

**LIGHT AND POWER**

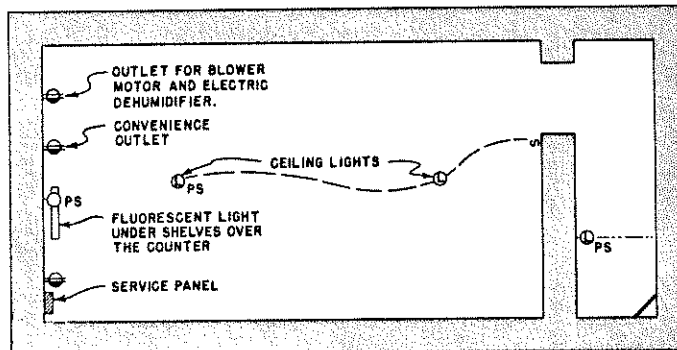
SERVICE ENTRANCE CABLE, TYPE UF, IS BURIED AT LEAST TWO FEET, LOOPED AND BROUGHT THROUGH WALL IN CONDUIT. PLUG CONDUIT WITH HYDRAULIC CEMENT.

SERVICE PANEL IS FUSED SAFETY SWITCH FOR TWO 20 AMPERE 120 VOLT CIRCUITS.

OUTLETS ARE SURFACE MOUNTED NON-METALLIC GROUNDING TYPE. CIRCUIT WIRING IS N<sub>2</sub> 12 UF.

SUGGESTED ELECTRICAL EQUIPMENT:  
TWO BURNER HOT PLATE.  
1600 WATT RESISTANCE HEATER WITH FAN.  
DEHUMIDIFIER (IN HUMID CLIMATES)

PROVIDE BATTERY OPERATED LANTERNS AND FLASHLIGHTS FOR USE IN CASE OF POWER FAILURE.

