

Photovoltaic

BE WHERE YOU BELONG
Join the best of the best, the community of members
who share your passion for the outdoors.

Photovoltaic

Building Integrated Photovoltaics (BIPV) generate power from solar collection surfaces that create savings in electricity costs, reduce fossil fuel consumption, and emission of ozone depleting gases. BIPV skylights allow solar power to produce some of the electricity used in your building, while adding an architectural interest that tells the world you are committed to renewable energy and green building.

- ▶ Building Integrated Photovoltaics (BIPV) allows the client the capability of adding solar power to their buildings, with as little additional cost to construct as possible. By changing the glass lites in a skylight to PV modules, the benefits of natural daylighting, solar shading, and green power generation can be realized.
- ▶ Super Sky Products is not only the world leader in skylighting, we are also the United States leader in BIPV skylights. Super Sky has constructed hundreds of projects incorporating our high standards of skylight design, construction and weatherproofing, as well as photovoltaic power generation. Because of this experience, we can offer a turn-key approach to your BIPV project.
- ▶ Due to our years of experience in BIPV, Super Sky worked with Underwriters Laboratories (UL) to help develop their new category “Building-Integrated Photovoltaic Mounting Systems” (QHZZ). *We are also the first company to have an approved UL Classified BIPV mounting system. Our UL Classification file number is E247515.*

Photo by William Lemke



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ADVANTAGES OF A SUPER SKY BIPV SKYLIGHT

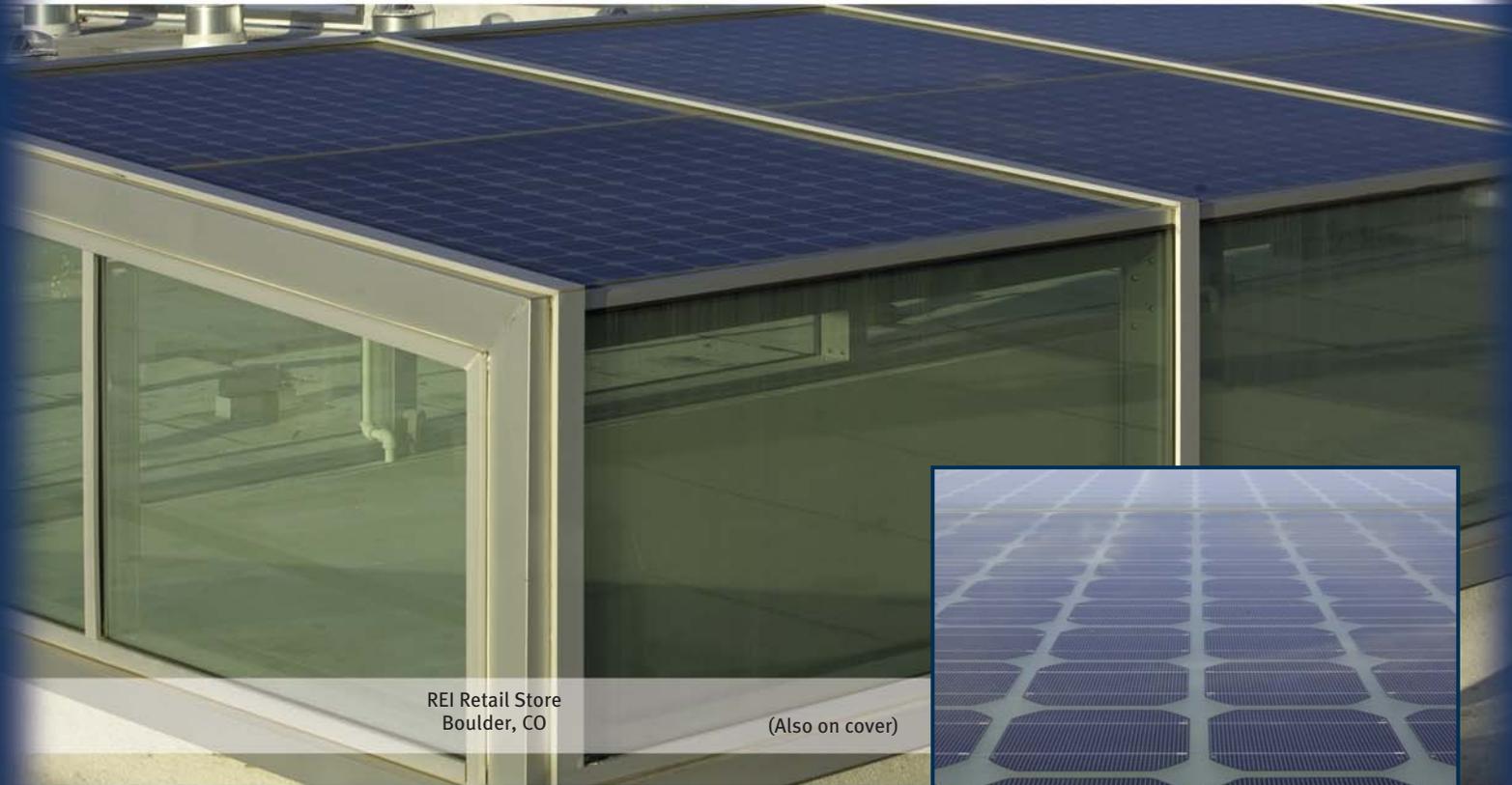
- ▶ Same advantages of a standard Super Sky skylight, including natural daylighting, solar shading, high quality design, workmanship and industry leading ten (10) year warranty against leakage.
- ▶ Incorporates photovoltaics into your building project with the minimal possible additional cost for infrastructure. The skylight glass is changed to photovoltaic modules. Wiring is handled internally in the skylight extrusions.
- ▶ Green building recognition in a highly visible way. Shows our corporate commitment to renewable energy and green building.
- ▶ LEED points (USGBC)  for natural daylighting and photovoltaics.
- ▶ Turn key design for the BIPV system, encompassing the proper skylight design and construction, photovoltaic array design, coordination of all electrical components with building electrical systems, and commissioning of installed product.
- ▶ Custom sizes and unlimited design configurations, utilizing custom thin film and crystalline (mono or poly) PV modules, are possible.
- ▶ Combining standard glazing products with PV modules creates architectural interest and generates electricity.
- ▶ Unlimited possibilities; covered walkways, shaded parking, entrances, gas stations, transit canopies, atriums, etc.



