Milking parlor pit equipped with two suspended ceiling fans for air ventilation.
Control fans with manual switches.
Use deep-seal floor drains.
Install 2×12 rubber board, centered 36" above floor, along walls cows have access to.

Heating—Duct 15 kw or 50,000 btu downdraft furnace under the floor to milkers' alley, milkhouse office and hospital area. Locate cold air returns high in wall from milking parlor, milkhouse and hospital area.
Water heaters-used one 80 gal., 165°F and one 50 gal., 115°F.

Slopes:
Milking Parlor—1/4" per ft. to drain Hospital Area—3/4" per ft. to drain Milkhouse—2" per ft. to drain Utility—1" per ft. to drain

Floor:
4" Concrete Slab, thickness to 8" under bulk tank.
Provide 6" to 8" step up from holding area to milking parlor and 2" step up from milking parlor to milkhouse and hospital area. A 1" to 2" sill from milkhouse to utility room, office and milking parlor also may be used to prevent washing between rooms.

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

CONSULT WITH EQUIPMENT SUPPLIER FOR SPECIFIC DIMENSIONS BEFORE BUILDING.
WALL Lining Alternatives

2B ga. Galv. Steel, with baked on paint, over 3/8" Plywood
3/8" M.D.O. Plywood
3/8" Ext. Plywood, painted

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
2B ga. Galv. Steel, with baked on paint
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.

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
2B ga. Galv. Steel, with baked on paint
3/8" Ext. Plywood, painted

Stud
Construction Grade (Doug Fir, Southern Yellow Pine or Hem Fir).
Trusses
No. 1 (Doug Fir, Southern Yellow Pine, or Hem Fir). See truss page.
Plywood
Roof Sheathing - 3/8" C-C Ext. Plywood
Siding - 3/8" C-C Ext. with medium density overlay.
Sills and Fascia
Pressure Preservative Treated (Southern Yellow Pine or equivalent).
Creosote - 8 pcf, Pento - 0.40 pcf, ACC - 0.25 pcf, ACA or CCA (Type A or B) - 0.25 pcf.

LUMBER SPECIFICATIONS

FREE-STALL DAIRY BARN
80 COW
MINN. '77 6281 SHEET 8 OF 12
FREE STALL AND COW PLATFORM 1/10

Install 1 1/4" pipe training rails if cows turn around in stalls or deposit manure at back of stall. 2 rails will force cow to move back as it gets up so its shoulders can't get caught under the rails.

FREE STALL DETAIL 2/10

MIDDLE ROW COW PLATFORM 3/10

FEEDBUNK DETAIL 2/10
KNEE BRACE DETAIL 1/11


WALL SECTION 2/11

Hold vent door open with a light metal chain from the vent door frame to an eye hook in the 2' x 4'. Below door.

WALL SECTION 5/11

4' x 8' VENT DOOR FRAME 3/11