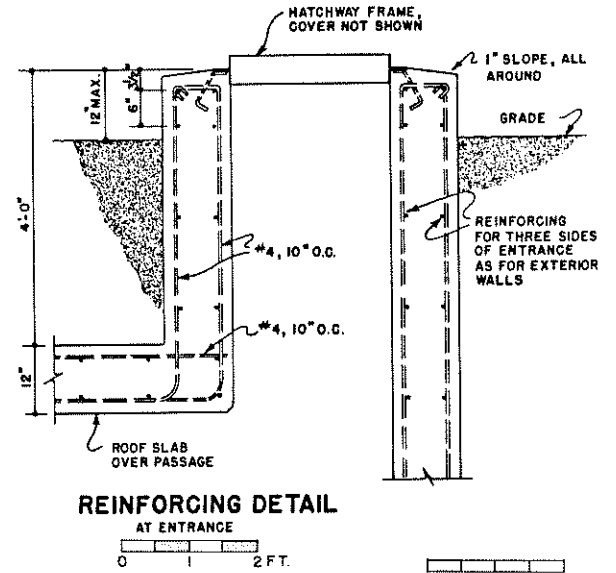
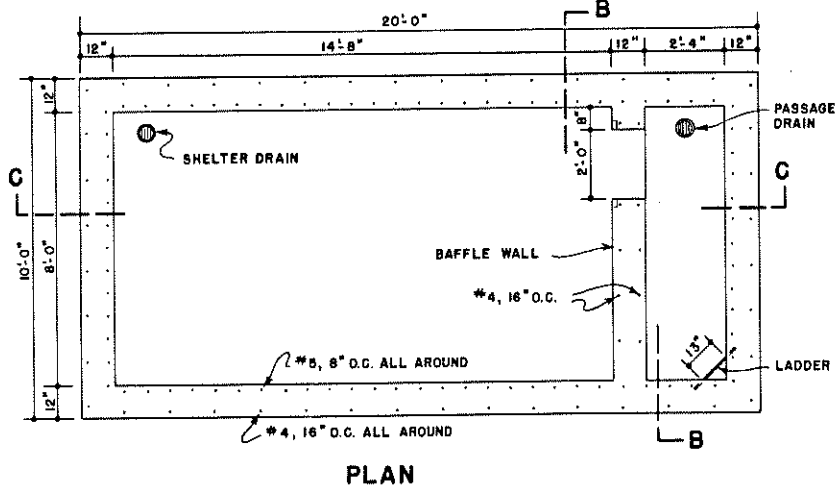
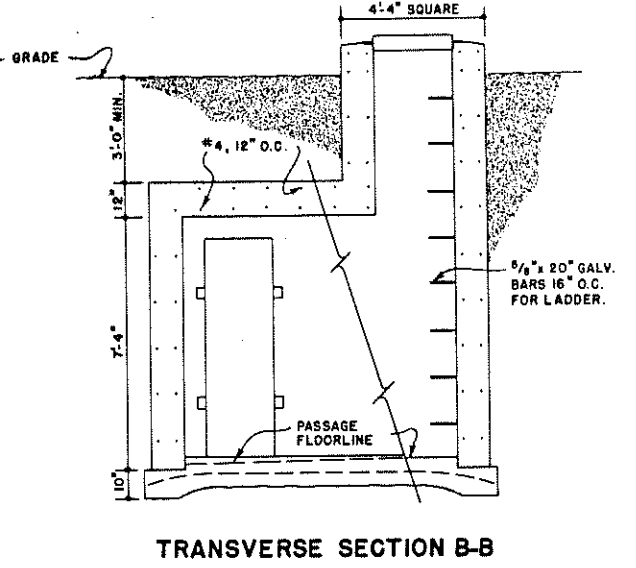
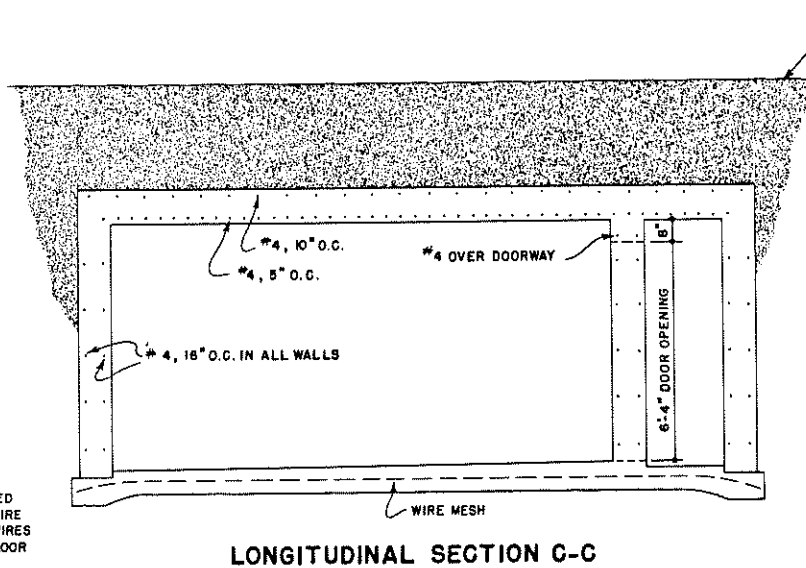
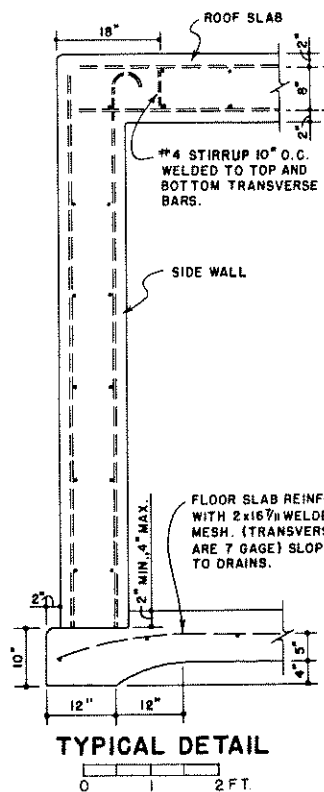


BERTHS ARE RECTANGULAR FRAMES OF 1" STD. PIPE WITH PLAIN ELBOWS, DOWEL AND PIN ONE END RAIL, OR USE LONG SCREW WITH CLOSE NIPPLE AND COUPLING FOR ASSEMBLY. COVER WITH 1/2" x 1" WELDED WIRE FABRIC, WITH TRANSVERSE WIRES SPACED 1/2".

