Decseal® waterproofing system is choice for Dublin Airport car park expansion.

CLIENT: DUBLIN AIRPORT AUTHORITY

MAIN CONTRACTOR: BALFOUR BEATTY

AUTHORISED CONTRACTOR: ECOFLEX SURFACING LTD

CAR PARKS CASE STUDY

Dublin Airport MSCP, Ireland

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- Product Selection
- Application

Project overview

With passenger numbers continuing to rise at Dublin Airport, up 17% alone in the first quarter of 2015, there was an urgent need to provide additional parking for travellers using Terminal 2. With convenient access to the terminal important, particularly for its many business users, the decision was taken to expand the existing Short Stay Multi-Storey Car Park.

Four new floors would be added to the existing structure, providing an extra 1,400 car parking spaces and more than doubling the total number of spaces available to 2,500. Importantly, the multi-storey car park would remain open throughout the project so minimising disruption and phasing the work successfully were priorities.

Lightweight materials were a key consideration too given the multi-storey nature of the project. Steel, rather than heavier pre-cast concrete, was used for the main infrastructure and further lightweight materials were therefore specified.



Dublin Airport MSCP

Product Selection

The nature of the project meant there were a number of criteria specified for coating materials. To minimise future disruption and avoid maintenance to a busy airport, durability and long-term performance were key. Similarly, with the airport remaining open throughout construction, speed and ease of application and the ability to work in phases around the project's progression were influencing factors.

Stirling Lloyd's Decseal range fulfilled all these criteria and the Fully Reinforced system was specified for the third floor, while the Wearing Course system was used on the fourth and fifth internal floors, as well as the external sixth floor. Providing long-lasting protection, Decseal is also lightweight and helps to reduce the dead load of structures, a crucial factor in its choice for this multi-storey car park.

With its durability already successfully tried and tested on previous Dublin Airport expansion projects - including multi storey car park 3 and in 2013, Terminal 1's multi-storey car park -Decseal had proven airport parking coating capability and was the go-to product for a third time.

Application

Decseal was spray-applied using a cold application system. Matching product capability to functionality is also required to get the right level of performance. On the exposed upper floor of the multi-storey, Decseal Fully Reinforced was applied for greater cracking resistance.

The three under-cover floors used the two Decseal systems to coat the

Summary

Decseal was the waterproof coating of choice for a Dublin Airport multi-storey car park expansion project for the third time, a hat trick that comes down to the product's proven durability, ease of

application and lightweight nature. This long-lasting protection means reduced maintenance costs and. importantly, avoids disruption to a busy and expanding airport.

COLOUR CODED DECKS (PASTEL ORANGE)



pedestrian walkways in a variety of colours including lilac and pastel orange. Overall, 10,500m2 of car parking was prepared, primed, embedded and coated in a high performance wear and waterproof membrane coating, while an additional 3,000m2 was prepared, primed and applied with Wearing Course on internal walkways. Ease of product application contributed to meeting the project's deadlines over a four-month period, with the first phase on levels three and four taking six weeks.

PEDESTRIAN WALKWAYS



Talk to our Car Parks Team and see how we can help deliver added value and improved whole life benefits on your next project.

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