

Greenfield, Massachusetts- Accessible Small Home

A retiree built her small, efficient dream home with friends and family.

Janet Obermann had been envisioning her ideal retirement home for years. By learning from people in the small homes movement and working with Unity Homes, Janet was able to set her plan into motion and build an affordable home that she loves. A Unity Homes project manager worked closely with Janet for over a year to ensure the Nano home would be designed to perfectly meet her needs as a homeowner, and being actively involved in the planning allowed Janet to learn important information about the materials and design of the house. Unity Homes set up the shell of the house in two days and the homeowner, along with a team of family and friends, completed most of the interior construction within four months. Janet's commitment to sustainable living, interest in the small homes movement, and innovative home, designed with Unity Homes, are the reasons she was named Pioneer Valley Habitat for Humanity's Small Home Hero of 2019.

Cost and Design

- 463 square feet on one-third of an acre
- Total cost of the house \$127,000
 - Land: \$35,000
 - Site preparation: \$10,000
 - Shell of the house: \$66,000
- Built on a new lot in an urban neighborhood
- Utilized materials leftover from other construction sites to increase savings and reduce waste
- Home Energy Rating System (HERS) score of R-37, which means the house is 63% more energy efficient than a standard new home
- Highly efficient dense-packed cellulose insulation, including 14 inches of insulation in the roof
- Mini-split heat pump used for heating and air conditioning, providing a ductless, low-cost alternative to gas or oil heat
- Designed to be accessible for accommodating aging and disability, including minimal edge on shower basin and wide doorways for a wheelchair



Photo Credit: Unity Homes

Financing

- Total cost significantly reduced by Janet, her family, and friends performing much of the interior construction on their own, including carpentry, hanging drywall, and flooring
- Janet faced the challenge of being unable to obtain a home loan for a home that she would largely be building herself, so friends and family provide some support in financing
- Unity Homes Nano shell offered an affordable option for small home design with costs starting at \$55,000
- Anticipated \$3,000 rebate for energy efficient mini-split, in addition to rebates for insulation
- The anticipated energy cost savings are \$1,787 annually, as a result of the house's efficient design, with heating anticipated to be only \$140 for the entire year
- Janet hopes to add solar to the future, contributing to her sustainable living goals, which would also provide tax credits
- Use of materials for construction that would have otherwise been thrown out, including a shed made entirely from recycled construction materials, allowed for additional savings



Photo Credit: Janet Obermann

Lessons Learned

- Small homes offer an opportunity for owners to be more involved in the building and design process, allowing them to build self-reliance and comfort in a space that they can call home
- Working with companies, like Unity Homes, that can help prospective homeowners actualize their dream home helps people to design a home that can meet their needs, such as accessibility, while offering an opportunity to learn more about the design and construction of homes
- Affordability and ongoing savings from owning a small and efficient home are a major draw to the small homes movement, reducing barriers to homeownership
- Sustainability and efficiency are benefits of small homes that the community and world can enjoy, not just the homeowner

Learn more:

<https://unityhomes.com/our-designs/nano/>

<https://www.pvhabitat.org/big-enough/>