

SOUTH CAROLINA EMERGENCY MODIFICATIONS

As authorized by Section 6-9-40(B)(1) of the South Carolina Code of Laws, 1976 as Amended, the South Carolina Building Codes Council has approved the following emergency modifications. Approved modifications under Section 6-9-40(B)(1) are mandatory for all local jurisdictions and must be incorporated into the applicable code.

Modification Number: E 2006-01.

Section: R323 Elevators and Platform Lifts, 2006 Edition of the International Residential Code.

Modification: To require the use of Section R323 in the 2006 Edition of the International Residential Code prior to its implementation date.

Reason: Elevators in one and two family dwellings are not inspected by the state. Improperly installed elevators in one and two family dwellings create an immediate risk of human injury or death.

Proponent: Building Codes Council Elevator Committee.

Effective Date: April 1, 2008.

Modification Number: E 2006-02.

Section: IFGC 406.7 and IRC G2417.7 Purging, 2006 Edition of the International Fuel Gas and Residential Codes.

Modification: The sections were deleted and replaced with new language.

The new sections now read: "IFGC 406.7 (IRC G2417.7) Purging requirements. The purging of piping shall be in accordance with Sections 406.7.1 through 406.7.3.

IFGC 406.7.1 (IRC G2417.7.1) Piping systems required to be purged outdoors. The purging of piping systems shall be in accordance with the provisions of Sections 406.7.1.1 through 406.7.1.4 where the piping system meets either of the following:

1. The design operating gas pressure is greater than 2 psig.
2. The piping being purged contains one or more sections of pipe or tubing greater than 2 inches in nominal size and exceeding the lengths in Table 406.7.1.1.

IFGC 406.7.1.1 (IRC G2417.7.1.1) Removal from service. Where existing gas piping is opened, the section that is opened shall be isolated from the gas supply and the line pressure vented in accordance with Section 406.7.1.3. Where gas piping meeting the criteria of Table 406.7.1.1 is removed from service, the residual fuel gas in the piping shall be displaced with an inert gas.

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IFGC Table 406.7.1.1 (IRC Table G2417.7.1.1)

Size and Length of Piping

Nominal Pipe Size (inches)	Length of Piping (feet)
2 ½	> 50
3	> 30
4	> 15
6	> 10
8 or larger	Any length

For SI units: 1 inch = 25.4mm; 1 ft =304.8mm.

IFGC 406.7.1.2 (IRC G2417.7.1.2) Placing in operation. Where gas piping containing air and meeting the criteria of Table 406.7.1.1 is placed in operation, the air in the piping shall first be displaced with an inert gas. The inert gas shall then be displaced with fuel gas in accordance with Section 406.7.1.3.

IFGC 406.7.1.3 (IRC G2417.7.1.3) Outdoor discharge of purged gases. The open end of a piping system being pressure vented or purged shall discharge directly to an outdoor location. Purging operations shall comply with all of the following requirements:

1. The point of discharge shall be controlled with a shutoff valve.
2. The point of discharge shall be located at least 10 feet from sources of ignition, at least 10 feet from building openings and at least 25 feet from mechanical air intake openings.
3. During discharge, the open point of discharge shall be continuously attended and monitored with a combustible gas indicator that complies with Section 406.7.1.4.
4. Purging operations introducing fuel gas shall be stopped when 90% fuel gas by volume is detected within the pipe.
5. Persons not involved in the purging operations shall be evacuated from all areas within 10 ft of the point of discharge.

IFGC 406.7.1.4 (IRC G2417.7.1.4) Combustible gas indicator. The combustible gas indicator used during purging operations shall be listed and shall be calibrated in accordance with the manufacturer's instructions and recommended schedule. The combustible gas indicator used for pipe discharge monitoring shall numerically display a volume scale from 0% to 100% with a resolution of not greater than 1% increments.

IFGC 406.7.2 (IRC G2417.7.2) Piping systems allowed to be purged indoors or outdoors. The purging of piping systems shall be in accordance with the provisions of Section 406.7.2.1 where the piping system meets both of the following:

1. The design operating gas pressure is 2 psig or less.
2. The piping being purged is constructed entirely from pipe or tubing of 2 inch nominal size or smaller, or larger size pipe or tubing with lengths shorter than specified in Table 406.7.1.1.

IFGC 406.7.2.1 (IRC G2417.2.1) Purging procedure. The piping system shall be purged in accordance with one or more of the following:

1. The piping shall be purged with fuel gas and shall discharge to the outdoors.

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2. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through an appliance burner not located in a combustion chamber. Such burner shall be provided with a continuous source of ignition.

3. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through a burner that has a continuous source of ignition and that is designed for such purpose.

4. The piping shall be purged with fuel gas that is discharged to the indoors or outdoors, and the point of discharge shall be monitored with a listed combustible gas detector in accordance with 406.7.2.2. Purging shall be stopped when fuel gas is detected.

5. The piping shall be purged by the gas supplier in accordance with written procedures.

IFGC 406.7.2.2 (IRC G2417.7.2.2) Combustible gas detector. The combustible gas detector used during purging operations shall be listed and shall be calibrated or tested in accordance with the manufacturer's instructions and recommended schedule. The combustible gas detector used for pipe discharge monitoring shall indicate the presence of fuel gas.

IFGC 406.7.3 (IRC G2417.7.3) Purging appliances and equipment. After the piping system has been placed in operation, appliances and equipment shall be purged before being placed into operation."

Reason: To coincide with action taken by the ANSI Z223.1 committee to issue an amendment to Section 8.3 of ANSI Z223.1 – 2009 National Fuel Gas Code which is the basis for the provisions found in Section 406.7 of the IFGC and Section G2417.7 of the IRC. The action taken by the Z223.1 committee is in response to the investigation performed by the U.S Chemical Safety Board of the natural gas explosion that occurred at the ConAgra Slim Jim production facility in Garner, North Carolina on June 9, 2009.

Proponent: Vaughn Wicker.

Effective Date: January 1, 2011.