

Elsworthy Road

Camden, London, England (2016)

PRODUCTS USED:

Kryston Internal Membrane™ (KIM®) Kryston Waterstop Treatment™
Krytonite™ Swelling Waterstop

OWNER:

Private Client

DISTRIBUTOR:

Kryton International Inc.

BACKGROUND

In highly dense neighborhoods where building out is no longer possible and land is too valuable to leave, the only option is to build further below grade. As a result, luxurious basements are becoming more common practice in such areas, including in Camden, North London. One Camden homeowner in particular planned to continue this trend. Living on Elsworthy Road, the homeowner wanted to expand their house to include a new two-level basement structure.

However, this was no ordinary basement structure. It would have all the bells and whistles, including a swimming pool, cinema, and bedroom in the upper level.

Unfortunately, a big challenge to creating this below grade marvel was the fact that such structures are often susceptible to damp conditions and even flooding if they're not properly waterproofed. The Camden homeowner's expansion would fare no differently as it would be facing high hydrostatic water pressure at the lower levels. Knowing this, the homeowner's construction team sought an innovative and reliable waterproofing system.

SOLUTION

To protect the homeowner's structure, a lengthy underpinning model was used to support the existing house with contiguous piles used for the rest of the perimeter. This left limited space for the construction team to work. To cope with that and the existing waterproofing challenges, the construction team chose Kryton's concrete waterproofing admixture KIM as it could be added to concrete mix, eliminating the need for labor-intensive, surface-applied waterproofing membranes.

Additionally, to ensure the construction joints and details would be as watertight as the surrounding concrete, the construction team applied other Kryton products, such as the Krytonite Swelling Waterstop and Kryston Waterstop Treatment. The Krytonite in particular was quick and easy to install and comes with a proven water-stopping performance of up to 0.8 MPa (8 bar), which meant it would stand up to hydrostatic pressure. With Krytonite, KIM, and Kryston Waterstop Treatment, the construction team created a complete waterproofing system that would work as specified for the life of the structure. As proof, Elsworthy Road currently remains watertight.

