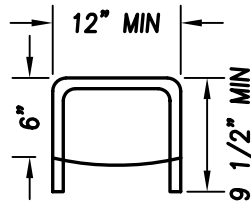
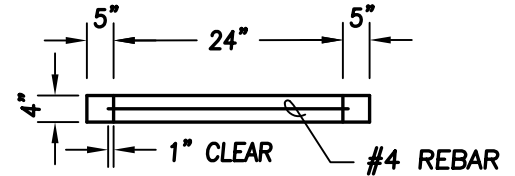


#4 BARS @ 6" CENTERS
BOTTOM FACE 1" MIN
COVER

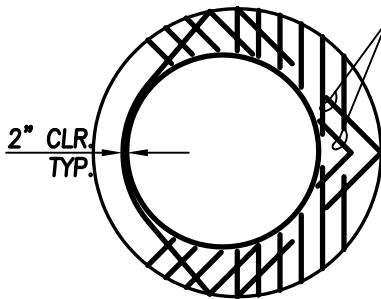


MANHOLE STEP

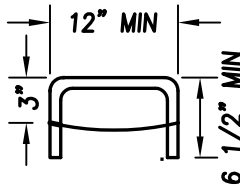


GRADE RING

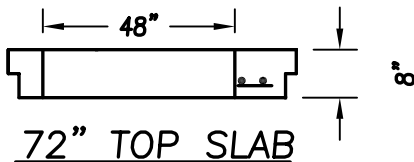
48", 54", & 60" TOP SLAB



#5 BARS @ 6" CENTERS
BOTTOM FACE 1" MIN COVER

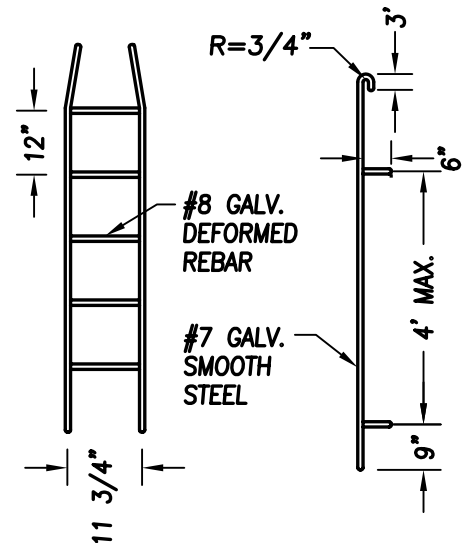


HANDHOLD

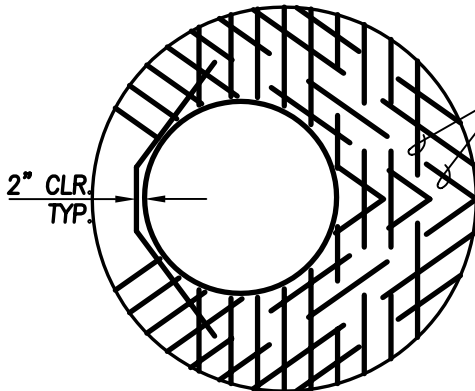


72" TOP SLAB

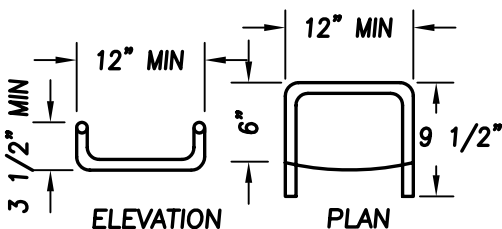
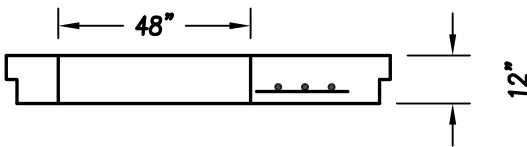
* ALL STEPS & RUNGS 1"
DIA GALV REBAR OR
COPOLYMER PROPYLENE



PREFABRICATED LADDER



#6 BARS @ 7" CENTERS
BOTTOM FACE 1" MIN COVER



ELEVATION

PLAN

MANHOLE DROP RUNG STEP

NOTES:

1. PROPRIETARY MANHOLE HANDHOLDS AND STEPS ARE ACCEPTABLE, PROVIDED THAT THEY CONFORM TO SEC. R, ASTM C478, AASHTO M199 AND MEET ALL WISHA REQUIREMENTS.
2. MANHOLE STEP/HANDHOLD LEGS SHALL BE PARALLEL OR APPROXIMATELY RADIAL AT THE OPTION OF THE MANUFACTURER, EXCEPT THAT ALL STEPS IN ANY MANHOLE SHALL BE SIMILAR. PENETRATION OF OUTER WALL BY A LEG IS PROHIBITED.
3. HANDHOLDS AND STOPS SHALL HAVE "DROP" RUNGS OR PROTUBERANCES TO PREVENT SIDEWAYS SLIP.
4. LADDERS OR STEPS SHALL EXTEND TO WITHIN 16" OF BOTTOM OF MANHOLE.
5. HANGING LADDERS SHALL BE PERMANENTLY FASTENED AT TOP BY HANGING ON STEP OR BY BOLTING OR EMBEDDING IN CONCRETE. EACH SHALL BE EMBEDDED AT BOTTOM IN BASE.
6. ADDITIONAL SAFETY FEATURES MAY BE REQUIRED IN VERY DEEP OR UNUSUAL STRUCTURES.

STANDARD MANHOLE DETAILS

NTS