

THE FIBROSEAL SYSTEM

For Asbestos Encapsulation

DESCRIPTION

THE FIBROSEAL SYSTEM has been specifically designed to address the issue of weathered asbestos roofs to minimise the danger of hazardous airborne particles. The system consists of a PRIMER that soaks through the lichen and degraded asbestos cement down to the sound base material binding these unstable elements. This is then followed by a high build UV resistant TOPCOAT.

THE PROBLEM

Asbestos surfaces undergo a weathering process after many years of exposure and a loose surface layer develops which, on roofs becomes colonised with dark coloured lichen. The lichen attacks the cement causing exposure of the asbestos fibres. The surface becomes unstable, the asbestos cement sheeting is weakened and the darkened colour causes a substantial increase in roof cavity temperatures.

The unstable nature of weathered asbestos surfaces is a cause of some concern in the community and THE FIBROSEAL SYSTEM has been developed to overcome these problems and provide an attractive, durable finish.

The traditional process for coating asbestos roofs was to firstly clean the roof with high-pressure water to remove all lichen and loose asbestos fibre. This procedure however, is banned on health grounds, creating a need for a system that could be applied straight to the degraded asbestos without disturbing the surface.

THE SOLUTION

Over 15 years ago, Crommelin addressed this problem and developed THE FIBROSEAL SYSTEM to:-

1. Bind and Encapsulate asbestos sheet fibres.
2. Avoid costly downtime associated with replacement of asbestos.
3. Achieve significant reduction in roof cavity temperatures resulting in savings in building cooling costs.
4. Extend the service life of asbestos structures.
5. Create a completely water based system.
6. Provide a rejuvenated appearance in a range of decorative colours.
7. Resist algae growth.

THE SYSTEM

Through extensive research and development, Crommelin developed FIBROSEAL PRIMER. The primer soaks through the lichen and degraded asbestos down to the sound base material, binding these unstable elements.

FIBROSEAL TOPCOAT is then applied to the primed surface to provide a durable, decorative, UV resistant protective coating. Active ingredients in FIBROSEAL TOPCOAT also resist the growth of moss and lichen.

Customers are advised to undertake their own assessment to determine suitability of a product for the particular use intended. Due to the performance of any product being subject to a wide variety of field and surface conditions we are unable to assume liability for any loss, consequential or otherwise that may arise from the use of our products. Where a product is proven defective, our liability is limited to the replacement of the product.

TECHNICAL DATA – THE FIBROSEAL SYSTEM

APPLICATION

Based on an assessment of the state of the existing asbestos by an independent contractor a specification to encapsulate the assessed surface will be provided to:

1. Apply the specified flood coat of FIBROSEAL PRIMER at approx 3m² / L.
2. Re-assess the complete binding of the asbestos fibres by the FIBROSEAL PRIMER (further FIBROSEAL PRIMER may be required).
3. Apply the specified number of coats of FIBROSEAL TOPCOAT (i.e. 2 coats at 5m² / L).

NB: FIBROSEAL TOPCOAT is to be applied as is without any watering down.

Physical Properties of Cured FIBROSEAL

| TEST DESCRIPTION | RESULTS |
|---|---|
| Tensile Strength | 3.06 MPa |
| Elongation | 329% |
| Recovery after Elongation | 92% |
| Low Temperature Flexibility (-18°C) | Excellent |
| 180° Mandrel Bend Test (3mm) | Pass – No cracking |
| Crack Bridging Ability | 4.3 x Dry Film Thickness |
| Water Resistance <ul style="list-style-type: none"> • Swelling (24 hours) • Moisture Vapour Transmission Rate | 7.8% 43 g/m ² /day |
| Accelerated Weathering Resistance | Excellent. No evidence of cracking, yellowing or loss of flexibility. |
| Dirt Pick Up Resistance <ul style="list-style-type: none"> • 1 year exterior exposure | Excellent |
| Mould and Mildew Resistance | Does not support mould or mildew growth |

Effect of Coating on Reducing Roof Cavity Temperatures.

| External Temperature (shade) | 20°C | 29°C | 32°C |
|---|------|------|------|
| Roof Cavity Temperatures | | | |
| Uncleaned Roof | 41°C | 59°C | 61°C |
| Cleaned Roof | 30°C | 44°C | 48°C |
| 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. | | | |

The above data shows the effect on roof cavity temperature when weathered asbestos roofs are painted white. This results in improved comfort for the occupants and savings on building cooling costs.

Resistance To Dirt Pick Up

The FIBROSEAL TOPCOAT has excellent resistance to dirt pick up and resists mould or mildew growth. The surface retains its initial white reflective coating for roofs, significantly reducing interior building temperatures.

Impact Resistance

The combination of elongation, tensile strength and low temperature flexibility properties formulated into the FIBROSEAL TOPCOAT gives the cured surface excellent impact resistance, even in cold climates.

WARRANTY

A warranty may be issued for THE FIBROSEAL SYSTEM when it is applied by using Quality Assurance procedures.

A 10 year manufacturer's warranty may be issued for the colours Off White, Gull Grey and Wheat.

A 7 year manufacturer's warranty may be issued for all other colours.

PACKAGING

20L container.

HEALTH AND SAFETY

This product is strongly alkaline and therefore incompatible with aluminum, copper, brass, bronze, zinc, glass and tin. Material Safety Data Sheets are available from Crommelin.

Ensure goggles, gloves are worn at all times. Avoid contact with skin and eyes. Wash with soap and water when finished.

When working on weathered asbestos roofs, refer to NOHSC Codes of Practice 2018 (2005) Management of Control of Asbestos in Workplaces.

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