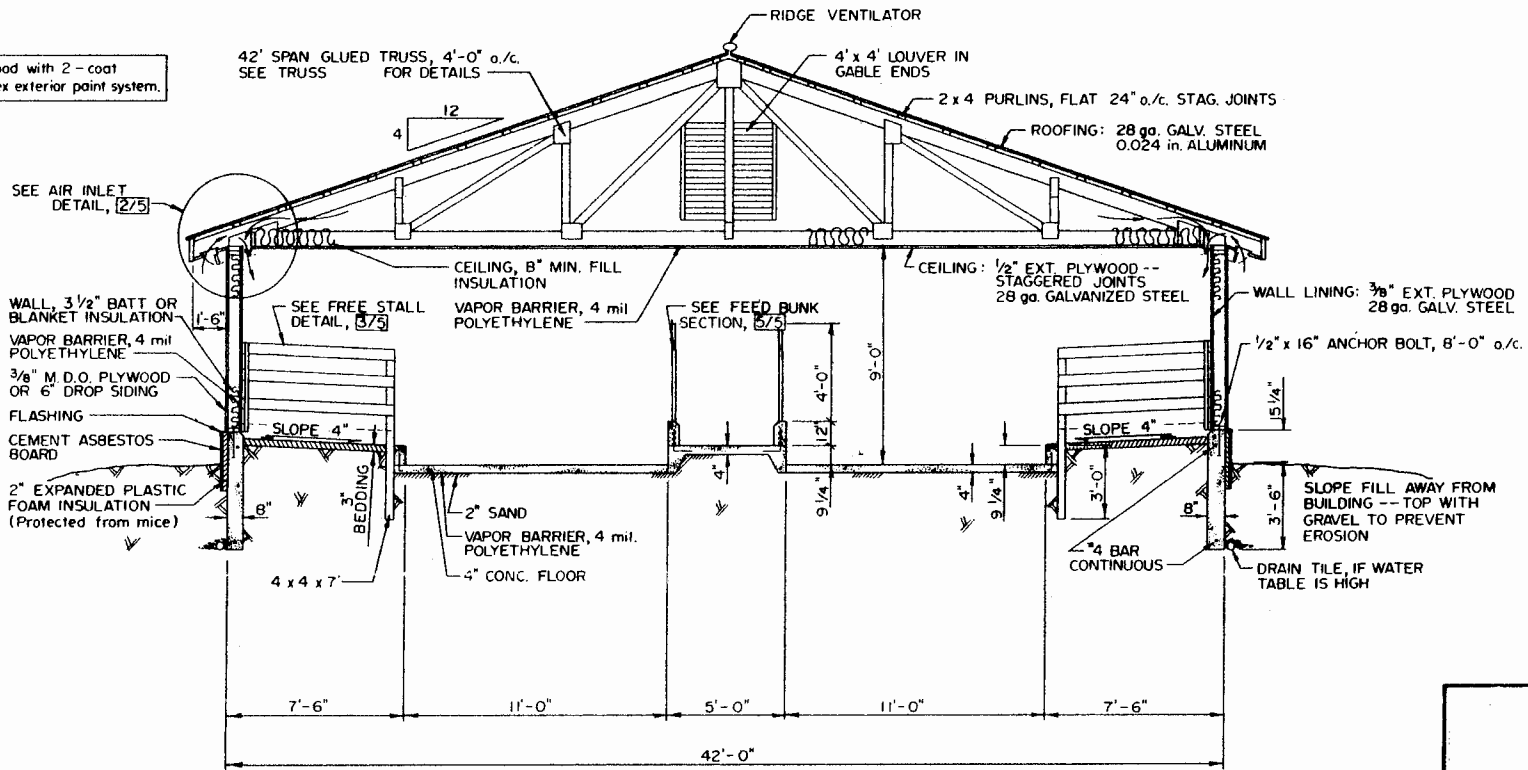
DEAD LOAD	SNOW ZONE	LUMBER TYPE	TOP CHORD	BOTTOM CHORD	A T, H, W,	B H, W,	C H, W,	D H, W,	W 2	W 1 AND W 5 ARE 2 x 4'S W 3	W 4	CRANE LOAD lbs.
MED	III	DOUG	2 x 8	2 x 6	1/2"x4"x2'4"	12"x12"	8"x10"	8"x8"	2 x 4	2 x 4	2 x 4	1921

ROOF SLOPE	RISE	TOP CHORD	W 1	W 2	W 3	W 4	W 5
4/12	7'-0"	18'6"	2'	8'	5'	10'	7'

Gussets B, C, and D are 3/8" thick plywood.

