

## **2003 International Fuel Gas Code Overview of Changes**

The *2003 International Fuel Gas Code* (IFGC) consolidates all code changes from the fuel gas related installations into one convenient document. It is a compilation of fuel gas related text from the *International Mechanical Code*, the *International Plumbing Code*, and the *National Fuel Gas Code*. The code is designed to complement the family of International Codes, including the *International Mechanical Code*, the *International Plumbing Code*, the *International Fire Code*, and the *International Building Code*.

The IFGC regulates fuel gas distribution piping systems, gas-fired appliance installation and gas-fired appliance venting systems for structures other than one-and-two family dwellings. Fuel gas installations associated with one-and-two family dwellings are regulated by the *International Residential Code*.

### **Removed from the 2000 Edition**

107.3- Coordination of Inspections  
202- Some definitions

### **New in the 2003 Edition**

- 202 - Some definitions (for example: Hydrogen Generating Appliance, Stationary Fuel Cell Power Plant)
- 302.4 – Alterations to trusses (truss members shall not be cut, drilled, notched, spliced or otherwise altered without written approval from a design professional)
- 304.5 – Indoor combustion air (New methodology for indoor combustion air is based on the actual air-infiltration rate of the building or an accepted default rate)
- 304.5.2 – Known air-infiltration-rate method for combustion air (new formulas reflect recent research regarding the volume of space required per 1,000 btu/h input rating of the appliance)
- 304.5.3.2 – Combining spaces in different stories (for the first time, the IFGC addresses vertical coupling of spaces on different floor levels for the purposes of increasing indoor combustion air)
- 304.9 – Mechanical combustion air supply (Provides new method of providing combustion air specifically by mechanical means)
- 304.12- Protection from fumes and gases (New text addresses the concern of drawing combustion air from contaminated sources such as barbershops, beauty shops and other facilities where chemicals or flammable products, such as aerosol sprays, may be used. Appliance isolation or direct vent appliances could be required in some contaminated atmospheres)
- 305.1 – Manufacturer’s installation instructions vs. code requirements (New text added clarifying that the product listing and manufacture’s installation instructions prevail in the event that a code provision is less strict on the same subject, in other words, that which provides the greatest level of safety is the ruling provision)
- 306.3 – Appliances in attics (a new exception allows a much greater distance between the access opening and the appliance in an attic when the passageway is at least 6 feet in high – increase from 20 feet in length to 50 feet max.)
- 306.4 - Appliances under the floors (a new exception allows an unlimited distance between the opening and the appliance when the passageway is at least 6 feet high)
- 306.5 – Appliances on roofs or elevated structures (added text provides criteria for permanent ladders for equipment on roofs or elevated platforms)
- 306.6 – Guards (new text added addressing the length of required guardrails)
- 310 - Gas pipe bonding ( )
- Table 402.2 - Maximum gas demand (new table can be used to estimate the gas demand of appliances where the exact input rating is not known for purposes of gas pipe sizing)
- 402.4 – Gas pipe sizing tables and equations (new methodology for gas pipe sizing includes “branch length method” and “hybrid pressure systems”)
- 504 - Vent sizing tables (all of the vent sizing table have been reformatted to make them easier to identify)

and apply)

505.1.1- Commercial cooking appliances vented by exhaust hoods (new section clarifies that commercial cooking appliances must be vented)

605.1 - Vented gas fireplace heaters (new text addressing a new type of appliance – vented gas fireplace heaters are intended to function as room heaters in addition to being aesthetically pleasing)

633.1 - Stationary fuel cell power plants (new coverage is added for hydrogen fuel cell power plants)

Chapter 7 - Gaseous hydrogen fuel systems (new chapter has been added to provide coverage for the emerging hydrogen fuel industry. The new text covers hydrogen piping systems, hydrogen-fueled vehicle refueling stations, and hydrogen generating systems)

**Changes included in the 2003 Edition:**

404.7 – Above-ground outdoor piping (new provision requiring gas piping installed outdoors to be elevated at least 3 1/2 inches above grade or a roof surface)

Table 415.1- Support of piping (new provision for gas tubing support – 1 inch or larger)

504.2.3 - Vent offsets (new text provides for a 5% reduction of the venting capacity as listed in the venting tables for each 45 each degree elbow)