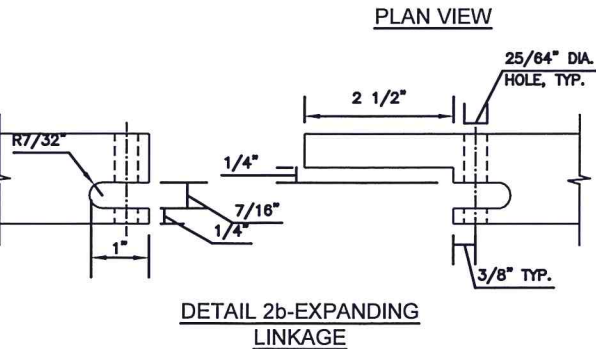


STRUCTURAL STEEL GRADE ADJUSTMENT RISER NOTES:

1. ADJUSTMENT RISER HEIGHT RANGE IN 1/4" INCREMENTS:
 - MINIMUM HEIGHT ADJUSTMENT = 3/4"
 - MINIMUM HEIGHT ADJUSTMENT = 5 3/4"
2. ADJUSTMENT RISER DIAMETER MINIMUM 1 3/4" TO 52".
3. PROVIDE STRUCTURAL STEEL CONFORMING TO ASTM A36-12 FOR RISER BAR.
4. SKIRT THICKNESS:
 - IF RISER HEIGHT IS EQUAL OR GREATER THAN LID THICKNESS PLUS 1/2" USE 10 GA ASTM A653 G90 SHEET METAL FOR SKIRT. ENDS OF SKIRT SHOULD OVERLAP 3/4" AT MEAN DIAMETER.
 - IF RISER HEIGHT IS LESS THEN LID THICKNESS PLUS 1/2" USE 12 GA ASTM A653 G90 SHEET METAL FOR SKIRT. ENDS OF SKIRT SHOULD TOUCH AT MINIMUM DIAMETER.
5. PIVOTED LINKAGE SHOULD EXPAND AND CONTRACT THE RISER PLUS AND MINUS 1/2" DIAMETER GIVING A FULL ONE INCH DIAMETER VARIATION WITHOUT BINDING. ATTACHMENT OF LINKAGE SHALL PIVOT ON 3/8" 304 STAINLESS STEEL ROLL PINS (14,000 LB DOUBLE SHEER STRENGTH).
6. TURNBUCKLE MATERIAL IS A.I.S.I. 12L 14 STEEL COLD DRAWN ZINC PLATED WITH YELLOW DICHROMATE FINISH DIPPED IN LINEBACKER RUST INHIBITOR.
7. RIGHT & LEFT ROD ENDS SHALTEE BE FORGING A.I.S.I. C-1030 STEEL HEAT TREATED BHN 240, AND ZINC PLATED WITH DICHROMATE FINISH (3/8-16).
8. WELD STRUCTURAL STEEL IN ACCORDANCE AWS D1.3-2008 STRUCTURAL WELDING CODE - SHEET STEEL AND AWS D1.1-2000 STRUCTURAL WELDING CODE - STEEL.
9. PROVIDE ADJUSTMENT RISERS WHICH EXPAND TO THE FULL CIRCUMFERENCE OF THE ORIGINAL FRAME AND ALLOWS NO MOVEMENT.
10. CUSTOM FABRICATE EACH ADJUSTMENT RISER TO FIT THE EXISTING DIMENSIONS OF EACH MANHOLE. CAREFULLY MEASURE TOP AND BOTTOM DIAMETER OF HOLE, LID DIAMETER, LID THICKNESS, AND HEIGHT OF EACH EXISITNG LID AND PROVIDE THIS INFORMATION TO THE FABRICATOR. CLEARLY MARK EACH ADJUSTMENT RISER FOR PLACEMENT LOCATION. UPON DELIVERY OF ADJUSTMENT RISERS, VERIFY ALL DIMENSIONS AND LOCATION BEFORE INSTALLATION BEGINS.
11. FABRICATION TOLERANCES:
 - BOTTOM OUTSIDE DIMENSION +/-1/8"
 - TOP INSIDE DIMENSION +/-1/8"
 - LID THICKNESS +/-1/16"
12. MANHOLE FRAME MUST BE CLEANED. REMOVE ALL DEBRIS ON ALL SURFACES THE RISER TOUCHES. INSTALL THE STEEL ADJUSTMENT RISERS SECURELY TO THE EXISTING FRAME BY EXPANDING THE PIVOTED TURNBUCKLE USING A SCREWDRIVER AS A LEVER.
13. CHECK FOR FULL BEARING OF LOWER RISER BAR SECTION ON EXISTING FRAMES DURING INSTALLATION.



STRUCTURAL STEEL GRADE ADJUSTMENT RISERS - TYPE 1

REVISIONS	
DATE	DESCRIPTION