Heathrow Airport Cuts Project Time with SILCOR® Waterproofing

Airport construction is a success after utilizing GCP Applied Technologies' SILCOR®

Project	Heathrow Airport T2A—The Queens Terminal
Client	BAA PLC
Architect	Luis Vidal & Architects (LVA)
Contractor	Ferrovial/Laing O'Rourke JV
Waterproofing Applicator	Structural Membranes Specialists Ltd
GCP Solution	SILCOR® liquid waterproofing

Project

Supporting an ambitious airport expansion

The £1.5 billion construction of the new T2A passenger terminal, also known as the Queens Terminal, at Heathrow Airport was completed in June 2014. Designed by Luis Vidal Architects, this major infrastructure project was built by HETCo, a joint venture between Ferrovial Agroman and Laing O'Rourke.

After a period of phased moves by BAA, the Queens Terminal airport construction project will be complete and will eventually have the capacity for 30 million passengers a year.

More than 80 successful SILCOR®liquid waterproofing projects have been completed in Europe to date. GCP is helping the world build with confidence, passionately delivering world-class products, applied knowledge, and service excellence.

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A unique waterproofing solution

The concrete podium deck, above car parking, baggage handling, and service areas totaled approximately 4,000 m^2 in area, and were on the program critical path. Finishes to the podium deck area were a mixture of paving, planted areas for pedestrian traffic, and asphalt for vehicular trafficked areas. The challenge for airport construction was to utilize a waterproofing system that met the program requirements for:

- Speed of installation
- Quick return to site access
- Damage resistance
- Suitable for multiple substrates (concrete, steel, aluminum, galvanized steel)

An additional key need for the project team was to use a waterproofing system that could be installed in discontinuous phases, with ease of lapping onto previously applied areas, after several weeks delay.

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Waterproofing high-traffic podium deck

HETCo evaluated several sheet and liquid waterproofing systems for the podium deck waterproofing, with particular emphasis on simplified detailing at terminations and penetrations. HETCo selected the SILCOR®spray applied liquid waterproofing system from GCP Applied Technologies. SILCOR®is a rapid set polyurea, two component liquid waterproofing system with exceptional physical properties.

The system has a BBA Certificate and a European Technical Approval (ETA).

Application is by spray, through specialist plural component equipment, in accordance with robust quality assurance procedures developed by GCP.

SILCOR®waterproofing was successfully installed by GCP-recommended applicator Structural Membranes Specialists. It solved the problem of good chemical resistance, as some areas of the vehicular trafficked deck were at risk of aviation fuel spillage.

SILCOR®liquid waterproofing is uniquely suited to waterproofing concrete podium decks for these types of contracts. For more than 50 years, GCP's products, knowledge, data, technologies, services, and people has provided superior construction assistance and innovation.

BLUE360℠ Product Performance Advantage.
Because every project, large or small, deserves the best level of protection.

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