THE FACTS

OCCUPATIONAL AND ENVIRONMENTAL SAFETY

Asbestos

Asbestos is a mineral – a rock. A rock composed of long strings of fiber; a natural "rock wool". It is fire-resistant, chemical-resistant, and an excellent insulator, asbestos was added to a variety of building materials and other products.



Asbestos comes in several varieties. The most common types are Chrysotile (which is white) and Amosite (which is either brown or offwhite).

What Are the Risks and Health Effects of Asbestos Exposure?

Risks

- The amount and duration of exposure
- Smoking
- **Health Effects**

(long-term inhaled asbestos exposure)

AsbestosisLung Cancer

Mesothelioma

Products containing Asbestos

Asbestos **may** be found in many different products and places. Broadly speaking, the materials listed below are <u>assumed to contain asbestos</u> if they were installed before 1981:

- Sprayed on fireproofing and insulation in buildings
- Insulation for pipes and boilers
- Wall and ceiling insulation
- Ceiling tiles
- Floor tiles

- Putties, caulks, and cement
- Roofing shingles
- Siding shingle
- Wall and ceiling texture
- Joint compound
- Plasters

Usually, asbestos is mixed with other materials and may contain only a small percentage of asbestos. Depending on what the product is, the amount of asbestos in asbestos containing materials (ACM) may vary from 1% to 100%.

Building materials may contain asbestos even if new.

The use of asbestos was never completely banned in the United States. Products that are made for use in Canada and Mexico - neither of which has banned the use of asbestos - are currently available in the United States and may contain asbestos.

When is Asbestos hazardous?

Asbestos is hazardous when it is "friable" or easily crumbled. When left intact and undisturbed, asbestos containing materials pose **no** health risk to occupants.

Sprayed on asbestos insulation is friable. Asbestos floor tile is not.

Non-friable Asbestos Containing Materials – ceiling tiles, floor tiles, laboratory bench tops, shingles, fire doors, siding shingles, etc. - will not release asbestos fibers unless they are damaged in some way, such as cutting, sanding, or scraping.

Wrapped asbestos insulation presents no hazard unless the protective covering is damaged, and the asbestos is exposed.

Avoiding Asbestos Exposure

Under no circumstances will Clemson employees be allowed to work in areas with dangerous levels of asbestos. If you do not know whether something contains asbestos or not, assume that it is until it is verified otherwise.

In most cases even experts cannot tell the difference between asbestos containing and non-asbestos containing forms of the same product just by looking at it. The material must be sampled and tested to confirm whether it contains asbestos. OES has a contractor available to assist in determining whether a material contains asbestos, and to assess the hazards.

Clemson employees are prohibited from intentionally disturbing asbestos containing materials.

Any removal or disturbance of asbestos must be performed by outside certified asbestos abatement contractors.

Never

- Drill Hammer Cut Br
- Damage
 Move
 Disturb

any material until it has been verified asbestos free.

Working Around Asbestos

Occasionally, employees will need to work in areas where asbestos containing materials are present but not friable and will not be disturbed by work activity. If there is any concern that fibers may inadvertently be released, contact OES to request an assessment.

Contact the Asbestos Program Manager at wnewber@clemson.edu. There are many federal and state asbestos regulations, all with the goal of minimizing exposure to asbestos. OES has copies of these standards and the Occupational Safety and Health Administration (OSHA) standard available.

For more information on OES website: https://www.clemson.edu/finops/oes/index.html