

## **PROJECT**

Leyburn Villas, Lantau Island, Hong Kong

## **SUMMARY**

Decorative waterproofing of residential properties

## **PRODUCTS**

Monodex Smooth Roofdex HB Cemprotec GFM 100

# **CONTRACTOR**

Cityscape Construction

### **BACKGROUND**

Located at the centre of South Lantau, Leyburn Villas is a prestige residential development with views facing the longest beach in Hong Kong. Lantau Island is popular as a tranquil alternative to Hong Kong city life, it is characterised by the scarcity of high rise developments and is often referred to as 'the lungs of Hong Kong' due its mountainous terrain and forestry.

The owners had previously refurbished the properties, but they found that standard paints lost their colour rapidly, offered little protection against severe rain and showed signs of cracking through the render within just a few years. It was important that the chosen refurbishment product could withstand the demands of the weather conditions. During summer, UV levels are high, relative humidity is in the region of 90% and daytime temperatures usually exceed 30°C. Hong Kong experiences heavy rainfall, but the biggest threat comes when typhoons land with extreme wind-driven storms.

#### THE SOLUTION ▶

**Monodex Smooth**, an advanced, water-based, elastomeric coating, was specified due to its ability to bridge cracks and provide a water resistant barrier to wind-driven rain from typhoons for many years. It is also able to withstand chloride attack in this marine environment and protect against harsh atmospheric pollution from the Pearl River Delta. The fact that **Monodex Smooth** is waterborne was also important, as no hazardous solvents or strong odours were released during application, thus no disruption was caused to residents present during the refurbishment work. **Monodex Smooth** is available in a range of attractive colours, of which white and green were chosen for this project.

**Roofdex HB**, a waterborne, high build, elastomeric membrane, was also applied to the side elevation as severe cracking was evident, as well as disbonded render. Due to the cracked substrate, **Roofdex HB** was reinforced with **Cemprotec GFM 100** to provide even greater tensile strength. This was an alternative to the owners removing the render, as this would have been costly, time consuming, noisy and dirty due to dust and debris. Had new render been applied, it is likely that the render would have suffered from shrinkage cracking, due to strong drying winds driven from the sea. Flexcrete's reinforced system provided excellent protection against water penetration and was able to bridge live cracks.





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