INTERPRETIVE MEMORANDUM 2008-1

To: LA Licensed Architects
LA Licensed Engineers
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From: Don Zeringue, Chief Architect

Approved by: Butch Browning, Fire Marshal

Date: October 1, 2008

REF: GAS FIRED FURNACES AND HOT WATER HEATERS NOT REQUIRING FIRE RESISTANT SEPARATION OR EXTINGUISHMENT PROTECTION


NFPA 101:8.7.1.1 Hazard Protection states that protection from any area having a degree of hazard greater than that normal to the general occupancy of the building or structure, shall be provided by one of the following means:

1. Enclose the area with a fire barrier, without windows, that has a 1-hour fire resistance rating.
2. Protect the area with automatic extinguishing systems.
3. Apply both of the above where the hazard is severe or where otherwise specified within the occupancy chapter.

Under the following circumstances, NFPA 101:8.7.1.1 shall not apply:

RESIDENTIAL TYPE/SIZE GAS-FIRED FURNACES AND WATER HEATERS:
Interpretive Memorandum 2000-13 exempts residential type/size gas-fired furnaces and water heaters from NFPA 101:8.7.1.1 Hazard Protection by stating: Residential type/size gas-fired appliances in Existing and New Facilities shall not be required to comply with NFPA 101:8.7.1.1 when the facility does not exceed 3125 sq. ft. based upon 8 foot ceiling (25,000 Cubic Feet in Volume) and when the facility is served by a single residential type/size gas-fired HVAC unit. Therefore, at a single residential type/size gas-fired hot water heater, or at a single residential type/size gas-fired laundry dryer, or at a single residential type/size gas-fired furnace, there shall be no requirement for protection, as it is the view of this office that this type/size appliance represents no more of a threat than one would expect in a one-or two-family dwelling, and represents a threat which is not greater than that normal to a general occupancy. For purposes of this interpretation, residential type/size gas-fired appliances shall be defined as follows:

- Gas-fired hot water heater: Under 50 gallons
- Gas-fired furnace: 5 Tons or less
- Gas-fired laundry dryer: Single unit
In facilities with multiple gas-fired devices (example: 2 gas-fired hot water heaters, or gas-fired furnace unit and a gas-fired water heater, or multiple gas-fired laundry dryers), the additional appliance(s) shall be required to be protected as per NFPA 101:8.7.1.1.

**GAS FIRED Furnaces AND Water HEATERS IN APARTMENTS:**
Interpretive Memorandum, dated March 14, 1995, exempts gas-fired furnaces and water heaters in apartments serving a single living unit from NFPA 101:8.7.1.1.

**ALL GAS FIRED FURNACES:**
Gas-fired furnaces satisfying the following are exempt from NFPA 101:8.7.1.1:
1. Combustion chamber shall be completely sealed with direct venting.
2. Shall provide 100% outdoor air for combustion.
3. Shall provide electronic ignition with no pilot light or other exposed flame.
4. Combustion air and exhaust pipe shall be plastic. Metal pipe is not permitted.

**ALL GAS FIRED WATER HEATERS:**
Gas-fired water heaters satisfying the following are exempt from NFPA 101:8.7.1.1:
1. Combustion chamber shall be completely sealed with direct venting.
2. Combustion air and exhaust pipe shall be plastic. Metal pipe is not permitted.

**ALL TANKLESS GAS FIRED WATER HEATERS:**
Gas-fired tankless water heaters satisfying the following are exempt from NFPA 101:8.7.1.1:
1. Shall provide electronic ignition with no pilot light or other exposed flame.
2. Combustion chamber shall be completely sealed with direct venting.

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