

Asbestos kills – safer substitutes exist

90 percent of present asbestos consumption goes into asbestos-cement products and 7 percent into friction materials. Substitutes for these asbestos products are not limited to products that simply replace asbestos with another material (e.g., PVA and cellulose in fiber-cement roofing sheet). There are also a number of wholly different products that can replace the asbestos products.

A number of substitutes for asbestos-cement products are included in the following table.

Asbestos Product	Substitute Products
<p>Asbestos-Cement Corrugated Roofing</p>	<p>Fiber-cement roofing using: synthetic fibers (polyvinyl alcohol, polypropylene) and vegetable/cellulose fibers (softwood kraft pulp, bamboo, sisal, coir, rattan shavings and tobacco stalks, etc.); with optional silica fume, flyash, or rice husk ash.</p> <p>Microconcrete (Parry) tiles Galvanized metal sheets Clay tiles Vegetable fibers in asphalt Slate Coated metal tiles (Harveytile) Aluminum roof tiles (Dekra Tile) Extruded uPVC roofing sheets Recycled polypropylene and high-density polyethylene and crushed stone (Worldroof) Plastic coated aluminum Plastic coated galvanized steel.</p>
<p>Asbestos-Cement Flat Sheet (ceilings, facades, partitions)</p>	<p>Fiber-cement using vegetable/cellulose fibers (see above), wastepaper, optionally synthetic fibers Gypsum ceiling boards (BHP Gypsum) Polystyrene ceilings, cornices, and partitions Façade applications in polystyrene structural walls (coated with plaster) Aluminum cladding (Alucabond) Brick Galvanized frame with plaster-board or calcium silicate board facing Softwood frame with plasterboard or calcium silicate board facing.</p>

Asbestos-Cement Pipe	<p><i>High Pressure:</i></p> <p>Cast iron and ductile iron pipe High-density polyethylene pipe Polyvinyl chloride pipe Steel-reinforced concrete pipe (large sizes) Glass-reinforced polyester pipe</p> <p><i>Low Pressure:</i></p> <p>Cellulose-cement pipe Cellulose/PVA fiber-cement pipe Clay pipe Glass-reinforced polyester pipe Steel-reinforced concrete pipe (large diameter drainage)</p>
Asbestos-Cement Water Storage Tanks	<p>Cellulose-cement Polyethylene Fiberglass Steel Galvanized iron PVA-cellulose fiber-cement</p>
Asbestos-Cement Rainwater Gutters; Open Drains (Mining Industry)	<p>Galvanized iron Aluminum Hand-molded cellulose-cement PVC</p>