

Fireplace Inspection Report

LOCATED AT: 548 N Hartley St West Covina, California 91790

PREPARED EXCLUSIVELY FOR: Anne Gayle Jardine

INSPECTED ON: Wednesday, May 22, 2024



Inspector, Braeden Carl Chimney Doctor

Wednesday, May 22, 2024 Anne Gayle Jardine 548 N Hartley St West Covina, California 91790

Dear Anne Gayle Jardine,

We have enclosed the report for the property inspection we conducted for you on Wednesday, May 22, 2024 at:

548 N Hartley St West Covina, California 91790

Our report is designed to be clear, easy to understand, and helpful. Please take the time to review it carefully. If there is anything you would like us to explain, or if there is other information you would like, please feel free to call us. We would be happy to answer any questions you may have.

We thank you for the opportunity to be of service to you.

Sincerely,

Inspector, Braeden Carl Chimney Doctor





Receipt 548 N Hartley St West Covina, California 91790

solo2mom@aol.com

Client: Anne Gayle Jardine

Receipt Number: 372767046

Receipt Date: Wednesday, May 22, 2024

Quantity Description		Unit Price	Amount
1	Base Amount	\$350.00	\$350.00
		Subtotal: Check:	\$350.00 -\$350.00

Change Due

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GENERAL NOTES

An inspection was performed on the fireplace at the above address on Wednesday, May 22, 2024.

This is a one-story masonry structure and it may be reinforced with steel rebar based on its age and appearance.

FIREPLACE

THE FINDINGS ARE AS FOLLOWS

The fireplace is a masonry wood-burning structure, built on site with no gas line installed. It has an opening of approximately 32.75 inches wide by 26.25 inches tall.





FIREBOX

The breastplate surface is cracked and deteriorated; this should be repaired with a fire rated mortar. The breastplate is directly above the firebox opening and helps to direct smoke and gases, along with protecting the backside of the facing materials from high heat in the fireplace.



Breast deteriorated

There is a crack along the back firebox wall - this should be repaired with a refractory (heat resistant) mortar.



Cracks in firebox back wall

There are smoke stains noted outside the firebox surfaces. This is often an indication that the chimney flue is not drafting properly (smoke or gas is not going up the flue properly and may enter into the living space when the fireplace is in use). It is recommended to use the fireplace during different climate conditions to determine if the fireplace is drafting correctly and if not, an appropriate remedy could be to install a smoke guard at the top of the fireplace opening. There are other more extensive remedies as well, should they be needed.



Smoke stains near outside of firebox

There were gaps noted between the bricks in the back wall. This should be repaired with a heat rated mortar.



Slight gap in back wall

There is efflorescence (white mineral deposits typically caused by moisture) noted on the firebox wallsthis is an indication of moisture intrusion into the firebox. The source of moisture should be isolated and then addressed.



Efflorescence in firebox

There are gaps in between the bricks noted next to the breastplate- these gaps should be sealed with a high temperature mortar.





Gap next to breast

Gap next to breast

The back wall of the firebox is not 8 inches above the top of the fireplace opening. Ideally, the firebox wall would be higher, but raising the wall in this case would restrict the throat area and I would not recommend raising it as it could inhibit drafting. It is recommended to use the fireplace during different climate conditions to determine if the fireplace is drafting correctly and if not, an appropriate remedy could be to install a smoke guard at the top of the fireplace opening. There are other more extensive remedies as well, should they be needed.



Back wall not 8 inches high



Back wall not 8 inches high

I was informed by the brother in law and sister of the previous owner that he was told not to use the fireplace due to a leak. The only indication of leaking or moisture entry other than efflorescence seen in the firebox and flue area was a moisture stain in the ceiling above the chimney in the living room. I was also informed that the roof was redone in 2016. It is possible that this problem has since been solved by the new roof installation. I did not see any other indication of moisture entry. Refer to a roof contractor regarding leaks in the roof.



Moisture stain above firebox

DAMPER

A damper is present and functioning correctly at this time.



Damper present

GAS SYSTEM

It is advised to install a carbon monoxide detector near the fireplace because one of the by-products of fire is carbon monoxide.

FACING / SURROUND

There are gaps where the surround meets the firebox at the opening- these gaps can allow heat to pass through it and behind the surround. The gaps around the fireplace opening should be sealed with a heat rated mortar or sealant.



Approximate location of surround gaps



Gap in surround



Gap in surround

MANTEL

There is a gap behind the mantel materials- the gap can draw heat into this area and is called a second chimney effect. This area should be sealed fully.





Second chimney effect

Second chimney effect

HEARTH EXTENSION

The temporary wood form boards are still below the hearth extension and this is not to code- these should be removed and replaced with non-combustible supports. Heat can transfer from the firebox floor to the wood and pose a fire risk.



Wood form boards under hearth extension

The hearth extension is deficient in depth, the sides of the hearth extension are angled and therefore not deep enough. This would be addressed by a finishing contractor. At the time of correction, the contractor should ensure that the proper clearances and insulating materials are provided for per the fireplace manufacturer requirements.



