



# WATERPROOFING 30 UNDER PAVEMENT VAULTS

## Converting Under Pavement Vaults into Dry Storage Space, London

### PORTLAND PLACE, LONDON

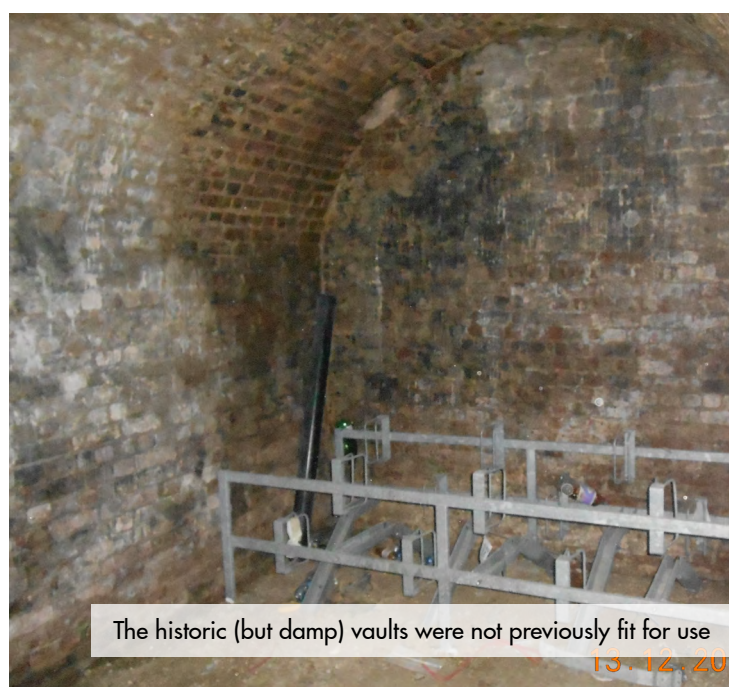
Located in the Marylebone district of Central London, Portland Place is an unusually wide street that was originally laid out in the 1770s.

Portland Place still contains many original spacious Georgian terraced houses, as well as being the home of the BBC's headquarters at Broadcasting House, and the [Royal Institute of British Architects](#) (RIBA).

