



Tech Talk provides accurate and timely information on topics of interest to the fire protection community. Topics are selected based on inquiries and suggestions that USFA receives from readers. To suggest a topic for a future edition of Tech Talk, [please contact us](#).

Problem Drywall in Homes

The Consumer Product Safety Commission (CPSC) has received more than 3,000 reports from citizens in 37 States, the District of Columbia, American Samoa, and Puerto Rico who believe that health symptoms and/or corrosion of certain metal products in their homes are related to the presence of drywall in their homes that was imported from China.

The CPSC and the Department of Housing and Urban Development (HUD) recently issued joint guidance that recommends the replacement of possible problem drywall, fire safety alarm devices, electrical components and wiring, gas service piping, and fire suppression sprinkler systems in homes that have problem drywall in them. Until the replacements recommended by CPSC and HUD have been completed, the U.S. Fire Administration (USFA) recommends that homeowners be alert for possible electrical or pipe problems, and that they take additional precautions to ensure that their life safety alarms are working properly.

The USFA recommends that homeowners who believe that there is problem drywall in their homes watch for signs of electrical or pipe problems, and perform weekly tests of their life safety alarm devices as long as problem drywall is present in the home. This includes smoke alarms, carbon monoxide alarms, and gas alarms. Additional information is given below.

Frequently Asked Questions (FAQs)

- What is the Federal Government doing about this problem?
- Has the Federal Interagency Task Force reached any conclusions?
- Has the Federal Government issued any preliminary guidance?
- What should I do to solve the problem in my home?
- Are there visible signs that a home has problem drywall?
- Where have drywall problems been reported?
- How can I determine if there is problem drywall in my home?
- What health problems have been reported?
- Has the metal corrosion caused any problems?
- What about fire hazards?
- What if I suspect that corrosion has affected my gas pipes?
- What should I do if I suspect a gas leak?
- What are the signs of a potential electrical hazard that I should watch for?
- What should I do if I suspect there is an electrical problem?
- What about my smoke alarms and/or carbon monoxide alarms?
- What should I do about my smoke alarms and life safety alarms?
- How should I test my life safety alarms?
- What if my alarm fails the test or does not work?
- What should I do if I suspect that I have problem drywall?
- Where can I get more information?

What is the Federal Government doing about this problem?

A Federal Interagency Task Force (the Task Force) was formed to investigate the problem, and scientific studies are ongoing. The CPSC is the lead agency in the investigation, and is being assisted by scientists and experts from many agencies, including

- HUD;
- Sandia National Laboratory;
- Lawrence Berkeley National Laboratory;
- the U.S. Geological Survey (USGS);
- the National Institute of Standards and Technology (NIST);
- the Federal Trade Commission (FTC);
- the Environmental Protection Agency (EPA); and
- the Centers for Disease Control and Prevention (CDC).

The USFA is actively collaborating with the Task Force to stay abreast of developments in the investigation.

[Frequently Asked Questions ↑](#)

Has the Federal Interagency Task Force reached any conclusions?

Significant progress has been made in the investigation, but there is more to do. The Task Force has released two preliminary conclusions:

- Certain Chinese drywall emits reactive hydrogen sulfide at rates much higher than other non-Chinese drywall.
- Hydrogen sulfide has a strong association to corrosion in homes with problem drywall.

Information developed by the Task Force investigation is posted on the CPSC's Drywall Information Center <http://www.cpsc.gov/info/drywall/index.html> which is frequently updated.

[Frequently Asked Questions ↑](#)

Has the Federal Government issued any preliminary guidance?

Based on the preliminary results of the Task Force study, the CPSC and HUD have issued interim guidance to the public. These documents are available on the CPSC's Drywall Information Center.

- [Interim Guidance on the Identification of Homes with Corrosion from Problem Drywall](#) was issued on Jan 28, 2010.
- [Interim Remediation Guidance for Homes with Corrosion from Problem Drywall](#) was issued on April 2, 2010.

