



SECTION 02533

SANITARY SEWERS-AIR TEST GUIDELINES

PART 1. GENERAL

This section outlines the testing parameters to be used when conducting an air test on pipe used for sanitary sewers. See Section 02532, Sanitary Sewers (Gravity), for the actual procedures involved in conducting the test.

PART 2. PRODUCTS

NOT USED

PART 3. EXECUTION

3.1 TABLES

The following tables indicate the time that must elapse before the air pressure inside the pipe drops 0.5 psig. If the pressure inside the pipe drops 0.5 psig before the time has completely elapsed, the air loss rate shall be considered excessive and the section of pipe has failed the test.



**MINIMUM SPECIFIED TIME REQUIRED FOR A 0.5 PSIG PRESSURE DROP FOR
SIZE AND LENGTH OF PIPE INDICATED FOR $Q=0.0015 \text{ ft}^3/\text{min}$.**

1 Pipe Dia. (in.)	2 Min. Time (min.: sec.)	3 Length For Min. Time (ft.)	4 Time for Longer Length (sec.)	Specification Time for Length (L) Shown (min.:sec.)			
				100 ft.	150 ft.	200 ft.	250 ft.
4	1:53	597	.190 L	1:53	1:53	1:53	1:53
6	2:50	398	.427 L	2:50	2:50	2:50	2:50
8	3:47	298	.760 L	3:47	3:47	3:47	3:47
10	4:43	239	1.187 L	4:43	4:43	4:43	4:57
12	5:40	199	1.709 L	5:40	5:40	5:42	7:08
15	7:05	159	2.671 L	7:05	7:05	8:54	11:08
18	8:30	133	3.846 L	8:30	9:37	12:49	16:01
21	9:55	114	5.235 L	9:55	13:05	17:27	21:49
24	11:20	99	6.837 L	11:24	17:57	22:48	28:30
27	12:45	88	8.653 L	14:25	21:38	28:51	36:04
30	14:10	80	10.683 L	17:48	26:43	35:37	44:31
33	15:35	72	12.926 L	21:33	32:19	43:56	53:52
36	17:00	66	15.384 L	25:39	38:28	51:17	64:06

1 Pipe Dia. (in.)	2 Min. Time (min.: sec.)	3 Length For Min. Time (ft.)	4 Time for Longer Length (sec.)	Specification Time for Length (L) Shown (min.:sec.)			
				300 ft.	350 ft.	400 ft.	450 ft.
4	1:53	597	.190 L	1:53	1:53	1:53	1:53
6	2:50	398	.427 L	2:50	2:50	2:51	3:12
8	3:47	298	.760 L	3:48	4:26	5:04	5:42
10	4:43	239	1.187 L	5:56	6:55	7:54	8:54
12	5:40	199	1.709 L	8:33	9:58	11:24	12:50
15	7:05	159	2.671 L	13:21	15:35	17:48	20:02
18	8:30	133	3.846 L	19:14	22:26	25:38	28:51
21	9:55	114	5.235 L	26:11	30:32	34:54	39:16
24	11:20	99	6.837 L	34:11	39:53	45:35	51:17
27	12:45	88	8.653 L	43:16	50:30	57:42	64:54
30	14:10	80	10.683 L	53:25	62:19	71:13	80:07
33	15:35	72	12.926 L	64:38	75:24	86:10	96:57
36	17:00	66	15.384 L	76:55	89:44	102:34	115:23



3.2 AIR TEST DATA SHEET

Air test results shall be recorded on the following worksheet:

AIR TEST DATA SHEET

Owner (Name of city, district, etc.):	Test No.:
Identification of Pipe Installation (Job name, location, contract number, etc.):	

Field Test Data: (To be filled in by the inspector)										
Date:		Specified Maximum Pressure Drop:					psig			
Identification of Pipe Material Installed:										
Pipe Under Test				Specification Time	Field Test Operations Data					
Upstream MH sta #	Downstream MH sta #	Dia. D (in.)	Length L (ft.)	Refer to UNI-B-6 (min.:sec.)	Pressure Initially Raised to (psig)	Time Allowed for Pressure to Stabilize (min.)	Start Test Pressure (psig)	Stop Test Pressure (psig)	Elapsed Time (min.:sec.)	Pass or Fail (P or F)
Inspector's Name and Title:										
Signature of Inspector:										

If a section fails, the following items should be completed:	
Identify section(s) that failed:	
Leak (was) (was not) located. Method used:	
Description of leakage found:	
Description of corrective action taken:	
For test results after repair refer to Test No.:	Inspector:

END OF SECTION