

Asbestos In Your Home

ARE YOU GETTING READY TO DO SOME HOME RENOVATIONS?

If so, have you thought about whether or not your home contains asbestos? Unless your home is made completely of wood, glass or metal there is potential for your home to have asbestos-containing building materials (ACBMs) in it, regardless of when your home was built. Asbestos use in the U.S. is not completely banned and there is potential for asbestos to be present in current building products.

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What is Asbestos?



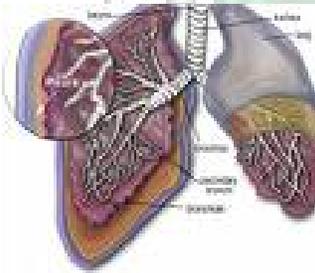
Asbestos is a mineral fiber which comes from a group of naturally occurring minerals with silicate composition and crystalline structure. It is a term used to describe six naturally occurring incombustible minerals. Three of the most common types are chrysotile, amosite, and crocidolite. Asbestos has been mined

and widely used throughout history to add strength, heat insulation and fire resistance to thousands of products. [Top of Document](#)

How Can Asbestos Effect My Health?

When ACBMs are NOT disturbed then asbestos is NOT a health hazard. However, when asbestos materials ARE disturbed it breaks into microscopic sharp fibers which are then released into the air and can be inhaled into the lungs. In comparison the average human hair is approximately 1200 times thicker than an asbestos fiber. You cannot see, taste or feel asbestos fibers. Exposure to asbestos fibers does not produce coughing, sneezing, or itchiness due to the microscopic size of the fiber. The more you are exposed, the more likely you are to get an asbestos-related disease. The fibers can accumulate in your body and increase the risk of developing one of the following asbestos-related diseases: Lung cancer, Mesothelioma, and Asbestosis. The symptoms of asbestos-related diseases do not usually appear until about 10 – 40 years after being exposed to asbestos.

Lung cancer has the highest death rate of all asbestos diseases. Almost all of the cases of asbestos-related lung cancer occurred among people who smoked and were exposed to asbestos. In fact, smoking increases ones risk of developing lung cancer by 50 – 90% when exposed to asbestos verses people who do not smoke.



Mesothelioma is a rare but deadly disease. There are two kinds of mesothelioma: pleural mesothelioma, which is a cancer that attacks the two-layered pleural lining of the chest, and peritoneal mesothelioma, which is a cancer that attacks the lining of the abdomen.

Mesothelioma is caused by high levels of exposure to asbestos and has the longest latency period, usually 30-40 years, before symptoms arise. Children are the exception to the long latency period rule. Because their bodies grow at a more rapid rate the latency period for a child is much shorter than that of an adult. If you have children in your home, all the more reason to take precautionary steps to handle ACBM with the help of licensed professionals prior to any home construction.

Asbestosis is the scarring of the lung, which weakens and destroys your lungs. It is not a cancer, but rather a progressive disease that keeps forming scars in your lungs. When you have asbestosis your heart has to work harder to get enough oxygenated blood to the rest of your body's cells. Many people with asbestosis die from heart attacks or heart failure, due to their heart being over worked. Asbestosis is dose-related. The more asbestos you breathe, the more likely you are to get asbestosis and the more severe the disease will be. [Top of Document](#)

How Do I Identify Materials That Contain Asbestos?

You can't tell whether a material contains asbestos simply by looking at it. If in doubt, treat the material as if it contains asbestos and have it sampled and analyzed by a licensed professional. Samples should be taken only by a licensed Asbestos Hazardous Emergency Response Act (AHERA) building inspector since they are knowledgeable of and trained according to federal regulations. They know the precautionary steps to take when collecting samples in order to minimize the risk of releasing fibers during the collection process. Taking samples yourself is not recommended. If sampling is done incorrectly, it can become more of a hazard than leaving the material alone. Materials that are in good condition and will not be disturbed (by remodeling, for example) should be left alone.

