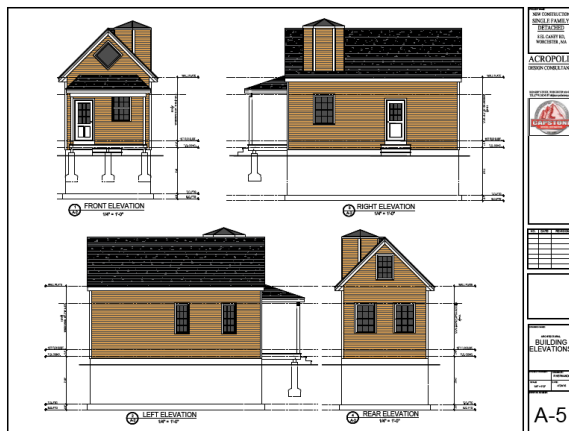


Worcester, MA 398 sf Tiny House

Builder built house/Smallest legal house in Worcester, MA

Sam and Ken wanted to minimize their impact on the earth and were interested in paying off their mortgage sooner. They decided that they could meet these goals by building and living in a tiny house. They chose to work with Capstone General Contracting in Worcester to design and build the smallest house legally possible for two people. They ended up building a 398 sf tiny house with a 225sf loft open to the living room below. It took 2 months for the overall project with a 9 day structure build with Tiny House Nation Season 4, Episode 1.



House Plan Elevations by Acropolis Design Consultants



Worcester Tiny House features a porch and traditional New England cottage look with room on the side to build an extra bedroom if needed.

Cost/Design:

The house and foundation cost \$128,500 for the general contractor to build. The land cost under \$40,000. Cost savings – materials changes were made mid-build to save money - include vinyl siding instead of cement board and butcher's block counters instead of higher end countertop.

The house has a classic New England cottage feel with a front porch and lots of windows for letting in light. There are bright white walls with 18' vertical space in living room/multi-purpose space. First floor ceiling height is 10 feet which both added the feeling of expansive space and added cost.

The window near the peak of the roof lets in lots of light. Pine board walls bring a warm feeling to living room and bedroom. There is a ladder to the office/loft storage space above.



The foundation creates a crawl space for electrical, plumbing and drainage. The house has a lot of desirable features with full sized kitchen appliances; full sized toilet, sink and tub/shower, white subway tile in bathroom; an efficient air source heat pump for heating/cooling; and asphalt shingles.

Storage is accommodated in a free-standing closet/cubby system along bedroom wall and in under bed pull out storage as there are no closets. There is also a pull up desk located under the bed with a block stool.



The house was located on the side of the lot so that there is room to build an addition for an extra bedroom in the future.

House specifications include: HERS rating of 68. Insulation of R19 floor; R21 walls; and R-38 ceiling. Double pane vinyl windows; Airsource heat pump with one head in living room and one head in bedroom. High efficiency fans in bathroom and kitchen which run at 20-30% capacity constantly to exhaust condensation. A highly insulated tiny home typically has a lot of condensation from the kitchen, bathroom and people.



Financing:

The house was financed with a traditional mortgage through Marlboro Savings Bank. The builder and loan officer met to address the unique qualities of this project. The builder was able to work with the bank to create a loan draw budget to match the stages of construction.

Regulatory:

“As far as we’re concerned here in the city,”(Worcester) deputy building commissioner David Horne said recently, “as long as you’re applying for a building permit to build a single-family home, and you’re meeting the provisions of the building code with area and habitable living space, fire protection, smoke

detector, carbon monoxide detector, sanitary (code) - we're all for it." Telegram.com article 6-24-2016
[Tiny homes pose big challenge for local building inspectors](http://www.telegram.com/news/20160624/tiny-homes-pose-big-challenge-for-local-building-inspectors)

This is the smallest legal house in the City of Worcester. The house meets zoning and building code requirements of the City. To keep costs down a search for a lot on city sewer and city water was key. They were able to find a lot on city sewer and water to avoid the high cost of installing a septic and drilling a well. The fire department requested that a permanent railing be installed in the loft for safety.

Lessons Learned:

The homeowners acknowledge that a tiny house is a tool for living the life that they want live. Owners felt that they should have found a way financially to install a full basement instead of a crawl space to create a more useable, utilitarian space for storage or a workshop. They saved about \$5,500 by shifting from a full basement to a crawl space. Additional clothes storage was needed. A ceiling mounted metal clothes bar and under eave storage bins were added.

Learn More:

www.Gccapstone.com

<http://www.telegram.com/news/20160624/tiny-homes-pose-big-challenge-for-local-building-inspectors>

Tiny House Nation Season 4 Episode 1

