

Asbestos Roof Encapsulation

PROJECT LOCATION:	Denmark Hill Hospital, London
PROJECT SIZE:	520 m ²
SUBSTRATE:	Asbestos Corrugated Cement Sheets
SYSTEM USED:	PU Foam and Top Coat

Technical situation

GLS Coatings were contacted by Graham Construction Ltd. to apply our asbestos roof encapsulation waterproofing system to seal a leaking asbestos roof at Denmark Hill Hospital in London.

24 hour access to the hospital building was critical throughout the renovation work. GLS Coatings offered a solution which would prolong the life of the roof and allow staff and patients full access to the hospital, while fully complying with the Control of Asbestos Regulations 2012.

Water ingress was occurring in the building through the rusting bolts that held the asbestos sheets in place. This had also allowed small movement of the asbestos sheets causing cracks to form.

GLS Coatings' Two-stage Asbestos Roof Encapsulation System stabilised the roof and sealed all the cracks, without the need for mechanical intervention or disturbance to the asbestos.

Solution

1. Preparation of substrates.

Once on site, we utilised our fully guarded rolling work platform, mounted on twin tracks to safely move up and down the roof. The mobile platform is designed to overcome the challenges with working on fragile roofs, while providing a safe working position.

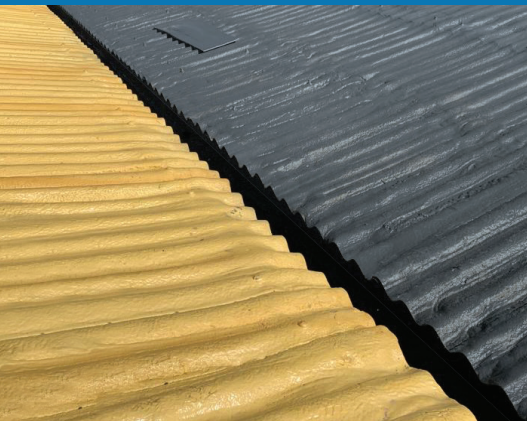
GLS Coatings prepared the existing surface by applying an environmentally friendly Biocide spray using a low-powered hand-pump to kill the moss and algae.

Once treated, our UKATA Category B Accredited Technicians hand picked off the moss and placed it in legally compliant double-bagged Asbestos bags. This waste was transported to an Approved Hazardous Waste Disposal site.





Significantly extend the lifespan of your leaking roof without the expense of a complete re-roof.



Structural Stabilising Foam Layer



Coating Extended up Parapet Wall



Complete Asbestos Roof Encapsulation

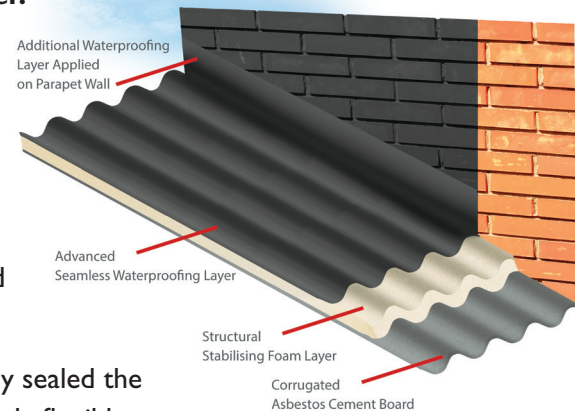
2. Applying the Structural Stabilising Layer to the Asbestos Roof.

High-density foam was spray-applied under high pressure at 4kg per m² to a depth of 25mm. This structural stabilising layer also improved the building's thermal properties.

The foam filled all of the small voids and cracks, before expanding and setting to form a lightweight layer that sealed the whole roof.

3. GLS Coatings applied a seamless fully bonding liquid coating to a depth of 2-3mm over the entire roof to form an impenetrable, joint free and seamless barrier.

During our initial site survey it was decided to also apply the coating area to the parapet wall. This created an additional water tight seal to prevent any water ingress where the asbestos sheets butted up to the supporting wall.



The spray-applied coating instantly sealed the leaking roof producing an extremely flexible water barrier, with up to 300% elongation that expands and contracts with the natural movement of the building.

The coating was touch-dry within 10 seconds of application, as work continued in Denmark Hill Hospital, safely below.

4. All data was recorded digitally on iPad Reporting Forms, for sign-off by the client.



GLS Coatings Ltd
Units 1-2 Broncoed Court
Broncoed Business Park
Mold CH7 1HP

telephone. 01352 753 494 freephone. 0800 231 5260
www.glscoatings.co.uk