

Cornerstone Building

50%

Reduced energy consumption

Challenge

The client wanted to do a complete renovation of their facility using deep energy conservation design strategies that can help lower cost and energy.

Solutions

CVAL implemented efficiency measures and sustainable designs that help in deep energy conservation design strategies that has reduced energy use by 50% vs. baseline design.

Building Envelope Performance

Insulated walls and ceiling with spray foam insulation; installed insulated doors and windows with heat-rejecting glass.

'State of the Art' LED Lighting

Designed & installed a premium efficiency LED lighting system with occupancy sensors & timers to reduce lighting load.

Roof Radiant Barrier

Installed radiant barrier with low emissivity to reduce heat gain into the attic. Radiant barrier was painted on the underside of the roof.

HVAC Enhancement

Designed & installed a premium efficiency variable refrigerant flow (VRF) system with advanced controls & energy recovery ventilation. Increased number of zones from 5 to 20, ensuring exceptional comfort, customized for the occupants.

Building Plug Load

Reduce building plug load by installing ENERGY STAR certified appliances.

Building Details

- **Location:** Killeen, Texas
- **Building Type:** Office
- **Building Height:** 2 story
- **Year Built:** 1955
- **Building Area:** 8,200 sq ft
- **Project Completion:** -
- **Energy Design:** Dec 2014
- **Construction:** Mar 2016
- **Efficiency Measures:** 5
- **Incremental Investment:** \$5,750
- **Operational Savings, \$/yr :** \$10,186
- **Simple Payback, years:** 0.6