

MAKING BUILDINGS BETTER



WATER TOWER SURGICENTER

Owner: W T Surgicenter LLC

Mechanical Engineer: Proteus Group

Mechanical Contractor: Westside Mechanical

General Description of the Building:

Water Tower Surgicenter is one of Chicago's premier same day surgical centers. However, the facility was not always used for the same purpose. It was originally an office space that was converted to a surgical center. The state-of-the-art facility is home to more than 50 physicians specializing in many disciplines including cosmetic surgery, pain management, podiatry, and general surgery. Water Tower surgical center is located right on Chicago's famed Magnificent Mile.

Customer Challenges:

Humidity control is critical for any operating room, and Water Tower Surgicenter was not any different. Occupant comfort and infection control are two major reasons operating suites require lower dew points. Temperature and humidity guidelines are prescribed by local and industry codes, but surgeons often expect even lower room temperatures than are mandated. Also, surgical suites require a high number of air changes per hour. On this job, that air change requirement forced the mechanical engineer to a 100% outside air design. In addition to those challenges, the design team also had to fit the equipment into a small footprint.

Trane Solutions to the Challenges of the Project:

Trane's CDQ Air handling unit was able to achieve a 42 °F dew point. By using a Trane CDQ wheel the Surgical center reduced their required cooling capacity by 13%. In addition, the low dew point didn't require any reheat, therefore, the Trane design also saved 170 MBH that would have been required for reheat.

Trane Equipment/Controls: Trane M-series Air handler with Trane CDQ desiccant dehumidification system



HEALTHCARE