

# PROVEN PERFORMANCE

TOPFLOW CONCRETE. GATWICK AIRPORT  
THE OPTIMUM HIGH-FINISH SOLUTION

**TOPFLOW**

**Product** TOPFLOW 10MM CONCRETE WITH STEEL FIBRES  
**Client** MANSELL  
**Main contractor** LANDBUILD  
**Location** GATWICK AIRPORT IDL NORTH TERMINAL 2  
**Date of completion** JULY 2013

## *Topflow 10mm concrete when used horizontally enables the rapid and effortless construction of slabs and floors.*

### THE CHALLENGE

With a high throughput of passengers, construction work at the International Departures Lounge at North Terminal 2 of Gatwick Airport had the potential to cause disruption. Therefore during the casting of a concrete slab, to infill an existing void, it was essential that disruption was minimised and the terminal remain open. The concrete used for the slab was required to have high early strength and self compacting qualities. In a further consideration to passengers, the noise levels in laying the slab needed to be kept to a minimum.

### OUR SOLUTION

To ensure that the concrete was compliant with the specification performance, as well as the construction constraints, Tarmac provided structural design guidance and technical support. Approximately 50m<sup>3</sup> of Topflow 10mm Concrete along with steel fibres was poured in just a few hours, eliminating the need for mechanical vibration and power floating and allowing the terminal to operate normally. The new floor infill was a 200mm composite slab using metal decking which will transfer 7.5kN/m<sup>2</sup> live load and 3.7kN/m<sup>2</sup> of super imposed load to the supporting steel frame.

### RESULTS AND BENEFITS

Topflow 10mm Concrete demonstrated both fast drying and early strength properties, ensuring it also answered the requirement for short timescales. Cube test results showed Topflow compressive strengths as high as 26MPa and 53MPa after two and 28 days respectively, allowing a 100mm capping screed to be poured soon after the initial pour. In addition, without the need for mechanical vibration, noise was also kept to the required level. Overall, there was minimum disruption and the new floor space was able to be utilised within a relatively short time following the pour.

# TOPFLOW

For more details contact your [topflow@tarmac.com](mailto:topflow@tarmac.com) or call 0800 1 218 218

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