



BC243, Kilo Apron Development, Heathrow Airport (UK) Deck/ Roof Waterproofing (bituminous)

Country	United Kingdom
Type	Airport
Client	Heathrow Airports Limited
Main Contractor	Ferrovial Construction (UK) Ltd.
Execution of the work	Renesco UK Ltd.
Construction Period	2020 – 2021

Project Description

The Kilo taxi lanes currently operate as two separate cul-de-sacs (North and South) between the sites of the existing Terminal 1/Pier 3 and T2A to the west, and T2B to the east. The two cul-de-sacs are separated by the Euro lounge and Europier buildings connecting the buildings between east and west. The key objectives of the Project are the creation of a Kilo through-taxiway, seven new stands and a substructure (AKA "the Box") built below the taxiway for future subsurface Early Bag Store (EBS), and tunnels for baggage and Track Systems (TTS). The new stands require the construction of VCC234 and the relocation of a coaching gate which currently occupies VCC235. A Kilo through-taxiway will reduce the current disruption caused by a cul-de-sac operation and improve taxi times. To achieve this, the Euro lounge and Europier buildings, need to be demolished.

Scope of Service

18'000m², Deck/Roof Waterproofing, supply & install on the Kilo Apron Development Substructure Project at Heathrow Airport/ UK. As part of the phased construction works, a fully bonded waterproofing membrane system, consist of a liquid primer and a bituminous membrane, is to be installed on the relevant roof areas via an automated application machine. Vent shaft, 500m D-Wall and 120m T2B-Wall will receive a liquid applied coating.

- Substrate preparation via sandblasting, punctual repair with epoxy base mortar
- Liquid Primer
- Bituminous membrane of 4mm thickness
- Protective slab with a 700g/m² polypropylene (PP) geotextile layer and concrete overlays with a minimum thickness of 10cm, in one or more layers.
- Reinforced liquid applied waterproofing at the verticals, bitumen-polyurethane resin, geotextile.
- Pull off test, Infra-red control.



1. Location/ Airport
2. Automated application of the fully bonded system
3. Liquid Primer and bituminous sheet membrane