



Carson City Building Division

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GAS FIRED APPLIANCES: Gas Pipe Testing

Depending on the scope of work involved, all gas piping systems shall have a High Pressure Test. The High Pressure Test is conducted to verify that there are no leaks within the actual gas piping.

When are the tests required?

- All NEW installations shall have a High Pressure Test
- Replacement of existing gas fired appliances (water heaters, FAUs, etc), where new gas piping is not installed are not required to have a High Pressure Test

High Pressure Testing

1. The person performing the High Pressure Test shall contact the Carson City Building Division to schedule a "Gas Test" inspection.
2. The High Pressure Test shall be conducted prior to any fixture, appliance or shut-off valve has been installed, and prior to the gas piping being concealed. ('06 UPC 1214.1.5)
3. The gas piping shall be tested using air, CO², or nitrogen. Oxygen shall not be used as a test gas. ('06 UPC 1214.1.7)
4. The gas piping shall be tested at a pressure not less than one and one half (1½) times the operating pressure for the system. The test duration shall be based on a period of 30 (thirty) minutes for each 500-ft³ (five hundred cubic feet) of pipe volume, for a period not to exceed to 24 (twenty-four) hours. For single family dwellings, or systems with a pipe volume of 10-ft³ (ten cubic feet) or less, the test duration shall be a minimum of 10 (ten) minutes. ('06 UPC 1214.3.2 & 1214.3.3)
5. The test gauge shall not have a pressure range greater than twice the test pressure applied. ('06 UPC 319.4)

Example: If the gas piping is tested at 30 PSI (thirty pounds per square inch) pressure, the test gauge may not have a pressure range greater than 60 PSI (sixty pounds per square inch). On the other hand, if the gas piping is tested at 10 PSI (ten pounds per square inch) pressure, than the test gauge may not have a pressure range greater than 20 PSI (twenty pounds per square inch). Furthermore, if the system is tested at 20 PSI (twenty pounds per square inch) of pressure, and the test gauge has a maximum pressure range of 100 PSI (one hundred pounds per square inch), this would not be allowed, since the gauge used is greater than twice the test pressure.