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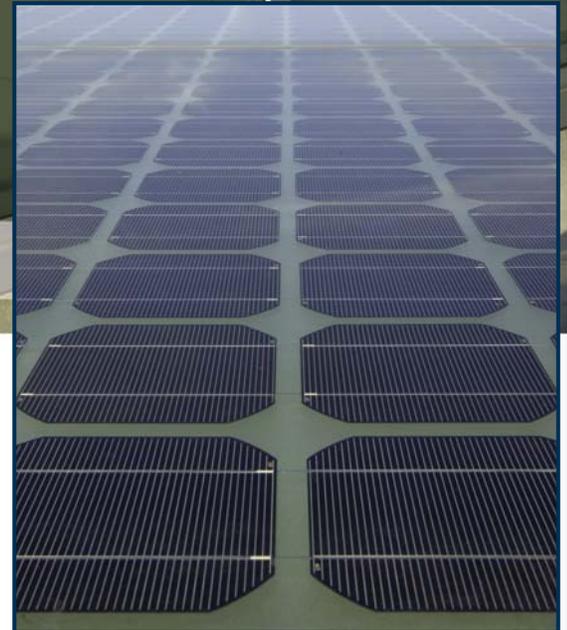
BIPV CASE STUDY

REI photos by Paul Brokering Photography



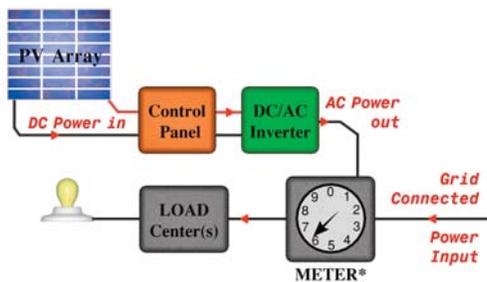
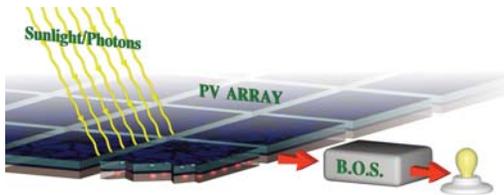
REI Retail Store
Boulder, CO

(Also on cover)



Super Sky is working with companies like REI, to help them reduce their environmental footprint. The Boulder store was designed to meet the USGBC's LEED Silver standards for commercial buildings.

Super Sky manufactured and installed this single slope skylight. The sloping portion was glazed with photovoltaic panels, which produce roughly 2% of the store's energy. The vertical portions were glazed with clear/silkscreened insulated Low "E" glass, allowing natural daylight into the building.



The BOS (Balance of System) converts DC energy to AC – the standard for utility supply throughout the world.

Apart from the engineering to ensure that the maximum yield of energy will be harvested from the solar array, safety measures are designed to isolate each component of the system.

A UL approved 'grid following inverter' provides alternating current to match perfectly with the utilities' supply. The utility can provide a meter that will spin in both directions to allow the site to purchase energy, or sell energy back to the utility – depending upon the specific site conditions.

