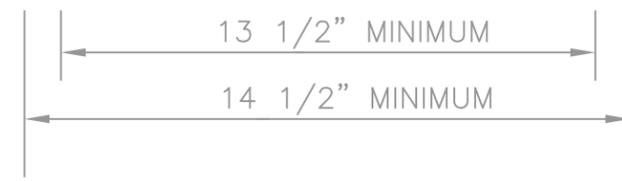
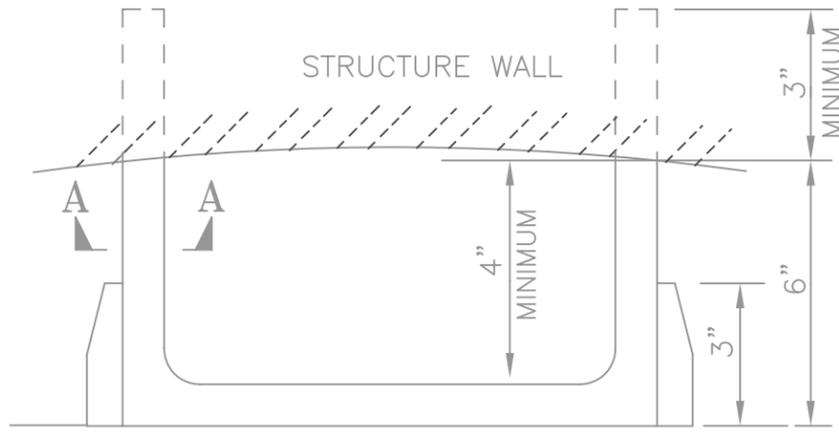
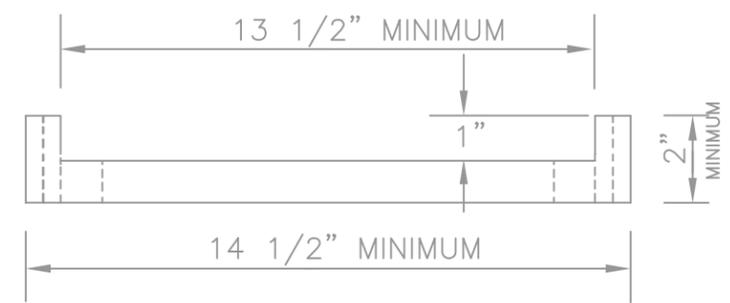


GENERAL NOTES

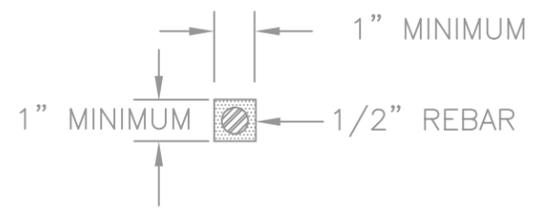
1. ALL STEPS SHALL MEET THE FOLLOWING SPECIFICATIONS:
 GENERAL: ASTM C-478 EXCEPT THAT THE HORIZONTAL PULL OUT LOAD SHALL BE 1,000 POUNDS, AND THE STEPS SHALL BE INSTALLED SO THAT DISTANCE FROM THE WALL OF THE RISER OR CONE, MEASURED FROM THE POINT OF EMBEDMENT TO THE OUTSIDE FACE OF THE RUNG IS 6".
 PLASTIC: ASTM D-4101 PP200B33454 (COPOLYMER POLYPROPYLENE STANDARD).
 STEEL REINFORCED BAR: ASTM A-615 GRADE 60 (1/2" DEFORMED STEEL REINFORCEMENT THROUGHOUT).
2. INSTALLATION METHOD MAY BE EITHER "DRIVE IN", "CAST IN PLACE", OR "GROUTED IN". DRIVEN IN STEPS ARE NOT TO BE INSTALLED UNTIL THE CONCRETE HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. EXPANSIVE GROUT SHALL BE USED FOR GROUTED IN STEPS.
3. ALL STEPS SHALL HAVE MANUFACTURES NAME, STEP NUMBER AND/OR MODEL NUMBER AND ASTM C-478 STAMPED IN THE PLASTIC.
4. THE RUNG OF THE STEP SHALL HAVE AN ANTI-SKID SURFACE.
5. ALL STEPS MUST BE APPROVED BY THE PUBLIC WORKS TESTING LABORATORY PRIOR TO USE.
6. ALL VIEWS ARE NOT TO SCALE AND ARE FOR DIMENSION PURPOSES ONLY.



PLAN



ELEVATION



SECTION A-A

Kansas City, Missouri
Public Works Department

MANHOLE STEP	STANDARD DRAWING NUMBER MH-S
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