

The Grand Opera House

Wilmington, DE



The historic Grand Opera House is a landmark in downtown Wilmington. Originally built in 1871, its mission is to entertain, engage, and enrich the community with diverse live performances and educational programming in a welcoming, patron-centered environment.

In addition to replacing the roof on *the baby grand*, the non-profit also had a chiller and multiple rooftop HVAC units that needed to be replaced. The Grand partnered with Seiberlich Trane Energy Services (STES) to replace these units in two phases. First, the chiller on the Grand was replaced with a new high-efficiency air-cooled chiller and a new web-based BAS front end was installed. In phase two, the existing roof on *the baby grand* and all 11 rooftop HVAC units were upgraded to new, higher efficiency Trane packaged units. The team from STES had to coordinate street closures with the City of Wilmington for multiple crane lifts under strict scheduling constraints due to performances within the Grand Opera House.

The team was able to complete the project within the client's time frame prior to show season. Additionally, STES helped secure an Energy Efficiency Investment Fund grant through DNREC for the environmental benefits of the project including conserving energy, reducing greenhouse gas emissions, and lowering facility operating costs. These extra funds helped the non-profit further invest in their remarkable building.

Project Objectives

- Guest and staff comfort
- Update 20 year old chiller and rooftop units
- Remove ballasts and replace roof
- Reduce energy consumption

Equipment Installed

- 200 ton air-cooled high-efficiency chiller
- 11 higher efficiency Trane rooftop units with adapter curbs
- Insulated energy efficient rooftop duct work
- State of the art Trane BACnet controllers
- New web-based BAS front end
- EPDM roof replacement

Project Results

In addition to a modernized HVAC infrastructure, the project is expected to realize energy savings including:

- 25,730 kWh annual energy savings

The environmental impact of the project:

- 18.2 metric CO₂e annual emissions reduction

Over \$10,000 in DNREC grants

“For almost 25 years, Seiberlich Trane Energy Services has been a valued partner of ours. Their team understands the intricacies of our historic building and worked around our busy performance schedule to complete a large, much needed HVAC systems upgrade without disruption.”

Julia Dougherty
Director of Operations



Seiberlich Trane Energy Services is the leader in creating and sustaining comfortable, healthy, and environmentally friendly buildings.