

Office buildings, retail spaces, multi-tenant buildings, airports, defense facilities, research facilities, stadiums, arenas, casinos, hotels... Systecon has experience providing solutions to satisfy the unique needs of all these various building types and more. Ice storage, chilled water storage and other shared central systems can be implemented to handle diverse loads and Systecon's VariPrime[®] pumping and controls can provide temperature control while lowering operating costs. Plus, Systecon's performance testing means you can use guaranteed efficiencies as a specification item, secure equal bids and then witness test the system to ensure performance prior to shipping and installation.

Proven Success

Modular Boiler Plant

Challenges – Site accessibility and space constraints that come with an existing, multi-story building in an urban setting. Time constraints for installation due to costs and regulations associated with procuring the necessary large equipment.

Systecon Solutions – A custom designed system that combined the boiler plant and chilled water in one space to occupy the smallest footprint possible. Outdoor application with enclosure for rooftop location. The factory-built, modular system allowed for a scheduled delivery date and quick installation which was completed over a weekend.

Hot Water System

Total Flow: 288 GPM
Total Capacity: 2,886 MBH output
Fluid: Water

Cooling Water System

Total Flow: 2,100 GPM
Fluid: Water

Mechanical – Chillers, pumps, pipe, strainers, valves, flex connector, air separator, expansion tank, make-up water, side stream mechanical filtration, (chemical treatment equipment provided and installed by others)

BAS Interface – Protocol: BACnet Type: MSTP

Boiler Interface – Protocol: BACnet Type: RTU



Madison Realty, New York, NY

Outdoor application with enclosure -
rooftop installation



Modular Condenser Water System

Challenges – Very limited space to house all the needed system equipment.

Systecon Solutions – The project team worked with Systecon on previous projects and sought to work with us on this job because of our design capabilities and ability to provide customized solutions. We were able to design a system to fit all necessary equipment in the available area and still provide space for serviceability and maintenance.

Mechanical – Pumps, pipe, strainers, valves, plate & frame heat exchanger, mechanical filtration, make-up water (office), chemical treatment (office), air separator (retail), expansion tank (retail), chemical shot feeder (retail), glycol feeder (retail)

Controls –
Controller w/HMI, VFDs, fused disconnect.
Wire to Water Efficiency, tower sequencing by Systecon.

BAS Interface – Protocol: BACnet Type: MSTP



4747 Bethesda, Bethesda, MD
Mixed-use building - Office/Retail/Tenant

Indoor application



Office

Total Flow: 2,550 GPM
Fluid: Water

Non-Witnessed flow test by Systecon Inc.

Guaranteed performance

	GPM	Max kW
25%	638	9.2
50%	1275	18
75%	1912	34.4
100%	2550	73.8

Tenant

Total Flow: 600 GPM1
Fluid: Water

Non-Witnessed certified pump performance test by pump mfr.

Guaranteed performance

	GPM	Max kW
25%	150	1.99
50%	300	3.79
75%	450	7.10
100%	600	15.25

Retail

Total Flow: 225 GPM
Fluid: 25% Ethylene Glycol

Non-Witnessed certified pump performance test by pump mfr.

Guaranteed performance

	GPM	Max kW
25%	56	0.79
50%	113	1.51
75%	169	2.82
100%	225	6.06