

The Address Residence Sky View Dubai, UAE



Case Study



Property Owner

Emaar Properties



Main Contractor

Arabian Construction Company



Architect

Skidmore, Owings & Merrill



Structural Engineer

Severud Associates



Acoustic Consultant

PMK International

OVERVIEW

Designed by the architects of Burj Khalifa, The Address Residence Sky View twin-towers in Dubai are two luxurious skyscrapers that feature 166 hotel rooms and 531 apartments, connected by a three-level Sky Bridge.

The project consists of two large swimming pools, located at podium level and the Sky Bridge that spans between the two buildings, offering a panoramic view of Downtown Dubai.

The concern from the acoustic consultant was potential of structure borne noise due to activities in and around the pools causing noise nuisance within the apartments and the hotel rooms.

Stravifloor Mat

- The base of the pool provides the most significant path for structure-borne noise
- This layer also acts as formwork thereby reducing the risk of acoustic bridging



SOLUTION

In conjunction with the acoustic consultant, CDM Stravitec designed a solution that will isolate any unwanted structure-borne noise from contaminating the residential rooms by means of a [Stravifloor Mat](#) solution based on a continuous resilient support to achieve natural frequency of 15Hz. Special attention was paid to the infinity pool. To avoid the transmission of unwanted noise through the acrylic wall of the Sky Pool, discrete resilient pads were installed.

AT A GLANCE

CHALLENGES

- Infinity pool design with an acrylic wall
- Required natural frequency of 15 Hz
- Adjacent hotel suites and residential apartments

BENEFITS

- Optimum isolation using minimum system thickness
- Engineering support during construction phase
- Quick and easy to install