GLUED TRUSSES

Finish plywood with 2-coat acrylic-latex exterior paint system.



WALL SECTION 1/3

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

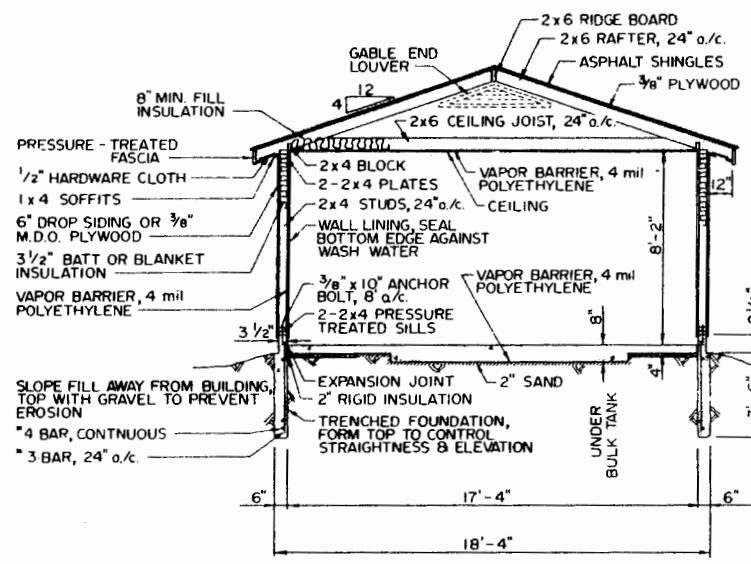


FREE-STALL DAIRY BARN  
40 COW

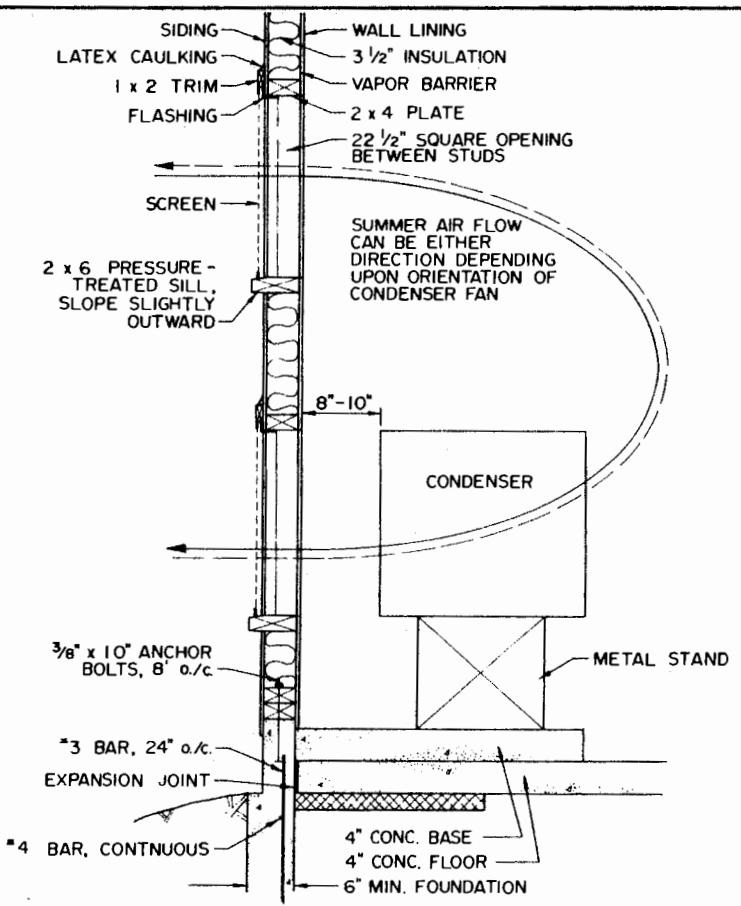
MINN. '78 6 2 9 2 SHEET 3 OF 7

- CEILING ALTERNATIVES:**
- 3/8" M.D.O. Plywood, painted, staggered joints, anchor with 6d nails
  - Fiberglass reinforced plastic surface laminated on 3/8" Ext. Plywood, install similar to 3/8" M.D.O. Plywood
  - 0.024 in. Aluminum
  - 28 ga. Galv. Steel, with baked on paint
  - 3/8" Ext. Plywood, painted