When planning a remodel consider having **any** material which will be disturbed that is **not** either wood, glass or metal sampled and analyzed for asbestos. If the materials do contain asbestos hire a licensed asbestos contractor to properly remove and dispose of the material. When installing new materials research Material Safety Data Sheets (MSDS) for the specific materials to be used and verify that they do not contain asbestos. These can be found on-line for most products or provided by the producer. An important thing to note is that the MSDS will not use the word asbestos explicitly. It is important to look for mineral names. See table below. [Top of Document](#)

Asbestos Mineral Name	Info	May Be Found In
Chrysotile (Hydrous Magnesium Silicate)	"White Asbestos" This is the most commonly used asbestos type and accounts for 95% of asbestos found in U.S. building materials.	Spray-on insulation, Asbestos cement, pipe and boiler insulation, brake linings, fire blankets and other fire proof and fire resistant textiles, roofing felts, mastics, putties and caulks, gaskets and ropes, and transite panels.
Amosite (Iron Silicate, Grunerite)	"Brown Asbestos", this is the second most commonly used asbestos type and accounts for 5% of asbestos found in U.S. building materials. It is imported from South Africa.	Spray-on insulation, ceiling tiles, pipe and boiler insulation, acid storage battery casings, and transite paneling.
	"Blue Asbestos", Sodium	Spray-on insulation,

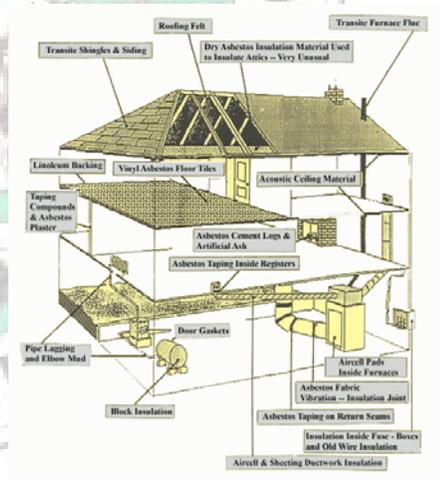
Crocidolite (Asbestiform Riebeckite)	based.	millboards, transite paneling, and acid storage battery casings.
Anthophyllite (Cummingtonite)	“White, Gray, Green, Brown Asbestos”, Iron based.	This type is generally not used in building materials, except as a contaminant from its talc component.
Actinolite (Ferractinolite)	Magnesium and Iron based.	As a contaminant in Vermiculite and Talc. (from the mines of Libby, MT.)
Tremolite (Ferractinolite)	Magnesium and Iron based.	As a contaminant in Vermiculite and Talc.

You can also contact the Consumer Product Safety Commission (CPSC) at 1-800-638-CPSC or via teletypewriter (TTY) at 1-800-638-8270, for more information regarding a products safety. [Top of Document](#)

Where Asbestos Might Be Found In Your Home...

EXTERIOR SURFACES

Exterior walls and closed decks were sometimes built with fire retardant sheeting in the form of asbestos paper. If it looks like a thick gray cardboard, it may contain asbestos. If left undisturbed and in good condition, the undersheeting is considered safe. However, if you are taking out a wall for expansion and remodeling, or if you are replacing siding and shingles, you could release many fibers in the process of drilling, sawing, and removing. Hire professionals for removing this paper.





Cement asbestos board (commonly referred to as CAB) has been used in houses as sheets for straight and lap siding and has been cut and shaped as a substitute for wood shingles for roofs and exterior walls. Since this material is mainly outside the home, and the asbestos is bound in a hard material, it presents little hazard, unless altered by drilling, sawing, or sanding. When CAB becomes worn or damaged, spray paint it to ensure sealing in the fibers, but do not touch or disturb it. If CAB must be removed consult a licensed asbestos professional to assist in the process.