[Frequently Asked Questions ↑](#)

What should I do to solve the problem in my home?

Recognizing that the scientific studies are not yet complete, and in light of the fact that many homeowners want to begin to repair their homes, the CPSC and HUD issued interim remediation guidance on April 2, 2010. The interim guidance addresses possible safety hazards related to problem drywall.

The guidance recommends the replacement of all possible problem drywall; all fire safety alarm devices, all electrical components and wiring, and all gas service piping and fire suppression sprinkler systems.

For the text of the document, see [Interim Remediation Guidance for Homes with Corrosion from Problem Drywall](#).

[Frequently Asked Questions ↑](#)

Are there visible signs that a home has problem drywall?

Blackened and corroded metal have been reported in homes. Photographs showing the types of corrosion that are typically found in homes with problem drywall can be found on the CPSC problem drywall Web site:

<http://www.cpsc.gov/info/drywall/how.html>

[Frequently Asked Questions ↑](#)

Where have drywall problems been reported?

Reports of problem drywall continue to be received at the CPSC and other agencies. To date, the majority of the reports to the CPSC have come from consumers residing in Florida, Louisiana, Alabama, Mississippi, and Virginia.

The CPSC provides frequent updates of reports of problem drywall at <http://www.cpsc.gov/info/drywall/where.html>

[Frequently Asked Questions ↑](#)

How can I determine if there is problem drywall in a home?

It can be difficult to tell the difference between good drywall and problem drywall. There is not yet a definitive test method to determine whether a home has problem drywall. The CPSC and HUD have issued interim guidance based on the results of the research to date. A two-step process to help determine whether the drywall in a home is problem drywall can be found in *Interim Guidance—Identification of Homes with Corrosion from Problem Drywall*. The guidance can be downloaded from the CPSC Web site: <http://www.cpsc.gov/info/drywall/interimidguidance012810.pdf>

The assistance of professional assessors and/or testing laboratories may be required to identify problem drywall. The Task Force is studying testing and remediation protocols for affected homes, but no federally-approved testing kits or definitive remediation methods currently exist.

The Federal Trade Commission has issued a *Consumer Alert* advising homeowners to be on the alert for anyone trying to sell test kits, inspections, and quick fixes for problem drywall. See <http://www.ftc.gov/bcp/edu/pubs/consumer/alerts/alt164.shtm>

[Frequently Asked Questions ↑](#)

What health problems have been reported?

The most frequently reported health complaints include irritated and itchy eyes and skin, difficulty breathing, persistent cough, bloody noses, runny noses, recurring headaches, sinus infection, and asthma attacks. Since many consumers report that their symptoms lessen or go away when they are away from their home but return upon reentry, it appears that these symptoms are short-term and related to something within the home.

CPSC is investigating if scientific evidence exists that links chemical emissions from the drywall to the reported health complaints. At this time, however, any such relationship or long-term health effects are unknown.

The CDC has published information sheets on their Web site for consumers <http://www.cdc.gov/nceh/drywall/docs/ImportedDrywallandYourHome.pdf> and for health care providers http://www.cdc.gov/nceh/drywall/docs/Drywall_for_Healthcare_Providers.pdf

[Frequently Asked Questions ↑](#)

Has the metal corrosion caused any problems?

Consumers have reported failures of certain devices such as:

- premature failures of central air conditioning evaporator coils located indoors as part of the central air conditioning unit air handler;
- intermittent operation or failure of appliances, such as refrigerators, microwave ovens, dishwashers, and electronic devices such as televisions and video game systems; and
- intermittent operation or failure of smoke alarms.

[Frequently Asked Questions ↑](#)

What about fire hazards?

