Tiny House, Big Ideas

A spacious 148 square feet of compact space

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If you drive up to the Architecture Building on the Andrews University campus, you’ll see an unusual structure in the parking lot. Fenced off by orange cones, sitting atop four wheels, with large windows and a sloping roof, it seems like a strange hybrid of truck, motor home and shed. What it actually is, however, is perhaps more amazing.

Carey Carscallen, dean of the School of Architecture, Art & Design, and the five graduate students in his Design/Build class, have built a fully-functional and livable miniature house, measuring a mere 148 square feet, on an 18-ft. flatbed trailer.

Traditionally, the construction class takes an annual trip to Bolivia to build for people there, but Carscallen wanted a project that all of his students could participate in during an entire school year. “It’s harder in Michigan,” he explains, “because of the winters. And how do you go out on a job site every day when you have a full day of classes? With this, we could work on it in the warehouse year round, and the weather wouldn’t affect it.” He pitched the idea, and received a grant from Physics Enterprises to build two miniature houses with his class. One of those houses—nicknamed “The Shed”—remained in the warehouse unfinished at the end of the semester, but the other—“Bay View”—was completed and beautiful in time for graduation.
The key to building a tiny house, Carscallen explained, is planning and research. The students had free rein on the project, proposing different designs and making most building decisions themselves. They had to learn all of the skills that one would for a regular house, including wall construction, siding, paneling, insulation, plumbing and wiring, all while working to use space efficiently and ingeniously.

The result is a space that manages to feel airy and filled with light, not cramped or claustrophobic. The “main floor” features a table for two; a kitchen area with a full sink, 10-cubic-foot refrigerator, small cooktop, and ample counter space; a hollow staircase with built-in storage cubbies; and a full-sized bathroom with a flush toilet, pedestal sink and shower. Above are two lofts—one that holds a queen bed, and one that can serve as a lounge area, second bedroom or storage space. Much like a traditional mobile home, it only requires simple electric and sewage hookups, as well as propane for the water heater. While not as easily transported as an RV—it weighs over 8,000 lbs.—the house can be pulled by a truck and moved from place to place, making it ideal for long vacations or cross-country moves.

The project was such a success that Carscallen has decided to repeat it in future years, which is why they’re selling the “Bay View” house for $30,000. In the future, they’d like to be able to turn enough profit to provide tiny homes to underprivileged residents of Benton Harbor at little or no cost. Another suggested idea would be building a small cluster of tiny homes as affordable alternative student housing on campus.

While living in a house this small takes adjustment, Carscallen says those who take part in the “tiny house movement” see this lifestyle as its own reward. Living in such a small space combats materialism, he explains. “If you accumulate and accumulate stuff...you need a bigger house to store it in, then you fill that. It’s a vicious cycle.” Furthermore, tiny houses are immensely affordable and sustainable. Instead of going deeply into mortgage debt and spending long hours on house upkeep, tiny house owners can focus on different interests. “Especially if you’re interested in missions,” he says, “in doing things beyond yourself, it saves you from being a slave to the bank.”

Overall, Carscallen says, the tiny house project was an incredible success that they look forward to repeating in the future. “We launched it not really knowing how it was going to turn out, but the students really liked it…and it was eye-opening for them.”

To learn more about the tiny house project, you can visit their website: http://www.theshedtinyhouse.com or view a time-lapse video of the construction at: https://www.youtube.com/watch?v=WqyUmLUT9ig&feature=youtu.be.

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