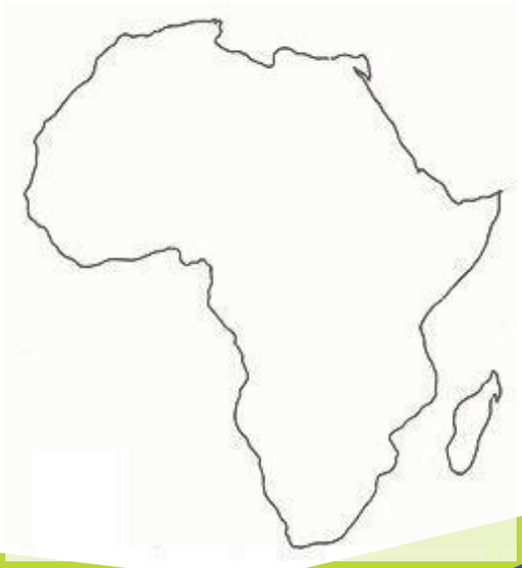
AsbestosSafe

Asbestos Africa



AsbestosSafe™ Primer Coating For The EncapsulationOf Weathered Asbestos – www.asbestos.africa

"Treatment of asbestos-containing materials (ACM) with a sealant material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers. A bridging encapsulant creates a membrane over the surface. A penetrating encapsulant penetrates the material and binds its components and any other unstable material together."

Asbestos Africa Heritage

Asbestos Africa the leading South African specialists in Asbestos safety systems, giving high levels of success in the encapsulation field providing quality and innovative products to the commercial construction industry.

All Asbestos Africa products are specifically engineered to perform in conjunction with South Africa's construction materials and under the harsh South African environmental conditions.

Specifications

All project requirements and site conditions are unique. Asbestos Africa actively partners with customers to provide product and specification information individually suited for each job.

Customised product development, specifications, education, application and on- site technical advice are just a few areas in which Asbestos Africa can support your project along every step of the way.

Empowerment

Asbestos Africa is pioneering a drive across South Africa to assist communities that have been exposed to **Asbestos** for many decades . We have an initiative in place whereby the communities are being empowered to become fully accredited applicators with intensive training on asbestos, the encapsulation process as well as health and safety.

Job creation especially for **Women** and **School leavers** alleviating the unemployment crisis currently on the ground in many communities .

Innovation

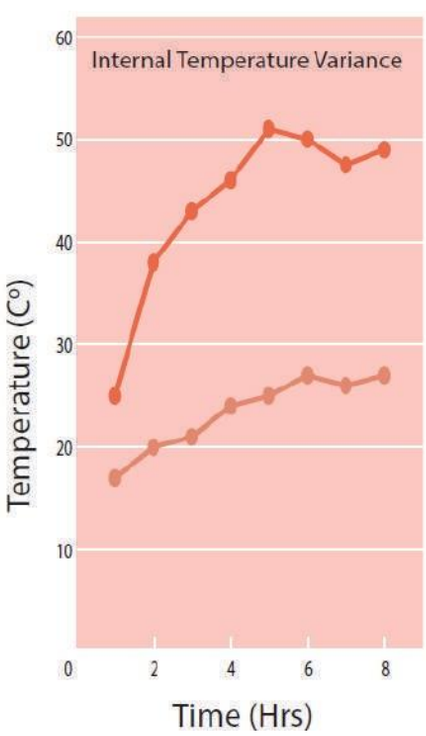
Asbestos Africa is at the forefront of technical advancement within the Asbestos Encapsulation Field. Our chemical Engineers continue to develop cutting edge solutions for the Asbestos problems in Africa with Great success, raising the standards of consistency, performance and reliability.

Service & Support

Asbestos Africa customers are supported by a highly trained team of commercial business development professionals. Products are available nationally, with Provincial service centers located in Gauteng, KZN, Eastern Cape & Western Cape with large expansion on the cards.

A 7-day technical support hot-line is also available 072 832 568 2

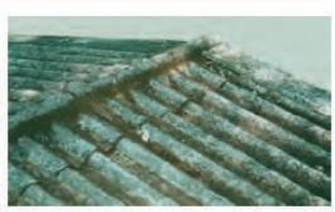
Effect Of Coating On Reducing Roof Cavity Temperature



External Temperature (shade)	20°C	29°C	32°C
Roof Cavity Temperatures			
Roof Cavity - Uncleaned Roof	41°C	59°C	61°C
Roof Cavity - Coated Roof (white)	24°C	34°C	38°C

*Taken from: Brown S.K., Souprounovich A.N., "Cleaning and Painting of Weathered Asbestos Roofing." Surface Coatings Australia May 1989

- Reflective properties aid in reducing internal air temperatures by up to 20°C.
- Aids in reduction of CO_2 emissions.
- Energy and cost efficient.
- Resistant to chemical attack.
- Weatherproof and lightfast.
- Good resistance to alkali.
- Fungal and algal resistant in high humidity environments.
- Excellent dirt pick up resistance.
- Elastomeric, remaining flexible even after weathering.
- Tough - high tensile strength and hardness.
- Resistive to impact and light traffic damage.
- Low VOC.



