



University of Buffalo - Clinton Hall
Buffalo, NY (2016)
Engineer: M/E Engineering

Modular Skids for Retrofit and New Construction

The Challenge

Existing educational facilities are always limited with the amount of downtime and disruptions they can have in their buildings. Mechanical projects typically can only occur during the summer, and downtime can be further reduced due to summer classes, sports, and other programs.

Project Information

The Clinton Hall dormitory was built in 1972 and was due for an upgrade to the mechanical system. The new design was a combination of comfort heating and instantaneous domestic hot water. Equipment included three 3000 MBH modular boiler skids and two plate & frame heat exchanger skids.

Limitations

Installation time was limited to one weekend between the end of summer classes and the start of the fall term. Access to the room was limited to a standard single doorway.

The Solution

The limitations lead to the need for a modular packaged system. The packaged skids would ensure that the system could be completed in as little time as possible. The modular design allowed the skids to easily be moved around corners and through the doorway. Both the boiler skids as well as the plate & frame heat exchanger skids included the pumps, piping, valves, fittings, and electrical wiring. Once in the mechanical room, the individual skids were connected using spool pieces that also serve as spacers between the equipment for service clearance.

Before leaving the factory, the complete systems were assembled, tested, and validated. This testing limited onsite issues typically seen with field built systems.

The system was installed and making hot water within three hours.