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
DEPARTMENT OF AGRICULTURAL ENGINEERING  
UNIVERSITY OF MARYLAND  
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**BLAST AND FALLOUT SHELTER**  
FOR SIX PEOPLE

USDA '63 EX. 5957 SHEET 1 OF 4



PROVIDE TRAPPED FLOOR DRAINS WHICH LEAD TO A GRAVEL-FILLED SUMP (NOT TO A SURFACE OUTLET). GRATINGS AND WATERTIGHT PLUGS ARE REQUIRED FOR BOTH DRAINS.

LAPS IN REINFORCING BARS SHALL BE AT LEAST 16 INCHES.

CONCRETE SHALL BE 1:2:3 MIX, WITH NOT OVER 5 1/2 GALLONS OF WATER PER SACK OF CEMENT.

CHAMFER OUTSIDE CORNERS 3/4".

PLACE A 6 MIL POLYETHYLENE VAPOR BARRIER UNDER THE FLOOR SLAB. USE A SHEET ABOUT 14 FEET WIDE SO THAT IT MAY LATER BE TURNED UP AGAINST THE OUTSIDE WALLS. AFTER THE FORMS ARE STRIPPED, APPLY TWO COATS OF BITUMINOUS WATERPROOFING TO THE ENTIRE STRUCTURE UP TO GRADE LINE, AND COVER WITH POLYETHYLENE.

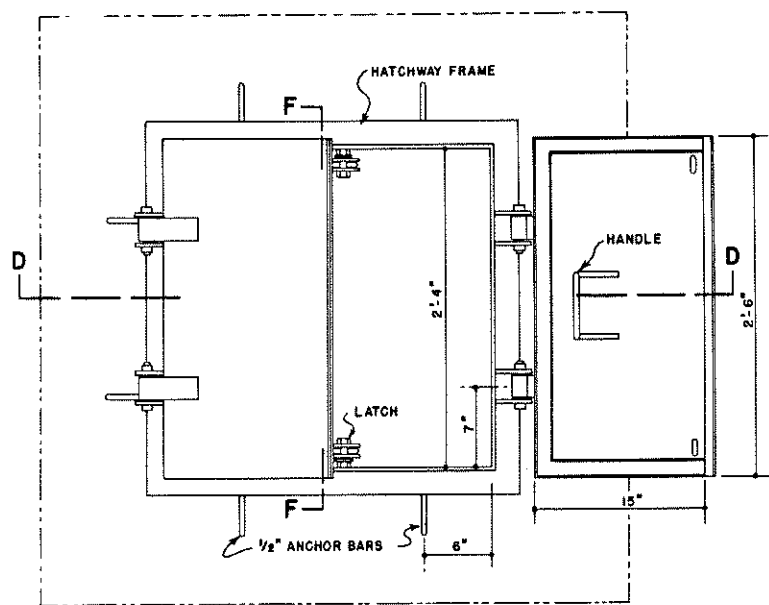
IT IS SUGGESTED THAT THE INTERIOR WALLS AND CEILING BE FINISHED WITH TWO COATS OF LIGHT COLORED CEMENT PAINT, AND THAT THE FLOOR IN THE SHELTER AREA BE FINISHED WITH LIGHT COLORED ASPHALT TILE OR LATEX BASE PAINT.