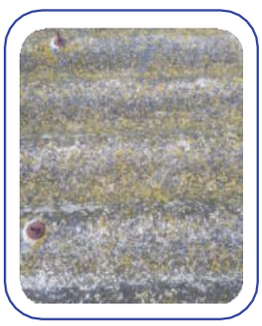
Uncoated

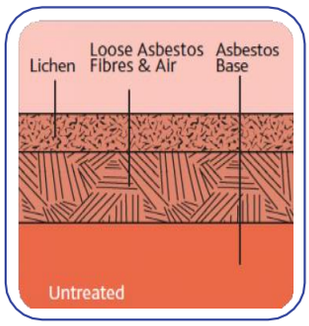
Coated

The Problem

Asbestos surfaces undergo a weathering process after many years of exposure and a loose surface layer develops which, on roofs becomes colonized with dark colored lichen. The lichen attacks the cement causing exposure of the Asbestos fibers. The surface becomes unstable and the Asbestos sheeting is weakened and the darkened color causes a substantial increase in roof cavity temperatures. The traditional process for coating Asbestos roofs was to clean the roof with high-pressure water to remove all lichen and loose Asbestos fibers. This procedure was eventually banned on health grounds, creating a need for a system that could be applied straight to the degraded Asbestos without disturbing the surface. The unstable nature of weathered Asbestos surfaces is a cause of some concern in the community and the **AsbestosSafe™ System** has been developed to minimize the danger of hazardous airborne fibres and provide an attractive durable finish.

Schools are most vulnerable

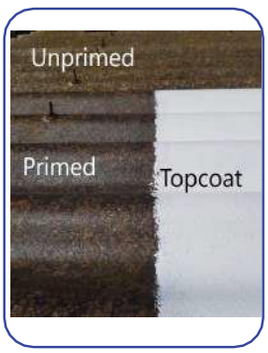




The Solution

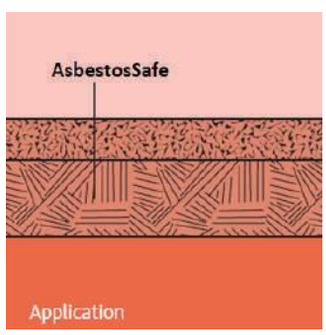
Years ago, Asbestos Africa addressed this problem and developed the AsbestosSafe System to achieve the following :

- The **binding** and **encapsulation** of **Asbestos fibers**
- Avoiding **costly downtime** associated with replacement of asbestos roofs.
- A significant reduction in roof cavity temperatures (up to 20 degrees) resulting in savings in building cooling costs.
- An extension of the service life of asbestos structures.
- A completely water based and truly environmentally friendly system.
- Provides a rejuvenated appearance in a range of decorative colours.



The system

Through necessity and concern for the safety of our fellow people, Asbestos Africa developed AsbostosSafe™ primer. The primer soaks through the lichen and degraded Asbestos down to the sound base material, binding these unstable elements.



Application and warranty

Recommended application procedure

An application with training and support from **A**sbestos Africa should undertake the following:

- An assessment of the state of the existing **A**sbestos.
- Provide a specification to encapsulate the assessed **A**sbestos.
- Application of the specified number of coats of **AsbestosSafe™ primer.**
- An assessment of the complete binding of the **A**sbestos fibers by the **Asbestos primer** (future **AsbestosSafe™ primer** may be required).
- Application of the specified number of coats of **AsbestosSafe™ topcoat.**

Warranty

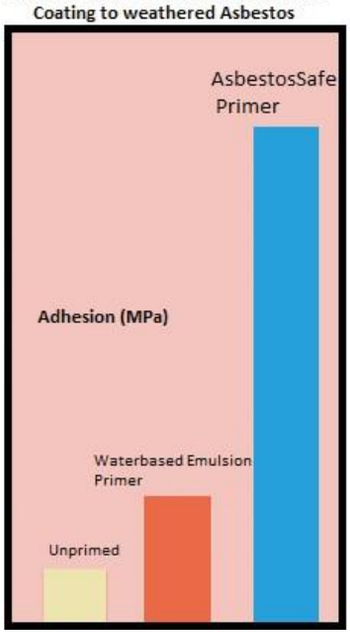
The **A**sbestosSafe™ system of primer and topcoat will give many years of protection to all asbestos surfaces. When quality assurance procedures are followed and the asbestos safe is applied by an experienced applicator a certificate of compliance warranty may be issued ensuring the integrity of the system for a period of up to 7 years.
A maintenance inspection must be undertaken every 2 years.

The management and control of asbestos in the workplace

It is a duty of care of the person with control of a premises to develop and implement a management plan. The purpose of an **A**sbestos management plan is to assist with the control of premises to comply with the **A**sbestos legislation and prevent exposure to airborne **A**sbestos fibers while **A**sbestos remains in workplace. The ultimate goal should be to haveall **A**sbestos materials removed from site. Where **removal is not viable,** safety measures should be put in place to reduce the risk of **A**sbestos fibres by enclosure or encapsulation. The **A**sbestosSafe™ system provides building owners with a proven alternative to roof replacement that assists in addressing the duty and requirements relevant in each province.

Encapsulation using the **A**sbestosSafe™ system is both **effective** and an **economic alternative** to roof replacement.

Technical Data



Test Discription	Results
Tensile Strength	>3.6 MPa
Elongation	321 %
Adhesion Strength	1.8 MPa
Low Temperature Flexability (-18 deg C)	Excellent
180 Degree Mandrel Bend Test (3mm)	Pass - No cracking
Crack Bridging Ability	4.3 x Dry Film Thickness
Water Resistance - Swelling (24 Hours) - Water Vapour Transmission Rate	 7.8% 43/m² / day
Accelerated Weathering Resistance	Excellent. No evidence of cracking, Yellowing or loss of flexibility
Dirt Pick up Resistance 1 - Year Exterior Exposure	 Excellent
Mould and Mildew Resistance	Does not support Mould or Mildew growth