

61 Milford Dr., Hudson, Ohio 44236 Cleveland: 330-463-0100 Akron: 330-342-9400 Fax: 330-463-0101 www.jacco.com

## Kimpton Schofield Hotel HVAC Narrative

The Kimpton Schofield Hotel on the corner of E. 9<sup>th</sup> and Euclid in Cleveland, Ohio, is a boutique hotel in a historic building that recently underwent a major renovation.

The HVAC system is a Water Source Heat Pump design that transfers the heat from one space to another through a condenser loop typically maintained between 60 and 90 degrees.

- During the summer when all spaces are cooling, the heat is rejected through a fluid cooler when the loop temperature exceeds 90 degrees.
- During the winter when the majority of the spaces are heating, the extra heat required to maintain the loop to 60 degrees is added through a boiler.
- During the spring and fall the loop temperature typically falls between 60 and 90, so no heat rejection or heat addition is required.

The Boiler Plant for the Schofield Building is a packaged Aaon BL system with Lochinvar condensing boilers located on the roof. The building condenser loop pump is an Armstrong "dual arm" pump with redundancy. All accessories required are pre-piped and wired. The plant requires a single point power connection as well as a single condenser loop inlet and outlet connection. The temperature controls are BACnet and integrate to the BMS.

The suites for the Kimpton Hotel are heated and cooled with Whalen "stacker" WSHP units. These units include the piping risers from floor to floor allowing simple installation. The "guts" of the Whalen unit are removable for ease of service during occupancy. The temperature controls are BACnet and integrate to the BMS.

The retail areas for the Schofield Building are heated and cooled through WaterFurnace vertical WSHP units. The temperature controls are BACnet and integrate to the BMS.

The corridor make up air for the building is provided by an Aaon WSHP rooftop unit with heat recovery and auxiliary gas heat. Outside air is cooled to remove the humidity and reheated, with free refrigerant gas, and distributed as neutral air to the corridors. The temperature controls are BACnet and integrate to the BMS.

The Building Management System is a Tridium "Open Architecture" temperature control system.