SCALE: EXCEPT AS NOTED

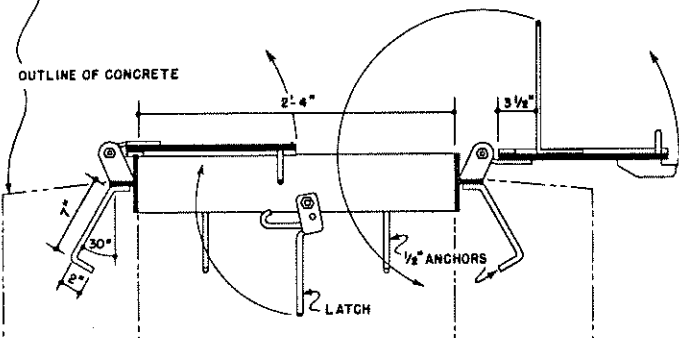
COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
 DEPARTMENT OF AGRICULTURAL ENGINEERING  
 UNIVERSITY OF MARYLAND  
 AND  
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**BLAST AND FALLOUT SHELTER**  
 FOR SIX PEOPLE

USDA '63 EX. 5957 SHEET 2 OF 4

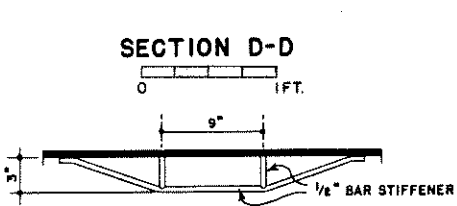


**PLAN**  
(WITH ONE COVER OPEN)

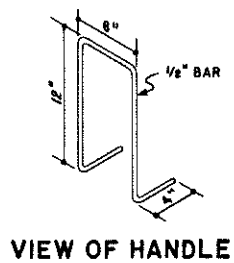


**SECTION D-D**

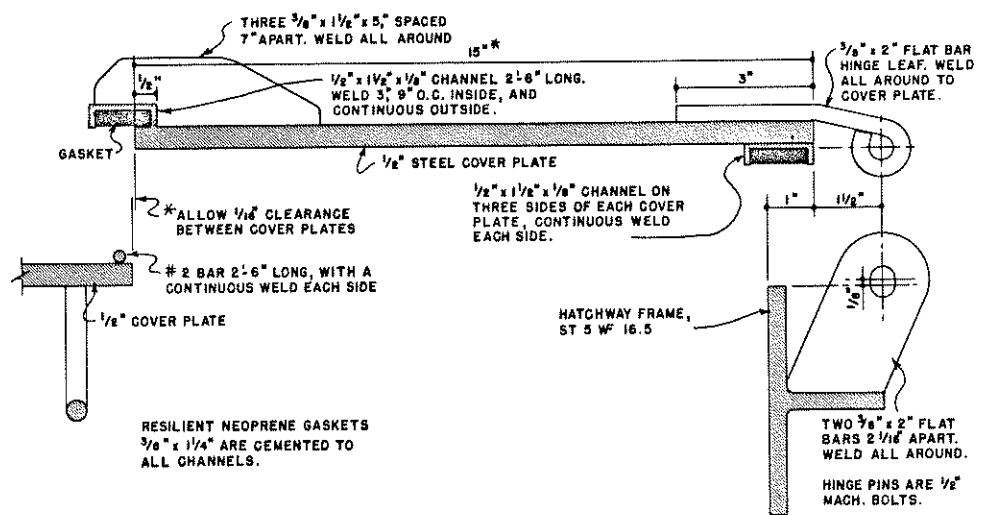
0 1 FT.



