

**Project:**  
*Eco Park Waste Facility*

**Location:**  
*Surrey*

**Owner:**  
*Suez*

**Applicator/Contractor:**  
*Rapid Industrial Flooring Solutions*

**Designer/Architect/Specifier:**  
*M&W Group*

**Market sector:**  
*Industrial Flooring*

**Products used:**  
*Ucrete IF*  
*MasterEmaco T1100 TIX*

**Sales contact:**  
*mark.driver@mbcc-group.com*

**Technical contact:**  
*tamsin.beach@mbcc-group.com*

## **Eco Park Waste Facility, Surrey**

### **Heavy duty flooring solution for food waste reception hall**



Our reference in Surrey (United Kingdom): Eco Park Waste Facility

#### **The background**

Eco Park is a collection of facilities designed to manage waste from Surrey households. Up to 40,000 tonnes 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.

#### **The challenge**

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.

**Head Office:**  
*Master Builders Solutions UK Ltd*  
*Swinton Hall Road*  
*Swinton Manchester*  
*M27 4EU, United Kingdom*

T: +44 (0)161 727 6300

**Redditch Office:**  
*Master Builders Solutions UK Ltd*  
*19 Broad Ground Road, Lakeside,*  
*Redditch, Worcestershire,*  
*B98 8YP, United Kingdom*

T +44 (0)1527 512 255

# Eco Park Waste Facility, Surrey

## Heavy duty flooring solution for food waste reception hall



Our reference in Surrey (United Kingdom): Eco Park Waste Facility

### Our solution

Master Builders Solutions proposed a flooring solution to solve the existing challenges. This solution comprised of MasterEmaco T1100 TIX for a rapid repair of the original degraded concrete floor with Ucrete IF applied on top of this for the maximum heavy duty protection flooring solution.

MasterEmaco T1100 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 MasterEmaco T1100 TIX was cured (which is trafficable in just 2 hours) Ucrete IF was applied onto the repaired surface.

Ucrete IF is a 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-lived floor is required.

Unlike cementitious materials, Ucrete IF is fully resistant to most acids and specifications are available that enable 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.

### The customer's benefit

- New fit for purpose floor with resistance to chemicals, heavy traffic with a high slip resistance.
- Loss of downtime for customer was minimal, with applicator being flexible on timeframes to best suit customer.
- Products with proven track records
- MasterEmaco T 1100 TIX - Fast-setting and hardening, extra-high-strength, thixotropic, fast-setting repair mortar
- Ucrete IF - Iron-armoured heavy-duty flooring

### Projects facts at a glance

- Original concrete floor damaged due to acidic attack from food waste collection and heavy traffic
- MasterEmaco T1100 TIX used to repair damaged concrete floor
- Over 400m<sup>2</sup> of Ucrete IF installed onto repaired substrate
- New floor now fully resistant to acidic attack and heavy traffic
- Loss of downtime benefitted the customer at this none stop facility

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Further information is available at:  
[www.master-builders-solutions.com](http://www.master-builders-solutions.com)