

# MARRIOTT HOTELS: INDOOR AIR QUALITY OPTIMIZATION & ENERGY SAVINGS WITH ZONE REGISTER TERMINALS® (ZRT)



## PROJECT DETAILS: JW MARRIOTT - MALL OF AMERICA

- **Location:** Minneapolis, Minnesota (USA)
- **Market:** High-end hospitality – Marriott International
- **Type:** Pilot project
- **Description:** One-year installation and evaluation of ZRTs in guest bathrooms (exhaust) and vestibules/sleeping areas (supply).



## CHALLENGES

- Millions spent annually masking odors and troubleshooting ventilation issues;
- Difficulty balancing centralized systems running continuously;
- Overventilation of unoccupied rooms/underventilation of occupied rooms;
- Pressure variations causing room-to-room cross-contamination.

## OBJECTIVES

- Achieve energy savings through the implementation of on demand ventilation;
- Control of stack effect, wind effect and pressure variations;
- Reduce odors and cross-contamination between rooms;
- Improve indoor air quality.

## ALDES SOLUTIONS

### Zone Register Terminals® (ZRT)

Model ZRT-1-4-120 for bathroom exhaust and model ZTR-W-S-1-4-120 for vestibules and sleeping areas.

### Key features:

- Pressure-independent flow control using Constant Airflow Regulators (CAR®);
- Airflow activation based on occupancy;
- Boost mode triggered by occupancy sensor and humidity sensor.

## MAIN ACHIEVEMENTS

### ENERGY SAVINGS AVERAGING \$200 PER ROOM ANNUALLY;

- Drastic reduction in guest complaints (especially odor-related);
- Payback period: 1.4 years;
- Balanced airflow eliminates under- and over-ventilation issues;
- ZRTs are now included in Marriott's Global Design Standards.



Discover  
the ZRT



Learn more about  
this case study