### **CASE STUDY**



# Mid Harbour Estate Project, Gibraltar

Comprehensive tanking solutions were required for the external concrete deck of a housing project in Gibraltar.



### THE CHALLENGE

The Mid Harbour Estate Project is a government led social housing project built on reclaimed land in Gibraltar, consisting of four large residential tower blocks, interconnected by a large 12,000 sq.m podium deck.

Cast Contracting Ltd were approached by Colomendy Ltd to carry out the remedial application of waterproof membranes and designed movement joints onto the main concrete deck over 2 phases. The deck, originally formed in 2011, had been waterproofed by a local contractor and had failed. Further new and remedial works undertaken by another UK waterproofing firm had also failed. Water penetration had occurred throughout the movement, construction joints, rainwater gullies, penetrations & building interfaces causing considerable damage to residents' cars in the car park below.



### THE SOLUTION

CCL's design team worked very closely with the waterproofing manufacturer RIW Ltd, the main contractor GJBS, the structural engineer and the specialist movement joint company Radflex UK, to ensure the new solution would not fail for a third time.

A variety of specialist liquid coatings were spray applied to the main areas of the deck, with the more detailed areas being applied by hand. Each stage of works was rigorously flood tested with dye using a specially designed bund, prior to final sign off and hand over to the client.

### **TESTIMONIAL:**

"This project presented us with a number of challenges due to its location in Gibraltar. The heat of the Spanish sun meant that it was imperative to apply the membranes during the coolest hours of the day — early mornings and late afternoon. Being located next to the coast meant that we encountered extremely changeable wind speeds that played havoc with spraying some of the membranes. Luckily the local knowledge of "The Levanter" (the cloud that often covers the rock of Gibraltar, heralding downpours of rain) received from the local companies and agencies working alongside us, meant that we were able to plan in the different stages of the waterproofing project accordingly."

Jim Langdon, Contracts Manager CCL

## **PRODUCTS**

RIW Cementseal

**RIW Cementflex** 

**RIW Flexiseal** 

**RIW Toughseal** 

RIW Double Drain

Radflex Movement Joint Systems