



Fireplace & Chimney Inspection Report

Inspection Date:

Prepared For:

Prepared By:

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Inspector:

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Report Overview

THE HOUSE IN PERSPECTIVE

This is a well built home that has been well maintained. This house is a rancher (1 level, with an attic and basement). The masonry fireplace is located in the basement. The brick chimney servicing this fireplace has one lined (clay tile) flue.

GENERAL DISCLAIMER

Customer understands that the Inspector may be required to walk on the roof to gain access to the chimney and adjacent areas. The Inspector will use reasonable care to avoid damage to the roof. However, damage to the roof may occur. Inspector will not be responsible for any damaged or repair whatsoever to the roof as a result of this inspection. I do not walk on slate roofs.

Customer understands the Inspector cannot obtain access to certain portions of the fireplace and certain enclosed adjacent areas. The Inspector makes no representations express or implied and will not be responsible in any way whatsoever for deficiencies, improper installation, or improper equipment in inaccessible areas.

If this inspection takes place during the resale or transaction of property, then we recommend that all repair suggestions we make within this report should be completed well before the close of escrow, by a licensed specialists, who may identify additional defects or recommend some upgraded that could affect your evaluation of the property.

The findings listed within this report are based on the condition of the appliance system at the time of this inspection and may be limited due to access or type of inspection requested.

CARBON MONOXIDE DETECTORS

Installation and operation of a carbon monoxide detector is recommended. It is very important to remember that CO alarm detectors available for consumer purchase and listed under UL 2034 may not be the protection needed by certain individuals with existing health problems or conditions. A low level monitor (typically costing \$100-200) may be preferable.

As a side note, CO is similar, in molecular weight to air (CO = 28.01 and air is about 28.8). Install your detector near the appliance and don't be concerned about the location (ceiling or wall) of the detector.

WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection. The estimated outside temperature was 60 degrees F. Weather conditions leading up to the inspection have been relatively dry.

Appliance #1

Description of Appliance

- 1.1 – Masonry Fireplace
- 1.2 – Flue is Lined with Clay Tile Liner

Scope Type of Inspection

- 1.3 – Complete flue inspection with Woehler VisPro chimney camera
- 1.4 – Visual inspection of fireplace
- 1.5 – Roof-top inspection

Location

Family Room

Calculations

1.1 – The cross-sectional area of the fireplace opening size is 1020 square inches (7.1 square feet). The actual dimensions are 34” wide and 30” high.

1.2 – The cross-sectional area of the square chimney flue is 121 square inches (11”x11” ID). The flue is properly sized (should be at least 102 square inches) in relation to the firebox opening (should be at least 1/10th of the firebox opening). The fireplace shows no evidence smoke spillage (staining on the front of the fireplace).

1.3 – The ideal dimensions of a single-face fireplace have been determined by experience to be 36” wide by 26” high by 20” deep. The width of this fireplace is 34”, the height of the firebox is 30” and the depth of the firebox is 22”. The fireplace is properly sized (slightly deeper to compensate for its tall height).

Masonry Chimney – Exterior (Observed from Roof)

2.0 – The concrete crown for the masonry chimney is good condition. Minor deterioration was noted to the top section of clay tile liner. Improvement should be coordinated with future repairs.



2.1 – A good quality chimney cap (including vermin screen) is installed. Consider replacing the galvanized cap with a stainless steel cap if rust stains are noted.

2.2 – Chimneys should be at least three (3) feet above the roof (which it is) and at least two (2) feet above anything that is within ten feet. This chimney is 3 feet above the roof but is only 18” above obstructions within 10 feet. Improvement should be coordinated with future repairs.

Masonry Fireplace Inspection (Visual Inspection – from basement recreation room)

3.0 – The rear wall of the masonry firebox shows evidence of moisture infiltration (slight efflorescence). The mortar is sound. The flashings, crown and cap are in good condition. The firebox should be monitored for evidence of further moisture infiltration.



3.1 – The fireplace has been properly designed and constructed. The smoke chamber is of non-standard design, the top of the smoke chamber is flat. Normally, smoke chambers have tops that are sloped (to direct smoke) toward the flue. My concern is that this configuration will impact the ability of this fireplace to “draw” properly.

Masonry Chimney (Visual Inspection – from the attic)

4.0 – The roof sheathing near the chimney (observed from inside the attic) does not have sufficient clearance (it is touching the chimney). No evidence of heat related deterioration was noted. This should be evaluated when the insulated metal liner is installed.

4.1 – The sheathing near the chimney is not well supported, my concern is that movement of the sheathing will lead to leakage (moisture infiltration). Slight staining was noted (unsure if the moisture causing the staining is active – it may have been sufficiently addressed at time of last re-roofing). The sheathing should be supported from underneath.

Masonry Chimney – Clay Tile Flue Liner (chimney scan)

5.0 – The scan of the fireplace revealed several gaps between sections of clay tile flue liner. Improvement will involve installation of a flexible metal liner system. The liner should be appropriately insulated.



Conclusion – Unsafe for Operation - Improvements Recommended

Based on the finding of this visual investigation, the video chimney scan, and the opinion of this inspector, *this fireplace is unsafe for operation*. Improvement will involve installation of a flexible metal liner system. The liner should be appropriately insulated.