

## green | light recertification document

Advanced Energy Engineering & Design, Inc. (AEED, Inc.) is a full-service Mechanical, Electrical, Plumbing, Fire Protection and Energy Engineering consulting and design firm located in Chattanooga, Tennessee. Founded in 2001, we were driven by the idea of helping customers identify and use energy efficient technology and principles in the design of buildings and processes. With this in mind, we were one of the early advocates for use of sustainable building technologies and designs bringing this idea to commercial, hospitality, educational, health care, industrial and municipal sectors of business.

Our office building at 408 McCallie Ave was originally built in the late 40's. In 2006, we completed a major renovation and took the opportunity to add a new two-story storefront with high performance glass. We took this time to set an Energy Baseline. A new roof and roof insulation was installed to improve the thermal performance of the building envelope. Later we would retrofit all standard plumbing to minimal flow flush valves and lavatories. Our building achieved its first Energy Star certification in 2015. Later in 2019, we replaced the T8 fluorescent with LED to not only reduce the power consumption of the lighting systems, but to also reduce our air conditioning load associated with the lighting. Room occupancy sensors were added to the lighting system switches.



## **Energy Efficiency**

- Perform regular maintenance on the HVAC system.
- Activated sleep modes on electronics.
- All lighting controls are room entry sensor and/or timer equipped.
- Installed programmable smart thermostats.
- All project management documentation is digital.
- Break areas are equipped with Energy Star appliances.

#### **Environmental Literacy**

- Employee feedback and buy-in
- Baseline tracking
- Promote green light program.
- Establish future sustainability goals.
- Establish communication program.

#### **Green Cleaning**

- Removed paper products and replaced with real plates, cups and cutlery.
- Store all chemicals in a controlled area.
- Purchase cleaning supplies in bulk or refillable containers

#### **Transportation**

- Purchased an all-electric work vehicle used on all job site visits/meetings/outings.
- Installed a permanent EV charging station.
- Utilize video conferencing and flex schedules when appropriate.
- Job site travel booked with Environmentally conscious hotels.

## **Waste Reduction**

- Comprehensive (outsourced) recycling program
- Practice e-waste recycling at end-of-life cycle
- All printed non retained blueprints and documents shredded.
- All employees given reusable water bottles to utilize water filling station.
- Utilize reusable vs disposable dinnerware in Break room/Kitchen dining supplies.

#### **Landscape Practices**

- New landscape- drought resistant plants
- Irrigation optimization
- No fertilizers or pesticides used.

# **Staff Participation & Wellness**

- Established an employee wellness program.
- Created a workout space for employee usage.
- Specified low VOC materials on future construction.

# <u>Water</u>

- All plumbing fixtures are low flow and automatic flush sensor.
- Regular filter changes on water systems

# **Purchasing Policy**

- Buy local when possible, to reduce emissions
- Focus on sustainable catering/food vendors.