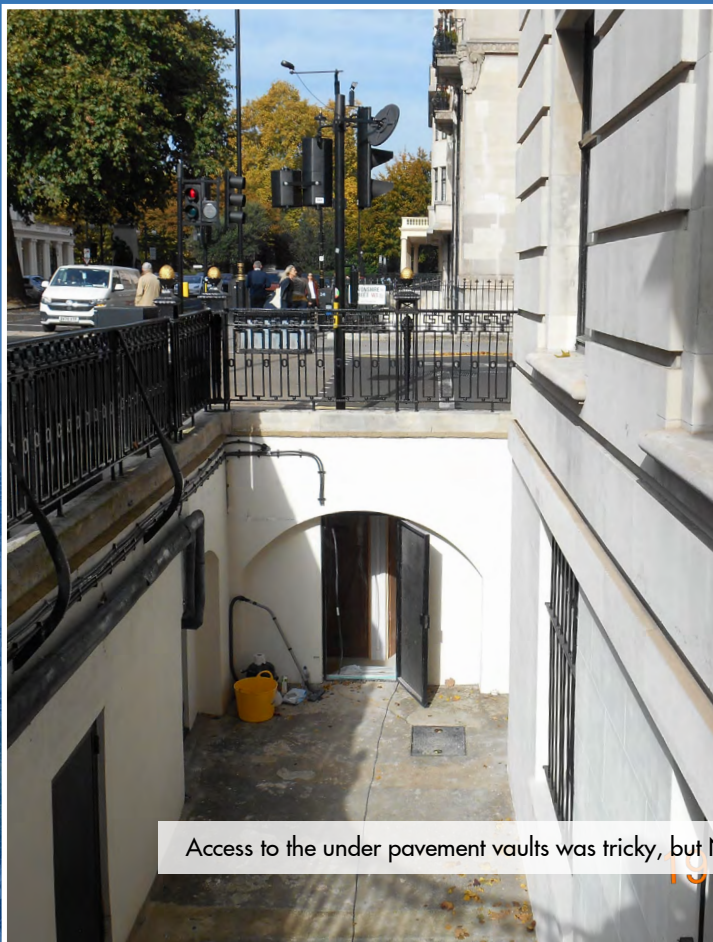
### PROJECT SCOPE

Newton Specialist Contractor [Strand Preservations](#) were called upon to develop a waterproofing strategy for a series of under pavement vaults on Portland Place. The original vaults were experiencing high levels of damp, and needed to be converted into dry, useable storage areas.

Starting with just two vaults, but with another 28 to follow, the qualified waterproofing specialists at Strand worked alongside [Faraday Property Management](#) to produce a full waterproofing specification. Strand were also appointed to carry out all associated building works.







Access to the under pavement vaults was tricky, but Newton successfully delivered the full CDM System for Strand to install



With the cavity drain system fitted to the walls, the 20mm floor membrane and independent steel framing could be installed



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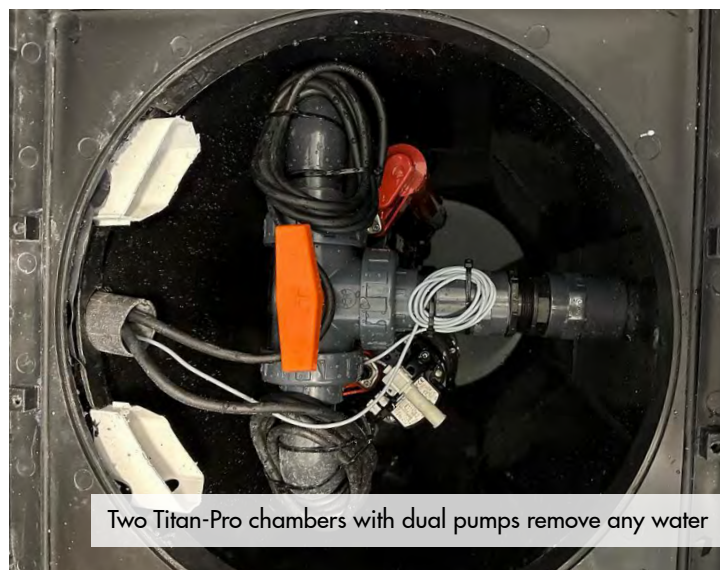
### THE SOLUTION

Strand recommended a full cavity drain system using the [Newton CDM System](#) to achieve a completely dry space, defined as Grade 3 by [BS 8102:2022](#).

However, to make things trickier the under pavement vaults all varied in dimension, with arched and barrel soffits presenting a complex installation of the cavity drain system.

In spite of this, Strand installed the 8mm [508 membrane](#) to all walls and soffits, with the 20mm deep [520 eco Floor](#) membrane across the floors. A maintainable drainage system was also created using [CDM BaseDrain](#) channels around the perimeter along with [CDM Inspection Ports](#).

Finally, the drainage was connected to two [Titan-Pro sumps](#) with dual pumps, [battery backup and alarm](#) systems for reliable water removal and complete peace of mind.



Two Titan-Pro chambers with dual pumps remove any water

### THE RESULT

Despite the busy Central London location making deliveries and waste collections particularly difficult, and strict time constraints on noisy works, the team at Strand delivered a high-quality installation that will keep these under pavement vaults dry and useable for many years to come.

