



## What Is Asbestos?

### Asbestos Products

Three-fourths of the world's supply of [asbestos](#) is mined in Quebec, Canada, and other large deposits are located in South Africa. Asbestos can be mined in various ways, but the most common method is open-pit mining. However, only 6 percent of the mined ore contains usable fibers. The fibers are split from the ore by crushing, air suction, and vibrating screens. During that process they are sorted into different lengths, or grades. The Quebec Standard Test Method is the most widely used method of grading. It divides the fibers into seven groups, the longest in Group One and the shortest, called milled asbestos, in Group Seven. The length of the fibers and its chemical composition determine the kind of product that can be made out of the asbestos. The longer fibers are used in fabric, usually with cotton or rayon, and the shorter ones for molded materials, such as pipes and gaskets.



Asbestos has been used in various products since the 1900s, but the peak usage years were between 1950 and 1975. It was considered an ideal material to use, since it resembles fibers such as cotton and wool in its pliability and softness, yet it is inflammable and acid resistant.

Because of its cloth-like qualities, it can be woven and spun into fireproof garments. It was once used to create fireproof protection for firefighters and other people who worked with high heat. Asbestos was also used in gas masks. It could be woven into sheets to act as insulation and thermal proofing for pipes, boilers, and electrical products.

It could be spray applied as fireproofing as well. It coated brake linings and clutch pads, and other friction materials (because friction causes heat).

It was used in an array of construction materials. Asbestos was included in cement pipes, packing, jointing, gaskets, floor and ceiling tiles, paneling, roofing shingles, asphalt coats and sealant, and acoustical and decorative applications.

Here is a list of common asbestos products:

- Building exteriors
  - asbestos cement siding panels – flat, corrugated, shingles or accent panels
  - asbestos cement soffits – flat or perforated panels
  - asbestos cement roof panels – corrugated
  - roofing felts and mastics
  - building overhangs – thermal spray

- stucco
- brick and block mortar
- loose fill insulation in exterior wall cavities ([vermiculite](#))
- Flooring
  - vinyl [asbestos tile](#)
  - sheet vinyl flooring (asbestos paper backing)
  - floor leveling compound
- Ceilings
  - t-bar ceiling tile
  - asbestos cement ceiling tile
  - acoustic and stippled finishes
  - plaster or drywall jointing materials
- Walls
  - plaster or drywall jointing materials
  - stippled finishes
  - thermal spray
  - asbestos cement panels
- Service Areas
  - insulation in boiler rooms – boilers, vessels, pipes, ducts, incinerators, floors, ceilings, walls
  - fan rooms – insulation of pipes, ducts, chillers, floors, ceilings, walls
  - machine rooms – insulation on pipes, ducts, floors, ceilings, walls
  - crawl spaces – insulation on pipes, ducts
  - wall cavities, insulation above ceiling spaces – pipe and duct chases, pipes, ducts
- Pipes (insulation on either exposed or concealed pipes)
  - steam and hot water heating supply and return lines
  - domestic water supply and drain lines
  - chilled water lines
  - rain water and sanitary lines – asbestos cement or bell and spigot cast iron, insulated or bare pipe
  - gaskets in flanged pipe joints
- Structural
  - fireproofing spray on beams, decks, joints, columns and other structural members
- Miscellaneous
  - incandescent light fixture backing
  - wire insulation
  - fume hoods – internal linings and exhaust ducts
  - lab counters
  - elevator brake shoes
  - heating cabinet panels (asbestos cement)
  - fire dampers and fire stop flaps
  - diffuser backplaster
  - emergency generators – thermal insulation and exhaust manifolds
  - firestopping
  - theater curtains

- welding blankets and screens
  - incinerators – internal insulation
  - cooling towers – panels and fill
  - duct tape
  - duct expansion/vibration isolation joints
- Building products containing asbestos in an unbound or loosely bound form:
    - insulating cements
    - sprayed insulation – fire resistant, acoustic, thermal, condensation control
    - insulation block – magnesia or calcium silicate
    - textiles – not saturated, for lagging, curtains or clothing

(List reproduced from the [Alberta Asbestos Abatement Manual](#) (pdf - 1.15 MB), August 2001)