



SIKA AT WORK

ECO PARK WASTE FACILITY, SURREY, UK

FLOORING: Sika® Ucrete® IF, SikaEmaco® T 1100 TIX

BUILDING TRUST



HEAVY DUTY FLOORING SOLUTION FOR FOOD WASTE RECEPTION HALL



PROJECT DESCRIPTION

Project name: Eco Park Waste Facility

Location: Surrey, United Kingdom

Size: 400 m²

Eco Park is a collection of facilities designed to manage waste from Surrey households. Up to 40,000 tons a year is handled at the Eco Park facility, with any remaining capacity treating food waste collected from local businesses. Once collected, the food waste is then treated at the Eco Park's anaerobic digestion facility. Anaerobic digestion is a process which uses micro-organisms to break down biodegradable material – in this instance food waste – in an enclosed system in the absence of oxygen. From this process a biogas is produced (a methane rich gas) which is used to generate electricity in a gas engine and generator that supplies electricity back to the national grid.

PROJECT REQUIREMENTS

At this facility, the food waste is dumped on the reception hall floor before being scooped up by a bobcat to be transferred to the anaerobic digesters. After just a few months the floor was degrading due to the food waste oozing acidic fluids which attacked the concrete surface and the bobcat bucket scraping the weakened topping damaging the floor even further. Also due to the 24/7 operation of the facility, it was essential that there was minimal downtime to carry out the refurbishment of the floor.

SIKA SOLUTIONS

The proposed flooring solution comprised of SikaEmaco® T 1100 TIX for a rapid repair of the original degraded concrete floor with Sika® Ucrete® IF applied on top of this for the maximum heavy duty protection flooring solution.

SikaEmaco® T 1100 TIX was chosen by the client due to its fast-setting properties, very high early & final strengths and its excellent durability due to being a fibre reinforced, thixotropic repair mortar. Once the SikaEmaco® T 1100 TIX was cured (which is trafficable in just 2 hours) Sika® Ucrete® IF was applied onto the repaired surface. Sika® Ucrete® IF is an iron armoured heavy duty polyurethane floor finish. It provides an extremely tough surface for environments subject to extreme impact and abrasion. Its dense and impervious iron armoured surface provides protection against severe abrasion making it the ideal floor finish for applications in the waste management like at Eco Park where a robust long-lasting floor is required. Unlike cementitious materials, Sika® Ucrete® IF is fully resistant to most acids and specifications are available that enable Sika® Ucrete® IF to be installed and cured within a 12-hour application window even at low temperatures. This solution now means the reception hall floor is resistant to the acidic fluids coming from the food waste, no longer suffers from the abrasive wear from the bobcat buckets and has the necessary slip resistance to prevent accidents.

PROJECT PARTICIPANTS

Project Owner:	Suez
Designer/Architect/Specifier:	M&W Group
Applicator/Contractor:	Rapid Industrial Flooring Solutions

Any product name or reference reflects the Sika name at the time of creation of this document and may differ from product name or reference during past events.

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