

## Chimney Safety

...because  
it's where you live!

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## Chimney Inspections Explained for the Homeowner

*A Public Safety Bulletin from the  
Chimney Safety Institute of America*

Until recently, the scope of work performed in the inspection or evaluation of a fireplace, stove or other venting system was generally up to the discretion of the chimney service technician. Professional service technicians now have an industry standard that removes much of that "discretion." The National Fire Protection Association (NFPA) has addressed the minimum chimney inspection standards in its latest publication (NFPA 211) concerning home heating appliances.

Inspections are now classified as *Level 1*, *Level 2* or *Level 3*. Each level of inspection covers specific items depending on the individual appliance and venting system.

Below is an explanation of the three levels of inspections and what services your chimney service technician should provide for each level.

- ✓ *Level 1* inspections - If your appliance or your venting system has not changed and you plan to use your system as you have in the past, then a *Level 1* inspection is a minimum requirement.

A *Level 1* inspection is recommended for a chimney under continued service under the same conditions and with the continued use of the same appliance.

In a *Level 1* inspection, your chimney service technician should examine the readily accessible\*\* portions of the chimney exterior, interior and accessible\* portions of the appliance and the chimney connection. Your technician will be looking for the basic soundness of the chimney structure and flue as well as the basic appliance installation and connections. The technician will also verify the chimney is free of obstruction and combustible deposits.

\*Accessible: May require the use of commonly available tools to remove doors, panels or coverings, but will not damage the chimney or building structure or finish.

\*\*Readily Accessible: Exposed, or capable of being exposed, for operation, inspection, maintenance or repair without the use of tools to open or remove doors, panels or coverings.



- ✓ *Level 2* Inspections – A *Level 2* inspection is required when any changes are made to the system. Changes can include a change in the fuel type, changes to the shape of, or material in, the flue (i.e. relining), or the replacement or addition of an appliance of a dissimilar type, input rating or efficiency. Additionally, a *Level 2* inspection is required upon the sale or transfer of a property or after an operation malfunction or external event that is likely to have caused damage to the chimney. Building fires, chimney fires, seismic events as well as weather events are all indicators that this level of inspection is warranted. A *Level 2* inspection is a more in-depth inspection than a *Level 1* inspection.

A *Level 2* inspection includes everything in a *Level 1* inspection, plus the accessible\* portions of the chimney exterior and interior including attics, crawl spaces and basements. It will address proper clearances from combustibles in accessible\* locations. There are no specialty tools (i.e. demolition equipment) required to open doors, panels or coverings in performing a *Level 2* inspection. A *Level 2* inspection shall also include a visual inspection by video scanning or other means in order to examine the internal surfaces and joints of all flue liners incorporated within the chimney. No removal or destruction of permanently attached portions of the chimney or building structure or finish shall be required by a *Level 2* inspection.

## About CSIA & CSIA Certified Chimney Sweeps

The Chimney Safety Institute of America (CSIA) is a non-profit educational foundation that has established the only nationally recognized certification and accreditation program for chimney sweeps in the United States. The program was developed in keeping with CSIA's commitment to the safety of chimney and venting systems and to the elimination of residential chimney fires, carbon monoxide intrusion and other chimney related safety hazards. CSIA devotes its resources to educating the public, chimney service professionals and other fire prevention specialists, and the insurance industry about the prevention and correction of chimney venting system hazards. For additional information, please contact:

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- ✓ **Level 3 Inspections** – When a **Level 1** or **Level 2** inspection suggests a hidden hazard and the evaluation cannot be performed without special tools to access concealed areas of the chimney or flue, a **Level 3** inspection is recommended. A **Level 3** inspection addresses the proper construction and the condition of concealed portions of the chimney structure and the flue. Removal or destruction, as necessary, or permanently attached portions of the chimney or building structure will be required for the completion of a **Level 3** inspection.



**Level 3 inspection** – A **Level 3** inspection includes all the areas and items checked in a **Level 1** and a **Level 2** inspection, as well as the removal of certain components of the building or chimney where necessary. Removal of components (i.e., chimney crown, interior chimney wall) shall be required only when necessary to gain access to areas that are the subject of the inspection. When serious hazards are suspected, a **Level 3** inspection may well be required to determine the condition of the chimney system.

### *The Importance of Annual Inspections*

Your chimney systems are an important part of your home heating system. The National Fire Protection Association recommends an annual evaluation of all chimneys, fireplaces and vents. For safe and efficient operation, your chimneys should be checked annually by a CSIA Certified Chimney Sweep® and cleaned as needed. Each year unsafe chimneys cause significant numbers of injuries and deaths, and account for more than \$200 million in property losses. Make chimney examinations a regular part of your home maintenance schedule. Don't become a statistic!

SITUATION	LEVEL OF INSPECTION
<ul style="list-style-type: none"> <li>✓ Annual Inspection</li> <li>✓ Routine Cleaning of Flue</li> <li>✓ Direct Replacement of a Similar Appliance</li> </ul>	<p><b>LEVEL 1</b></p>
<ul style="list-style-type: none"> <li>✓ Upon any sale or transfer of property.</li> <li>✓ After an operating malfunction or an external event is likely to have caused damage to the chimney.</li> <li>✓ Addition or removal of one or more connected appliances, or the replacement of an appliance with one of a different type, a different input rating or a different efficiency.</li> <li>✓ Prior to relining or replacement of the flue lining.</li> </ul>	<p><b>LEVEL 2</b></p>
<ul style="list-style-type: none"> <li>✓ Where necessary for the investigation of an incident which has caused damage to the chimney or building.</li> <li>✓ Where a hazard is detected or suspected as the result of a Level 1 or a Level 2 inspection and the suspected hazard cannot be fully evaluated without access to concealed areas.</li> <li>✓ A Level 3 inspection may be required when the construction of all or part of the chimney is deemed critical to the renewed or continued use of the chimney due to potential concealed defects.</li> </ul>	<p><b>LEVEL 3</b></p>

*A chimney interior video inspection with Chim-Scan® offers homeowners and fire inspectors accurate and documentable information*

Accurate information is important for making decisions about a chimney. *National Fire Protection Agency (NFPA) 211 codes - 2000 edition* requires companies to do a Level II inspections when a home is sold or new heating appliances are being installed. Chim-Scan® equipment allows the operator to do Level II inspections and document the findings.



