



# **TECHNICAL BULLETIN**

## **PERMIT AND RESOURCE MANAGEMENT DEPARTMENT**

P-6X

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### ***Plumbing Air Test Requirements***

#### **INTRODUCTION**

To provide an accurate test in a reasonable time, the proper gauge should be used. The *pressure gauge* recording line test pressure must be sensitive and accurate enough to detect small leaks quickly. Gauges with small dials, with large pressure ranges or gauges that indicate pressure by means of an extended graduate rod (used to check tire pressure) are not sensitive enough to detect small leaks.

*Air testing* of gas lines must be done at various stages of construction; yard piping to the building, underfloor, close-in and final. At the underground and rough-in stages the lines should not be concealed. No fixture, appliances or connector valves should be installed when the lines are being tested. Gas appliance connector valves are designed to operate at a normal system pressure of about  $\frac{1}{3}$  PSI. The test pressures can damage the valve. Gas appliances are designed to operate at system pressures ranging from  $\frac{1}{6}$  to  $\frac{1}{3}$  PSI. **Exposure to the test pressure can ruin appliance control systems.**

#### **TECHNICAL DETAILS**

Tests which are performed utilizing dial gauges are limited to the following:

- I. Required pressure tests of 10 PSI or less shall be performed with gauges of  $\frac{1}{10}$  PSI incrementation or less.
- II. Required pressure tests exceeding 10 pounds but less than 100 PSI shall be performed with gauges of one PSI incrementation or less.
- III. Required pressure tests exceeding 100 PSI shall be performed with gauges incremented for 2 percent or less of the required test pressure.

Test gauges shall have a pressure range of NOT greater than twice the test applied.

## REFERENCES

1998 California Mechanical Code Sections 116.3; 1026; 1122; 1201.1.8; 1202.1.6;  
1208; 1305

1998 California Plumbing Code Sections 103.5.3; 319.0 through 319.4; 609.4; 712.3;  
1109.2.2; and 1204.3.2

Sonoma County Residential Construction Handbook Section 14

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