

NOTES:

1. NOTE ABOUT EFFECTS OF AN EQUIPOTENTIAL PLANE: IF THE FLOOR IS AT THE SAME POTENTIAL AS THE CONDUCTIVE EQUIPMENT AND ANY STRUCTURES ACCESSIBLE TO THE ANIMAL, STRAY VOLTAGE PROBLEMS CANNOT EXIST. THIS CAN BE ACCOMPLISHED BY PLACING A BONDED NETWORK OF WELDED WIRE MESH IN THE FLOOR. ANY ANIMAL STANDING ON A FLOOR CONTAINING A PROPERLY INSTALLED EQUIPOTENTIAL PLANE WILL HAVE ALL POSSIBLE CONTACT POINTS AT OR VERY NEAR THE SAME POTENTIAL.
2. BOND NO.4 COPPER WIRE TO 6" x 6" (UP TO 12" x 12" IS OK) WIRE MESH IN CONCRETE FLOOR, 2 OR 3 TIMES PER EACH CNT. SECTION OF MESH.
3. IF THERE IS A POSSIBILITY FOR ENERGIZING DUE TO A LOCAL ELECTRICAL FAULT SUCH AS ELECTRIC EQUIPMENT NOT BEING PROPERLY GROUNDED, THEN STEEL POSTS, GATE POSTS, SUPPORT POSTS, FEEDER BRACKETS, ETC. SHOULD BE GROUNDED ACCORDING TO THE NATIONAL ELECTRIC CODE.
4. ANGLE IRON GRATE SUPPORTS FOR FLOOR DRAINS TO BE BONDED BY RESISTANCE WELDING AT 2 OR MORE POINTS FOR EACH CNT. SECTION.
5. 6" x 6" WIRE MESH ON FLOOR OF PIT CONNECTED AT 2 POINTS TO MESH IN COW PLATFORM FLOOR.
6. WIRE MESH TO HAVE A PROTECTIVE CONCRETE COVER TO PROTECT MESH FROM CORROSION OR DAMAGE (1" IS SUFFICIENT, BUT 1 1/2" IS BETTER).
7. 1/4" ROUND STEEL ROD WELDED (RESISTANCE OR EXOTHERMIC) TO FEEDER, EXTENDING DOWN TO WIRE MESH. WELD OR BRAZE 1/4" ROD, MESH, AND NO.4 COPPER GROUND WIRE TOGETHER. INSTALL 2 RODS PER SIDE OF PARLOUR PROVIDED THAT ALL FEEDERS ARE INTERCONNECTED BY METAL PARTS. NOTE: CONDUCTORS AND CONNECTIONS SHOULD BE LOCATED WHERE THEY CANNOT BE EASILY DAMAGED OR DISTURBED.
8. UNDER SERIOUS CONDITIONS AN ANIMAL MAY BE EFFECTED WHEN IT STEPS ONTO THE EQUIPOTENTIAL PLANE FROM AN AREA BEYOND THE PERIMETER. TO PROVIDE A MORE GRADUAL CHANGE IN VOLTAGE, A VOLTAGE RAMP SHOULD BE INSTALLED AT THE ENTRANCE OR EXIT OF THE EQUIPOTENTIAL PLANE. (SEE VOLTAGE RAMP DETAIL)

NO.4 COPPER GROUND WIRE TO GROUND ROD AT ELECTRICAL DISTRIBUTION PANEL.