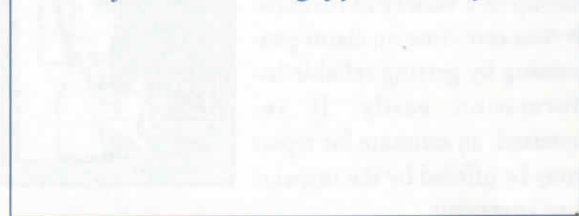
Chim-Scan® equipment allows the operator to do Level II inspections and document the findings.

If you are a homeowner having your chimney swept ask for a video inspection. Seeing the interior of your chimney will give you

added peace of mind and a general knowledge of your chimney system. So ask for it by name, "I want a Chim-Scan® done on my chimney!"

If you are a fire inspector or insurance adjustor, your evaluations should be based on accurate and documentable information. Take the guesswork out of a chimney evaluation by hiring a chimney professional who has the Chim-Scan® video evaluation system.

*For more information and to set up an appointment for video scanning of your chimney call:*

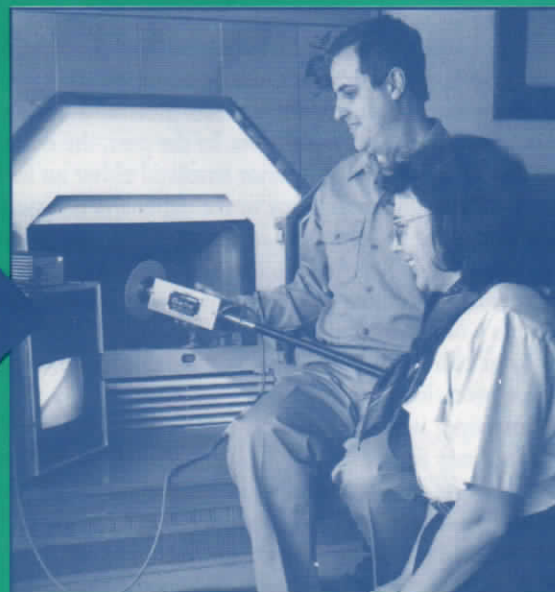


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# Chimney Interior Inspection

By Chim-Scan®  
Video Camera

*An accurate and valuable service for homeowners, insurance adjustors, and home and/or fire inspectors.*



Chim-Scan equipment allows operator to do Level II inspections when required by *National Fire Protection Agency (NFPA) 211 codes - 2000 edition*.

## Homeowners rely on video inspections of their chimneys with Chim-Scan® for assurance and efficiency

No homeowner should assume his chimney can be used without a thorough examination, both exterior and interior. Rain, flue gases, and freezing moisture cause erosion and deterioration in chimneys. Breaks in the chimney liner—even small ones—can be a risky condition by allowing combustion gases and condensation into the home.

While viewing the monitor screen from the hearth, homeowners see the condition of their fireplace and chimney. The scan operator can point out vital information about the chimney interior condition. In gas appliance chimneys, early detection of condensates can help prevent additional costly home repairs.

Every homeowner needs accurate information about his or her chimney's condition. In the past, the examination of the chimney interior involved either an ineffective flashlight and mirror or the expensive disassembly of part of the chimney to see problem areas. Now with the Chim-Scan® video inspection service, it is easy to obtain an accurate evaluation of your chimney's interior in a non destructive way.

Your chimney professional will be able to show you these precarious conditions, if they exist:

- ▶ Improper new construction
- ▶ Chimney fire damage
- ▶ Improper prefab chimney connections
- ▶ Deterioration from gas appliance connections
- ▶ Cracks, even hairline cracks, in flue liners
- ▶ Broken or missing tile liners and mortar joints
- ▶ Deterioration of the smoke shelf or damper
- ▶ "Quick-fixed" thimble holes
- ▶ Hidden breechings
- ▶ Nests, limbs and other blockages



## Insurance adjustors and home/fire inspectors and realtors depend on video inspections for accurate and documentable information

The increased use of fireplaces and wood heat has resulted in an increase in chimney fires. When conducting a sudden occurrence investigation, a Chim-Scan® video inspection service can give you the reliable information you need. An examination soon after the mishap, can determine the cause of damage:

whitened mortar joints, blaze marks, missing mortar, cracks and discoloration in liners and buckling of steel liners are indications of sudden occurrence chimney damage.

Your inspection may provide several report formats: a written report on a chimney evaluation form, a VCR tape recording of the inspection and/or digital photographs which can be e-mailed.

A video inspection of a chimney interior offers both the Fire Investigator and the Insurance Adjustor these important benefits:

- ▶ You get detailed information, obtained only inches away from the chimney walls.
- ▶ You get complete documentation in a variety of formats.
- ▶ You save time on claim processing by getting reliable information easily. If requested, an estimate for repair may be offered by the inspecting company.