Hearth extension present



Hearth extension depth as measured 12 inches from the left of the firebox opening



Hearth extension depth as measured 12 inches from the right of the firebox opening

SCREEN

A fireplace screen isn't present- it is advised to install a proper screen to prevent sparks from escaping the fireplace and for restricted physical access.

CHIMNEY

This is a one-story masonry structure and it may be reinforced with steel rebar based on its age and appearance.





There wasn't significant movement in the chimney when pressure was applied to it.

The chimney is approximately 1/2 a foot too short as it does not extend 2 feet higher than the any part of the structure within 10 feet of it, as required by code. The flue can be extended with a fabricated metal flue extension or by increasing the height of the chimney, with full permit and inspection.



Chimney slightly too short

CHASE

There isn't a catwalk platform in the attic to get to the chimney and there are low clearances, so the chimney was viewed in the attic from a distance and there may be undetected flaws in this area.

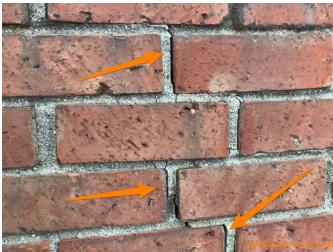


No catwalk and low clearances in attic space

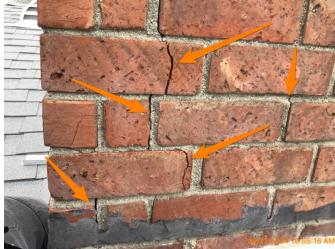
There is cracking in the masonry above the roof line that appears to be caused by rebar rust and expansion underneath the surface. This is an ongoing process and can continue even in spite of repairs being done. So at a minimum repairs should be done by repairing and sealing the cracks, including a water repellant to mitigate continued rusting and expansion cracks. And then monitor the condition of the masonry and repair/replace as needed.



Exterior cracks



Exterior cracks



Exterior cracks



Exterior cracks

FLUE

The inside of the chimney is lined with terra cotta clay liners. It has an oval opening of approximately 15.5 inches by 8 inches.



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Looking down the flue

There is a lot of efflorescence (white mineral deposits typically caused by moisture) noted to the flue walls, this is an indication of moisture intrusion into the interior of the chimney. This is most likely caused by moisture entering the top of the flue.



Efflorescence in flue



Efflorescence in flue

There is missing and deteriorated grout between the flue liners. This affects the integrity of the surfaces against heat transfer to adjacent materials and normally should be addressed with an approved recoating or relining procedure and materials.



Missing mortar between flue joints

SMOKE CHAMBER

The mortar surfaces along the inner walls of the smoke chamber are missing in a few areas - a proper coating should be applied to the smoke chamber surfaces for smooth surfaces to help the fireplace draft correctly and to prevent heat transfer to adjacent materials to the chimney. It is recommended to perform a proper recoating with approved materials.



Smoke chamber surfaces worn



Smoke chamber surfaces worn

There is debris noted on the smoke shelf - it should be cleaned off as it can affect the proper ventilation of the fireplace or cause a chimney fire.



Derbis on smoke shelf

SPARK ARRESTER

The chimney and flue don't have a rain cap and spark arrestor, this is needed to prevent rain from entering the flue and sparks from escaping the chimney. A spark arrester and rain cap should be installed.



Spark arrester rain cap missing

EXTERIOR CONDITION

The concrete crown is cracked and worn and does not extend to the edges of the chimney. Proper repairs to the crown should be made to help prevent water saturation of the upper materials.



Crown cracked



Crown does not extend to the edges



Crown does not extend to the edges

Some of the mortar between the exterior masonry is missing. It is recommended to point the deteriorated mortar joints.



Deteriorated grout above roof

FLASHING

A cricket has not been installed at the roof flashing of the chimney - this is typically required to help divert water around the chimney. It is recommended to consult with a licensed roof contractor for further information and directions regarding the roof flashings.



No cricket

CHIMNEY BASE/FOUNDATION

Some of the grout between the exterior masonry is deteriorated. It is recommended to point the deteriorated grout joints.



Deteriorated grout at base of chimney

SUMMARY

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The indicated repairs should be performed before the fireplace is used for fire safety.

You should anticipate estimates in the range of \$9,000 - \$12,000 for the repairs listed in this report, this would not include finish materials around the fireplace. There are areas and aspects of the fireplace and chimney that are not viewable without opening or cleaning surfaces and these areas were not viewed or evaluated. During repairs, if other flaws are observed they should be corrected as well.

The servicing and repairs should be done during escrow to allow for changes to the anticipated scope of work. In the event of a seismic or high wind event, it is prudent and highly recommended that the fireplace be re-inspected prior to any further use.

The above prices are provided as a guideline and could well vary from a contractor's estimate intending to perform the scope of work and/or the final costs.

Thank you for using our services.

Respectfully,

Braeden Carl