

Vermiculite Insulation

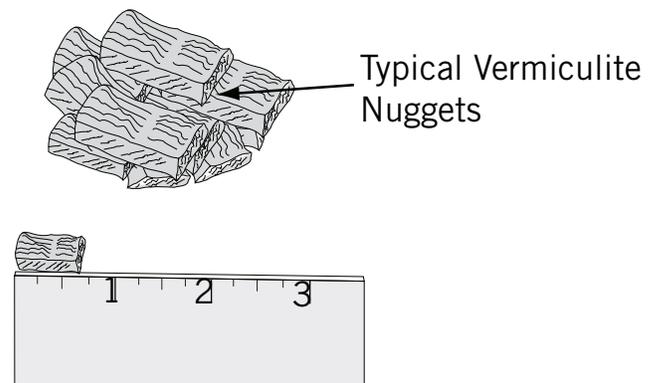
Vermiculite is a mineral in the earth. It is mined to produce a variety of products. When heated to a high temperature, vermiculite “exfoliates” or pops like popcorn into lightweight pieces of material, ideal for use as thermal insulation. Pieces of vermiculite are anywhere from 1/4 to 1 inch thick, and are shaped like little silver, gold or brown nuggets.

Vermiculite is easy to pour into the spaces in attic framing. It was a popular do-it-yourself insulation material in its heyday. Vermiculite was also used in walls and in difficult-to-access areas.

Vermiculite was used to insulate attics from roughly 1925 to about 1985. It was primarily used as a retrofit insulation for older homes. If you have an older home, you could have vermiculite insulation.

Commonly poured into the spaces between the ceiling joists and level with the top of the joists, vermiculite may be underneath a layer of modern fiberglass insulation added later as an upgrade.

Most of the vermiculite attic insulation produced until the mid 1980s was sold under the brand name Zonolite.



The Problem

The largest supply of vermiculite came from a mine near Libby, Montana. The Libby mine also had natural asbestos deposits. Vermiculite from the Libby mine contains asbestos. The problem is the asbestos, not vermiculite. If you have vermiculite insulation, it is impossible to know if it came from the Libby mine. Since most of the world’s supply came from that mine, chances are high your vermiculite is from this source.

Authorities have known for some time that vermiculite from the Libby mine contained a small amount of asbestos (less than 1%). They thought the low percentage did not pose a significant health risk. More recently, however, the same authorities say that although the bulk percentage of asbestos is low, a concentrated cloud of asbestos fibers could form when disturbed, posing a health risk.

Tiny asbestos fibers can become trapped in the lungs. Frequent and prolonged exposure could lead to a lung disease called asbestosis, or to lung cancer. Asbestos is only a health concern if it gets into your lungs.

Action Plan

First of all, it is reasonable to assume that vermiculite in any attic contains asbestos. You could have it tested, but even for a trained expert it is difficult to test the material reliably.

There is no health risk if you do not disturb the insulation. Authorities agree that the best course of action is to leave it alone.

- Avoid going into your attic; do not use it as a storage area.
- If you do go in, make every effort not to disturb the insulation.
- If you must disturb the insulation, leave the attic immediately after.
- A dust mask will NOT protect you.
A special mask, requiring fitting and training, is required to filter asbestos.
- Seal any openings to the attic, such as around recessed light fixtures .

Renovations and Remodeling

When renovating or remodeling, anything from rewiring the ceiling light fixtures to installing a skylight could disturb the insulation. Get a recommendation from a certified asbestos contractor. This is not a do-it-yourself project.

Is Vermiculite Still on the Market?

Vermiculite insulation is still available on the market. Anything produced after 1990, however, will not be from the Libby mine. Vermiculite from other sources does not contain asbestos.

