



Job #26707746

Masonry Fireplace Inspection

Customer Information

Customer Name

Tom Poole

Customer Address

18 Southern Avenue, Rensselaer, NY 12144 USA

Todays Date

2022-12-14

Employee name

Jared Bender

Picture of Home

ATTENTION:

As a certified and active member of the Chimney Safety Institute of America, National Fireplace Institute, and the National Chimney Sweep Guild, Chimney Heroes operates in accordance with the industry's best practices. The following documents are used as resources: International Residential Code, the National Fire Protection Agency's 211 Standard for Chimneys, Fireplace, Vents, and Solid Fuel Burning Appliances, local building codes and manufacturer's installation instructions. A thorough understanding of these documents is essential for detecting potential fire and safety hazards, as well as providing appropriate repair recommendations.



Masonry Fireplace Inspection

Level of Inspection

Level 1

Number of Fireplaces

1



Picture of Fireplace



Dimensions of Fireplace

H x W x D

H 23.5' FW 32' BW 28 D 22'

Trim to Fireplace, height of floor of firebox to hearth extension (if not level)

RS x LS x T - x"

RS 20.5' x LS 20.25' x T 19.25'

Gas Line Present?

Not Present

Hearth/Hearth Extension Clearances

Are visible hearth and hearth extension clearance to combustibles met?

- ✓ Mantel, trim, hearth and hearth extension clearances meet current code standards.



Firebox

Is the interior of the fireplace in sound condition?

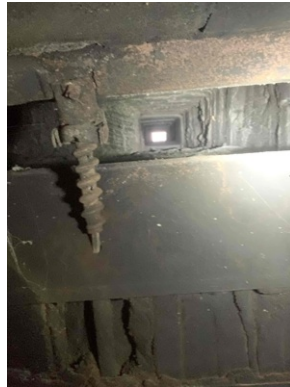
- ✓ Deteriorated mortar - The firebox has deteriorated mortar joints. Firebrick are to be laid with a refractory mortar.
- ✓ Gaps / cracks in mortar - There are gaps in the mortar joints. The smallest gap in the masonry can create a pathway for rogue flue gases to be drawn into areas of the structure that could pose a potential fire or carbon monoxide threat. Fireboxes are to be laid with refractory mortar that can withstand heat and moisture.



Damper Type

What type of damper is currently present?

Throat Damper



Damper Condition

Current condition of Damper

☒ Damper appears to be in normal operating condition



Smoke Chamber Condition

What is the condition of the smoke chamber?

- ✓ The smoke chamber is unparged which does not meet current code. An unparged smoke chamber can increase the residency time of smoke and flue gasses which can lead to smoke smells, an increase in potentially flammable creosote build up and allow dangerous flue gasses to escape the structure. NFPA 211 11.2.1.13 The inner surfaces of the smoke chamber shall be parge coated smooth, with an insulating refractory mortar, and not inclined more than 45 degrees from vertical.
- ✓ The smoke chamber is not properly sized. The smoke chamber should not be taller than the width of the masonry firebox. NFPA 211 standards 11.2.1.11 The smoke chamber height shall not be greater than the inside width of the fireplace room opening. 11.2.1.12 The smoke chamber depth shall not be greater than the depth of the fireplace fire chamber. The smoke chamber will need to be hand parged to correct parameters.



Lining type

What type of lining is currently present?

- ✓ Terra Cotta Clay Tile



Liner size

Size of liner

8x13

Actual Flue ID"

Actual inside dimensions

7' x 11.5'

Flue Condition

Are there cracks, gaps or other issues present with the flue tiles? If liner is present, are there any obvious signs of deterioration?

