CUSTOMER: Westin Philadelphia

LOCATION: Philadelphia, Pennsylvania, USA

BACKGROUND: Armstrong International designed, supplied, and commissioned a triple, single-wall Flo-Rite-Temp Electronic Mixing Center in the Westin Philadelphia to accommodate the high load demand of the hotel. The installation was specifically designed to be the primary water temperature controller in a continuously pumped recirculating hot water system.

SCOPE OF WORK: The Flo-Rite-Temp mixing unit manages the water flow through the heat exchanger based upon downstream hot water demand and eliminates the requirement for a modulating steam control valve.

BENEFITS:

- Speed of Response: Rapid response time to a change in system demand and significantly reduction in the lag times typically associated with feed back/modulating steam control valve systems.

- Safety: Constant and accurate water temperature prevents potential scalding. Additionally, water is raised above Legionella survival temperature. The mixing unit is also “failure safe” because in the unlikely event of failure, the unit will not allow hot water to escape the heat exchanger.

- Accuracy: Outlet temperature to system is +/- 4°F

- Simplicity: Constant steam pressure prevents stall, therefore, no pump trap is required; low surface temperature (modulated steam) reduces scaling; instantaneous water supply does not require storage tanks; and a single integral digital control valve (DRV80) replaces multiple components.

- Connectivity: Performance monitoring by digital water temperature control to connect to a resident Building Automation System.

- Ease of Installation and Maintenance: No storage tank, small footprint, access via a standard doorway and pre-piped packaged solutions reduce installation time, space and expenditure. Additionally, the unit has accessible “non helical” brass straight tubes inside the carbon steel shell available mechanical cleaning and visual inspection.