

BASEMENT WATERPROOFING CASE STUDY Pillar & Lucy House, Gloucester Quays

BASEMENT WATERPROOFING WITH NEWTON SYSTEM 500

Newton System 500 used as the waterproofing solution in this major redevelopment scheme

History

The Gloucester Quays project is a major £400m mixed use regeneration scheme. Gloucester Quays occupies 25 hectares of largely industrial land and derelict historic buildings at the northern end of the Canal Corridor, straddling both sides of the Gloucester and Sharpness Canal. This important project was probably the largest single redevelopment scheme ever undertaken in Gloucester, and was named as one of the UK's top 30 most valuable regeneration developments. The Pillar and Lucy Building was one of many canal side buildings that had below ground space suitable for conversion and use. The very large basement in this particular building was earmarked for various office suites and new warehouses so obtaining dry internal conditions was essential.

Methodology

Due to the canal being directly adjacent to basement area there was a very high likelihood of water ingress. Newton System 500 was installed by Newton Specialist Basement Contractor Protectahome Ltd. Newton 508 cavity drain membrane was applied to the walls. Newton Basedrain was installed at the wall/ floor junction within a channel in the floor slab. The Basedrain allowed for non pressurised movement of water to several sump and pump systems necessary to service such a large basement. Newton 520 was then laid to the floors with a screed finish. The walls were lined and plastered to a smooth finish. For the highest levels of protection Newton battery back up and control panel systems were installed with each sump and pump.

The Newton system now manages the potentially aggressive water ingress thus creating a completely dry internal environment fit for habitable and working space. This has meant that premium rental rates have been achieved for the offices and warehouse spaces.

Benefits

- Optimum use has been made of the available areas of the building for prime rental units
- The system is sympathetic to the structure and is easily reversible which conforms to the requirements of the heritage authorities.
- The System is covered by a 10 year insured installation guarantee from Protectahome Ltd
- Protectahome Ltd took full design liability for the waterproofing.
- The system is maintainable and conforms to BS8102:2009 Code of Practice for The Protection of Below Ground Structure from Water from the Ground.

NSBC Contractor: Protectahome Ltd



Pillar and Lucy House is situated by the canal, so a reliable waterproofing solution was essential



Application of Newton 508 cavity drain membrane to the walls



Application of Newton 520 to the floor, ready for a screed finish