### TESTIMONIAL

*"From the initial concept, detailed comprehensive report and costings, review of the treatment options and undertaking the works to completion, Strand offered an extremely professional service throughout and were a pleasure to work with. The works have been completed to a high standard and have transformed old damp pavement vaults into useable storage areas."*

Stewart Hawkins, Senior Building Surveyor  
Faraday Property Management



Peace of mind is provided by the battery backup and alarm



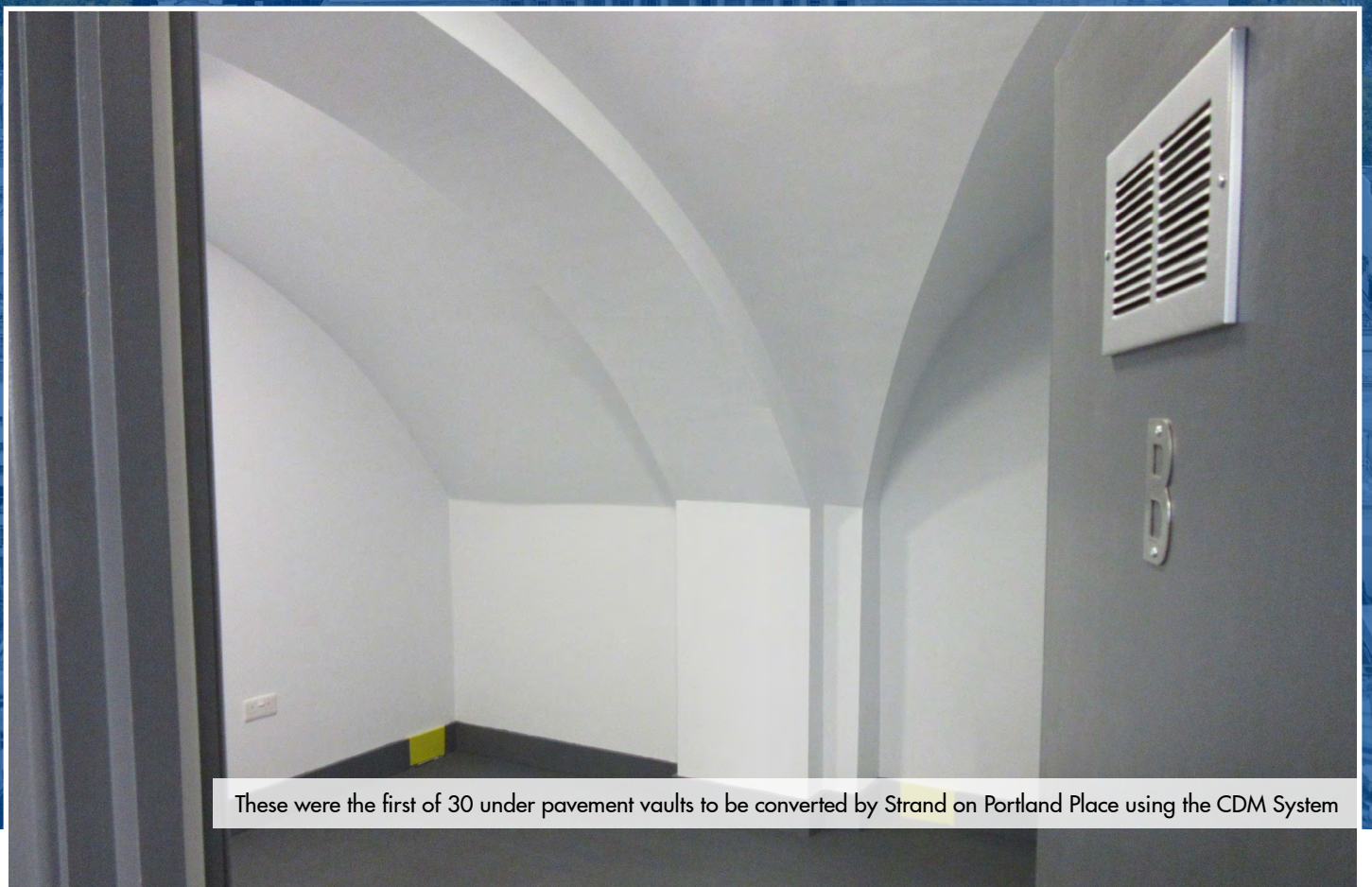
With the cavity drain installation complete, the vaults were ready for the internal finishes to be applied, transforming the space







