

Study Session

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2009 IFGC Sections 301 – 304 General Regulations I

OBJECTIVE: To develop an understanding of the general code provisions related to the listing and labeling of appliances, the types of fuel gas, the protection of the structure and the installation of appliances including combustion air requirements.

REFERENCE: Sections 301 – 304, 2009 *International Fuel Gas Code*

- KEY POINTS:**
- What is the basis for accepting appliances?
 - What procedures are used for labeling appliances?
 - Who must test a representative sample of the appliances being labeled?
 - What minimum qualifications apply to a testing agency?
 - What restrictions apply to cuts, notches and holes bored in engineered wood products?
 - What are the maximum sizes and location restrictions of notches and bored holes in solid wood joists and studs?
 - Under what conditions are alterations of trusses permitted?
 - In which locations are direct vent appliances permitted where other appliances generally are prohibited?
 - What locations require protection of appliances against vehicle impact? What is the minimum protection required?
 - Under what conditions is an appliance permitted to be installed in a closet?
 - What requirements apply to appliances installed in a pit or excavation?
 - A draft hood or a barometric regulator must be installed in what location?
 - What is the remedy when an exhaust fan interferes with the operation of an appliance?
 - What is the standard method used for calculating indoor combustion air?
 - How is the air infiltration rate of a structure used for calculating the amount of required combustion air?
 - How is the minimum size of a combustion air opening determined?
 - How are the combustion air requirements determined when obtaining combustion air from more than one story?
 - Where must combustion air openings be located?

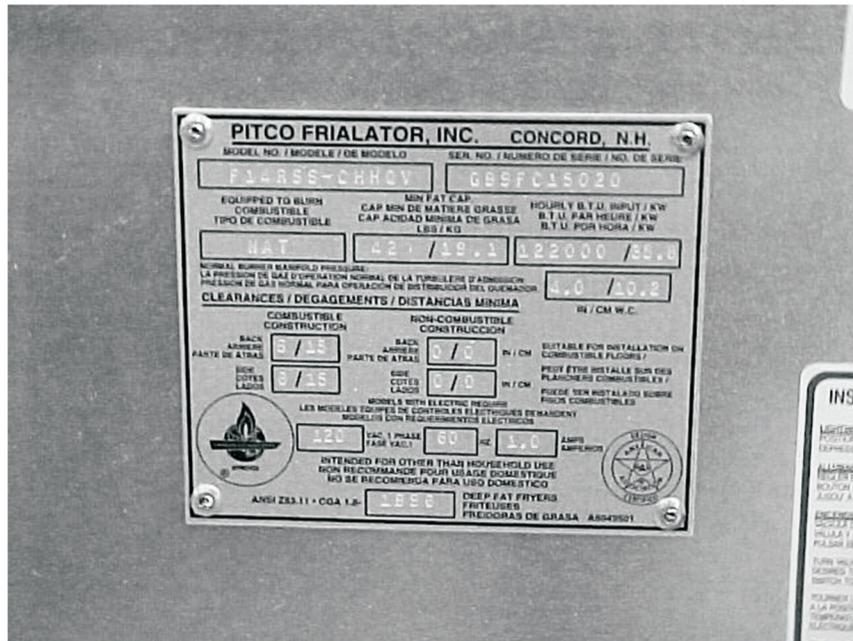
- Under what circumstances is a single opening permitted for obtaining combustion air?
- When is a mechanical combustion air system permitted?
- When is an appliance interlock system required for obtaining combustion air?
- How is the net free area determined for louvers and grilles that cover combustion air openings?
- What are the material and construction requirements for combustion air ducts?
- How many appliance enclosures may be served by a combustion air duct?
- Is a single duct permitted to serve both the upper and lower combustion air openings?
- What are the clearance requirements for combustion air intake openings?

Topic: Appliance Listing and Labeling
Reference: IFGC 301.3

Category: General Regulations
Subject: Approval and Installation

Code Text: *Appliances regulated by this code shall be listed and labeled for the application in which they are used unless otherwise approved in accordance with Section 105. The approval of unlisted appliances in accordance with Section 105 shall be based upon approved engineering evaluation.*

Discussion and Commentary: Listing and labeling of an appliance in accordance with the IFGC assures the code official that the appliance has been tested to operate safely for the intended use. Testing must be performed by an approved independent agency in accordance with the relevant standards. The approved testing agency is required to have appropriate equipment, employ experienced personnel and maintain detailed records of all tests performed. In addition to providing a reliable basis for approval, an appliance label contains important information related to safe installation and operation of the appliance.



The code official has the authority to approve unlisted appliances, but the approval must be based on an engineering evaluation. Such an evaluation may be based on testing by an approved independent testing agency.