

BASEMENT WATERPROOFING CASE STUDY Brentworth, Hampshire

WATERPROOFING AN EXISTING BASEMENT

Newton System 500 used to convert a damp basement into a dry living space

History

The clients of this picturesque property wanted to make the use of the all the space they had available by converting their existing basement into a dry and habitable area. Because the building was Grade II Listed they had to choose a waterproofing system which would be sympathetic to the existing building and deemed reversible - a listed building prerequisite.

Methodology

Newton Specialist Basement Contractor MacLennan-LSE were commissioned to design, install and guarantee the basement waterproofing. BBA approved **Newton 508 Mesh** membrane was fixed to the walls and vaulted ceiling and a render finish was applied directly to it. The membrane forms an air void around the internal building fabric and should water enter through the structure it is then diverted down to the wall floor junction where it is collected by the **Newton Basedrain** sitting on the slab. Closed Cell insulation was then applied to the slab and the non-meshed **Newton 508** membrane was loose laid on top and taped to form a vapour seal. Once the floor build was installed, MacLennan-LSE installed a 65mm sand and cement screed to finish. The basement was previously equipped with small sump to deal with water that entered the basement. MacLennan-LSE modified this and installed a Newton pump and sump with battery back-up protection to give peace of mind to the clients in the event of a power failure.

Result

A dry and habitable basement space was created with no messy or destructive preparation works, giving a sympathetic and cost effective installation to the client. For the first time in the property's history it had a fully functional below ground area suitable for living accommodation.

Benefits

- The client was happy that NSBC contractor MacLennan-LSE could take the project from start to finish, giving the client an expertly installed waterproofing package provided with no split responsibility.
- The proven success of **Newton System 500** for waterproofing listed buildings is well documented and has approval from all Heritage related bodies in the United Kingdom as fit for purpose.
- The ability to use a direct plastered finish to the **Newton 508 Mesh** membrane meant that minimal internal space was lost in the basement.

NSBC Contractor: MacLennan-LSE



This stunning property is Grade II Listed, so the waterproofing solution had to comply with Listed Building regulations and Newton System 500 was ideal



Newton 508 Mesh cavity drain membrane was fitted to the walls and vaulted ceiling, and Newton 508 was loose laid to the slab and taped to form a vapour seal



A Newton pump was installed with battery back-up protection in case of power failure