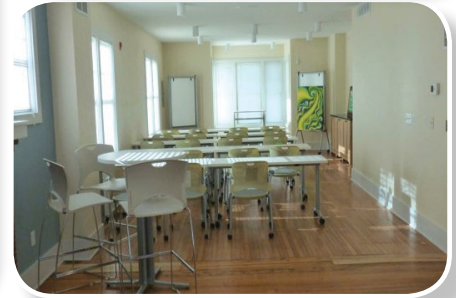


# UNIVERSITY OF MICHIGAN-FLINT/GENESEE COUNTY LAND BANK – URBAN ALTERNATIVES HOUSE

CLASSROOM AND LIVING LABORATORY  
AND RESIDENTIAL MULTIFAMILY DESIGN

**FUN** ARCHITECTURE

## CASE STUDY



### CLIENT

University of Michigan-Flint/  
Genesee County Land Bank

### LOCATION

Flint, Michigan

### PROJECT COST

\$450,000

### PROJECT SIZE

3,500 SF

### COMPLETION DATE

January 2013

### PROJECT DELIVERY

General Contractor –  
Standard Design/Bid/Build

SNAPSHOT

## A Home for Innovation

**F**UNchitecture worked with the University of Michigan-Flint and the Genesee County Land Bank to hone and shape the scope of work necessary for turning the house into a sustainable reality over the past nine months. The Urban Alternatives House is an excellent exercise in the power of sustainable design and adaptive reuse, but we believe it will prove to be a Michigan Demonstration Center and an educational tool for the entire community in the future. FUNchitecture utilized multiple sustainable strategies to make the house over 50% more energy efficient than it was before renovation and as new technologies become available coupled with our energy monitoring systems, we will be able to improve the project over time.



### THE "NUTS AND BOLTS"

The house features new blown insulation to improve the R-value significantly as the existing house was uninsulated for the most part. Existing wood flooring were left in place and refinished to save money and materials during the renovation.

*Continued on back...*

## CASE STUDY

*Continued from front...*



This contributed to the “sense of place” as a demonstration center showing visitors where original walls might have been, but also helping to understand

the new adaptive reuse of the house including reuse of existing walls & materials where possible. All windows were replaced with new double pane insulated glazing, again increasing the R-value in the building’s walls. FUNchitecture designed the gut rehab from the inside out where the interior materials were abated and the exterior materials were removed or encapsulated.

### SPACE PLANNING AND ARCHITECTURAL DESIGN

FUNchitecture designed floor plans that left the majority of the interior walls in place. New bathrooms reused existing pipe chases. Two new barrier free unisex toilet rooms were created on the first floor for the University classroom space and would be the required bathroom should the classroom someday be converted back to a residential unit. Two residential units were created in the new plans, one with an interior stair to the second floor bedrooms for the larger of the two units. Additionally, the classroom space has a small but functional demonstration kitchen that allows food prep and presentation for visitors interested in the fruits of the community garden. All appliances and fixtures specified for the house are energy star rated, contributing to the UAH’s efficiency. The house also passed a five-star energy rating for efficiency.

Stormwater run-off is collected into two porous paver areas and filtered into new rain gardens created to the south and east of the new parking areas.

FUNchitecture employed an inclusive approach to the planning and design of the Urban Alternatives House

via several neighborhood input gathering sessions which helped in garnering public support for the project.

### EXTERIOR SITE DESIGN

The adjacent side lot houses an eight vertical well geothermal system, as well as a community garden and demonstration space. A newly constructed deck at the rear of the house serves as an extension of the Urban Alternatives Classroom and the house features multiple rainwater collection barrels. FUNchitecture also designed the south side of the deck to accommodate a few “fitness circuit” components (ie. chin-up bar, resistant band anchors) to help promote community fitness. Two bike racks accommodating at least a dozen bikes are erected in the paver area next to the handicapped parking space at the front of the house for visitors. In addition, two new photovoltaic panels occupying the southern and western exposed roof slopes will contribute to the energy efficiency and renewable resources of the house.

