

SILCOR[®] liquid waterproofing saves pharmaceutical company's challenging commercial building project

A pharmaceutical facility was completed on time by utilising SILCOR[®] liquid waterproofing.



Project	Pharmaceutical Facility
Architect	Simons Group Ltd.
General Contractor	SDC Special Projects
Applicator	Capel Waterproofing Ltd.
GCP Solution	Silcor [®] liquid waterproofing

The Overview

The Project

Due to strong demand for its products, a pharmaceutical company invested in expanding the production capacity at its Ware site in the UK. Part of this project was to increase the size of the commercial building and to incorporate new production lines.

The project engineers at the facility needed to install new air conditioning, electrical and mechanical into new plant rooms. It was decided to construct new steel gantries approximately 50 cm above the existing building roof to provide the structural base for the new plant rooms, which were supported by extending 18 steel columns through penetrations cut through the existing roof.

Since the penetrations needed to be sealed, and access to the existing roof would be restricted, the project team decided to re-waterproof the entire roof.



“Silcor® solved our waterproofing problems on this project, we worked well with both GCP and Capel Waterproofing, the roofing contractor. We are already considering the use of Silcor® liquid waterproofing for other projects that we have secured or are tendering for”, said Mike Hodges Contracts Manager, SDC Special Projects.”

The Challenge



A key project requirement was to complete the work without disrupting production at the plant. This meant that the penetrations through the roof had to be cut and sealed with a new roof waterproofing system that would immediately prevent any water entry. The chosen waterproofing system also needed to be applied to the commercial building's old mastic asphalt roof which was over 10 years old.

GCP Applied Technologies, a global construction and technologies leader, was selected to waterproof both the penetrations and the existing commercial building roof coverings. GCP proposed their SILCOR[®] liquid waterproofing system be installed.

The Solution

The pharmaceutical facility was concerned about the risks of immediately sealing the column penetrations, so a 'mock up' commercial building construction was built. The 'mock up' was waterproofed and tested after 12 hours for water tightness, with a high-pressure jet washer. The test showed that the SILCOR® liquid waterproofing achieved a highly effective seal around the columns.

GCP chose SILCOR® liquid waterproofing because it adhered to both steel and mastic asphalt, enabled continuation of roof vapour control layer and insulation and resisted water penetration within two hours of application to the steel columns.

SILCOR®900HA hand-applied membrane was used to seal the 18 column penetrations and SILCOR®900MP spray-applied membrane was used to re-waterproof the mastic asphalt roof.

Blue360SM Product Performance Advantage.

Because every project, large or small, deserves the best level of protection.

Why SILCOR® ?

SILCOR® liquid waterproofing was selected by the commercial building project engineers and the contractor due to:

- Application Versatility – Applies to all substrates
- Speed of Application – Spray and trowel application options
- Speed of Curing – Quickly achieves watertight seals around details
- Inherent Strength – Avoids lap weakness and weld breakdown (unlike sheet-applied waterproofing systems)
- Reduces Fire Risk – Does not require a bitumen boiler on site