





# Beautiful Basements Case Study New Build Basement - Church Langton, Leicestershire

Clients
Waterproofing Designers

Mr. & Mrs. Singha Beautiful Basements

### Background

Basement build for a new mansion on the edge of Church Langton village. Beautiful Basements were commissioned to supervise excavation of the site including a 50m² sunken garden, then build and waterproof the 400m² basement. Once constructed, the basement was split into several rooms, including a guest bedroom and ensuite, recreational space, plant room and lift shaft to reach the upper storeys.

## **Construction Method**

Mass filled reinforced concrete slab with several thickenings for structural loadings was cast first.

The walls were then build using insulated concrete formwork (ICF) on top of this slab.

A 140mm thick brickwork wall was built inside the ICF walls and a block & beam floor laid onto this blockwork to form the ground floor.

### Waterproofing Method

Type A – External Barrier System

A thick, two coat, fibre glass reinforced bitumen was sprayed onto all external faces, protected by a geotextile covered cavity drainage membrane and linked to external perimeter drains & a pumping station.

Type C – Cavity Drainage Membrane System

A cavity drainage membrane was applied internally to all walls and the flooring throughout. These membranes were then linked to a sump & pumping station via under-slab drainage.

Waterproofing materials supplied by Köster UK & Safeguard Europe Ltd.

## **Build Programme**

7 months



Basement Build Conversion Retro-fit Waterproofing

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