

# Institute of Manufacture, Cambridge Sika Watertight Concrete System

### Sika Concrete System:

Client: Architects: Contractor: Sub Contractor: Concrete Supplier: Watertight Concrete System, SikaSwell<sup>®</sup> Jointing System University of Cambridge Arup Associates Keir Marriott MJS Construction Lafarge Readymix



Innovation & since Consistency 1910

## Institute of Manufacture, Cambridge

**Sika<sup>®</sup> Watertight Concrete** was chosen in the construction of the Alan Reece Building, the new home for the Institute for Manufacture, recently commissioned by the University of Cambridge. Founded in 1998, the Institute had, over the years, out grown its original site in the former Cambridge University Press warehouse in Mill Street.

The new £15 million, 4,500 sq ft building was designed by Arup Associates and built by Keir Marriott. It is a two-storey split-level concrete frame construction and is located on the University's new site in West Cambridge. Incorporating the **Sika® Watertight Concrete** system had many benefits including simplified design and time saving on site through the elimination of laborious detailing of tanking membranes. Importantly, it has provided a BS 8102 Grade 4 environment suitable for the storage of valuable archive materials and equipment.

The BBA certified **Sika® Watertight Concrete** system incorporates two state-of-the-art powerful Sika admixtures. These work firstly by reducing the water cement ratio, whilst producing a highly workable concrete to aid placement and compaction, and secondly, by blocking the remaining capillary pores. The system has a successful track record going back 50 years.

Lafarge Readymix supplied 800 cubic metres of **Sika®** Watertight Concrete to MJS Construction, who carried out the concreting on the project. Construction joints were





sealed with 200 metres of the **SikaSwell**<sup>®</sup> jointing system, which consists of joint sealing profiles that expand on contact with water to seal any voids between adjoining concrete slabs and walls.

The building will incorporate state-of-the-art research equipment and teaching facilities, an Industrial Design and Innovation Studio, an Industrial Systems Workshop, together with a large common room area and open-plan office areas to house the department's staff.

It is the first building at the university to achieve a Breeam (BRE Environmental Assessment Method) excellent rating for its eco-friendly features.

### Sika Concrete Systems

#### **Specialist Concretes**

Corrosion resistant concrete Micro-silica concrete Underwater concrete Early strength concrete Self-compacting concrete

#### Admixture Range - premix and precast concrete Concrete admixtures

Mortar admixtures Grouting admixtures Powdered admixtures

### Watertight Concrete

Solutions for basements and swimming pools Watertight jointing systems BBA certified 50 year track record



For further information or to discuss your project requirements E-mail concrete@uk.sika.com or telephone 01707 394444

**Sika Limited**, Watchmead, Welwyn Garden City, Herts, AL7 1BQ Tel: 01707 394444 Fax: 01707 329129 e-mail: concrete@uk.sika.com www.sika.co.uk Innovation & since Consistency 1910