

CITY OF MILPITAS

Building & Safety Department
455 E. Calaveras Blvd.
Milpitas, CA 95035
408-586-3240
www.ci.milpitas.ca.gov



EXISTING BRICK, MASONRY & PRE-CAST FIREPLACE RECONSTRUCTION

1. PERMIT INFORMATION:

- The repair of existing fireplace chimneys and fireboxes that have cracking or voids requires a building permit.
- A Building Permit may be issued only to a State of California Licensed Contractor or the Homeowner.
- If the work is performed by the Homeowner personally or by his/her workers, and an inspection indicates the work cannot be completed satisfactorily, then a licensed contractor must perform the work.
- If the Homeowner hires workers, State Law requires the Homeowner to obtain Worker's Compensation Insurance. Proof of this insurance is required prior to inspection.

2. INSTALLATION REQUIREMENTS:

- Building Codes:** All work must comply with the 2010 California Building Code (CBC), 2010 California Residential Code (CRC), 2010 California Mechanical Code (CMC), 2010 California Electrical Code (CEC), 2010 California Plumbing Code (CPC), 2010 California Energy Code based upon 2008 Building Energy Efficiency Standards (CEnc) and 2011 Milpitas Municipal Code (MMC).
- Tear down the damaged section past the problem area. There must be a minimum of 24" of existing reinforcing bars exposed above the existing chimney to tie in the new work. If no reinforcing bars are found you must continue to tear down until reaching the foundation or until the existing rebar is exposed for 24". The void between the exterior and firebox must be completely filled prior to starting of "Shoulder" and "Chimney" reconstruction.
- If restarting from foundation drill 5/8" by 8" deep holes in existing foundation and install four (4) 1/2" diameter (#4) steel reinforcing bars. Rebar shall be installed with approved epoxy. Building Inspector shall review epoxy prior to installation.
- When 24" of existing reinforcing bars are exposed call for an inspection prior to continuing.
- After approval by the Building Inspector, rebuild the fireplace in accordance with CBC Chapter 21.

3. SMOKE ALARMS, CARBON MONOXIDE ALARMS & SPARK ARRESTER:

- In single family residences and multi-family (townhomes, condominiums, and apartments), installation of smoke detectors, carbon dioxide alarms and spark arrestors on all chimneys is required prior to the final inspection as follows:

- **Smoke Alarms:** When the value of the work exceeds \$1,000, smoke alarms approved and listed by the State Fire Marshal must be installed if they do not already exist in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms, and on each additional story of the dwelling. In existing buildings, alarms may be solely battery operated where alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes. Where more than one smoke alarm is required to be installed, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit, except where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Refer to CRC Section R314 and the "Smoke Alarms" handout for more additional information.
- **Carbon Monoxide Alarms:** When the value of the work exceeds \$1,000, an approved and listed carbon monoxide alarm shall be installed if they do not already exist in existing dwellings or sleeping units that have attached garages or fuel-burning appliances as follows: outside each separate dwelling unit sleeping area in the immediate vicinity of bedrooms and on every level of dwelling unit. In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space. Where more than one carbon monoxide alarm is required to be installed, the alarms shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit, except where repairs do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space, and no previous method for interconnection existed. See CRC Section R315 for additional information.
- **Spark arrester:** When the value of the work exceeds \$1,000, a spark arrester must be installed on fireplace chimneys if one does not already exist per MMC Section II-3-2.06. Spark arresters shall be constructed in conformance with CRC Section 1003.9.1.

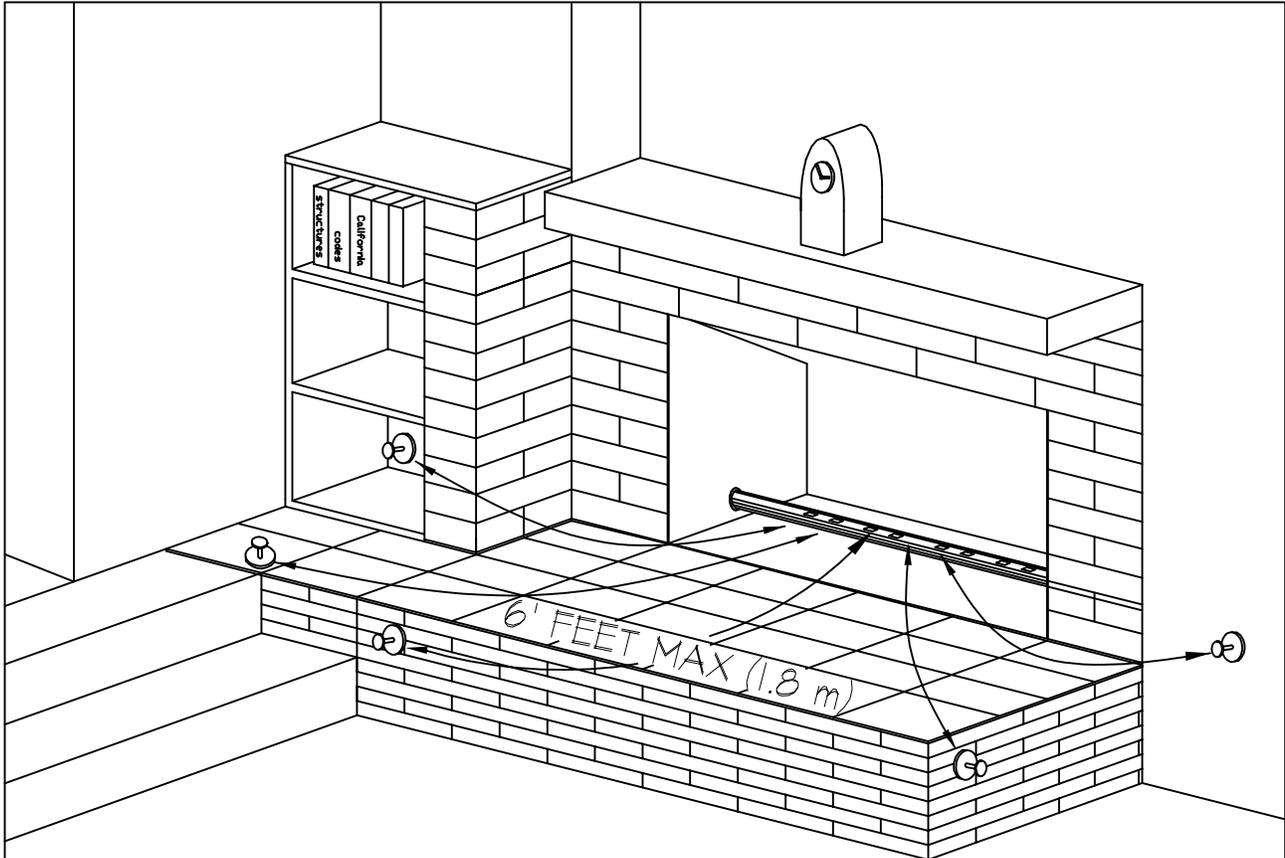
- If access to the interior of the dwelling by the Building Inspector cannot be scheduled for inspection of the smoke detectors and carbon dioxide alarms, Smoke Alarm, Carbon Dioxide Alarm and Spark Arrester Certificate can be filled out by the property owner and provided to the inspector prior to final inspection.