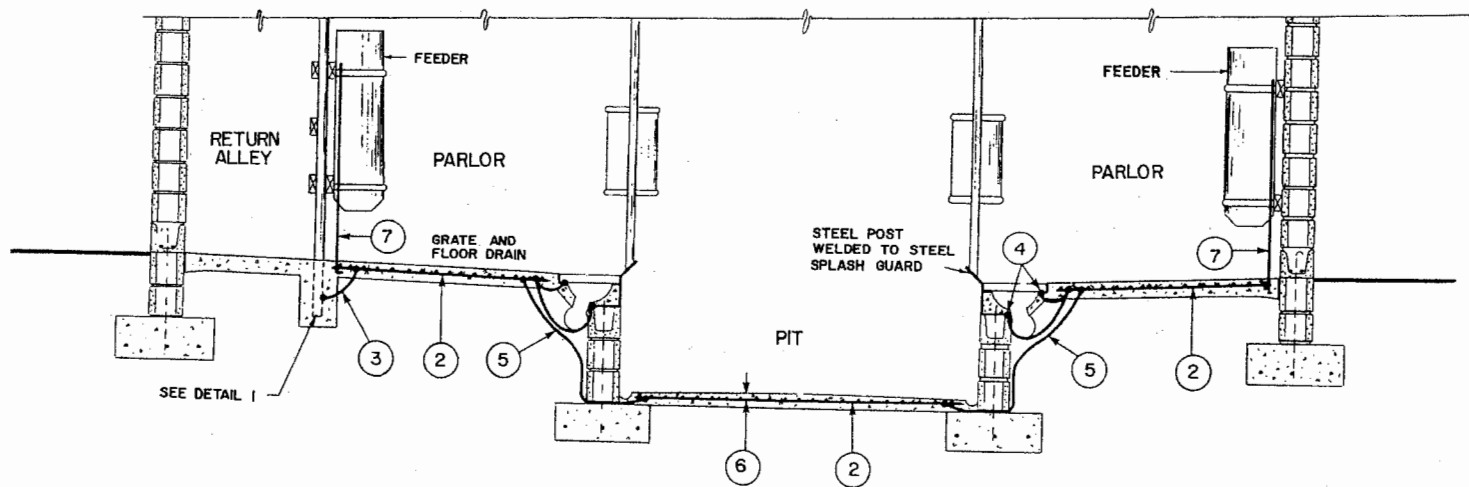
THIS DRAWING IS NOT INTENDED TO SHOW STRUCTURAL, MECHANICAL, OR ARCHITECTURAL DETAILS. IT SHOULD ONLY BE USED FOR MILKING PARLOR GROUNDING DETAILS.

DRAWING NOT TO SCALE

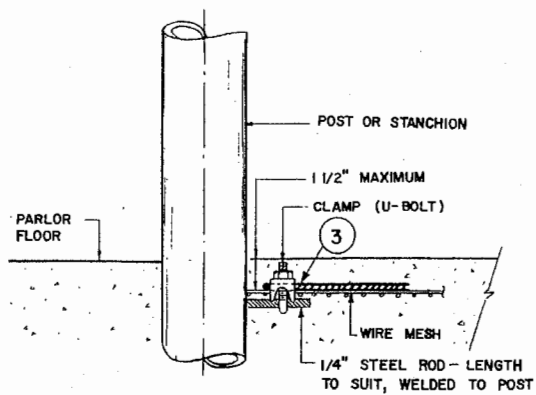


MILKING PARLOR GROUNDING METHOD

CAN. 87	6387	SHEET 1 OF 2
---------	------	--------------

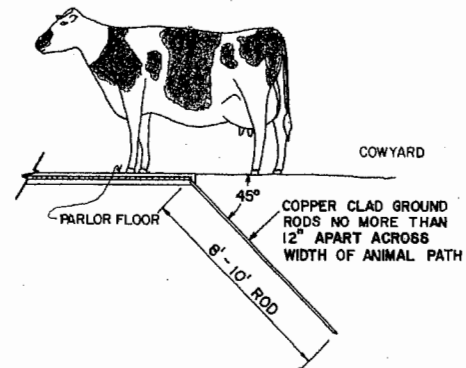


CROSS SECTION



WIRE MESH, GROUND ROD, AND
1/4" STEEL ROD ALL CLAMPED
TOGETHER TO ENSURE CIRCUIT
CONTINUITY.

OPTIONAL TECHNIQUE FOR
BONDING PARTS
(see notes)



VOLTAGE RAMP DETAIL

THIS DRAWING IS NOT INTENDED TO
SHOW STRUCTURAL, MECHANICAL,
OR ARCHITECTURAL DETAILS. IT
SHOULD ONLY BE USED FOR MILKING
PARLOR GROUNDING DETAILS.

DRAWINGS NOT TO SCALE



MILKING PARLOR GROUNDING METHOD

CAN. 87

6387

SHEET 2 OF 2

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.