the challenge:
As part of its effort to modernize its nine campuses, the Los Angeles Community College District is in the midst of one of the largest publicly funded sustainable building programs in the nation. The program includes an energy plan intended to encourage energy efficiency while also generating renewable energy, particularly solar power.

the solution:
In keeping with its commitment to the environment, the District installed a pair of “smart ceilings” in a repurposed, single-story, open plenum, multi-use building at its Trade-Technical College. The acoustical ceilings are installed as “free-floating” clouds and feature the use of DC FlexZone, the new grid system from Armstrong that has the ability to distribute safe, low voltage direct current (DC) power to lighting fixtures, sensors, and other electrical devices in a ceiling.

The grid system improves the flexibility and reuse of interior spaces by enabling easier repurposing and reconfigurations without the need to rewire. It can also contribute to more sustainable buildings by making more efficient use of on-site renewable energy sources, such as solar.

The opportunity to link solar power directly into the grid system was a key consideration because the College is looking to add a solar presence at the site. The lights and Crestron controls in the ceiling would then be powered directly by DC energy distributed through the ceiling grid in concert with power components from Nextek Power Systems, and cables from TE Connectivity – all co-members with Armstrong in the EMerge Alliance®.

According to Larry Eisenberg, Executive Director for Facilities Planning and Development, the District is excited about the installation of the smart ceilings. “They not only help manage the lights and other devices in the ceiling more effectively and flexibly,” he states, “but also have the potential to revolutionize how we think about our buildings in the future.”