

Institutional Northern Arizona University Distance Learning Center



Charcoal SolarWall[®] air heating system installed at Northern Arizona University's new LEED[®] Silver Distance Learning Center.

Background

When project architect Burns Wald-Hopkins Shambach Architects started work on the new Distance Learning Facility at Northern Arizona University in Flagstaff, AZ, they were targeting a LEED® silver rating. In order to achieve this LEED® status they implemented a variety of green technologies. The most prominent green technology being a south-facing SolarWall® solar air heating system. The SolarWall® system was chosen because it provides fresh solar heated ventilation air in the winter, and acts as a shading screen during the summer. The SolarWall® system provides exceptional air quality for the classrooms, faculty offices, and a new television studio that make up the new building. The SolarWall® system also qualifies for up to 6 LEED® points.

Solution

Conserval Systems designed the SolarWall® system for the solar-rich, south facing wall of the new facility, integrating the solar component into the building's mechanical system. The total solar collector area is 2,828ft² (263m²) and the architect designed it in such a way that the horizontally-mounted SolarWall® system became one of the key visual features of the front façade.

Results

The SolarWall® system on the new Distance Learning Facility at Northern Arizona University is projected to produce over 412 million BTUs of renewable energy annually. The system will also reduce greenhouse gas emissions by 29 tons of CO_2 each year, with an estimated payback of under 8 years.

U.S.A. Conserval Systems Inc.

4242 Ridge Lea Rd, Suite 28, Buffalo NY 14226 P: 716-835-4903 F: 716-835-4904 E: info@solarwall.com www.solarwall.com

Canada Conserval Engineering Inc.

200 Wildcat Road, Toronto, ON M3J 2N5 P: 416-661-7057 F: 416-661-7146 E: info@solarwall.com

Europe SolarWall Europe Sarl.

66 Avenue des Champs Elysees 75008 Paris, France E: info@solarwall.eu www.solarwall.eu