

water proofing an aging City building roof

After many decades of wear and tear the project site was experiencing water damage resulting from a break down of the old bitumen coating.

The technology at the time of construction was to cover the concrete slab with a bituminous compound. As this material moves and deteriorates over time, large cracks blister all over the surface. Exposed to a tough environment of high winds, dirt, rain, sun, plus maintenance and crane workmen, water damage occurs.

The solution is to use the current technically advanced waterproofing membranes to form a secure, light, trafficable surface.

PRODUCTS USED

Sikaflex Pro - Polyurethane
Microl 2000 - waterproofing membrane
Fibreglass matting

BEFORE



AFTER



'HOW TO' INSTRUCTIONS



PREPARATION:

Stating the obvious – preparation is the key to a good job.

In this type of external environment the effects of years of weather need to be stripped back. Cleaning the dirt and grime off the surface, in particular the corners, parapets and services pipes, ready for application.

Usual tools are scrapers, brooms and water pressure cleaning

CUT IN PROBLEM AREAS:

Look ...identify problem areas, plan to fix these areas first. Fix any rust issues. Large surface cracks to be filled, plus attend to joints, flashings etc which need poly urethane protection.

Cut thin strips of fibreglass matting (125mm wide). Apply waterproofing membrane to identified problem areas a small section at a time, embedding the fibreglass matting strips in the membrane coats.

APPLICATION METHOD:

1. Complete the first coat 'cut in' of membrane the difficult or detailed areas.
2. Broad area application of waterproofing membrane system requires planning your start and finish points.
3. Coat the surface approx 8m x 1.2m with membrane, lay a suitable size strip of fibreglass matting into the wet membrane. Then apply another coat of membrane on top of the fibreglass, embedding the the fibreglass in membrane.
4. Repeat this process until the area is covered. Noting as you start the subsequent rows of fibreglass matting overlap the previous row by approx 50-100mm.
5. Apply a final coat of membrane to the entire surfaces being treated.

SAFETY CONSIDERATIONS:

Safety should always be considered. The main considerations for this type of job is the physical conditions rather than product hazards. Protective eye, breathing and work wear are particularly important in the preparation and 'cut in' phase. When working near building edges, safety harnesses and approved secure fixings may be required. Product safety is highlighted on the packaging, noting that the membranes are water based and relatively benign