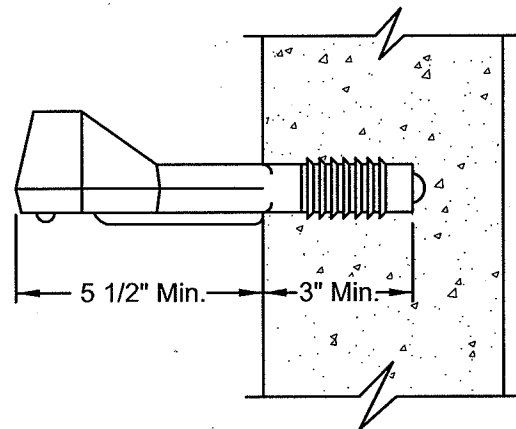
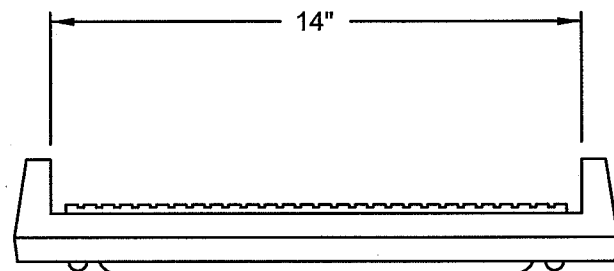
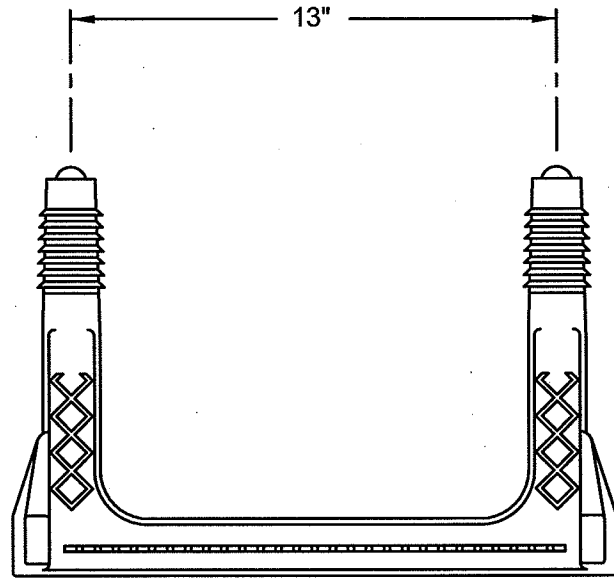



P-168_STEP_PRECAST_MANHOLE.DWG 4/6/09 5:57 PM RICKS



NOTES:

1. ONLY USE CITY CERTIFIED STEPS IN ALL MANHOLES. A CURRENT LIST OF CERTIFIED STEPS CAN BE OBTAINED FROM THE CITY OF PORTLAND MATERIALS TESTING LAB (503) 823-2340.
2. ALL STEPS SHALL BE OF THE SAME DESIGN, TYPE AND SIZE AND INSTALLED IN CONFORMANCE WITH THE MSPCP AND THE MANUFACTURER'S RECOMMENDATIONS.
3. FOR PRECAST MANHOLES THE MANUFACTURER SHALL INSTALL THE STEPS BEFORE DELIVERY TO THE JOB SITE.
4. LOOSE STEPS WILL NOT BE ACCEPTED. IN PRECAST MANHOLES LOOSE STEPS SHALL BE CAUSE FOR REJECTION OF THE MANHOLE CONE OR SECTION.
5. LOCATE THE FIRST MANHOLE STEP 6 INCHES BELOW THE TOP OF CONE AND NOT MORE THAN 26 INCHES BELOW FINISH GRADE. SUCCEEDING STEP SHALL BE SPACED 12 INCHES ON CENTER.
6. STEPS SHALL BE ALIGNED VERTICALLY.

<p>The selection and use of this Standard Detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.</p>	 <p>Bureau of Environmental Services CITY OF PORTLAND, OREGON</p> <p><i>William Fly</i> Chief Engineer</p>	
	<p>Standard Detail Title</p> <p style="text-align: center;">Step for Precast Manhole</p>	
<p>Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.</p>	<p>Effective Date: 01-01-09</p>	<p>Standard Detail No.</p> <p style="text-align: center;">P-168</p>
	<p>Calc. Book No.: N/A</p>	
	<p>Baseline Report Date: N/A</p>	