

Smoke Restoration Guide

If your home has been exposed to smoke and/or debris from a wildfire, this publication aims to guide you in getting your home restored to its pre-loss condition.

Your insurance company should work with you to retain reputable and qualified professionals to do the following, and cover the costs as provided in your insurance policy and in compliance with applicable standards, laws and regulations.

1. Thoroughly inspect, measure and assess the interior and exterior condition of your home, inside and out, including basements, crawl spaces, attics, duct systems (heating, cooling, ventilation), and cavities.
2. Prepare a cleaning/remediation plan that addresses all inspection and assessment findings.
3. Do all the work that's called out in the plan in a satisfactory and timely manner.
4. Conduct post-cleaning testing to confirm successful remediation/restoration.

If your home was exposed to wildfire smoke and ash, [you want to make sure the building and its contents get properly inspected, cleaned, treated and tested to give you assurance that everything has been restored](#) to pre-exposure condition and is safe for habitation and use. [Damage to your home and possessions by smoke and ash is covered in your home policy](#). Payment for smoke damage to the structure of your home (walls, studs, wall-to-wall carpeting etc.) comes out of your dwelling coverage. Payment for smoke damage to area rugs, clothing, curtains, furniture, etc.) comes out of your contents coverage. No special dollar limit cap (such as you may find for mold) should apply, other than your overall dwelling and contents insurance limits.

Smoke testing and cleaning protocols

Unless they are also a trained and certified expert in indoor air quality and/or smoke and ash remediation, an insurance adjuster is not qualified to opine on the condition of your home, or what needs to be done to restore/clean/remediate damage, or whether it is safe to live in. Those opinions should come from credentialed, licensed, trained and experienced professionals.

Testing is the most reliable way to determine whether or not a home is damaged and what has to be done to restore it to pre-loss condition. If an insurance company adjuster who isn't a credentialed, licensed industrial hygienist or remediation professional tells you the home seems fine and doesn't need to be cleaned, insist they pay for testing and get a second opinion from a qualified expert.

If your insurance company acknowledges damage and authorizes cleaning but will only pay for *post-cleaning testing*, (not pre-cleaning), you have three choices:

- Pay for pre-cleaning testing and seek reimbursement from your insurer.
- Let the house get cleaned then tested.
- Insist the insurer pay for the pre-cleaning testing and pursue all available options for compelling them to do so... (professional/government/legal/advocacy).

When indoor testing is performed properly, it should be by a Field Tester who swabs and/or tape lift tests surfaces to establish if there are carbon, soot, and ash particulates present. Micro-vac samples can be taken from fabrics and other soft, porous items. If you are concerned about airborne smoke by-products, air testing can be used to test for VOC's (volatile organic compounds), heavy metals and aldehydes, all of which can be isolated for those specific to wildfire smoke. The results of this testing provide the basis for determining cleaning and repair methods and/or whether further cleaning is needed. The work that gets done to make your home clean and safe again is often described as "remediation." The costs of properly *testing* a home vary. It generally costs between \$2,000-\$4,000 for the collection of samples, lab work and a written report.

The smoke restoration process is well established, and the company you hire should follow industry-approved processes for proper smoke removal. These processes begin with a visual inspection; factoring in how close the fire came to your house, from which direction the fire came, and the direction the wind was blowing and for how long. They should also ask you whether any windows were open at the time, and whether the heating or air conditioning was on at the time of the fire.

Next the company should diagram and measure your house, usually with a laser pointer, to determine the total square footage and identify areas of the home that have greater and lesser amounts of smoke damage. Then, there should be a complete walk-through to determine the scope of loss - meaning what specifically needs to be cleaned.

If your home has already been tested by a hygienist, and if the hygienist prepared a protocol (a specific outline of the work that needs to be completed, based upon the testing results) then the restoration technician should use the protocol during their walk-through, and base their scope on it. The scope is then used to complete an estimate of how much the work will cost, which you should get in advance.

The owners and employees of restoration companies tend to change over time, so it is important that you interview at least two of them, don't just go on Internet reviews. You want to feel comfortable with how they scope, explain and price the work. Check that both the company you hire *and* the lead technician who'll be overseeing your restoration are [IICRC certified](#) (Institute of Inspection Cleaning and Restoration Certification) for Fire & Smoke Restoration.

Cleaning scope and cost estimates

Restoration company estimates can differ in the way they are written. Many will charge based on the total square footage of your home and the amount of smoke damage, then provide you with a brief list of cleaning services they will perform. This is very common, especially after a wildfire event that damages many homes, but can cause some confusion if the cleaning does not eliminate the smoke odor or particles, as it can be unclear what they were specifically hired to do. If you are able, it is much better to get the contractor to write that is called a "line-item" estimate, which outlines *specifically* the cleaning that will be done in *each room*. This way, you can check to make sure all the work they proposed was done.