INSULATION: WALLS & CEILING



Loose blown-in (vermiculite) and batt insulation have been known to contain asbestos, especially in homes built or remodeled between 1930 and 1950. This material was used for thermal insulation and can be found where interior rooms and spaces need to be protected from outside temperatures. These areas include outside walls and floor or roof/attic spaces between structural joists and rafters. This asbestos presents a hazard only if renovation and repair work disturbs it. If you plan such a project and find asbestos-containing materials stop what you are doing, limit access to that area, do not disturb the material and consult licensed asbestos contractors/workers for advice on how to proceed with your project so you do not spread asbestos fibers throughout your home and the environment.

FLOOR COVERINGS

Sheet vinyl (including the backing or underlayment), vinyl tile, and vinyl adhesive may all contain asbestos. In these products, asbestos fibers were added to the basic materials to give them strength and durability. These products are considered safe unless the flooring is altered or damaged. Damage could occur as a result of prolonged or excessive abrasion. Breaking, sawing, cutting, grinding, and sanding will release asbestos fibers into the environment. When replacement or repair becomes necessary, these flooring products should be handled as little as possible and disposed of in an approved manner.

According to the Environmental Protection Agency (EPA), "In an approved manner" refers to legal procedures for asbestos disposal applicable to the jurisdiction in which the house is located. Contact the local air pollution control authority, which is the Arizona Department of Environmental Quality (ADEQ) to determine requirements a licensed professional should follow regarding proper disposal of asbestos containing material and products. [Top of Document](#)



Be sure not to power grind or sand down the flooring, the remaining adhesive or adhesive backing. [Top of Document](#)

If you need to replace floor covering, sometimes the best solution is to lay the new floor directly over the old one. However, you should keep in mind that this asbestos-containing material remains in your house, and must eventually be dealt with if and when you remodel or demolish. Notifying future buyers of its hidden existence may be required.

FURNACES, BOILERS, HEATERS, & PIPING

Insulation blankets (the outside covering or shell), door gaskets, duct insulation, and tape at duct connections of furnaces and boilers all may contain asbestos. It was used as the best material available, during its time, as high-temperature insulation. Oil, coal, or wood furnaces with asbestos-containing insulation and cement are generally found in older homes, its installation dating between 1930 and 1972. The material is white or grey in color and resembles the plaster used in casts to protect broken bones. If your furnace insulation is in good condition, it is best to leave it alone and keep maintaining it. If the insulation is in poor condition, pieces are breaking off or it has been subjected to water damage, you should have it repaired or removed entirely. You may want to have the entire furnace replaced by a more modern efficient model. You should first find out if the insulation actually contains asbestos by having a licensed professional sample and analyze it. While the insulation is in poor condition and awaiting repair limit access to the area and do not touch or disturb it.

Steam and hot water pipes were insulated with asbestos-containing material, particularly at elbows, tees, and valves. Its appearance is similar to that found on boilers. Pipes may also be wrapped in an asbestos "blanket", or asbestos paper (which looks very much like corrugated cardboard). Asbestos-containing insulation has also been used on and inside round and rectangular furnace ducts. Sometimes the duct itself may be made of asbestos-containing materials.

If you have moderately damaged insulation around pipes or boilers, the best current recommendation is to leave the insulation in place and have the protective covering repaired by a licensed asbestos contractor.

Asbestos-containing cement sheets (CAB), millboard, and paper have been used frequently as thermal insulation to protect the floor and walls around wood burning stoves. Again, there is no hazard if left as is, if it is in good condition.

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INTERIOR SURFACES: WALLS AND CEILINGS

Sprayed-on or trowelled-on surface material on wall and ceiling surfaces of some homes may be composed of asbestos-containing materials. If the surface material is firmly attached, has a hard surface, and has no water damage, it should not be hazardous. If the surface can produce powder or dust by hand pressure, it is advisable to seek professional advice before deciding what further course of action to take.

You should NOT try to repair or removal this material yourself. There is high risk you will expose yourself and your family to heavy concentrations of asbestos fibers. Contact a licensed professional whose workers are specifically trained to remove this type of material without contaminating people or the environment.

