



Asbestos Encapsulation

Thermal Insulation

Waterproofing

Asset Protection





ASBESTOS ENCAPSULATION | Thermal Insulation | Waterproofing | Asset Protection

Type of Roof: Super 6 Fibro Asbestos

The Thermoshield ceramic coating was chosen for its ability to provide a non-permeable membrane over the heavily weathered & aged asbestos roof sheeting. The coating offered a multi-faceted solution, which will be able to significantly prolong the life of the roof.

Roof replacement is a hugely costly endeavour at the best of times... However an asbestos roof carries with it additional difficulties & risks. The Thermoshield coating has been able to resolve the issue, with little to no disruption to the premise.

HOW THERMOSHIELD OFFERED A MULTI-FACETED SOLUTION:

Storage King ultimately decided to apply the Thermoshield coating in order to:

- Encapsulate the dangerous asbestos fibres
- Abrasion resistant membrane that is undamaged by foot traffic, knocks & bumps
- Provide an effective barrier (membrane) - greatly increasing roof waterproofing
- Thermal insulation - which results in lower internal temperatures & comfort
- Extending the life of the roof & strengthen the roof sheeting
- Visually restore the heavily weathered sheeting

The restoration & coating process consisted of the following process:

- **Acticide coat** (applied to kill all mould spore growing on sheets)
- **Penetrol coat** (applied to fasteners as required)
- **Penetrating primer/sealer** (**applied to all roof sheeting**)
- **3 coats of Thermoshield** (to a wet film thickness of 750 micron)

An additional [3rd coat] of Thermoshield was applied to ensure a comprehensive “sealing” to ensure the asbestos sheeting had a membrane/blanket covering the entire surface.

The abrasion resistant coating will also withstand knocks & bumps that could dislodge dangerous fibers.

PREPARATORY TASKS

Prior to the coating process commencing, the below measures were undertaken in accordance with best work safe practices:

- Extensive Work Place Health and Safety Audit to provide JSA
- Erection of Safety Equipment
- Sensor equipment installed within the ceiling cavity to detect any Asbestos Fibers entering the atmosphere while carrying out repairs. All tests came back negative, which means no fibers were detected.
- Remove debris from roof and carry out any repairs. (No roof sheets were disturbed)

Below series of photos demonstrates the guardrail installation around the roof perimeter:



For additional information such as Work Place Health and Safety Audit or data from the sensor equipment – please contact us.

SURFACE PREPARATIONS

No power washing took place due to the roof being Asbestos.

At 3,500psi, the high pressure would cause the dangerous fibers to be displaced

Rather than washing, low pressure preparatory coats were applied:

- Penetrol coating - applied to all roof fasteners as required
- Acticide coating - anti-mould applied to entire roof area
- Penetrating etch primer/sealer - applied to entire roof area.



Full PPE worn & guard rails eliminating risk of fall:



THERMOSHIELD – THERMAL CERAMIC COATING

3 coats were applied to ensure a non-permeable membrane to seal the asbestos fibers, eliminate water penetration & increase surface sheeting strength.

The asbestos sheeting is quite porous compared to metal sheeting. As a result, an initial coat (in colour surf mist) was applied to ensure maximum contact.

The remaining 2 coats were in the basic white Thermoshield.

First coat (surf mist):



Second coat (white):

The below photos of the white coat, highlights the contrast between the first coat that was completed in 'surf mist'.

The benefit of applying a tinted coat is to ensure evenness between coats so that the protective membrane is applied to a consistently thick, even coat.

When applying layer of white onto white, it is increasingly difficult to track progress & can result in potentially thin patches of coating.



Third coat (white):

Because the Thermoshield ceramic coat is so thick, you can see how the additional same colour coat is difficult to track:



PROJECT COMPLETION:



BEFORE & AFTER examples:

