goodUse
A program of Southface

2019 CASE STUDY

Salvation Army Red Shield Shelter

469 Marietta Street, Atlanta, GA 30313

PROJECT OVERVIEW

The Salvation Army Red Shield Shelter provides programs to the homeless population of Atlanta. Red Shield provides 324 beds for families, veterans, men, and women struggling with substance abuse. Due to close quarters, dormitory-style living arrangements can spread illnesses easily, such as the flu virus. Because of this, illness is one of the main challenges that residents and staff at the Salvation Army face.

Through the GoodUse (formerly Grants to Green) program, Southface recommended a Global Plasma system, which is an upgrade for HVAC systems. Among many other functions, this system kills viruses, bacteria, and mold. Kristie Wood, administrative assistant and former resident of Red Shield, says, "The biggest improvement that we've noticed...since the installation of the Global Plasma system [is that] we've had fewer cases of illness."

In addition to this improvement, LED lighting, high-efficiency drinking fountains, and a photovoltaic (solar) system were also implemented. According to Chris Durand, the Director of Management Services at Salvation Army, these projects resulted in the annual utility bill decreasing from $60,000 to $25,000. These savings can be put directly back into the Shelter and its mission of reducing the stress of homelessness and facilitating good decision-making.

SITE DETAILS

48,428 square foot property

Houses up to **362 people and 52 staff**

Occupied 24/7

BASELINE UTILITIES BENCHMARKS

$297,800 spent on utilities

IMPROVEMENTS

Installing photovoltaic system

Installing Global Plasma system

Installing high-efficiency drinking fountains

Installing high-performance plumbing fixtures

Installing LED lighting with occupancy controls

Installing variable-speed kitchen exhaust system

IMPACT

Reduced costs by **$17,334**

Reduced energy usage by **250,273 kWh**

Reduced water usage by **1,125 kgal**

PROJECT HIGHLIGHTS

FIG. 1

Solar panels were installed on the roof of the Red Shield facility. These will help lower energy costs, potentially becoming a source of sustainable income.

FIG. 2

An Intelli-Hood Panel was installed in the Red Shield kitchen. This panel automatically instructs the exhaust fan to run at a to run at a speed corresponding to cooking activity, preventing unnecessary energy consumption by the exhaust fan.

FIG. 3

Example of the sleeping arrangements at Red Shield. The installation of a global plasma HVAC system kills viruses and bacteria that can spread easily in these close quarters.