To date, **no** evidence has been substantiated that metal corrosion caused by problem drywall has increased the chance of a fire occurring. We have **not** received reports of fire linked to problem drywall. The CPSC did issue an alert to Fire Safety Professionals requesting that any fires suspected of being associated with problem drywall be reported to CPSC <http://www.cpsc.gov/info/drywall/firesafetyprof.pdf>

We do have concerns that the corrosion observed may have fire safety and electrical shock ramifications. These concerns have prompted us to provide this information. To date, we have identified the following five different areas of concern:

- Visual examination of electrical wiring within affected homes showed varying levels of corrosion on the exposed portions of copper wires. History has shown that degraded electrical connections could develop hot spots resulting in overheating and possibly a fire.
- Corrosion damage to circuit traces or electronic components on printed circuit boards could cause failure of protective devices like ground fault circuit interrupters (GFCIs) and arc fault circuit interrupters (AFCIs). Failures of these devices can present shock and fire hazards. These are devices designed to continually sense for electrical faults and to turn off the electricity to a circuit or appliance if the fault is detected.
- Corrosion damage to circuitry or components could cause failure of life safety alarms such as smoke alarms, carbon monoxide (CO) alarms, and gas alarms.
- Corrosion damage to natural gas or propane gas supply pipes could lead to a leak, which could present a fire or explosion hazard.
- Some types of fire sprinklers use metallic fusible elements. Corrosion may adversely affect activation temperatures, resulting in a delay in operation or failure to operate in the event of a fire.

[Frequently Asked Questions ↑](#)

What if I suspect that corrosion has affected my gas pipes?

The CPSC has received **no** reports of flexible metal gas connectors or copper piping corroding to the point of leakage. Surveys in homes with problem drywall have shown some black corrosion of these copper gas supply lines. If you suspect that corrosion has affected the pipe supplying natural or propane gas, you should consult your gas supplier immediately.

[Frequently Asked Questions ↑](#)

If you suspect a gas leak:

- **Leave** the area **immediately** and tell others to leave too.
- **Do not** turn any lights on or off, smoke, or operate any vehicle or equipment that could cause sparks.
- **Do not** attempt to turn gas valves on or off.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service should be performed by a qualified installer, service agency or the gas supplier.

[Frequently Asked Questions ↑](#)

What are the signs of a potential electrical hazard that I should watch for?

You should always be on the watch for the following potential electrical hazards in your home. The signs described here could be caused by a number of different problems, most of which are not related to problem drywall. Multiple symptoms would be a stronger indication of a problem that should be investigated by a professional.

Power outages—a circuit breaker which needs resetting frequently without any apparent cause; especially if a GFCI or AFCI trips frequently. AFCIs are a special kind of circuit breaker designed to detect arcing conditions in the electrical wiring.

Dim/Flickering lights—lights dim often without any specific cause, such as the air conditioner or the refrigerator turning on.

Arcs/Sparks—bright flashes or showers of sparks anywhere in your electrical system.

Sizzles/Buzzes—unusual sounds from electrical system devices.

Overheating—parts of your electrical system, such as switch plates, dimmer switches, receptacle outlet covers, cords, and plugs may be warm as a normal consequence of their operation, but they should not be discolored from heat or painful to touch.

Odors—pungent smells such as strong fumes from overheating plastic or electrical insulation materials.

Electrical shocks—any shock, no matter how small—even one which produces only a mild tingle.

[Frequently Asked Questions ↑](#)

If you suspect there is an electrical problem:

- If the problem involves smoke that you can see or smell, or in any way causes you to suspect that there is or might be a fire, call 9-1-1 or contact your local fire department immediately.
- Otherwise, contact a licensed electrician who can inspect your electrical system and recommend any necessary repairs.

[Frequently Asked Questions ↑](#)

What about my smoke alarms and/or carbon monoxide alarms?

The impact of corrosion on life safety devices (e.g., smoke alarms, carbon monoxide alarms, gas alarms, etc.) in homes is an area of special concern, and is being addressed in the ongoing research. Accelerated aging studies that seek to determine the impact of continued exposure to problem drywall are a part of the ongoing research.

