

**ARCHITECTURAL ENERGY**  
CORPORATION  
*Integrated Engineered Solutions*

## North Boulder Recreation Center

Boulder, Colorado



Corporate Offices:  
2540 Frontier Avenue, Suite 201  
Boulder, Colorado 80301  
303 444 4149 Telephone  
303 444 4304 Fax

San Francisco Office:  
142 Minna Street  
San Francisco, California 94105  
415 957 1977 Telephone  
415 957 1381 Fax

Chicago Office:  
955 North Lively Boulevard  
Wood Dale, Illinois 60191  
630 860 1439 Telephone  
630 860 1442 Fax

Southeast Regional Office:  
2354 Wimbledon Circle  
Franklin, Tennessee 37069  
615 599 5368 Telephone  
303 444 4304 Fax

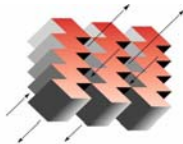
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The North Boulder Recreation Center recently underwent an extensive renovation to refurbish and expand the recreation facilities and services offered to the citizens of Boulder. High levels of energy efficiency and sustainable design have been integrated into the recreation center, including solar heating of the swimming pool water, aggressive daylighting, heat recovery, low environmental impact material use, and a comprehensive building automation system. The 5,680 square foot flat plat solar thermal array on the roof provides heat for a lap pool and a child's pool. An energy meter continually totals how many Btus of solar energy have been collected to date. Energy wheels in the roof-top units that serve the pool area capture the energy of the exhaust air and reintroduce it into the supply air. Architectural Energy Corporation provided whole-building commissioning to ensure comfort (temperature, relative humidity, and ventilation) requirements were met while optimizing energy savings. The project earned a LEED® Silver Certification.

## Project Information: North Boulder Recreation Center

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Project Type	Recreation Center
Client / Commissioning Services Team	<i>Client:</i> The City of Boulder Boulder, Colorado  <i>Commissioning Authority:</i> Architectural Energy Corporation Boulder, Colorado
Size	60,000 ft <sup>2</sup>
Location	Boulder, Colorado
Year Constructed / Occupied	Pre-construction Commissioning meeting June 5, 2002 Opened with LEED Silver certification March 16, 2003
Project Highlights	<p>Architectural Energy Corporation provided compressive whole-building commissioning services throughout the design, construction, and acceptance / occupancy process.</p> <p>Commissioning activities (construction observation, functional performance testing, short term monitoring, etc.) uncovered and verified correction of the installation and operation of many control and equipment features. Control of the Air Handling Unit gas reheat through the DDC is important for CO2 control but was not being implemented. Because the sensor wire was close to the power wires, the only building-wide outside air sensor was reading erroneously whenever the compressors of the roof top unit adjacent to it would run. Several of the lighting occupancy controls were not installed in locations that blocked their operation. These and several other issues were identified and resolved with cooperation from the commissioning team members.</p>



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