



## WINSPEAR OPERA HOUSE, DALLAS, USA

Winspear Opera House forms part of the Dallas Center for Performing Arts on a 6 acre site in Downtown Dallas. The 2200 seat Opera House has been designed with Foster + Partners and Theatre Projects Consultants and was completed in 2009

We worked closely with the Architect and the design team to develop the design and propose construction systems for the whole Winspear Opera House development. Costs were reviewed on an ongoing basis with the cost consultant and account was taken of the rise in steel material prices.

During the scheme design phase the orchestra level structures (including the orchestra pit) were co-ordinated with the needs of the Theatre Consultant and the design of the stage walls co-ordinated with the architectural and acoustic needs of the project. The auditorium roof structure was co-ordinated with the layout of the auditorium below and the design

updated to allow for a cantilevering screen around the perimeter of the roof.

Buro Happold also provided a people movement study for the key circulation scenarios in the opera house: arrivals, interval, and end-of-performance scenarios. Through rigorous data collection and analysis from a survey at the Royal Opera House in London, visual simulation models were built to assess and optimise circulation in terms of queues, congestion, waiting times and comfort at the reception, restaurants, toilets and stairs and corridors.

### CLIENT

Dallas Centre for the Performing Arts

### ARCHITECT

Foster and Partners

### SERVICES PROVIDED BY BUROHAPPOLD

Structural engineering, ground engineering, facades, and Smart Space – People Flow & Space Analysis