

Case study

Ronacrete waterproofing hits the height of sustainability in the Far East

Ronacrete is hitting the heights in the Philippines where its products have been approved, specified and used on a massive and prestigious LEED compliant building project, the Zuellig Building, the first "green" office building in Makati City, Manila.



The 155 metre high Zuellig Building houses 33-storeys of office space, a three storey retail annex and five storeys of basement car parking. The building was the first project in the Philippines to be Pre-Certified at Gold level under the Leadership for Energy and Environmental Design Core and Shell (LEED-CS) programme. In order to conform to the LEED criteria, a specific set of processes had to be followed through every phase of the project to comply with the energy and environmental principles of the US Green Building Council. Ronacrete provided independent certification to show that all Ronacrete products supplied to the project met the requirement for low VOC content.

Ronacrete products were used for waterproofing, screeding and rendering in; basements, wash rooms, roof areas, roof level planters, lift lobbies, machine rooms, lift shafts and water tanks.

Unidri Super 20 was applied extensively to waterproof the reinforced concrete walls on all five below-ground storeys and to protect plant, machinery and parking areas. www.ronacrete.co.uk/

tech@ronacrete.co.uk



Ronabond PU 55 injection resin was used on the lowest basement level to rectify water leaks through day joints and fissures.

Monoprufe WP Elastic was applied to all water storage tanks to accommodate movement and to maintain a waterproof barrier; **Ronafix Mix A mortar** was applied as a protective layer to the waterproofing. The tanks are used to collect surface rainwater for use as washroom flushing water.

Monoprufe WP Elastic and **Ronafix Mix A1** were used in all the washrooms to stop any possible water leakage into the rooms below.

The roof areas and open planters were waterproofed with **Monoprufe WP Elastic** and **Ronafix Mix A1** screed was used to provide falls before closed cell PU insulation panels were laid.

All lift lobbies, machine rooms and lift shafts were treated with **Ronafix** screed or render.

Ronaflex PU 1 sealant was extensively used around the building to provide a water tight seal at joint details.

All exterior concrete pavers at ground level were bedded on **Ronafix** modified mortars.

The water feature was waterproofed with **Monoprufe WP Elastic**, protected by **Ronafix** mortar. The black granite panels were bonded with **RonaBond Super Tile Adhesive** and grouted with **Ronafix Colour Grout**.

Power costs are high in the Philippines, so cost efficiency and sustainability are very important; occupants of the building will enjoy energy savings of at least 15%. Green features include: double glazing and low emissivity glass to minimise heat gain and energy loss, water efficiency through rainwater capture plus very efficient drainage and irrigation systems, power save lighting, CO₂ sensors to ensure air quality and

www.ronacrete.co.uk/ tech@ronacrete.co.uk



centralised paper recycling. Ronacrete takes pride in being involved in a project noted for design excellence as well as being of benefit to sustainability.