

## Ritz Carlton Dubai

Complete	Area	Client	Architect
2009	Middle East	Ritz Carlton Hotels	Gensler

The Ritz Carlton is a luxury, five star hotel situated in the heart of the Dubai International Finance Centre.

Behind the stone façade the hotel's guests are welcomed by a 14-storey waterfall in the main reception lobby.

There are 350 rooms with an additional 120 serviced apartments and 300 residential units. Facilities include a gym and spa, conference and meeting rooms and underground parking.



## Services provided

Sandy Brown was appointed by Gensler to provide design advice from concept design up to tender on the proposals for the hotel and residences. This included:

- noise survey and 3D modelling of noise around the site
- advice on sound insulation of the facades to meet client requirements for the control of noise ingress
- sound insulation between internal spaces such as hotel function rooms and conference facilities
- acoustic finishes to front of house areas and control of noise and vibration from building services.

During the construction stage we were appointed by the contractor to provide detailed reviews of noise and vibration measures for specific plant items located directly over guestrooms.

## Special acoustic features

One of the main roads in Dubai, Sheikh Zayed Road, is located close to the site. The site noise survey indicated high levels of noise from road traffic on the road. However, during the design stage it was known that new buildings were to be constructed between the road and the hotel site. The screening effect of these was therefore accounted for in the environmental noise modelling of the site, which allowed façade sound insulation requirements to be assessed more accurately.

Early in the design, we worked with the architects on developing the layouts to minimise potentially difficult adjacencies and the subsequent cost of providing higher performance constructions. Initial layout proposals for the hotel specified a layout where many of the lifts would be positioned adjacent to guestrooms. Through working collaboratively with the rest of the design team we were able to explore options for reducing the impact of this acoustically by rearranging the layouts.

As the hotel's pool and fitness centre are located over a pre-function and entrance area, consideration was needed on control of impact noise from footfall, treadmills and weight machines. The fitness suite is also directly beneath apartments. Structural columns connect to the soffit above so noise transfer upwards was a possibility. Our design included incorporating a floated floor within the fitness suite that is isolated from the columns, with the effect of reducing vibration transfer into the building structure.