

# KingspanWater Case Study

## Gap House, West London



### Rainwater harvesting in a very modern setting.

Architect Luke Tozer has a cool head for a man who appears to like tight spots. His eco-friendly new home in west London is squeezed into the 2.4 metre space between two semi-detached villas. A claustrophobic brief and a major headache, even for space-hungry builders in the Capital. However, Luke has managed to overcome the lack of room to create a home with a wonderfully designed, bright and spacious interior.

But this isn't just a house with a brilliant gloss on its doors; its attraction goes far deeper than its white-walled interior.

The four-storey building has been constructed to have as low a carbon footprint as feasibly possible. For this, Luke engaged ARUP Engineering to review the constraints of the site, which is not only snug, but which is situated in a conservation area between listed buildings.

**"We had a good service from the KingspanWater team and their technical helpline was very good."**

*Luke Tozer.*

**Client:** Luke Tozer

**Project:** Gap House

**Architect:** Pitman Tozer Architects  
[www.pitmantozers.com](http://www.pitmantozers.com)

**Location:** West London, UK

**Product:** KingspanWater Envireau Fully Integrated Rainwater Harvesting System with 1,200 litre storage tank

The restrictions on the build as a result of its situation lead to some compromises. The house doesn't have solar panels, for example, for generating heat and electricity. Instead, a ground source heat pump extracts the heat from three 50 metre bore-holes. These warm the house and supply all the hot water.

A KingspanWater Envireau rainwater harvesting system has been installed to capture, filter and store water from the 72 m<sup>2</sup> roof and guttering, in an underground 1,200 litre tank. The water is transported, via a soundless pump, to a header tank in the roof and is used to flush all four loos in the house.

Luke laughs: *"I must be one of the few people in this country who smiles at the sight of storm-clouds, because I know they're going to fill up my tank!"*

*"The water in the loo is perfectly fine – it's odourless and almost clear. Quite honestly, it seems mad to think people routinely flush their loos with drinking water! I would strongly recommend that anyone installing a rainwater harvesting system has their plumbers, electricians and a ground-worker working together on-site to ensure a seamless installation process."*

For more information, call the KingspanWater Technical Advisory Service on +44 (0) 1296 633139, or visit our website [www.kingspanwater.com](http://www.kingspanwater.com).

Sustainable, Reliable, Affordable