Before the restoration contractor starts on the work to clean your home, you should arrange to have a specialized textile restoration company come in, give you an estimate to clean your "soft goods" (clothing, rugs, curtains, and other permeable items) and remove those items from your home. Soft goods, because they are porous, hold onto smoke smell, and if left in the house will cause it to smell like smoke, even if the building is clean. Often, regular laundry and dry-cleaning services will not be able to remove smoke smell, so sending your soft goods to a specialist cleaning company who has experience in smoke is recommended.

The cleaning process

Once the restoration company is ready to start cleaning, they should come in and set up HEPA air filters. HEPA stands for high efficiency particulate air filter. These machines not only eliminate the smell of

smoke, but more importantly, catch the smoke particles that are dislodged and blown around your house by the cleaning process. Every part of your house should be cleaned, from the top down. This means that they should start at the attic, then do the ceiling, and finish at the floor.

The cleaning process should start with “dry removal” of the smoke which is usually done with HEPA vacuums. Regular (non-HEPA) vacuums will simply blow the smoke particles out the exhaust, and all over your house, so it is not recommended that you do this yourself. HEPA vacuuming is usually followed by a wipe down of the surfaces with a mild detergent. Remember that smoke rises, so it is very important to inspect your attic, and in most cases have the insulation (which acts like a smoke sponge) removed, and the attic HEPA-vacuumed to remove the smoke particles.

Every surface in the house should be cleaned, including walls, cabinets, shelving, appliances, windows etc., - anything that has been contaminated. A reputable company will go through your pantry and wipe down all salvageable items and dispose of what cannot be cleaned. Food items that are packaged in paper, cardboard or plastic are generally considered unsafe to eat, and should be thrown away. Be sure that an inventory is taken of everything, and you take photos to document your claim before throwing anything away.

Your furniture will also need to be cleaned. Wood furniture and other hard surfaces can be wiped down with mild detergent and water. Upholstery that has mild smoke smell can usually be HEPA-vacuumed, then cleaned (if product label allows) though this might not remove all the odors. Carpets will need to be shampooed, but if odor persists, they may need to be removed and discarded. Carpet padding acts like a sponge and holds odors - it cannot be cleaned, so if the smell persists, it will need to be removed and replaced. Often, in cases of heavy smoke, carpets, padding and upholstered furniture may be too damaged to be salvaged.

After the cleaning is completed, your entire home will be deodorized. There are several methods that companies use, including ozone, hydroxyl and thermal fogging, each of which has pros and cons. Talk to your restoration company about your options.

Finally, the last step is to have your HVAC system tested and cleaned. The system should not be turned on until the cleaning is complete, and the heater and ducts are clean, or else it will simply blow smoke particles back into your house!

Troubleshooting and hidden damage

Sometimes, in cases of heavy smoke where the smell persists after cleaning, you may need to check the inside of the wall cavities for smoke. This can usually be done at an opening in the sheetrock at an outlet or switch and can tell you if the walls need to be opened to clean the framing inside. Also, if the restoration company completes the agreed-upon cleaning, and the odor persists, you might need to seal and paint the areas that had the worst smoke, (usually the attic, or other unfinished rough wood surfaces) in order to “seal in” the smell.

The outside of your house should be checked for paint blisters. Windows should be checked for any warping, melting, bubbling, moisture between the layers, or edge deformation. The house and patios should be pressure washed and will sometimes need painting. If there are questions about the structural integrity of your dwelling, consult a structural engineer.

Resolving disputes with a vendor

For some items, you will not know if they can be successfully cleaned until after an attempt has been made. If you feel strongly that cleaning an item will be a waste of time and you have limited insurance coverage, insist on a fair replacement value settlement for that item. If you are not satisfied with the condition of items after they’ve been cleaned, you can claim the replacement value in addition to the cleaning cost.

Insurance adjusters have relationships with restoration companies and they often will recommend or even send a company out to perform cleaning and repairs. Although you may welcome that help, you still need to oversee the work and get cost estimates in advance. Homeowners generally expect insurance companies to stand behind vendors they recommend, but that does not always happen. If you are not satisfied with the extent, quality or cost of work done by a vendor who came through your insurance company, do your best to resolve the dispute and seek help from your insurer. If a restoration worker damages your property, document it and seek redress from their company. Don’t use up your own insurance benefits paying for the damage. It is important to know that you have the right to choose your own contractor for ANY work performed on your property.

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Resolving disputes with your adjuster/insurer

Your insurance company will most likely pay for cleaning visible smoke and ash. Disputes often arise over pre-cleaning testing, and whether surface cleaning is adequate, and whether items can be cleaned or need to be replaced, and whether particulates remain in the home that are invisible to the naked eye. The cost of properly remediating a smoke damaged home and testing it before you move back in varies from a few hundred dollars to six figures.