**Project Description**
Heathrow is the second busiest airport in the world by international passenger traffic. With ever-increasing volumes of passengers and freight, pavement rehabilitation work is a priority for BAA’s design team. This includes constant monitoring of the condition of runways, taxiways and aircraft stands.

**The Challenge**
The low tensile strength of asphalt means it can be easily damaged by a number of factors including settlement, fatigue, temperature fluctuations and impact loadings.

Damage arising from reflective cracking means increased maintenance disruption and costs. A cost-effective method for controlling reflective cracking and further deformation of the pavement was therefore required.

The solution needed to be quick, with work to be carried out under night-time closures, within very strict time limitations to prevent disruption to air traffic operations.

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**Project Information**

| **Client** | Heathrow Airport  
| **Contractor** | AMEC  
| **Consultant** | BAA  
| **Products** | Asphalt reinforcement  
| **Quantity** | 6,400m²  
| **Benefits** | • Control of reflective cracking  
| | • Extended maintenance intervals  
| | • Quick to install  
| | • Low strain reinforcement solution  

High-strength, low-strain reinforcement interlayer
Airport Taxiway Rehabilitation
Asphalt Reinforcement, Heathrow Airport, UK

The Solution
The ABG range of asphalt reinforcement products provide a low strain composite layer combining a non-woven polyester geotextile and glass fibre or steel grid. Benefits include a substantial reduction in the asphalt overlay thickness required and a significant extension of the pavement service life, reducing associated maintenance periods and costs as a result.

The ABG Service
Following pre-patching and joint-sealing, 6,400 m² of asphalt reinforcement grid was supplied and installed by ABG Ltd on Taxiway Blocks 118/119. The ABG reinforcement layer was installed directly on the existing surface and immediately overlaid with a 50mm proprietary surfacing material. Disruption to air traffic was minimised by working under night-time closures over 2 shifts.

Mechanism of Reflective Cracking

Solution to reflective cracking
Quick to install and bond, with reduced overlay required

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.