NET ZERO BUILDINGS • Highlighting the Path Toward Net Zero Building Design

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EUI Imperative. Renewable power is a necessary element in any net zero facility, but a buildings' overall energy profile must take top priority, and must be delivered in an economical way that opens the budget door for renewable energy tech.

OUT OF THE BOX COOLING

Energy Equation. If budgetary room must be found, how? Mechanical systems, are one avenue, and should be designed sufficiently to bring down the size, and cost, of renewable systems or even a beefed up envelope.

One HVAC alternative that won't break the bank—and unlike any other HVAC process, does not actually expend energy—is evaporative cooling. The concept borrows from nature; turn inside to learn how, exactly.

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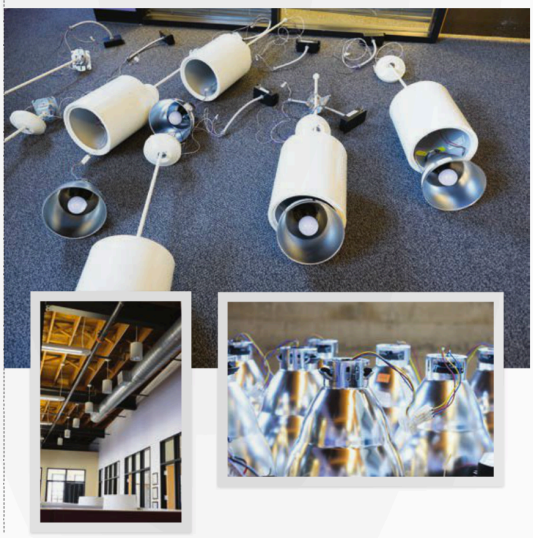
RETROFIT SOLUTION
According to lighting controls manufacturer WattStopper, at least 75% of of U.S. buildings were constructed before energy codes came into existence. The company's line of wireless and batteryless sensor solutions, based on its award-winning DLM technology, are an easy way to address improved energy efficiency.



▶ Not only do the LEDSENSE fixtures sense occupancy, they can "smell" harmful toxins and report alerts to the owner via the cloud.

◀ **SENSIBLE CONTROL**
LEDSENSE, by TERRALUX is a hybrid technology that enables a fixture to essentially see, smell and touch its environment, all while intelligently controlling energy use via the cloud. The fixtures, as installed here at the University of California Berkeley, also automatically adjust light levels to reflect demand response alerts from utilities. "We are deploying an LED platform that goes behond basic illumination," says Steve Hane, TERRALUX CEO. "Technology, available today, will pale in comparison to the capablities we are building in the emerging cloud lighting space."

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