



KAIZEN FDD FOR NEW CONSTRUCTION COMMISSIONING

CLIENT OVERVIEW

A major non-profit organization that aims to advance policies for human civic, social, and economic conditions in areas of the Southern United States engaged with a commissioning company to provide new construction commissioning in one of their new buildings in Texas. CopperTree's partner, the commissioning firm, used our Kaizen analytics platform to assist with their commissioning work.

BENEFITS



The solution proposed by Kaizen resulted in the following benefits to the building:

- 94,500 kWh of yearly energy savings
- Equivalent to 13 homes electricity use for one year
- Annual potential savings of \$8,500



THE PROJECT

CopperTree's FDD platform was used to analyze the operation of the building's ventilation and hydronics systems.

THE CHALLENGE

It was observed that 37 Fan Powered Terminal Units (FPTU) had their Supply Air Temperature deviate from the setpoint by over 10°F. It was also found that some FPTU fans operate at 100% speed during the entire duration of their operation. Additionally, some CO2 sensors for FPTUs and TUs were found miscalibrated.

THE SOLUTION

CopperTree's FDD platform was used to analyze the operation of the building's ventilation and hydronic systems. It was observed that 37 Fan Powered Terminal Units (FPTU) had their Supply Air Temperatures deviated from their setpoint by over 10°F. It was also found that some FPTU fans operated at 100% speed during the entire duration of their operation. Additionally, some CO2 sensors for FPTUs and TUs were found miscalibrated – all were reading approximately negative 400ppm to 500ppm. Finally, when compared to other weather trends in the area, all outdoor air temperature sensors were reading 10°F to 20°F above the observed weather trends.