

# Thiel Case Study



## Project Information

**Project Type:** Single family Remodel

**Location:** Fredrick, Md.  
Urban historic district

**National Green Building Standard  
Certification Level:** Emerald

**Date Completed:** 2015

**Climate Zone:** 4

## Project Team

**General Contractor:** Thiel Butner

**Lead Carpenter:** Devin Donovan

**Verifier:** Jay Hall & Associates

## Specifics

Thiel Butner purchased and remodeled the property as a rental unit. Her project is unique: She is not a builder (although the general contractor on this project), but is a verifier. Butner took on this project to understand the process from the other side of the table. It brought together great energy technology within an older structure and the outcome was stylish, topical, pertinent, efficient, classy, elegant and primitive – and all rolled into less than 500 square feet.



## Cost Notes

Although this was a very in-depth and costly rehab, Butner believes she's getting a premium in rent, particularly considering the size of the home. She wants to recoup construction costs through rent before considering selling it.



“It was important to me that this project was energy efficient for ethical reasons, but also that it was durable as a landlord. I plan on keeping this property for a long time and therefore looked for the most durable material that I could find, hoping only to have to paint it in the future.” - Thiel Butner

## Key Features:

- Ductless HVAC (heat pump mini-splits) for increased efficiency and minimal impact to wall area and ceiling heights as well as additional comfort to the space
- Vented bath fan, range hood and dryer (no bath fan or range hood before, and dryer was vented indoors)
- Insulated sheathing under the new roof in addition to closed-cell spray polyurethane foam between the ceiling joists to maximize attic insulation while retaining head space in the sloped-ceiling bedroom
- Salvaged finish materials: bathroom tile from Craigslist and leftover accent tile from a family friend's project; bathroom sink and medicine cabinet from Habitat ReStore; bathroom vanity built from wood from the site; granite kitchen counters, kitchen sink and kitchen faucet from parents' house (granite had cracked, so it was removed and cut to fit this new space); brick and wood fireplace finish from the site; vented natural gas fireplace insert from Craigslist; painted original subfloor as finish floor for stairs and bedroom; exposed subfloor and joists as living room ceiling



## Lessons learned

Thiel found subcontractors by referral whenever possible, or through comparing quotes. She developed many new relationships while working on this project and plans to continue using many of the same subcontractors on future projects. She did not have specific trainings for her subs and it showed. Having to redo the insulation the day before the pour, after her subs had already done it once proved communication is key. Explaining expectations and helping subcontractors understand how important their work is to the process, hopefully will save Butner this trouble again in the future.



This home, along with the one next door (which received mostly exterior work and minor indoor upgrades) received a Historic Preservation Award from the City of Frederick. Although Butner hasn't figured out exactly how old the house is, she believes it was built between 1850-1860. This house is a perfect example of livability, style and comfort, while maintaining its eccentricity. Devin Donovan, the project's lead carpenter said, "There are many older homes that have wonderful architecture and patina that can be enhanced and enjoyed for hundreds more years when effective design meets energy technology."

*All information in this case study was provided by one or more members of the project team.*

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