

Project Profile

PureFlow in award-winning tiny house



The tiny house trend is big, and Viega has a hand in it, contributing to a tiny-house competition in California. The team from University of California, Berkeley utilized different Viega products and finished second in the competition, pulling in some other awards as well.

Viega is a member of the Center for the Built Environment (CBE), a UC Berkeley-sponsored scientific research partner, so the collaboration on the tiny house grew from that relationship. Students from the CBE formed a team to compete in the tiny-house building competition, and Viega came on board as a sponsor of the entry, providing products, loaning tools and giving some advice to what became a very successful venture.

Other awards the Berkeley entry garnered were for sustainability, water conservation, home life and best craftsmanship. The tiny home used some unique and efficient ways to save or reuse water, and that came with the help of Viega products.

Sponsored by SMUD (Sacramento Municipal Utility District), the Tiny House Competition was open to colleges and universities across California. Given the focus of the CBE – where teams research things like mechanical systems for commercial buildings – it made sense for the organization to put together a team.

They made good use of the Viega PureFlow®

system, installing PureFlow PEX in red and blue for hot and cold potable water, and also purple for reclaimed water, as well as polymer PureFlow Press Fittings. PEX in 1/2" and 3/4" was utilized on the project, and the team was also able to use a ManaBloc® in the mechanical room.

Using Viega products for innovative ideas

The Berkeley team wanted their tiny house to be completely off the grid, able to produce its own energy and use as little water as possible. The team worked to create a system to recycle as much water as they could for a second use.

“Our concept was to pump the greywater to planter boxes on the back end of the trailer/ house and then filter it through the planter boxes, through a UV disinfection light, and then recollect it as filtered greywater,” Siegner said. “We recycled greywater from the kitchen sink and shower.

The recycled and filtered water is mostly used for watering plants and for landscaping. The tiny house has a low-flow showerhead and sink, so on a day that the house is “well-used,” meaning two showers and dishwashing, there are about 15 gallons of greywater collected.

The PureFlow PEX products played a big role in the whole water system, with lots of tubing used not only for hot and cold water output, but to move the greywater through the recycling system.

Object	Water, wastewater systems
Location	Sacramento, California, USA
Year	2017



Viega PureFlow System was used to circulate hot and cold potable water in the tiny house, as well as reclaimed water.