

Grand Rapids HQ: More than a Safe Haven



About GR HQ

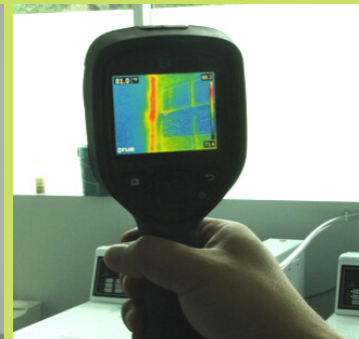
Grand Rapids HQ, nestled on the red brick road of State Street in the Heartside neighborhood of Grand Rapids, Michigan, is a drop-in center for youth experiencing unsafe or unstable housing. Dedicated to end the cycle of homelessness and vulnerability of human trafficking, Grand Rapids HQ is a safe and affirming place with resources youth need to succeed - no strings attached.

BEFORE

An intrinsic part of a safe space is a shelter which provides and protects. Through the generosity of Mars Hill Bible Church, GR HQ owns the building in which they reside. Inheriting this asset came with benefits and challenges. The 1900s architecture used to be an assembly space, then an office, and now renovations changed the open floor plan for community support. Challenges included zoning and temperature regulation, thermal bridging, and eroding brick & mortar; the largest challenge was heat loss from the poorly -insulated high ceilings, spider-web, and water damage associated with the crumbling roof.

THE AUDIT

The Grand Rapids 2030 District’s Energy Assistance Program sponsored an ASHRAE level “1.5” energy audit performed by Catalyst Partners. A total of \$2,810 in potential annual energy cost savings for the facility from five key Energy Conservation Measures (ECMs) was proposed. These savings represent a potential 28% reduction in annual energy costs and a of 32,256 lbs of avoided CO2 pollution. The audit also included an assessment of the utility bills and customized EnergyStar Portfolio Manager account. From this data, GR HQ had the information in front of them to make decisions which best suited their priorities.



AFTER

The “Green Umbrella Fund” is a green revolving fund in which a percentage of energy savings is reserved for the next facilities improvement. From a Wege Foundation grant, they were able to hire a GC to manage the roof replacement and other energy conservation measures. In replacing the roof, the contractors realized that only an R value of 2 existed in the roof. They have since upgraded to an R 30 insulation. This improvement is expected to decrease heating costs by 35% this winter and reduce their carbon footprint by approximately 20,000 lbs of CO2. Water heater and furnace tune-ups will save an additional estimated \$500.

Energy Conservation Measures (ECMs) Chosen for year 1 and 2			
ECMs	Cost Savings	CO2 Savings (lbs)	Payback (years)
Furnace Filters	19%	2,173	0.3
DHW Pipe Insulations	15%	1,695	2.3
DHW Pipe Timer	81%	76	1.1
Roof Replacement R-49	11.8%	21,399	42.1

With a recent grant from The Ronald McDonald house of WM, HQ will be upgrading to a “warm kitchen” with state-of-the-art appliances and will be able to receive hot donated meals from God’s Kitchen and local charitable vendors. This contributes to the circular economy and the sustainability of our local community.

To Put This into Perspective

Before GR HQ underwent these energy savings, their Energy Use Intensity (EUI) was 79.73 kBtu/sf/yr. After the expected renovations, their EUI should decrease to 60.83 kBtu/sf/yr. The ECMs elected in years 1 and 2 are expected to save 24,153 lbs of CO2 and over \$1,500 in annual utilities. In HQ terms, this equates to their entire food budget, a month of safe and affordable housing, 6+ vital document recovery services, a year of Art Squad events, and 40+ lives impacted in a single day. Not only do they have a better building, but they have a leaner budget to insure the longevity of this community treasure.