

Roofing Case Study

East Midlands Airport



Project

East Midlands Airport

Size

12,000m²

Products

Decothane Omega 15 and Soladex

Client

East Midlands Airport (MAG)

Contractor

W. Hughes and Son

background

East Midlands Airport is owned by Manchester Airports Group and opened for passengers in 1965. Since that time it has grown to become a busy airport catering for passenger, freight and cargo flights. This building houses the main airport check-in facility, passport control, terminal, and restaurants and offices for on site staff. The roof of the building is airside therefore security is extremely high.

the problem

The existing roof had a felt waterproofing system covered with chippings, which were adding excess weight to the roof and blocking the outlet pipes as well as causing leaks internally. As expected with an airport roof, there was also a huge amount of plant and roof lights, which put additional stress on the waterproofing. Liquid Plastics was called in at a stage where repairs were needed. The challenge was to remove all the existing chippings from the roof, repair any damaged areas, and apply a new waterproofing system whilst the airport remained open.

continued overleaf

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the solution

Liquid Plastics' Decothane Omega 15 waterproof system was specified. This included a Carrier Membrane in some areas, a cold applied reinforced Decothane membrane, Liquid Plastics' roof edge trims, and Flexistrip and Flexitape to provide additional reinforcement. The contractors began at the furthest end of the roof, tackling all the plant as they moved along. Where plant could be lifted the waterproofing was applied underneath, where it could not be raised the waterproofing was taken onto up stand blocks to ensure complete encapsulation. Decothane's liquid application also meant that it could be easily and seamlessly applied into gutters, outlets, under flashings, and into termination details. With the chippings removed any water on the roof was free to run to the outlets much faster and in greater amounts, therefore the outlets needed to be modified to accommodate this. All of the remedial and waterproofing work was completed whilst the airport remained open, and all material had to be taken onto the airfield side prior to being lifted onto the roof. In addition there was also a metal sheet roof that received an application of Liquid Plastics' Soladex to provide a 15 year guarantee throughout the entire project.

the benefits

The client realised that due to the large amount of plant on the roof any system other than a liquid applied coating would have been almost impossible to install, and would certainly have resulted in a lengthy drawn out project. Bryn O'Connor from the airport researched several liquid systems and was very impressed with what he saw at Liquid Plastics. The result was a Decothane Omega 15 system that was not only cold applied but could also be installed around the plant without causing major disruption to the day to day operations of the airport. The new system is also backed by the BBA and as it was installed by one of Liquid Plastics' Quality Assured Contractors, it has received a Single Point Guarantee covering both material and labour for at least 15 years.



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