



Case study Warehousing

Flooring

Client: London & Cambridge Properties Ltd

Specialist Contractor: Prestec

Products Specified: Sikafloor®-263SL

What do you get if you mix super-heavy items, hovercrafts and a 6,000m² warehouse? A project so unusual that it stretched the minds of more than a few engineers before Sikafloor®-263SL, a floor smoother from renowned manufacturer Sika, came to the rescue.

Specialising in the storage of items up to 100 tonnes in weight, the London & Cambridge Properties Ltd (LCP) facility in Burntwood, Staffordshire, was looking to initially double and ultimately triple usable storage space beyond the reach of its main crane system and to accommodate heavier items. It was told that to achieve this it may need to make significant and costly alterations to its existing warehouse. Following extensive research, it developed an ingenious solution featuring air film technology from Movetech UK and an advanced flooring system from Sika.

The remarkable air-skates, often used in aeroplane manufacture, are hand operated hovercrafts capable of moving the most weighty of items. As they run on a very thin film of air they require exceptionally smooth surfaces for operation, making the choice of

flooring vital. Sikafloor® from Sika provided the solution to the inventive plan, as it would enable the creation of a perfectly smooth floor, ensuring that the vital machines were fully protected from puncture or damage. The smooth surface would also limit the resistance of the flooring, reducing the compressed air requirements and thereby making the whole system more energy efficient. The Sikafloor® and air-skates combination was by far the most efficient solution to the project. Having faced the costly and time consuming prospect of having to modify the warehouse, as well as considering a variety of alternative solutions – some of which were genuine logistical nightmares – LCP was keen to progress with the innovative solution.

Specialist contractor Prestec was called upon to install the Sika flooring as part of the challenging project. As the warehouse is split into three bays, only one of which is under the reach of the crane, it was decided that the flooring be renovated with Sikafloor®-263SL in sections, to allow the continual operation of the warehouse.

Sikafloor®-263SL is a two part epoxy-binder resin that is cost effective and suitable for a wide range of applications, including everything from warehouses to car parks. It is also especially popular in the food and beverage industry for its hardness and resistance to chemicals.

Installation of the new floor first required Prestec to prepare the surface of the existing concrete, ensuring that it was free of dirt and grime. This preparation was essential to ensure a solid bond between the Sikafloor®-263SL and the substrate. Some areas of the original substrate also had to be patched owing to damage.

Sikafloor®-263SL, a self levelling system, was then mixed and hand-trowel applied. Though the existing floor was close to being level, operatives from Prestec diligently applied the Sikafloor®-263SL to an exacting tolerance across the floor slab. This resulted in a gloss finished floor with all of the smoothness and flatness that air-skates require.

Alongside the textured floor that Sikafloor®-263SL offered, its durability is of the utmost importance to the solution. Should the concrete begin to fail under the weight of storage items, there is a risk that the air-beds of the Movetech air-skates will be damaged, rendering the expensive equipment inoperational. Sikafloor®-263SL can tolerate the most arduous usage – which combined with its smoothness, made it the ideal specification for the unusual project.



Sikafloor® Systems

System Description

Sikafloor®-263SL is a two part, economic, multi purpose binder based on epoxy resin.

Uses

Self-smoothing and broadcast systems for concrete and cement screeds with normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops, garages, loading ramps etc. The broadcast system is recommended for multi-storey and underground car parks, maintenance hangars and for wet process areas e.g. beverage and food industry

Characteristics /Advantages

- Highly fillable
- Good chemical and mechanical resistance

- Easy application
- Economical
- Liquid proof
- Gloss finish
- Slip resistant surface possible

Further Information

Sika Limited has a comprehensive range of flooring systems to meet the requirements of virtually any application. These solutions are backed up by a highly experienced technical team, who offer expert specification advice and support. For project specific technical advice please contact our technical department on 0800 1123863 or alternatively email: technical@uk.sika.co.uk

