

Case Study

Location: San Diego, CA

Product: Ultima® Ceiling Panels with

Total Acoustics® Performance

Architect: Carrier Johnson + Culture,

San Diego, CA



Sempra Energy Corporate Headquarters



The Challenge

When Sempra Energy began drawing up plans for its new corporate headquarters building in downtown San Diego, acoustics was top of mind for the design team charged with meeting specific criteria for noise levels inside the 16-story office building.

Those criteria required that the design team specify acoustical ceilings that would absorb noise in the open-plan offices and prevent noise from private offices and conference rooms from being overheard in adjacent spaces.

The Solution

To meet the noise level criteria for the open-plan offices, the design team needed an acoustical ceiling with a Noise Reduction Coefficient (NRC) of at least 0.70, meaning it absorbs 70 percent of the sound that strikes it. In the adjacent private offices and conference rooms, where speech privacy is important, a Ceiling Attenuation Class (CAC) of at least 35 was needed to effectively block sound from traveling across the plenum into adjacent spaces.

The design team satisfied both requirements by selecting Armstrong Ultima® ceiling panels for all the office spaces in the 320,000 square foot building. The panels feature new Total Acoustics® performance, which is the ability to provide both sound absorption (NRC) and sound blocking (CAC) in the same panel.

"The NRC was very important in the open-office areas," says lead interior designer Stuart Fromson. "By utilizing very low furniture partition system heights, we are providing daylight and views to 70 percent of the building occupants. This creates a very open environment."

In the old Sempra Energy building, which was built in the 1960s, there were frequent complaints about being able to hear private conversations between offices. "That's why it was important to have CAC in the ceiling of the new building," says Fromson. "It's critical that we don't get sound transfer over the top of the walls."

A movable wall system that coordinates well with the flush Silhouette® XL® suspension system provides the design flexibility needed to reconfigure the office spaces when needed. "With high NRC and CAC in one panel, we can move walls as needed to make private offices into open spaces and open spaces into private offices, and still maintain the sound blocking and sound absorption we need for each space."

NRC + CAC = Total Acoustics



877 276-7876 armstrongceilings.com/totalacoustics