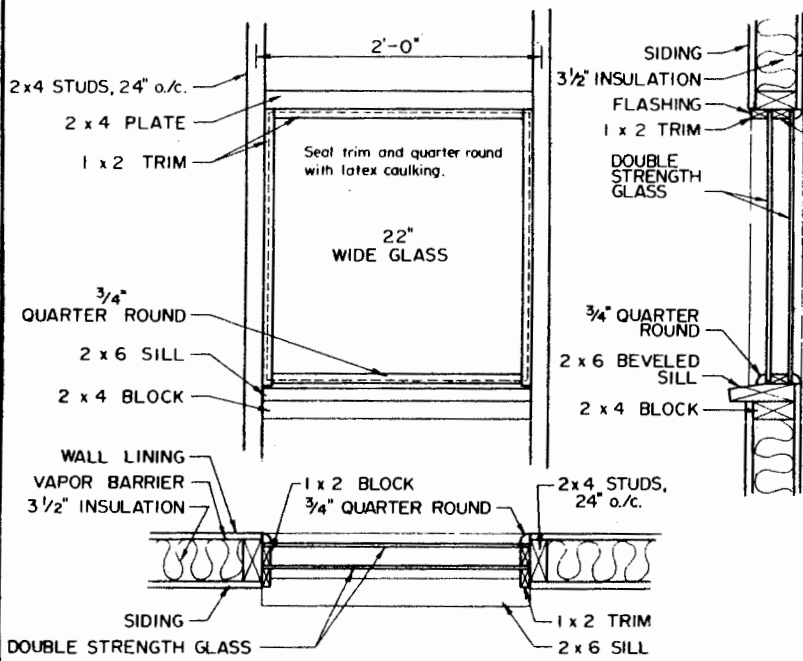
- WALL LINING ALTERNATIVES:**
- 28 ga Galv Steel, with baked on paint, over 3/8" Plywood
  - Structural Glazed Tile
  - Fiberglass Reinforced Polyester Resin Board
  - Fiberglass reinforced plastic surface laminated on 3/8" Ext. Plywood
  - 3/8" M.D.O. Plywood, painted
  - 3/8" Ext. Plywood, painted
- USE GALV. NAILS EXCEPT WITH ALUMINUM.
- Finish M.D.O. and Ext. Plywood with 2 coat acrylic-latex exterior paint system.



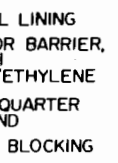
**WALL SECTION 1/4**  
SCALE - 1/4" = 1'-0"



**CONDENSER VENTILATION DETAIL 3/4**  
SCALE - 1" = 1'-0"

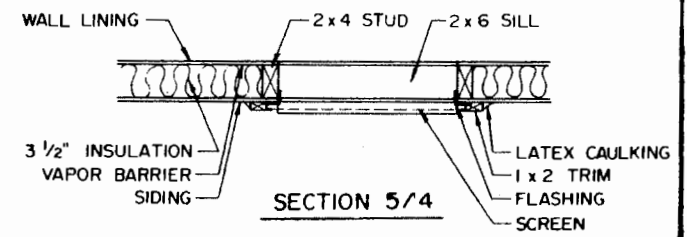


**FIXED WINDOW FRAMING 2/4**  
SCALE - 1 1/2" = 1'-0"

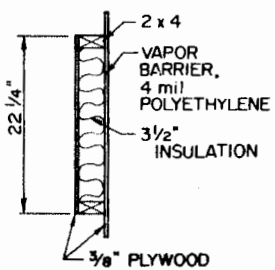


**REMOVABLE WALL PANEL 4/4**  
SCALE - 1" = 1'-0"

Install in screened opening in cold weather so condenser heat remains in milkhouse.