- ✓ Missing mortar - The mortar joints between the flue tiles are no longer intact. These missing or deteriorated mortar joints prevent the flue tiles from properly conveying the byproducts of

combustion to the exterior of the home. Flammable creosote can now store in uncontained areas of the flue that can no longer be swept which increases the potential of a high heat event such as a chimney fire. NFPA 211 14.9* Damaged or Deteriorated Liners. If the flue liner in a chimney has softened, cracked, or otherwise deteriorated so that it no longer has the continued ability to contain the products of combustion (i.e., heat, moisture, creosote, and gases), the liner shall be either removed and replaced, repaired, or relined with a listed liner system or other approved material that will resist corrosion, softening, or cracking from flue gases at temperatures appropriate to the class of chimney service.

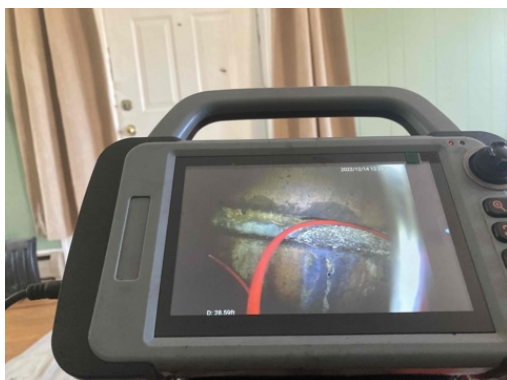
✔ Vertical crack - There are tiles that have vertical cracks. Vertical cracks are an indication that there has been a sudden rapid heating of the tile. This rapid heating causes thermal shock to the tile. Thermal shock causes the inside of the tile to heat more rapidly than the exterior of the tile. When this occurs, the tile will crack vertically. This flue tile can no longer perform its intended function. The chimney must be relined. NFPA 211 14.9* Damaged or Deteriorated Liners. If the flue liner in a chimney has softened, cracked, or otherwise deteriorated so that it no longer has the continued ability to contain the products of combustion (i.e., heat, moisture, creosote, and gases), the liner shall be either removed and replaced, repaired, or relined with a listed liner system or other approved material that will resist corrosion, softening, or cracking from flue gases at temperatures appropriate to the class of chimney service.

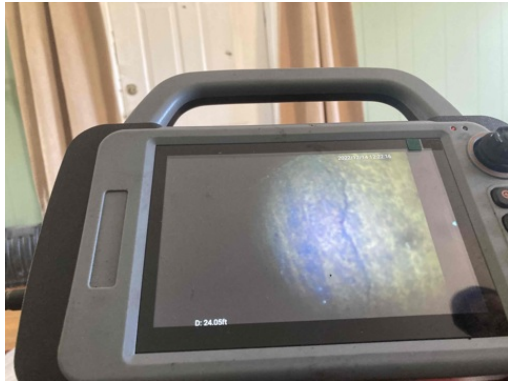






Picture(s) of chimney flue







Height of chimney

25"

Sweep/Status

Flue Swept; Free and clear of Blockages

Damper Status

Left Closed

After pictures

Summary

Does this chimney pass inspection?

(According to NFPA 211 standard, IRC codes, and manufacturer instructions if available at time of inspection)

☒ NO - explained below

Inspection Summary

Found smoke chamber to be oversized and unparged
Cracks and gaps in flue tile

Recommendations

- (1) parge smoke chamber for smooth transition for flue gasses
- (2) resizes smoke chamber for optimal draft
- (3) liner for fireplace or install a wood stove insert

Sign Offs

ANNUAL INSPECTION: The National Fire Protection Association (NFPA) recommends that an annual inspection of all Chimneys, Vents, & Fireplaces to be performed.

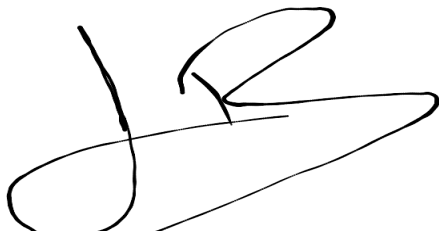
Technicians Recommendation:

When should we return based on your system.
ASAP for repairs

Forward Scheduled Month

Guaranteed Discount:
The office will call and set up your appointment time.
N/A - Unit requires repair

**Tech
Signature.**



2022-12-14

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