

Case Study

One New Change, London



The Challenge:

To provide a state of the art drainage system which offers maximum efficiency under all conditions, as well as being aesthetically pleasing, in order to blend in with the cutting edge architecture.



The approach:

ACO Bespoke drainage solutions to meet the main challenge, related to the variety of floor levels, curves, sharp angles and the presence of water outlets and inlets offset at different heights.



The product:

Bespoke drainage system with more than 800m of level invert drainage channels, bespoke slot channel with locked heelsafe grating, AS1001 discrete channel with easy cleaning jet access and conventional bore for high capacity, together with AS301 channel.

One New Change, London

London's newest shopping destination goes for ACO drainage system

Developed and manufactured by ACO Building Drainage, the UK's leading specialist in drainage systems and corrosion resistant building products, a new bespoke drainage solution has been installed at one of the most prestigious and most innovative shopping developments in London.

One New Change, located right in the heart of the City of London next to St Paul's Cathedral, is a contemporary building with a total of eight floors comprising offices, a public roof terrace and shops. With around 60 stores spanning the three floors, One New Change is one of the largest shopping centres in central London, rivalling other London shopping hot-spots. This iconic building has been designed by Pritzker Prize-winning architect, Jean Nouvel and features 6,500 floor-to-ceiling glass panes in varying shades of red, grey and beige, flooding the floors with natural light.

With an external perimeter of around half a kilometre, several internal walkways, split levels and a roof terrace, the provision of a state of the art drainage system was paramount. The drainage channels had to offer maximum efficiency under all conditions, as well as being aesthetically pleasing, in order to blend in with the cutting edge architecture.

Above all, the main challenge was related to the variety of floor levels, curves, sharp angles and the presence of water outlets and inlets offset at different heights. In the circumstances, there was no prospect of utilising an entirely off the shelf product and for the most part bespoke elements were applied. Access units presented a particular problem and had to be developed to include a stone infill tray positioned next to the bespoke slot channel, combined with locked heelsafe grating. All external channels were reinforced, to allow for the use of cherry pickers and other heavy duty equipment. Stainless steel was used for the gratings, with cast iron for the gullies.

A number of readily available ACO products were also used for this prestigious project, combining the 50mm wide AS1001 Discrete channel with easy cleaning jet access and conventional bore for high capacity, together with AS301 standard box channels.

ACO's engineers spent over two years working assiduously with developers and contractors in order to provide the required range of elements for more than 800m of level invert drainage channels. This was a complex and intricate project where all parts had to fit perfectly, rather like in a massive jigsaw puzzle.

The bespoke drainage channels had to integrate seamlessly with the stone floorings personally selected by the architects, who were keen to ensure there would be almost no visible transition between the outdoor area and the interior of the building, bringing a London street right into One New Change. The appointed contractors Szerelmey, a leading stonework and restoration firm, were tasked with the installation of over 5,000 sq m of traditional English Yorkstone, incorporating the ACO drainage elements into it.

The flooring looks as though installation was simple but much careful design and thought went into laying it. Darren Moore of Szerelmey explains, *"The simplicity of the flooring's appearance belies the work that went into creating it. One New Change is a combination of both external and internal spaces so there are a lot of complicated gullies and drainage systems incorporated within the stone. Areas of stone themselves are installed to subtle twists and cross-falls to deal with rain water."*

John Guest, Contracts Manager at Szerelmey adds: *"There were numerous technical challenges in relation to the drainage channels. These related principally to the falls and crossfalls to enable the system to function correctly. The drainage solution provided by ACO has so far operated successfully and it has been appreciated thanks also to its aesthetic qualities, with a design which is well suited to the dynamic architecture of this outstanding building."*

ACO drainage solutions can be found in some of the most prestigious public buildings across the United Kingdom – a sure indication of the reliability and commitment for total quality solutions of this global water management technologies organisation.



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In Brief:

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For more information on our bespoke design and fabrication services, contact ACO Building Drainage on 01462 816666 or email buildingdrainage@aco.co.uk.

A full overview of ACO Building Drainage products and resources is available at www.acobuildingdrainage.co.uk.