**SECTION 5/4**



**LSU Ag Center**  
RESEARCH & EXTENSION

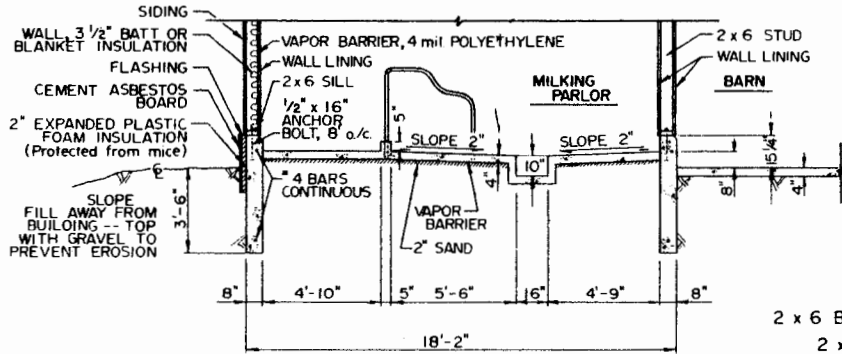
**FREE-STALL DAIRY BARN**  
40 COW

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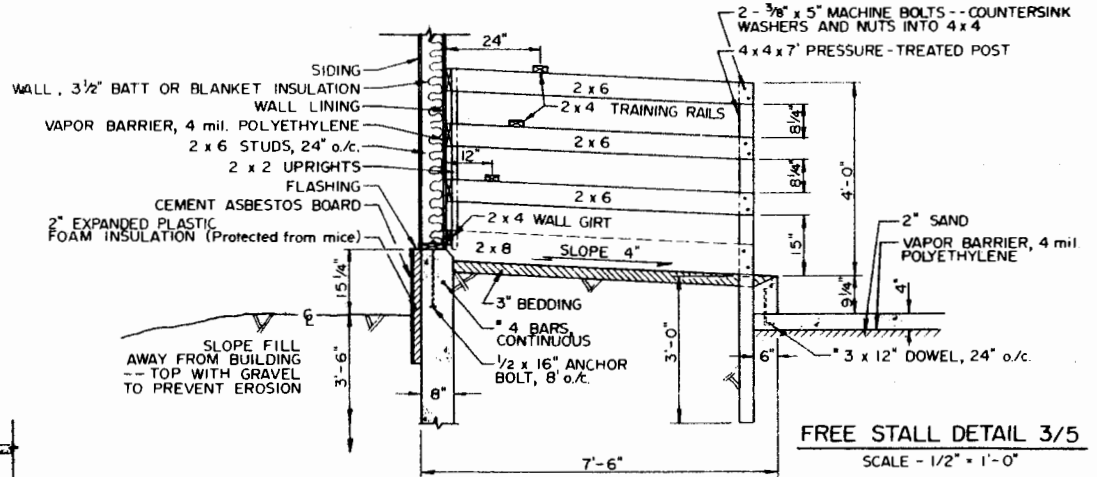
FINISH PLYWOOD WITH 2-COAT  
ACRYLIC-LATEX EXTERIOR PAINT SYSTEM.

WALL LINING:  $\frac{3}{8}$ " EXT. PLYWOOD  
28 ga. GALV. STEEL

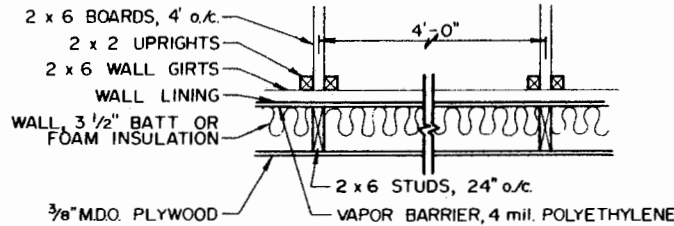
SIDING:  $\frac{3}{8}$ " M.D.O. PLYWOOD  
6" DROP SIDING



