

The Galleries,

Dubai



Country: Dubai

Timescale: January—August 2009

Structure: The Galleries, Downtown

Client: GHD

CPT Treatment used:

DuoGuard™ Hybrid Anode™ System



The Galleries building was part of the extensive Limitless development in the Jebel Ali area of Dubai. A \$149m value project, The Galleries provides 198,000 sqm of useable space split into four office buildings.

Problem

Towards the end of the construction phase, issues with basement leakage were observed and following investigation works, chloride contamination from the local groundwater was evident. With the prospect of chloride induced reinforcement corrosion establishing in the basement over the life of the structure, a preventative cathodic protection system without ongoing maintenance was required.

Solution Developed

Following an extensive examination, the consulting engineers, GHD, specified the use of DuoGuard 500 anodes in selected locations of the basement to provide localised corrosion protection to areas of significant moisture ingress.

Benefits

Steel and anode connections from each zone of DuoGuard anodes were terminated within an enclosure such that the system could be monitored as required, and also to provide the option of delivering further current if deemed necessary. The system was monitored with over 100 MN15 reference probes provided by CPT, which facilitated calculation of steel reinforcement corrosion rates over the life of the structure.



Ref. Electrode



DuoGuard 500

CPT Products Used:

- ◆ DuoGuard™ 500
- ◆ DuoCrete SD Mortar
- ◆ GAN 3 Monitoring syst.
- ◆ MN15 Ref. Electrode

For technical and sales support please contact us at;

Concrete Preservation Technologies Ltd,

Unit 1, Palmer Business Court

Manor House Road

Long Eaton, Nottingham

United Kingdom NG10 1LR

t: +44 (0)115 9724 238

f: +44 (0)115 9220 316

www.cp-tech.co.uk



CORROSION PREVENTION ASSOCIATION
CATHODIC PROTECTION • REINFORCEMENT • CHLORIDE EXTRACTION
SACRIFICIAL ANODES • CORROSION MONITORING



**Cert No. 10159
ISO 9001**