

Salem Conference Center

SALEM, OREGON

Services

MEP Engineering
Sustainable Design
Building Technologies
Fire/Life Safety
Lighting
Commissioning

FAST FACTS

Architect

LMN Architects

General Contractor

Rushforth Construction

Completion

February 2005

Building Size

78,000 sf

Project Cost

\$22.3 million

Contact

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The Salem Conference Center was designed to revitalize downtown Salem by building to modern standards, while at the same time melding with its historic surroundings. Adjoining the new Phoenix Grand Hotel, it can host groups up to 1,800. The 29,000 sf of meeting space includes a 12,000 sf grand ballroom.

Because of their expansive quality and transient occupancy, the pre-function areas of the conference center are designed to allow a much wider temperature range than would be possible in a confined space, such as the meeting rooms. Interface developed a number of ingenious design solutions to address this unique opportunity for energy savings.

- » A sophisticated rooftop weather station opens and closes windows automatically in response to the indoor and outdoor conditions. A group of sensors in the weather station report the current conditions to the direct digital control (DDC) system, actuating the windows as appropriate.
- » Radiant floors eliminate air moving across the space from forced air handlers. The radiant design imbeds plastic pipe inside the concrete floor, pumping hot or cold water through the pipes depending on the desired effect, supplying a substantial amount of energy extremely efficiently.
- » A single outdoor air ventilation/heat recovery unit brings in 100percent of fresh outside air. The unit incorporates two large fans and a “heat wheel”

that pre-conditions the in-coming air to recover the heat in the air from the building’s exhaust in winter, while downsizing the amount of equipment needed for heating or cooling,

- » A clever chiller design uses magnetic bearings so that when the shaft is turning there is no metal-to-metal contact, thus cutting down on friction. Consequently, the chiller is quieter and saves 25percent energy. Additionally, this chiller uses environmentally friendly refrigerant.
- » To address the effects of west-facing floor-to-ceiling glass, external awnings automatically open up and close, in response to the afternoon sun. This keeps the building cooler in summer and cuts air-conditioning use.

Commissioning

Interface also provided commissioning services for the following systems:

- » HVAC systems
- » Building automation and control systems
- » Fire alarm/BAS interface
- » Energy conservation measures.

From the underground parking garage accommodating 300 cars to the fully equipped kitchen, the Salem Conference Center sets the stage for a grand performance.



(Above) To address the effects of west-facing floor-to-ceiling glass, external awnings automatically open up and close, in response to the afternoon sun. This keeps the building cooler in summer and cuts air-conditioning use.