BUILT-IN EQUIPMENT

Oven & dishwasher (in cabinet) units were often wrapped in asbestos-containing insulation blankets or sheets until the mid-1970s. Homeowners should not disturb these materials since they do not pose a hazard if left in place. Removal or repair should be done by licensed asbestos professionals.

MISCELLANEOUS

Older gas-fired decorative fireplace logs and artificial ashes may have a considerable amount of asbestos fibers and, if disposed of, should be handled in the same manner as other asbestos materials. Asbestos-containing gloves, stove-top trivets, and pads that are still being used should also be discarded.

This listing is not intended to be all inclusive, but rather a baseline for home owners to gain a better understanding of potential areas of hazard.

What Should be Done About Asbestos in the Home?

If you think asbestos may be in your home, don't panic! The best thing is to leave asbestos material that is in good condition alone. Check materials that have potential to contain asbestos regularly. Look for signs of wear or damage such as tears, abrasions, punctures or water damage. Damaged materials may release asbestos fibers. If you do notice materials that are damaged it is best to limit access to the area and do not touch or disturb it. When planning to do repair work or a renovation to your home consider consulting a licensed professional to sample and analyze the materials that will be disturbed to determine if asbestos is present, prior to construction. [Top of Document](#)

Choosing a Professional

When choosing a professional to do work with asbestos, keep in mind that most home repair or remodeling general contractors may not have certification or certified workers, nor are they equipped to work with asbestos safely. If the contractors do not have the right equipment and expertise and do the work improperly, they will spread asbestos fibers throughout your home and the neighborhood. They may create an asbestos hazard where none existed before or make an existing situation worse. You should request references from the contractor's former customers before you make an agreement for removal. [Top of Document](#)

If You Think Asbestos Has Been Released In Your Home, What Should You Do?

If the release appears significant (for example, 4 or 5 square feet of sprayed-on ceiling material or 1 to 2 feet of pipe insulation), close off the portion of the house, such as a bedroom or the basement, in which the problem has occurred, so that people will not be exposed. Close off air ducts and vents, shut windows, and tape bottoms of doors to prevent drafts. Contact a qualified contractor to assess the condition and provide advice on appropriate actions.

You will probably want to have samples of dust or debris from floors, shelves, or window sills collected by a licensed professional who would then send the samples off to be analyzed by a laboratory. Air samples may also be needed to define the situation; if so, they must be taken and analyzed by a licensed professional who has the proper training and equipment, but the samples must be analyzed by a laboratory. Ask for prices for this work before selecting a contractor. Analysis of material (bulk samples) and air samples will provide the information needed to decide what further measures may be necessary.

CAUTION!

Do not dust, sweep, or vacuum debris that may contain asbestos. These steps will disturb tiny asbestos fibers and may release them into the air. Never use your household vacuum for cleaning up potential asbestos debris as this will continue to release fibers throughout your home. [Top of Document](#)

Points to Remember

Asbestos is only dangerous when it's deteriorated to the point where its tiny fibers can be released into the air and inhaled. If the material is solid (in appearance and to the touch) and maintained in good condition, it presents no problem.

If the asbestos-containing material in your home has become deteriorated for some reason, there's a good chance you can solve the problem without removal. Removal is generally the last resort, because it involves disturbing the material and sending more fibers into the air. Seek the advice of a licensed professional to assist in the identification and handling of asbestos containing building materials prior to any repairs or renovations to your home. [Top of Document](#)

More Information...

For more information on asbestos in other consumer products, contact the Consumer Product Safety Commission (CPSC) at 1-800-638-CPSC. A teletypewriter (TTY) contact is 1-800-638-8270.

Additionally, the City of Flagstaff Environmental Technician may be contacted at (928)213-2151 or the Environmental Project Manager at (928)213-2146 to answer other asbestos related questions.

