First RESET Air Certified Cathedral in the World

Historic Church Uses Technology to Reduce Energy and Carbon

East Liberty Presbyterian Church (ELPC)Pittsburgh, PA

ELPC's first-ever comprehensive renovation, consisting of increasing usable space in the building while reducing energy and dramatically improving indoor air quality.

Realtime Dashboard: www.auros360.com (U: ELPC: P: Auros360)



ELPC raised \$6 million for the renovation with the objective to get as much building performance as possible while reducing long-term operating costs. Using AUROS360™ technology, the church targeted a 30% reduction in EnergyUse Intensity and improved thermal comfort.

Metrics

- 30% or greater reduction in EUI
- Particulate Matter 2.5 (PM2.5): < 12 μg/m3
- Particulate Matter 10 (PM10): < 50 μg/m3
- Total Volatile Organic Compound (TVOC):
 400 μg/m3
- Carbon Dioxide (CO2): < 600 ppm

Sustainability Programs

- Passive House strategies
- RESET Air certification

Renovation

Renovation of Iconic Gothic Cathedral

163,715 square feet \$6.6 million

Project Team

AUROS Group

Pfaffmann + Associates
CJL Engineering
Landau Building
Company



Project Highlights

As Owner's Performance Advocates, AUROS Group used Owner's Project Requirements (OPR) to align all team members to performance metrics. Using whole building performance simulations, smart building infrastructure and an integrated performance dashboard, ELPC knew the impacts of their investments beforespending one dollar in construction costs.

Expected Energy Reduction from 83.6 EUI to 58.6 EUI

First cathedral in the world to achAir Certification

35% improvement in church space utilization with improved indoor environmental quality

Open integration, smart building infrastructure

Project Reference

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