The CPSC has received reports of failures of smoke alarms and CO alarms in homes with problem drywall. It is possible that gas alarms, water alarms, or any other electronic devices used in homes may also be affected by problem drywall. Smoke alarms have been removed from a number of homes that have problem drywall, and are being studied to determine the impact on their ability to perform their lifesaving function. Results of the study will be released as soon as they are available.

[Frequently Asked Questions ↑](#)

What should I do about my smoke alarms and life safety alarms?

Since there are unresolved questions about the impact of problem drywall on the function of electronic life safety devices, the USFA is recommending that homeowners take additional precautions to ensure that their life safety alarms are working properly.

The USFA recommends that all life safety alarms, such as smoke alarms, CO alarms, and gas alarms, be tested once each week in any home that has any problem drywall.

This recommendation may be changed when more information from the Task Force research becomes available. The USFA will issue additional guidance once the results of the research on life safety issues are available.

As a general precaution, the USFA recommends that all homes be equipped with both [smoke alarms](#) and [automatic fire sprinklers](#), and all families should have and practice a [home fire escape plan](#).

[Frequently Asked Questions ↑](#)

How should I test my life safety alarms?

The USFA recommends that smoke alarms in homes with problem drywall be tested using commercially-available smoke detector test spray. This is the best way to safely test the smoke sensor and all of the electronics in the smoke alarm. Pressing the TEST button tests the electronics and the alarm horn, but not the smoke sensor. You can easily locate the test spray by typing “smoke detector test spray” into your Internet search engine to find available products. Be sure that the test spray you use is listed by Underwriters Laboratories (UL) to ensure that it will not damage your smoke alarm.



CO alarms and gas alarms should be tested in accordance with the manufacturer’s instructions. If you no longer have the user’s manual, most manufacturers post the user manuals for their devices on their Web sites.

Note: Increasing the test frequency of these alarms may shorten the life of the battery, so you should have fresh batteries available in case this happens.

[Frequently Asked Questions ↑](#)

What if my alarm fails the test or does not work?

If a life safety alarm fails to operate properly during a test, it should be replaced with a new alarm immediately. Do not let your home and family go unprotected. Refer to the USFA Web site for information about selection of smoke alarms and where they should be located in a home http://www.usfa.dhs.gov/citizens/all_citizens/home_fire_prev/alarms/

Save any nonworking alarm, and report it to the CPSC. It may be useful in the investigation.

[Frequently Asked Questions ↑](#)

What should I do if I suspect that I have problem drywall?

The most important issue is your health and safety. If you are suffering from the health symptoms described above, please consult your physician as soon as possible. If you experience any of the electrical or fire safety concerns described, please consult your local gas or electric supplier and a licensed electrician or building inspector as soon as possible.

The interim guidance issued by the CPSC and HUD for identification and remediation of problem drywall contains the most current information from the Task Force. These documents can be downloaded from the CPSC’s Drywall Information Center Web site at:

- [Interim Guidance on the Identification of Homes with Corrosion from Problem Drywall](#) (issued on Jan 28, 2010); and
- [Interim Remediation Guidance for Homes with Corrosion from Problem Drywall](#) (issued on April 2, 2010).

You should also contact your State and local authorities to report your concerns and get direction on any help or resources available in your area.

(continued on next page)

If you suspect that there is problem drywall in a home, report it to the CPSC via their Web site <https://www.cpsc.gov/cgibin/drywall.aspx> or by calling CPSC toll-free at 1-800-638-2772.

You should also consider contacting your insurance company and homebuilder to report your concerns.

[Frequently Asked Questions ↑](#)

Where can I get more information?

Results of the Task Force investigation and related information are freely available on the CPSC's Drywall Information Center at: <http://www.cpsc.gov/info/drywall/index.html>

Homeowners who have a Federal Housing Administration (FHA) insured mortgage loan may find some useful information from the HUD Web site:

http://portal.hud.gov/portal/page/portal/HUD/press/press_releases_media_advisories/2009/HUDNo.09-237

Be sure to check the CPSC and USFA Web sites regularly to stay abreast of new developments and recommendations.

[Frequently Asked Questions ↑](#)
