

# MAKING BUILDINGS BETTER



## JOLIET CENTRAL HIGH SCHOOL

**Owner:** Joliet Township School District 204

**Architect:** Wight & Company

**Mechanical Engineer:** Ketchmark & Associates

**Mechanical Contractor:** Air Design Systems

### General Description of the Building:

Due to the age and the architectural style of Joliet Central, the school was lagging on some of the current indoor air quality and comfort standards. The school had no central air conditioning and still used steam to heat the building. The thick limestone structure of the building limited the type of retrofit that was possible for the design team.

### Customer Challenges:

The design engineer determined that a Variable air volume rooftop system would suit the client's needs and budget. Trane Intellipak rooftops were equipped with exhaust energy recovery wheels to precondition the outside air intake. Energy recovery lowers the operating cost of the system by reducing the energy input required. In addition, the rooftop VAV system was significantly less expensive for the district compared to other systems. The team was able to get the project under budget.

### Trane Solutions to the Challenges of the Project:

Joliet Central High School was built in 1901 on Jefferson St. in Joliet IL. The building features marble floors and staircases, and a castle-like limestone exterior. Joliet Central features four stories of classroom space that stretches over two city blocks. The 9<sup>th</sup> through 12<sup>th</sup> grade school is home to 2700 students and 175 teachers.

**Trane Equipment/Controls:** Large Commercial Intellipak Rooftop units with Energy Recovery Wheels, Voyager Rooftop Units, Trane VAV boxes, Trane Controls with Tracer Summit Software