



## SOLAR INTEGRATION

Increased awareness about rising energy costs in the last decade has brought about a renewed interest in harnessing solar energy. Solar technology has greatly improved since the original solar panels of the 1970's, and panel prices have plummeted. Energy companies are working with innovators and scientists to create even more efficient technologies. Some of these technologies will prove reliable and be installed correctly, while other systems will fail prematurely.

Allana Buick & Bers, Inc. brings 33 years of experience in roofing, waterproofing and building envelope engineering to the field of solar installations. Our extensive engineering expertise, bidding services and construction management will ensure a reliable solar power system and installation that is properly integrated into your building's roof and exterior walls at the lowest possible cost.

### Should You Install Solar?

The price of traditional energy from the grid has historically increased 5% per year or more. Therefore, solar power needs to be evaluated first as a financial decision, since it allows you to lock in a 30 year power supply for a low, fixed cost that is lower than your existing utility rate.

Many projects can be financed, requiring minimal or no up-front capital. Federal and state grant programs provide rebates which enable some projects to achieve as high as 65% payback or more in the first year! The period for recovery of the original investment typically range from two to seven years.

Once the decision has been made to add photovoltaic panels to the roof of your property, the two major questions that need to be answered are 'Which type of solar panel is best for my roof?' and 'What needs to be done to ensure my building is in the right condition for a solar energy installation?'

The age and condition of your roof plays a vital role in successfully using solar energy. Good solar panels will last 30-40 years and the cost to remove them to replace a faulty roof can quickly erode any financial savings you may have made. Savings calculations estimated by solar companies are typically based on a 30 year period of constant use. Therefore your roof must be assured of having a life of at least 30 years, including all flashings and penetrations, and be structurally able to handle the increased weight and wind-loading from the panels.

ABB will select the proper panels based on geographic region, amount of shading the roof gets, roof type and the building's orientation to the sun.

## The ABB Method

ABB combines solar, roofing, waterproofing, energy efficiency and engineering in one firm with expertise in all aspects of building systems.

Our first step is to assess the financial viability of solar at your site (which can include your roof, building walls and even your parking lot). We call this a Financial Assessment, and we'll communicate those findings to you, along with available financing options. If the project makes financial sense, we'll continue with a roof and structural assessment.

We have significant expertise in building energy audits, and can provide recommendations for alternative energy saving technologies and changes if those are of interest.

After these assessments are complete, ABB selects the solar technologies, manufacturers and installers who will be allowed to bid on your project, develops project specifications, runs a bid process, and presents final bids to you along with our recommendation.

ABB then works with the winning manufacturers and installers, providing engineering specifications and drawings as needed to begin installation. Throughout the project, ABB provides construction administration and monitoring services to ensure the panels are installed and integrated into the roofing membrane properly.

There are several types of grants and rebate programs on a local, state and federal level. We are knowledgeable about the different programs and will incorporate any cost savings into our overall recommendation and cost estimate. ABB will assist in the re-warranty process for many existing roofs.

## ABB Is Your Solar Resource

ABB is with you every step of the way, from determining the financial performance of your proposed or existing system, to selecting and designing the best solar solution and correct roofing technology, to making sure these are installed properly.

We evaluate roofing and solar installers to make sure only well qualified firms do the work, and we can help you evaluate and obtain the right financing. We are your primary contact from project conception to receipt of solar energy rebates and credits from the State and Federal government.



## About Us

Allana Buick & Bers, Inc. is an architectural engineering and forensic consulting firm. We have over 34 years of experience making building enclosure, roofing, and waterproofing systems perform better. We have 16 office locations nation-wide ready to deliver a locally managed streamlined response for new construction, renovation, and repair projects.

- Palo Alto, California
- Oakland, California
- Sacramento, California
- Los Angeles, California
- Irvine, California
- San Diego, California
- Mesa, Arizona
- Maui, Hawaii
- Maui, Hawaii
- Las Vegas, Nevada
- Charlotte, N. Carolina (dba ABBAE, Inc.)
- Tulsa, Oklahoma
- Portland, Oregon
- Coppell, Texas
- Chesterfield, Virginia
- Seattle, Washington

**CONTACT  
ABB**

**bd@abbae.com  
800.378.3405**



**ALLANA BUICK & BERS**  
Making Buildings Perform Better