



ENVIROCLAD F.B.S. IS A TPO MEMBRANE WITH A FLEECE UNDERSIDE – DESIGNED ESPECIALLY FOR OVERLAY PROJECTS.

TE KUITI POST OFFICE – KING COUNTRY

CHALLENGE: THE 60 YEAR-OLD TE KUITI POST OFFICE BUILDING HAD AN 850M2 FLAT ROOF, CLAD WITH A VERY OLD TORCH-ON MEMBRANE THAT WAS LEAKING. IN MANY AREAS, THE MEMBRANE HAD CRACKED OR LIFTED FROM THE ROOF COMPLETELY. PAST REPAIR EFFORTS WERE EVIDENT IN THE FORM OF LIQUID FIBREGLASS PATCHES IN SOME AREAS, AND TORCH-ON MEMBRANE PATCHES IN OTHERS. THE AREAS OF LIQUID FIBREGLASS HAD WRINKLED AND BUBBLED INDICATING THAT WATER HAD TRACKED UNDERNEATH.

Solution

It was clear that the roof needed to be waterproofed properly - for the long-term. Having a concrete substrate was a bonus, as it meant that even if water ingress had been occurring, the substrate wouldn't be rotten (as a timber-sarked substrate would have been). So an overlay was possible versus a complete re-roof (saving time and money).

The Viking Approved Applicator suggested Enviroclad F.B.S. (fleece-backed system), which is a thermoplastic (TPO) membrane with a fleece on its underside - designed especially for overlay projects. The fleeced-backing assists with the bond by 'bedding-in' to the existing surface, meaning that the propensity for uneven, unforgiving substrates to telegraph through to the membrane surface is significantly reduced. This renders a lot smoother finish than would be achieved without the fleece.

To begin with, the roof was stripped back to the bare concrete wherever practical. Sections

of the existing membrane that were too tough to remove were left in place, seeing they had proven to be well bonded already. The concrete substrate was then moisture tested to decipher the extent of any water ingress. As some moisture had found its way into the concrete, a drying period was necessary to allow the trapped moisture to evaporate. Some grinding and levelling of parts of the 60 year-old concrete was also required.

Once the substrate was prepared and dry, the Enviroclad F.B.S. membrane was adhered to it. This was exactly the kind of situation this 3.6m wide, heat-weldable, fleece-backed TPO membrane was designed for, as its underside was able to forgive most of the unorthodox substrate comprising of bare concrete and stubborn old bitumen, by providing a surprisingly flat membrane surface. Maximum bond to this aged-surface was achieved through the use of Viking's specialised Dual-Cartridge F.A.S.T.

expanding polyurethane adhesive system; the wind uplift resistance of which rivals mechanical fastening.

Not only did the Viking Approved Applicator already have an outstanding track-record; having completed several successful Enviroclad F.B.S. overlay projects, but NZ Post had previously commissioned this successful Viking overlay specification for one of their other similar aged buildings - the Kaitaia Post Shop.

Result

NZ Post Properties staff were happy. The roof had been given a well overdue birthday. It was now water-tight; professionally installed; and was covered by a 20 year product warranty of substance issued by Viking Roofspec and backed by the substantial Tiri Group.

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