

MANHOLE LEAKAGE TESTS

MANHOLES SHALL BE TESTED FOR LEAKAGE BY NEGATIVE AIR PRESSURE AS PRESCRIBED IN ASTM C 1244 TO DEMONSTRATE THE INTEGRITY OF THE INSTALLED MATERIALS AND THE CONSTRUCTION PROCEDURES. THIS TEST METHOD SHALL BE USED FOR TESTING CONCRETE MANHOLE SECTIONS UTILIZING MORTAR, MASTIC, OR GASKETED JOINTS AND IS INTENDED TO DEMONSTRATE THE CONDITION OF THE CONCRETE MANHOLES PRIOR TO BACKFILL. IN ACCORDANCE WITH THE ASTM C 1244, THE TEST HEAD SHALL BE PLACED AT THE TOP OF THE MANHOLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. A VACUUM OF 10 IN. HG SHALL BE DRAWN ON THE MANHOLE, THE VALVE ON THE VACUUM LINE OF THE TEST HEAD CLOSED, AND THE VACUUM PUMP SHUT OFF. THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 IN. HG. THE MANHOLE SHALL PASS IF THE TIME FOR THE VACUUM READING TO DROP FROM 10 IN. HG TO 9 IN. HG MEETS OR EXCEEDS THE VALUES INDICATED IN ASTM C 1244 TABLE 1, SHOWN BELOW. IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE BY AN APPROVED METHOD. THE MANHOLE SHALL THEN BE RETESTED UNTIL A SATISFACTORY TEST IS OBTAINED.

TABLE 1 Minimum Test Times for Various Manhole Diameters
in Seconds

DEPTH (FT)	Diameter, in.									
	30	33	36	42	48	54	60	66	72	
	Time, in seconds									
8	11	12	14	17	20	23	26	29	33	
10	14	15	18	21	25	29	33	36	41	
12	17	18	21	25	30	35	39	43	49	
14	20	21	25	30	35	41	46	51	57	
16	22	24	29	34	40	46	52	58	67	
18	25	27	32	38	45	52	59	65	73	
20	28	30	35	42	50	53	65	72	81	
22	31	33	39	46	55	64	72	79	89	
24	33	36	42	51	59	64	78	87	97	
26	36	39	46	55	64	75	85	94	105	
28	39	42	49	59	69	81	91	101	113	
30	42	45	53	63	74	87	98	108	121	

REV	DATE	BY	REVISIONS



**TECHNICAL
STANDARDS
MANUAL**

**UTILITY TESTING AND
INSPECTION REQUIREMENTS
TECHNICAL STANDARDS MANUAL**
CITY OF LYNN HAVEN FLORIDA

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