

BBC Broadcasting House

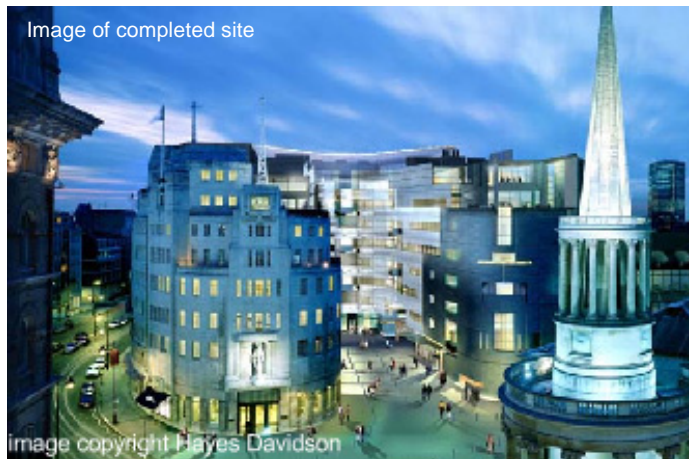


Box-in-Box construction
CDM-ISO-LAT-SPECIAL



Client BBC
Main Contractor Bovis LendLease
Architect McCormac Jamieson Pritchard
Acoustic Consultant Bickerdike Allen Partnership
Structural Engineer Whitby Bird & Partners
Area 4 Studios totalling 200m²

Broadcasting House is located on Portland Place, just North of Oxford Circus in the heart of London's West End. The existing building is situated between the Bakerloo and Victoria Underground lines and the building has long suffered from re-radiated noise from trains passing by. As part of BBC's huge redevelopment of the site the existing building has been undergoing a massive refurbishment.



To protect the 8th floor studios from underground railway noise an isolation system supported off dwarf walls was specified.

CDM-ISO-LAT-SPECIAL isolation rails were used with differing stiffnesses incorporated to take the high imposed loads from 8m high blockwork walls and steel columns which form the box-in-box construction.

The picture to the left shows the isolation rails supported off dwarf walls with the metal edge closures and decking fixed in.

Finite element analyses were carried out on each of the slabs to ensure that the deflection on each of the bearings resulted in a system natural frequency of 6-8Hz.

One of the floors had several service penetrations and man-holes which were created using timber formwork.



CASE STUDY – CDM-ISO-BOX

CDM-UK
PO Box 7035
Melton Mowbray
Leics LE13 1WG



noise & vibration control

T: + 44 (0) 1664 482486
F: +44 (0) 1664 482487
E: info@cdm-uk.co.uk
www.cdm-uk.co.uk