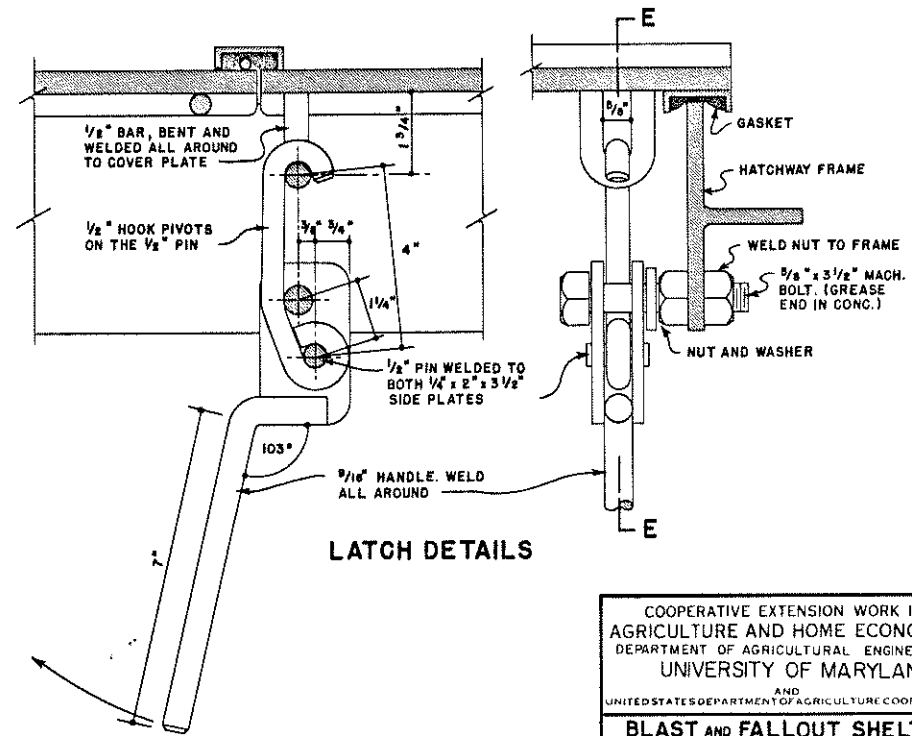
**SECTION F-F**  
HATCHWAY FRAME NOT SHOWN



**VIEW OF HANDLE**



**COVER AND HINGE DETAILS**



**LATCH DETAILS**

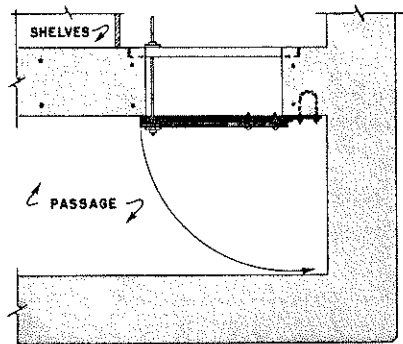
**SECTION E-E**

ALL STEEL PARTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.  
STOCK STEEL ITEMS ARE ALSO GALVANIZED.

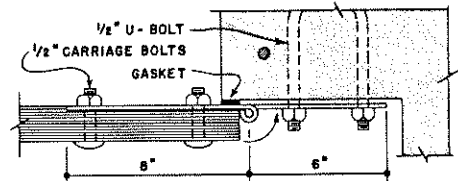
COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS  
DEPARTMENT OF AGRICULTURAL ENGINEERING  
UNIVERSITY OF MARYLAND  
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**BLAST AND FALLOUT SHELTER**  
FOR SIX PEOPLE

USDA '63 EX. 5957 SHEET 3 OF 4

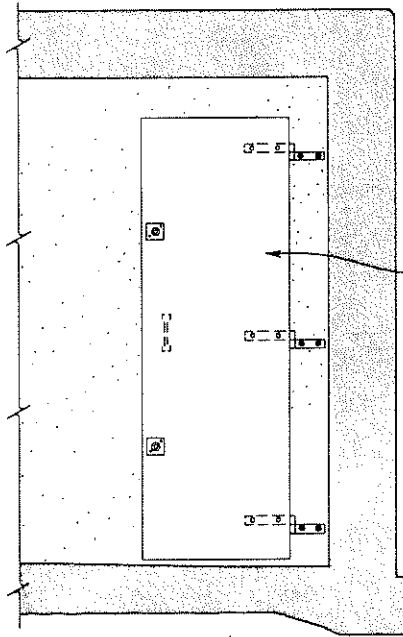


PLAN

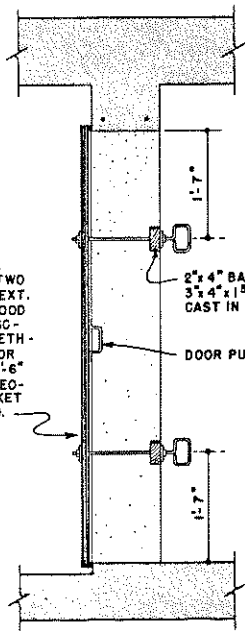


USE HEAVY DUTY HINGES WITH 8" LEAF FLUSH WITH INNER FACE OF DOOR. SHIM 6" LEAF TO THE COMPRESSED THICKNESS OF GASKET (ABOUT 3/16").