4. ENERGY REQUIREMENTS:

- Fireplaces must comply with the minimum equipment efficiencies listed on the attached MF-1R form.

5. INSPECTION PROCEDURES:

- At least two inspections are required. The first inspection should be scheduled when the new steel and straps are installed. The final inspection should be scheduled after all work is complete. Permits expire 180 days after the last passed inspection. For each inspection, the Permit Card and the Approved Job Copy of the Drawings (if any) must be presented to the inspector. Permits expire 180 days after issuance or last inspection passed, whichever is the latest.



Flanged connection shall be provided downstream from this valve to permit removal of controls. Shut-off valves serving decorative gas appliances shall be permitted to be installed in fireplaces if listed for such use. [NFPA 54:9.6.4.1]

REFER TO CPC 1212.4

Gas utilization equipment, such as gas fire place, connected to a piping system shall have accessible, approved manual shut-off valve with a non-displaceable valve member, or a listed gas convenience outlet installed within 6' of the equipment it serves.

REV.	DATE	BY:	SCALE:
			N.T.S
			DATE:
			APRIL 2009
			DRAWN BY:
			HR

City of Milpitas
 BUILDING AND SAFETY DEPARTMENT
 GAS SHUT-OFF / FIREPLACE

SHEET
1
 OF 1 SHEETS

Mandatory Measures Summary		Fireplace Only	MF-1R
Residential			
Site Address:	Enforcement Agency: City of Milpitas		Date:

Fireplaces, Decorative Gas Appliances and Gas Log Measures:
§150(e)1A: Masonry or factory-built fireplaces have a closable metal or glass door covering the entire opening of the firebox.
§150(e)1B: Masonry or factory-built fireplaces have a combustion outside air intake, which is at least six square inches in area and is equipped with a with a readily accessible, operable, and tight-fitting damper and or a combustion-air control device.
§150(e)2: Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.

CITY OF MILPITAS

Building & Safety Department
455 E. Calaveras Blvd.
Milpitas, CA 95035
408-586-3240
www.ci.milpitas.ca.gov



SMOKE ALARM, CARBON MONOXIDE and SPARK ARRESTER CERTIFICATE

SMOKE ALARMS, CARBON MONOXIDE ALARMS & SPARK ARRESTERS

When building permits are issued for additions, alterations or repairs to residential buildings and the value of the work exceeds \$1,000, the installation of smoke alarms, carbon monoxide alarms and a spark arrester on fireplace chimneys, if any, must be installed for safety of the occupants, if they do not already exist.

Smoke alarms approved and listed by the State Fire Marshal must be installed in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms, and on each additional story of the dwelling. In existing buildings, alarms may be solely battery operated where alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes. Where more than one smoke alarm is required to be installed, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit, except where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Refer to CRC Section R314 and the "Smoke Alarms" handout for more additional information.

An approved and listed carbon monoxide alarm shall be installed in existing dwellings or sleeping units that have attached garages or fuel-burning appliances as follows: outside each separate dwelling unit sleeping area in the immediate vicinity of bedrooms and on every level of dwelling unit. In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space. Where more than one carbon monoxide alarm is required to be installed, the alarms shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit, except where repairs do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space, and no previous method for interconnection existed. See CRC Section R315 for additional information.

A spark arrester must be installed on fireplace chimneys if one does not already exist per MMC Section II-3-2.06. Spark arresters shall be constructed in conformance with CRC Section 1003.9.1.

These safety devices must be installed by the time a final inspection is requested for your project.

*** CERTIFICATION FORM ***

I understand the above requirements and certify that we now have smoke alarms and carbon monoxide alarms installed that comply. If we have a fireplace, we also have installed a spark arrester on the flu outlet. We agree to comply with the CRC and MMC in regards to smoke alarms, carbon monoxide alarms and fireplace chimney spark arresters.

HOMEOWNERS NAME (please print): _____

ADDRESS: _____

SIGNATURE: _____

DATE: _____ PERMIT NO. _____

NOTE: This Certification is only used when normal access to the interior of the dwelling by the City of Milpitas Building Inspector is not achieved during the course of project construction. It is normally used for projects such as re-roofing, re-siding, patio covers, swimming pools and the like.