Strand Preservations also carried out all remaining fit-out work to complete the under pavement vaults



These were the first of 30 under pavement vaults to be converted by Strand on Portland Place using the CDM System



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### FEATURED PRODUCTS

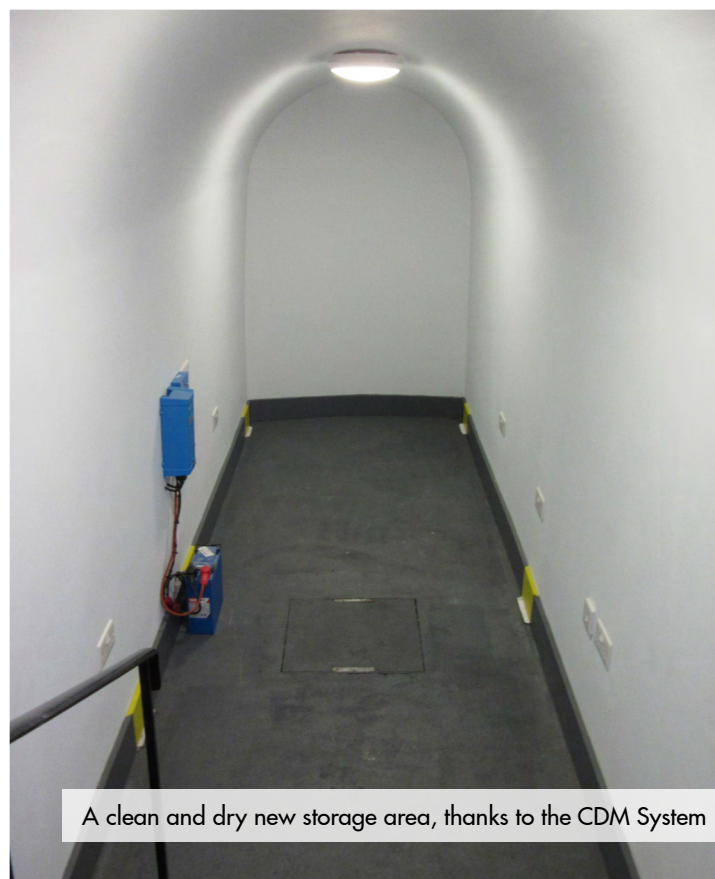
- [CDM System](#) - A comprehensive Type C waterproofing system that will usually be suggested when looking for superior levels of protection against water ingress.
- [508 Membrane](#) - BBA approved, high-quality 8mm cavity drain membrane for use within the Newton CDM System.
- [520 eco Floor Membrane](#) - BBA approved, 100% recycled, 20mm deep cavity drain floor membrane delivering high drainage capacity.
- [CDM BaseDrain](#) - Drainage system used with the CDM System to receive water ingress and discharge it to a pump system or drainage.
- [CDM Inspection Ports](#) - Fitted to the BaseDrain to ensure the Type C System is accessible and maintainable throughout its design life.
- [Titan-Pro Pump System](#) - A specialist sump and pump system, uniquely designed for use with the Newton CDM System.
- [Battery Backup Systems](#) - Our range of batteries, inverters and control panels, ensuring continued pumping at all times.

### NEWTON SPECIALIST CONTRACTOR:



### Newton Specialist Contractors

We recommend that our systems are installed by one of our nationwide network of Specialist Basement Contractors (NSBCs). Trained by us, NSBCs offer a full guarantee on the design and installation, and can act as Waterproofing Design Specialists.



A clean and dry new storage area, thanks to the CDM System



The newly converted vaults will be dry for years to come