# 248 CMR 5.00: BOARD OF STATE EXAMINERS OF PLUMBERS AND GAS FITTERS

#### 248 CMR 5.00: AMENDMENTS TO NFPA 54

### Section

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## 5.12: Modifications to Chapter 12, Venting of Appliances

(1) Delete sub-section 12.4.4.2 and replace with the following:

### 12.4.4.2 Venting via a damper or with a power means of exhaust

Where gas appliances or equipment are vented through a ventilating or exhaust system equipped with a damper or with a power means of exhaust, provisions shall be made to allow the flow of gas to the main burners only when the damper is open to a position to properly vent the appliance or equipment when the power means of exhaust is in operation. All gas lines serving such appliances or equipment shall be equipped with a solenoid valve which meets the following criteria:

- (a) The solenoid valve may not be bypassed.
- (b) The solenoid valve must be equipped with or connected to a manual reset device controlled by one of the following options:
  - 1. at least one audible hard wired carbon monoxide detector listed for the environment in which the appliance or equipment is being installed. This carbon monoxide detector must be interlocked with the solenoid valve such that it will close the solenoid valve if an unsafe level of carbon monoxide is reached in the room or the detector becomes defective.
  - 2. a draft proving switch which allows the solenoid valve to be open only when:

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- i. the equipped damper is 100 percent open; or,
- ii. the power means of exhaust is fully operational.
- (c) Notwithstanding the provisions of subsection 1.3 (Retroactivity), installers of replacement appliances or equipment used in connection with ventilating hoods or exhaust systems must ensure that the gas line(s) serving the replaced appliances or equipment meet the requirements of subsection 12.4.4.2.
- (2) Delete sub-section 12.5.2 and replace with the following:

Plastic Piping. The only Pplastic piping which may only be used for venting appliances shall be CPVC, polypropylene, and other pipes which have been Product-accepted for that purpose by the Boardwhen explicitly allowed by the appliance manufacturer's installation instructions.

(3) Replace sub-section 12.6.4.2, *Exception* with the following:

Exception: Chimneys which are tile lined or existing chimneys which do not meet the requirements of sub-section 12.6.4.2 may be utilized with the replacement or installation of a gas appliance, including a gas appliance replacing an oil appliance, when the following requirements are met:

- (a) The existing appliance must have operated with a non-positive vent static pressure that did not create condensation in the chimney;
- (b) Existing chimneys may not be utilized when replacing an atmospheric appliance with a fan assisted appliance; and
- (c) An existing chimney may only be utilized with one or multiple gas appliances if the interior area of the chimney is no greater than seven times the area of the smallest flue to be connected to that chimney.
- (4) Add a new sub-section 12.7.6.1 as follows:
  - 12.7.6.1 Marking of schedule 40 PVC and other non-metallic piping

Schedule 40 PVC and other non-metallic piping used for ventilation, make-up, or combustion air intake shall be labeled as follows:

- (a) Throughout the entire developed length:
  - 1. Labels must be placed every ten feet for exposed/visible piping; or
  - 2. Labels must be placed every three feet for concealed piping.