

Project Profile - Buildings & Commercial Construction

PROJECT

Dexion House, Wembley, London

SUMMARY

Structural waterproofing within the pool area

PRODUCTS

Cementitious Coating 851,
Monomix HD, Cemprotec EF
Primer, Cemprotec E-Floor HB,
Monolevel RM, Biodex Sheen

DEVELOPER

Peaceridge

MAIN CONTRACTOR

G & J Developments

SUB-CONTRACTOR

Donban Construction

BACKGROUND ►

Dexion House is a student accommodation development currently under construction, just 200 metres away from Wembley Stadium. The development is comprised of 802 bed spaces across a range of accommodation types, of which a steel framed modular system has been used to enable a quick off-site manufacturing method. The development comprises two buildings standing at 17 and 8 storeys high which date back to the 1960's and are separated by a communal shared courtyard. Also within the development are a swimming pool, gym and retail spaces at ground floor level. Flexcrete was approached by Donban Construction to provide a waterproofing solution for the floors and walls within the pool area.

THE SOLUTION ►

Flexcrete was selected to supply materials for this project as the company could supply a complete package of products for structural waterproofing. **Cementitious Coating 851** was initially used to tank the swimming pool. Applied at just 2mm, **851** is able to resist positive and negative pressure under a 100 metre head. It forms a hard, highly alkaline coating which not only protects concrete from the effects of aggressive acid gases, moisture and chlorides, but also has greatly enhanced chemical resistance. **851** is non-toxic when cured, and like all of Flexcrete's products, it is water-based so there are no special concerns during application in enclosed locations.

On the walkways **Monomix HD** - a structural repair mortar with good abrasion resistance for trafficked areas - was used as a fillet and the whole walkway was then sealed with **Cemprotec EF Primer** before **Cemprotec E-Floor HB** was poured onto the primed surface and spread to the required thickness of 3-6mm. **Cemprotec E-Floor HB** is a self-smoothing, water-based, epoxy and polymer modified cementitious flooring system which provides concrete floors and decks with exceptional resistance against abrasion, water penetration, chloride ions and aggressive chemicals. In areas where movement is expected, **Cemprotec E-Floor HB** was reinforced with **Cemprotec 2000-S** to accommodate movement over cracks and joints.

On the wall areas, **Monolevel RM**, a pre-bagged cementitious mortar for structural waterproofing, was specified due to its suitability for providing cost-effective, waterproof rendering. **Monolevel RM** is a single pack material that is simply mixed with water on-site and is extremely quick and easy to apply by a single coat application. It can be applied in thicknesses ranging from 5-50mm even on a vertical face and crucially, is resistant to 7 bar positive and negative hydrostatic water pressure at just 10mm applied thickness. A hygienic, vapour permeable, attractive finish was achieved by overcoating the surface with **Biodex Sheen** in white. **Biodex Sheen** is a tough, water-based biostatic coating which is non-toxic, non-leaching, non-tainting and low odour. It is highly resilient and is able to withstand extreme temperature changes from -50°C. to +80°C. without cracking or flaking.



FM 41091
EMS 597350
OHS 597351

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