



ASBESTOS

AWARENESS TRAINING

This training is being presented so that you may avoid *any* exposure by becoming more aware of the locations and types of asbestos.

**Exposure is RARE
But you need to be AWARE**

Types Of Asbestos

- **Chrysotile** is white asbestos with fine silky fibers. It accounts for over 90 percent of the asbestos used in the U.S. Chrysotile is mined in Canada and the Soviet Union.
- **Amosite** is known as brown asbestos and is used in heat insulation materials. Amosite is mined primarily in Transvaal, South Africa.
- **Crocidolite** is known as blue asbestos and is occasionally found with amosite or chrysotile in pipe or boiler wrap. Crocidolite is mined in South Africa.

Tremolite, actinolite and anthophyllite are rarely found in building or commercial products

Mineral Characteristics

- Separate into increasingly smaller fiber bundles when disturbed or handled
- Resistant to heat, bacteria and chemicals
- Great tensile strength and stiffness
- Excellent electrical and thermal insulator
- Very good noise insulator
- Resistant to the effects of friction and wear

FRIABLE: An important term used in describing the condition of asbestos is the word "friable." A material is considered friable if it can be reduced to powder by hand pressure when dry.

Potential Health Effects

ROUTES OF ENTRY

The Respiratory System:

1. The mouth & nose - filter out large particles
2. Coated Bronchi - filter out smaller particles



HEALTH RISKS

1. Asbestosis
2. Mesothelioma
3. Lung Cancer



The combination of asbestos exposure and smoking greatly increases the risk of developing lung cancer

4. Other Cancers

Where is it & What is it Used in?

- Acoustical Plaster
- Base Flashing
- Breaching Insulation
- Cement Pipes
- Chalkboards
- Ductwork
- Electrical Panel Partitions
- Fireproofing Materials
- Heating & Electrical Ducts
- Joint Compounds
- Roofing Shingles
- Fire Doors
- Vinyl Floor Tile
- Textured Paints
- Spackling Compounds
- Blown-in Insulation
- Caulking/Putties
- HVAC Duct Insulation
- Roofing Felt
- Spray-Applied Insulation
- Thermal Paper Products
- Vinyl Wall Coverings
- Flooring Backing
- Thermal Taping Compounds
- Cement Siding
- Mastics/Adhesives
- Pipe Insulation
- Adhesives
- Wallboard
- Asphalt Floor Tile
- Boiler Insulation
- Ceiling Tiles
- Cement Wallboard
- Decorative Plaster
- Electrical Cloth
- Themolite Asbestos



Gaskets

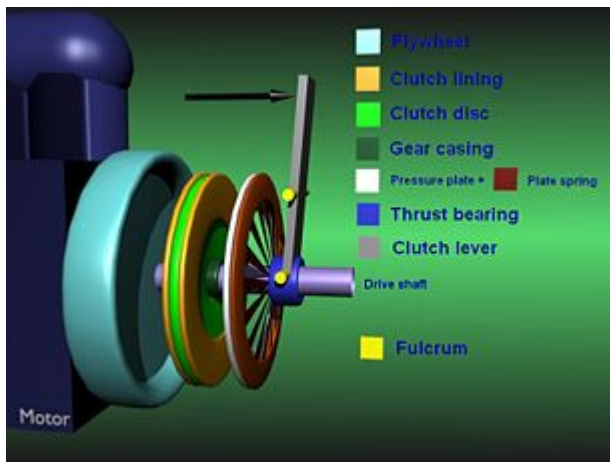


Caulking



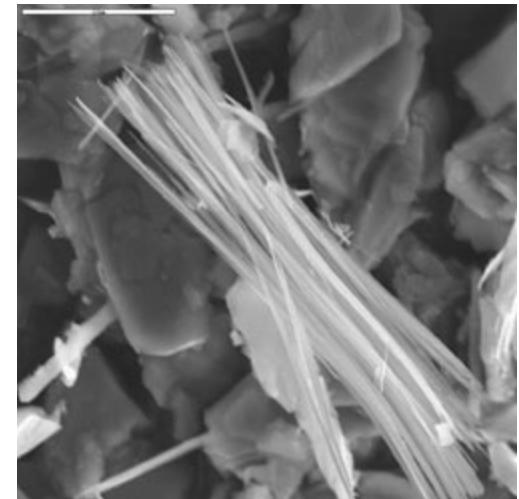
Canadian College (Greater Montreal, Quebec, Canada, August 2008). This is a joint that has been fireproofed to keep the structural steel elements below critical temperature (ca. 1000°C) ... reached some minutes of a fire, when some failures. Beams are often subject to sudden changes in structural and mechanical services that must be suspended from the fireproofed ceiling. Commercial spray fireproofing must be light and fluffy to properly insulate the steel. Rusted steel wiring or piping is not fireproofing and insulation with salt deposits the fireproofing, which must then be polished and made whole again if the fire resistance rating of the beam is to be protected is 0-14. Commercial fireproofing shows large deformations, supporting metal steel above, which is not touched by the fireproofing ceiling that was used as the design basis.

Fire Proofing



Clutch Plates

Themalite
Asbestos



Notices & Labels

Most ACMs (Asbestos Contained Materials) that employee's will encounter will not be labeled:

- Homes
 - prior to 1980
- Apartments
 - Brake pads
- Offices
 - Sound reducing materials
- Other
 - insulating



*The presence of asbestos alone in a building
does not mean that the building occupants
are at risk.*

*As long as ACM remains in good
condition, and is undisturbed
exposure is unlikely*

Release Of Fibers

METHODS:

- 1. Fall-Out**
- 2. Contact**
- 3. Reentrainment**

MINIMIZE POTENTIAL EXPOSURE:

- 1. Damage & Detrioration**
- 2. Floor Care**



Roles Of Charter Personnel

Become familiar with the health hazards associated with ACM.

Be aware of areas that could potentially contain ACM. Assist in the prevention of activities, which disturb the ACM (hanging plants or pictures, pushing furniture against it, etc).



Report any evidence of disturbance or damage.

Periodically inspect and report any dust or debris from ACM, change in appearance of ACM, or any improper action, which could potentially damage the ACM.

If you see ACM that has been damaged or disturbed, contact your supervisor and or call RM/EH&S at 3-3531.

