



The Royal National Theatre on the South Bank is a prominent public building constructed next to the Thames in central London. It contains three theatres together with extensive rehearsal, workshop and office spaces, and other back stage and front of house facilities. Flint and Neill carried out the original structural design of the Royal National Theatre working with the architect Sir Denys Lasdun and supervised the construction. F&N also undertook the original building services design. The project received a Concrete Society Award in 1977, and F&N has been retained ever since to give advice in connection with ongoing improvement and modification works.

Flint & Neill was also appointed in 1996 for the structural design of the £12 million Front of House Modifications project, which involved comprehensive re-modelling and re-development of this well known building. As the structural designers, F&N paid particular attention to the exclusion of dampness from the basement car park, which has a capacity for more than 600 vehicles. During the recent refurbishment and extension, F&N had to re-assess loading capacities and design the strengthening and other structural modifications to the car park as a result of change of use in several areas.

The structure is in reinforced and pre-stressed concrete and has deep foundations adjacent to the river Thames. Long span roof beams were used in the main Olivier Theatre auditorium to create an effective and exciting clear internal space. Special measures were introduced for noise and vibration control.

Since late 2008 F&N have been involved with the Masterplan to renovate and improve different areas of the theatre. The works centre around providing more space within the building for workshops and larger foyers and updating the building's Front of House and surrounding areas to improve the public's experience of and interactivity with the theatre. The proposed works are currently underway and it is aimed for them to be completed by 2013.

**Client:**  
Royal National Theatre

**Location:**  
South Bank, London, UK

**Service Dates:**  
1969-1975, 1996, 1999-2001,  
2005 - present

**Services:**  
Structural Design  
Structural Modification  
Design of Strengthening  
Structural Consultancy