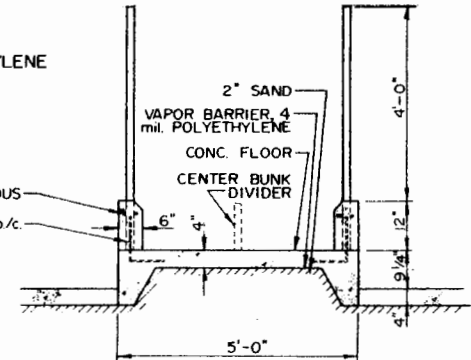
**WALL SECTION 1/5**  
SCALE -  $\frac{1}{4}$ " = 1'-0"



INSTALL 2x4 TRAINING RAILS IF COWS TURN AROUND  
IN STALLS OR DEPOSIT MANURE AT BACK OF STALL -  
3 RAILS WILL FORCE THE COW TO MOVE BACK AS IT  
GETS UP SO ITS SHOULDERS CAN'T GET CAUGHT  
UNDER THE TOP RAILS. INSTALL 2x8 BOTTOM STALL  
PARTITION BOARD TO PREVENT COWS FROM DIGGING  
HOLES IN EARTH STALL BOTTOMS.

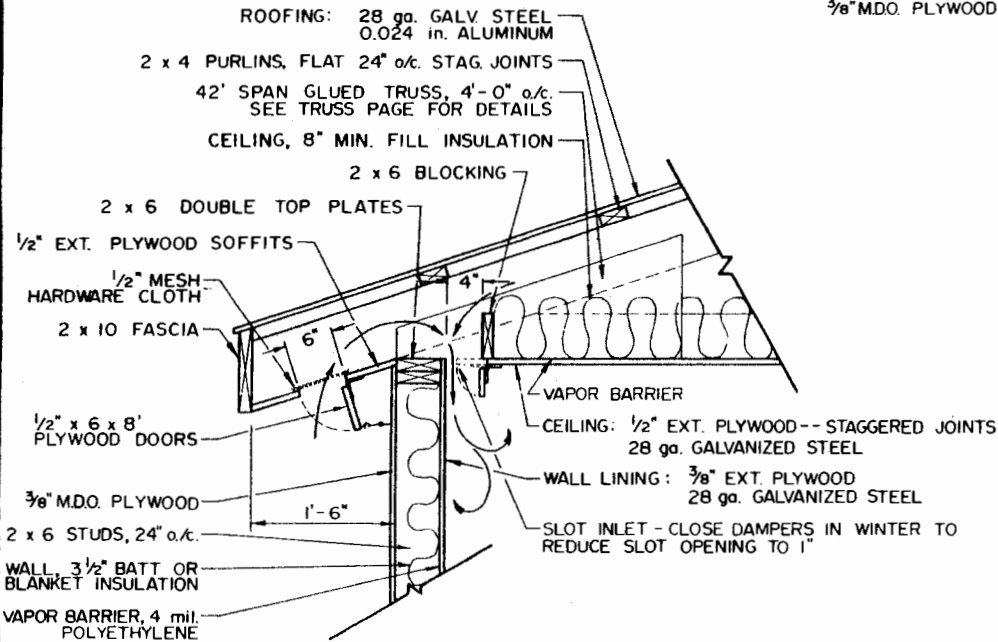


**WALL CONNECTION 4/5**  
SCALE - 1" = 1'-0"

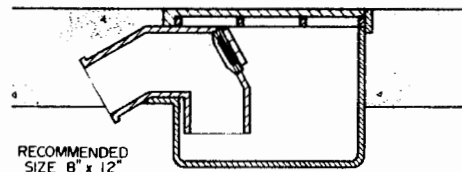


**FEEDBUNK CROSS SECTION 5/5**  
SCALE -  $\frac{1}{2}$ " = 1'-0"

Install center bunk divider if herd is divided and  
fed different rations.



