TEAM LOVE FOR LIBERTY

RETURN, REUSE, REBUILD

Ball State University
Urban Single Family

Project Summary

Muncie, Indiana is a city with a long prosperous history in large scale industry. In the middle of the 20th century, the factories left leaving many families without financial stability. Several homes in the city soon fell into disrepair and were abandoned. Our chosen site was vacant for five years before the Muncie Mission decided to use this property as an extension of their existing transitional housing program. This home will give program graduates a place to live independently with a support network nearby. Since this is for a not-for-profit organization, the budget is strict compared to most high-performance home projects. This renovation will prove that even with a tight budget, a net zero energy ready home is possible. This previously abandoned home will be transformed into a functional, efficient home that will serve as a flagship for other Muncie Mission transitional homes and other vacant housing in Muncie.

Design Strategy

The core values for this project are represented in the title: Reuse, Rebuild, Return. Reusing the existing structure preserves the fabric of the community and reduces the amount of waste produced during construction. Rebuilding this structure as a high-performance pilot home will serve as an example for future Muncie Mission projects. This building will then be returned to the neighborhood as a functioning home and serve as a first step for its occupants to return to society.

Project Data

- Muncie, Indiana; Climate zone 5
- Lot size: 5000 sf. House size: 895 sqft
- 2 bedrooms, 2 bathrooms, 2 adult occupants
- Estimated HERS score: 54
- Estimated Utility Cost: $80/Month Average

Technical Specifications

- Foundation Insulation: Extruded Polystyrene. Wall insulation: Dense Pack Cellulose and Extruded Polystyrene. Roof Insulation: Dense Pack Cellulose
- Window Performance: U=.24 SHGC= .30
- HVAC= Ductless mini split system
- Passive ventilation
- Renewable Systems: Photovoltaic Panel System, producing 6.41 Kwh/ year