

Standard Operating Procedure Level I Inspection Masonry Chimney Attached to a Building Heating Appliance

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

Masonry chimneys are site built and should conform to the requirements of applicable local code. While this document references the NFPA 211, you must be familiar with requirements in your area and be aware of any differences between local requirements and NFPA 211. Chimney service contractors should be familiar with, and have a copy of, locally adopted building codes related to fireplaces, chimneys and venting systems. In the absence of local codes, some sweeps choose to use NFPA 211 as their standard.

Choice of Inspection Level

NFPA 211 defines the inspection requirements for fireplaces and chimneys, and has defined three levels of inspection. A Level One inspection is the recommended level of inspection to use during routine chimney cleanings and annual inspections. It is also the appropriate level of inspection when replacing an existing appliance with a new appliance of a similar type. Level One is the appropriate inspection when “nothing is changing”. In other words, the chimney will continue to be used as it has been without significant change such as the addition of a new appliance. A Level One inspection should include readily accessible portions of the appliance and chimney and accessible portions of connected appliances and the chimney connection. *Readily Accessible* can be described as being quickly or easily reached for inspection, maintenance or repair. Readily accessible would not require the use of tools for opening or removal of any panel, door or other covering. Readily accessible also does not require the use of ladders. *Accessible* could first require the movement or removal of a panel, door or other covering. *Accessible* could require the use of ladders or common hand tools such as a screwdriver or wrench. Neither Readily Accessible nor Accessible would require removal of permanently attached components or destructive actions to the building.

You must determine that the system is not blocked and is capable of continued use as is. You are also in a position to determine the overall cleanliness of the venting system. This will require disconnecting the appliance from the chimney, and using a light to look up the chimney and into the flue. If the chimney is dirty it will require sweeping. Sweep, or recommend sweeping, any chimney with 1/8th inch or greater buildup. You are also expected to determine that no blockage exists in the flue, which you may be able to determine through visual inspection of the flue. In some cases, such as a flue with offsets, it might be necessary to send a chimney brush through the system or do an internal camera inspection.

Video Inspection

If you plan to video scan the chimney set up the drop cloth and bring in the proper equipment. Take pictures of irregularities within the chimney and save them to include with the job sheet when submitted to the office. Be certain to identify the photos with the date and location of the job. While the video scanning is not a mandatory part of a Level I inspection, many companies elect to provide the service in an effort to enhance the value of the inspection and to document their service.

Appliance

Look at the general condition of the appliance. This would include door gasketing, warped baffles, damaged glass, and cracks in the appliance, rust or anything else that could create problems in the operation. Make sure any dampers operate freely. Also make a note on the job sheet of damaged accessories such as burned out grates, catalytic combustors or firebrick in poor condition. If there is a barometric draft regulator, draft hood, stack damper or heat reclaimer inspect for proper operation.

Check the appliance clearance. For listed appliances you will need to consult the appliance installation manual or data plate for the requirements. For unlisted appliances the clearances should conform to local code requirements which is normally 36" from appliance to combustible material in all directions. If there is clearance reduction system used for the connector or the appliance, confirm that it is also appropriately designed and installed. If possible, have the homeowner provide you with the manufacturers' installation instructions for the appliance. This will help you to determine proper clearances from the appliance to combustibles as well as floor protection requirements. Often you will find a label attached to the appliance that contains this information.

Floor Protection and Hearth

For wood burning appliances measure the size of the floor protection. It should extend 18 inches beyond the stove in all directions unless listed otherwise. Describe the material on the job sheet. Make a note describing if it is site built or a listed product.

The Chimney

Make sure the chimney is appropriate for the appliance. Check where the connector joins the chimney to be certain that the connection is secure at the thimble. Look for signs of water entry or any other leakage at this connection. Closely inspect clean-out doors to confirm that they close securely. The material found in the clean-out can often provide you with information about the condition of the chimney interior. If the chimney has a mechanical draft system installed, check that it operates correctly.

The Connector and Wall Pass-through

Check the general condition of the wall pass-through device. It may be necessary to disconnect the connector in order to view the interior of the chimney flue. In some

cases, you can open the clean-out door and see up the chimney to determine cleanliness and lack of obstructions. You must be able to see out the top to make this determination. Make sure the connector is of the proper thickness, secure, and that it maintains the proper rise. Look at the overall installation clearances.

Sweeping

Once you have performed the initial inspection, begin the sweeping process. If the chimney is so dirty you cannot complete the inspection you will have to sweep it before you can evaluate the condition of the flue liner. Make a note of the volume or nature of the deposits found in the chimney. Whether sweeping from the bottom or the top, listen for odd sounds that could indicate a separation in the chimney or some unusual assembly.

If there are indications that there was a chimney fire, take pictures and document your findings before sweeping the flue and recommend a Level 2 inspection at this time. If the client declines the recommendation, make a note on the job sheet.

Top Examination

If you choose to sweep the chimney from the top you will be expected to look at the general condition of the chimney crown, and flashing. When sweeping, use tools that will not damage the interior of the chimney. Get an accurate measurement of the interior dimensions of the chimney. If there is a rain cap make sure it not obstructed or restrictive. Proper chimney termination height can also be determined.

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.