

# PLUMBING AND MECHANICAL INTERPRETATION MANUAL



CODE: 2003 IRC, IPC, IFGC

**DATE:**

CODE REF: Chapter 20, Section 1305, 2803,

3/4/2004

SUBJECT: Water Heater Inspection Check List (page 1 of 2)

**Question:** What are the requirements for replacing a water heater?

**Answer:** Manufacturer Installation Requirements Must Be Meet Water and Code Requirements

Requirement	2000 International Residential Code Sections	2000 International Plumbing Code International Fuel Gas Code Code Section
1. Installation	IRC-2001.1	IPC-502.1
2. Location		IPC-501.4, IFGC-303
3. Prohibited Locations	IRC-2005.2	IPC-502.3, 502.4, IFGC-303.3
4. Installed in Garages	IRC-1307.3	IPC-502.2
5. Attic Installations	IRC-1305.1.2	IPC-502.5
6. Cold Water Line Valve	IRC-2903.9.2	IPC-503.1
7. Antisiphon Devices		IPC-504.1
8. Vacuum Relief Valve		IPC-504.2
9. Relief Valve	IRC-P2803	IPC-504.4-504.6.2
10. Relief Valve Discharge	IRC-P2803.6	IPC-504.6, 504.6.1
11. Relief Valve Discharge Line Material		IPC-504.6.2
12. Required Pan (See Interpretation)	IRC-P2801.5	IPC-504.7, 504.7.2
13. Pan Drain Size & Termination	IRC-P2801.5.1	IPC-504.7.1
14. Venting	IRC-G2425	IFGC-502
a. Vent Heights	IRC-G2426.5.3	IFGC-503.6.7
b. Vent Connectors	IRC-G2426.10	IFGC-503.10
c. Vent Material	IRC-G2426.3.4	IFGC-502.1, 503.7
d. Single Wall vent	IRC-G2426.7	IFGC-503.7, 503.7.7
15. Combustion Air	IRC-G2407	IFGC-304.8, 304.15
16. Unions	IRC (None Required)	IPC (None Required)
17. Thermal Expansion Control	IRC-P2903.4	IPC-607.3.2
18. Fuel Gas Shutoff Valves	IRC-G2419.1	IFGC-409.5
19. Appliance Connectors	IRC-2421	IFGC-403.4.3, 403.5.2, 411.0, 411.1.2,

- **2000 IRC- International Residential Code**
- **2000 IPC-International Plumbing Code**
- **2000 IFGC-International Fuel Gas Code**

SIGNATURE: *Lonnie Erwin,*

Chief Plumbing and Mechanical Inspector  
City of Dallas

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**All Waters Heaters:**

- Waters heaters installed in garage and attics must have the exposed water pipes insulated.
- Water Heater in garages in garage must have the drain pan piped to the floor or to the outside.
- Waters heaters "Temperature and Pressure" (T&P) relief valve discharged to the outside or to an approved location. Outside not more than two (2) feet or less than six (6) inches above ground or floor level.
- All water heaters **located in the garage** must be elevated eighteen (18) inches above the garage floor.
- All water heaters must be installed in a one and one half (1.5) inch deep pan with a one (1) inch drain to the outside or to an approved location.
  - **Exception:** (See Interpretation dated 11/05/2003)
- A readily accessible full-open valve shall be installed in the cold water supply pipe to each water heater at or near the water heater.
- Water heaters install in a closed water system (cold water supply that has a backflow device) must have a provisions for thermal expansion.

**Gas Water Heaters:**

- Upper and lower combustion air must be installed when the water heater is installed in a confined space. (**CONFINED SPACE. A room or space having a volume less than 50 cubic feet per 1,000 Btu/h (4.83 L/W) of the aggregate input rating of all fuel- burning appliances installed in that space. )**)
- A minimum of one (1) inch clearance from combustible material is required for all double wall vent pipe. (Manufacturer installation instructions)
- No single wall vent pipe may be installed in the attic.
- Equipment shutoff valve. Each appliance shall be provided with a shutoff valve separate from the appliance. The shutoff valve shall be located in the same room as the appliance, not further than 6 feet (1829 mm) from the appliance, and shall be installed upstream from the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with ready access. (**FULLWAY VALVE. A valve that in the full open position has an opening cross-sectional area equal to a minimum of 85 percent of the cross- sectional area of the connecting pipe)**)
- Approve appliance connector and sized to provide the total demand to the connected appliance. (See manufactures installation instructions.)

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