



PLNU leads effort to build cost-effective homes in Armenia

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A structurally sound house made out of styrofoam? Sounds like a pipe dream, not a cost-effective model for building homes in developing nations. However, Point Loma Nazarene University (PLNU) recently led a construction effort in Armenia to build a residence primarily out of innovative polystyrene blocks, which is the same substance as Styrofoam coffee cups.

Intrigued by the approach, Habitat For Humanity has plans to use the PLNU model to build 20 to 30 more homes in Armenia using the concrete-filled blocks. In addition, the U.S. Agency for International Development (USAID) is interested in utilizing the blocks for storage sheds for farmers.

In May, the group of about 25 participants—which included students and faculty from PLNU, Waco, Texas-based Baylor University, and the University of Southern California (USC)—built two structures in only 14 days. The project was facilitated and led by PLNU adjunct professor George Fermanian, and Robert Gailey, director of PLNU's Armenian Center for International Development. Fermanian is a former San Diego real estate developer with an expertise in affordable housing. They were assisted by Walter Bradley, distinguished professor of engineering from Baylor, who served as an engineering consultant.

There are a number of different kinds of polystyrene blocks used in various construction models. The blocks used by the PLNU team are made by Keeva—a company that produces the blocks in Tijuana—and represent the most simple and easy-to-use design, requiring very low technology to manufacture and build.

In order to create a possible sustainable solution for affordable housing in developing nations, PLNU's partners in Armenia are in negotiations with a company in Iran to produce the blocks at a lower price. A Trade and Technology Center is planned that will train Armenians on how to build these homes throughout the country and surrounding region.

"The first phase of this venture has proven very successful," said Gailey. "In 14 working days, we were able to build two different model homes using mostly university students in a location on the other side of the globe. Though PLNU was the lead school, we could not have

accomplished what we did without the contributions from students and faculty at Baylor and USC. Now, we are turning our attention to the next phase of building a sustainable home construction business in Armenia. If this is successful, we hope to look at doing this in other countries.”

For more information on the Armenia trip or the polystyrene blocks, contact Rob Gailey, (619) 849-2786 or rgailey@pointloma.edu

To view pictures of the entire project, start-to-finish, [Click Here](#).

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