DETAIL AT HINGE



ELEVATION

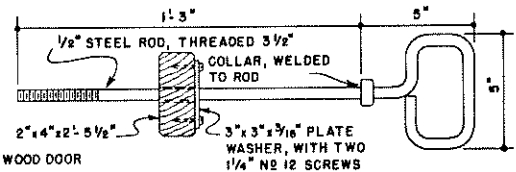
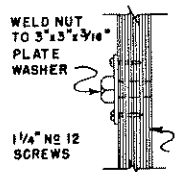


1 1/2" METAL CLAD DOOR, TWO LAYERS 3/4" EXT. GRADE PLYWOOD GLUED AND SCREWED TOGETHER. THE DOOR IS 2'-1 1/2" x 6'-6" WITH 3/8" NEO-PRENE GASKET ALL AROUND.

2" x 4" BARS REST IN 3" x 4" x 1 1/2" NOTCHES CAST IN CONCRETE.

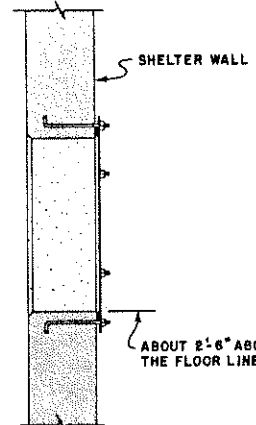
DOOR PULL

SECTION

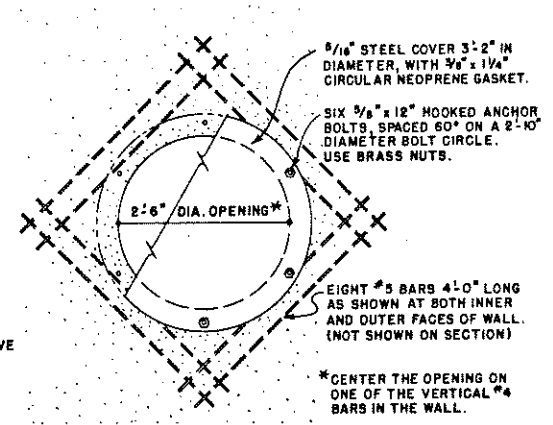


LOCKING DETAILS

INNER DOOR

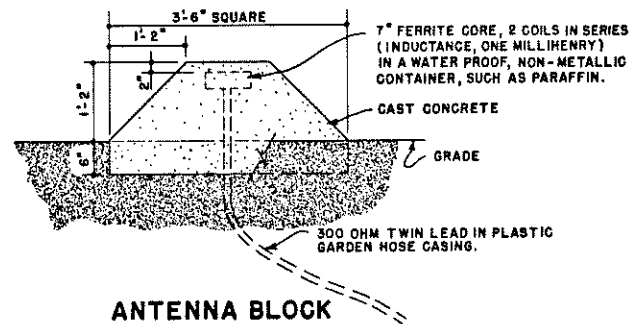


SECTION  
REINFORCING BARS NOT SHOWN

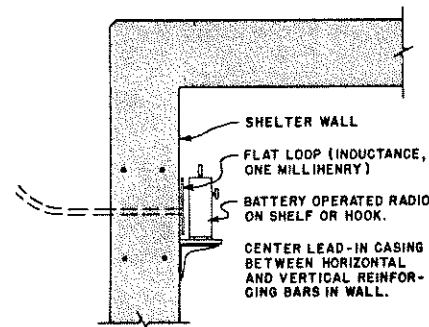


ELEVATION  
FROM INSIDE

OPTIONAL EMERGENCY EXIT



ANTENNA BLOCK



SECTION  
ANTENNA SYSTEM

COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS  
DEPARTMENT OF AGRICULTURAL ENGINEERING  
UNIVERSITY OF MARYLAND  
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING  
**BLAST AND FALLOUT SHELTER**  
FOR SIX PEOPLE  
USDA '63 EX. 5957 SHEET 4 OF 4