**AIR INLET DETAIL 2/5**  
SCALE - 1" = 1'-0"



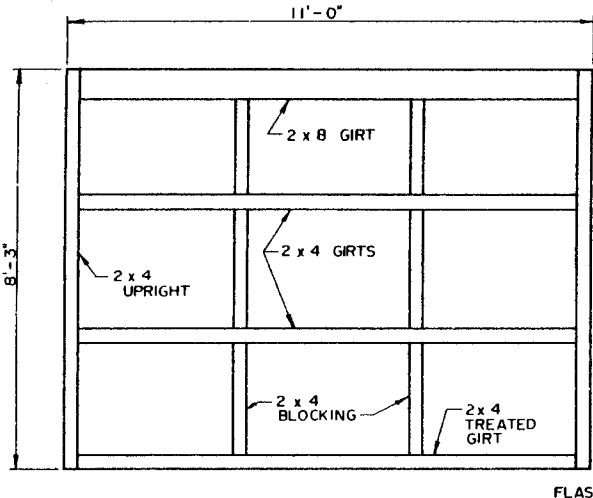
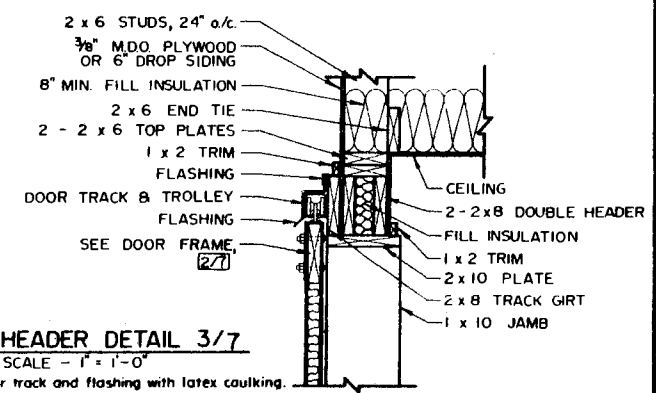
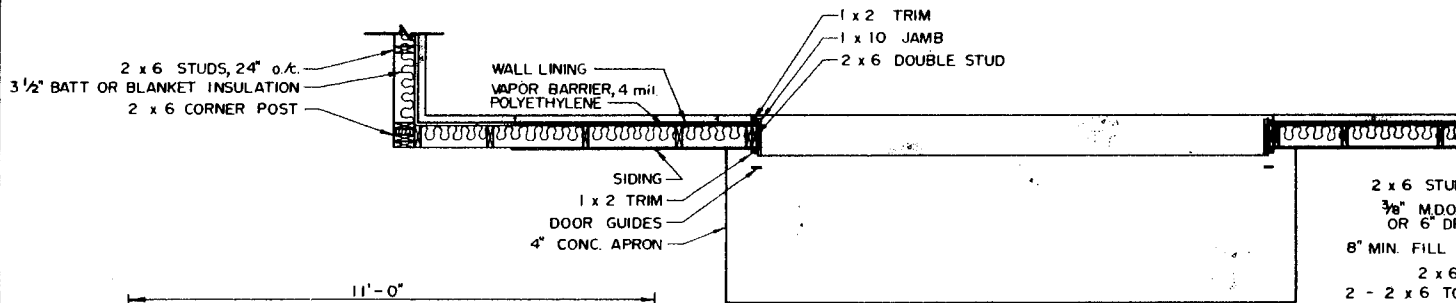
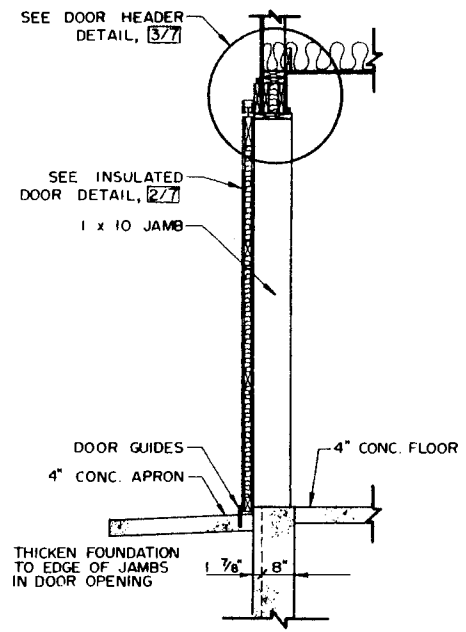
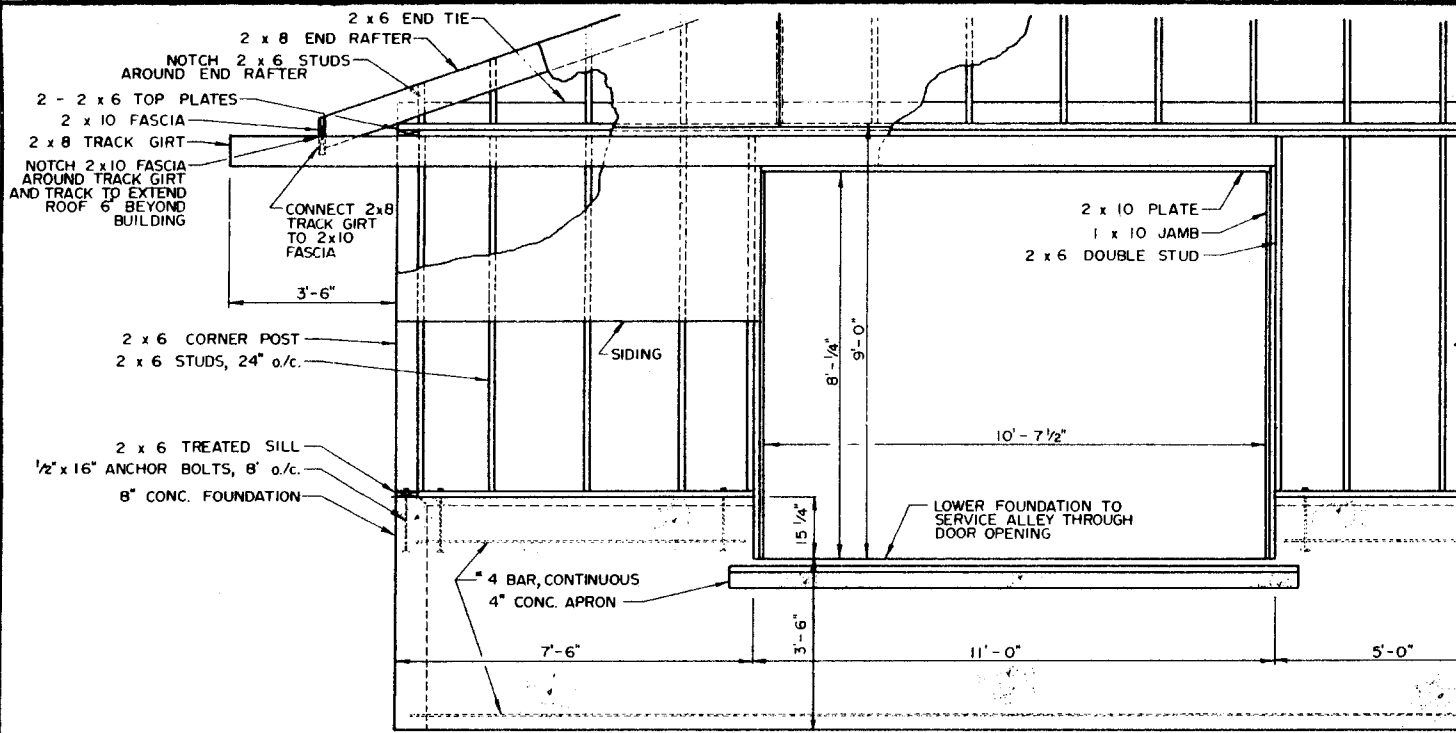
**DEEP SEAL FLOOR DRAIN 6/5**  
SCALE - 3" = 1'-0"



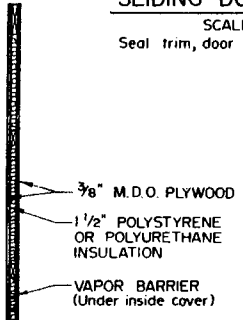
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**SLIDING DOOR FRAMING 1/7**  
SCALE - 1/2" = 1'-0"  
Seal trim, door track and flashing with latex caulking.



**SLIDING DOOR FRAME 2/7**  
SCALE - 1/2" = 1'-0"

**DOOR HEADER DETAIL 3/7**  
SCALE - 1" = 1'-0"  
Seal trim, door track and flashing with latex caulking.

**LSU**  
**AgCenter**  
RESEARCH & EXTENSION

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## Disclaimer

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.