

Standard Operating Procedure Level 2 Inspection Factory-Built Fireplace

This Standard Operating Procedure (SOP) is promulgated by the Chimney Safety Institute of America (CSIA) solely as general guidance for chimney sweep professionals. Since all operations are different and since it is not possible to foresee all potential hazards, this SOP must be tailored to fit the needs of each particular operation. CSIA does not warrant in any way whatsoever that adhering to this SOP will reveal every possible defect in an appliance, fireplace, venting system or chimney. Accordingly, CSIA makes no guarantee, nor does it assume any responsibility, for any damage, claim, or legal action that may arise in connection with a chimney sweep professional's use of this SOP.

Introduction

NFPA 211 defines the inspection requirements for fireplaces and chimneys, and has defined three levels of inspection. A Level Two inspection is recommended when conditions of use are changing, such as adding a new appliance, or replacing an existing appliance with a dissimilar one (different fuel, efficiency or type) or if a Level 1 inspection is not sufficient to determine serviceability of the venting system. A Level 2 inspection is also recommended when the property is being sold, if you are planning on lining or relining the chimney or if there has been a building or chimney fire, weather or seismic event or any operating malfunction likely to have caused damage to the chimney. A Level Two inspection includes everything defined from the Level 1 inspection, with numerous additions. Review the CSIA SOP for Level One Inspection of a Factory-Built Fireplace.

A Level Two inspection should include all *Accessible* portions of the fireplace, chimney and connected appliance(s). *Access* could require the use of common tools to open or move panels or doors, and may require the use of ladders. A Level 2 inspection will require that you go on the roof to investigate the chimney and inspect the system within accessible attics, basements and crawl spaces. Inspectors should consider their personal safety prior to entering these areas (standing water, heat, confining spaces, etc.) If you are not able to access these areas, or the client requests that you don't, be sure to note those exceptions in your report and provide a reason.

In this level of inspection the primary focus is to determine if the chimney is suitable for continued use under new or changed conditions. Video scanning (or similar inspection) of the chimney interior is required during a Level Two inspection. If it is not possible to video scan the chimney interior due to size or multiple offsets, be sure to note that in your report. When performing a Level Two inspection, you should request a copy of the fireplace installation manual from the building owner or occupant. If they are not available you should note that in your report.

Begin the inspection at the fireplace

Record the fireplace make and model. This information is usually found on a tag (data plate) near the front side of the fireplace and behind the screen. If the data plate is absent or illegible make a note of that in your report. If there is a combustion air supply, make sure it operates properly and is not blocked. The manufacturers'

installation instructions will provide clearance information from the fireplace opening to the sides and describe how the finishing material is to be installed around the fireplace. In many cases the clearances from the fireplace opening to the trim and mantle are the same as a masonry fireplace. If the fireplace is equipped with glass doors, evaluate them to determine if they are an approved type for fireplace. Inspect the fireplace hearth for condition and sizing.

Attic inspection

Once in the attic it should be possible to determine if clearances are met on interior installations as the chimney passes through the floor and confirm it is properly fire stopped. Check to see if there is an attic insulation shield in place. Many chimneys were installed before attic insulation shields were required so it is not uncommon to find systems that do not include this feature. If the chimney is not equipped with an attic insulation shield make sure that insulation is pushed back away from the chimney. It may be desirable to recommend the addition of an attic insulation shield if the attic is drafty and contains loose fill insulation. Look for any electrical wires in contact with the chimney and proper clearances as the chimney passes through the roof. On exterior installations where the chase is open to the attic, you may be able to look for firestops. There should be one at every floor or ceiling level. Look for water damage anywhere it might be visible, especially just below the flashing. Inspect the condition of offsets in the flue if they are accessible.

Inspecting the top of the chimney

You will inspect the storm collar, rain cap and the flashing. If there is a chase pan, look for rust, low spots, or pinholes that allow water to remain on the pan. Water entry through the chase pan may indicate further investigation for moisture damage need to be made. Make notes if you see any deterioration or damage. If there is a cricket installed, inspect it and note the condition. If the chimney chase is wider than 30 inches and does not intersect the ridge, a cricket should be recommended. Evaluate whether chimney caps and shrouds are an approved type for the fireplace and chimney system.

Get an accurate measurement of the dimensions of the flue and the chase. Measure the height of the flue from the top of the chimney to the fireplace. Note the overall chimney condition. Proper chimney termination height can also be determined. While on the roof, look down any additional flues. If there is obvious damage, note that in your report.

Outside of the chimney chase

Inspect the outside air supply if there is one installed. Look for any irregularities in the construction of the chase where the chimney is joined the structure. Make note of any irregularities, such as staining or other indications of water entry.

Throughout the Inspection

Consider if the fireplace and chimney is assembled with appropriate parts, and check the condition and clearances of those parts where they are accessible.

Delivering Your Report to the Client

After you have completed the inspection, you should discuss your findings with the client, provide them a copy of the report, and obtain their signature on the report. Without the client signature it is difficult to prove that you informed them of the conditions observed. You should maintain the inspection report in a permanent filing system.