

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.

"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."

A unique waterproofing solution

The concrete podium deck, above car parking, baggage handling, and service areas totaled approximately 4,000 m² 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.

"The challenge for airport construction was to utilize a waterproofing system that met the program requirements."

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.

Blue360SM Product Performance Advantage.

Because every project, large or small, deserves the best level of protection.

"Silcor® liquid waterproofing is uniquely suited to waterproofing concrete podium decks for these types of contracts."

gcpat.com | North America Customer Service: 1 877-4AD-MIX1 (1 877-423-6491)

This document is only current as of the last updated date stated below and is valid only for use in the United States. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.com. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2021-06-14

gcpat.com/about/project-profiles/heathrow-airport-cuts-project-time-silcor-waterproofing