

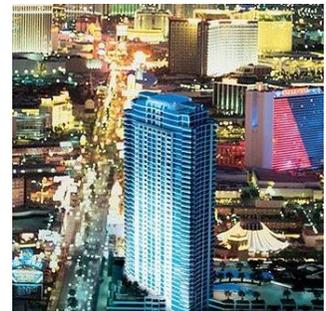
Residential interior noise and vibration design

Interior noise influences quality of life for occupants and can degrade property values for owners and developers. Intrusive noise from neighboring units can disturb residents and lead to legal confrontations that could be avoided with proper design. Our goal is to meet owner's and tenants' expectations with manageable risk and minimized construction cost. We can design to prevent intrusive noise in residential spaces, test existing residential units to check how they comply with their design and municipal codes, and model mitigation measures to ameliorate noise complaints. Our experience spans all market segments, from affordable to market rate to luxury. Below are some of our residential projects.



Transbay Block 6 (San Francisco): Acoustical design for a project with 402 **market rate apartments** in a 300' tower and 70 **affordable units** in an adjacent mid-rise structure. An additional seven market rate townhomes and retail span between the two. The project includes challenging vertical adjacencies arising from height limitations at the site. Traffic noise from the urban environment drove the design of the curtain wall system.

Sky Las Vegas: Acoustical design for a 45-story **luxury condominium** project. The building included penthouse suites, a multi-story garage, and a community movie theater. Above the penthouse level, a swimming pool, spa, and elevator machine room were located on the roof, requiring extensive mechanical noise isolation design. Exterior traffic and aircraft noise isolation were critical due to the location. Our design achieved very high noise isolation between adjacencies for this high-end project.



Mission Bay Blocks 5 & 11 (San Francisco): Acoustical design for two separate **market rate apartment** communities. Both projects included four stories of residential space over retail and parking. Block 5 consists of 170 apartments and 18,000 sqft of retail and amenity space. Block 11 consists of 190 apartments and 5,000 sqft of common area amenities. The developer's goal was to generate affordable designs for the façade, interior separations, and mechanical systems.

Rosa Parks II, TNDC (San Francisco): Acoustical design for a new 5-story, 98-unit **affordable housing** development for senior citizens. The Developer's primary goal was to generate affordable designs meeting CBC / Title 24 acoustical guidelines as required by SF DBI. Our scope included site noise studies to support permitting; exterior façade noise isolation design; interior acoustical design; and construction administration.

