



DC Universities Build Sustainable Home for 2013 Solar Decathlon

Published on 21 May 2013

Written by Sarah Buffaloe

Posted in [Center for Green Schools](#)



In 106 days, Team Capitol DC will be presenting Harvest Home, an off-the-grid showcase of all things sustainable in Irvine, California for the Department of Energy's bi-annual [Solar Decathlon](#) from Oct. 3-13. Team Capitol DC is a joint effort of the Catholic University of America (CUA), George Washington University (GW) and American University. CUA leads with architecture and design, GW covers landscape and engineering and American is on point for communications and marketing. The design of Harvest Home takes advantage of sun, water and material resources to create a true net-zero house. The entire design has been "right sized" to conserve resources. Harvesting of these resources occurs through a large solar array on the roof which supplies the energy needed for building systems. Water is collected and stored in cisterns for occupant use and irrigation, and many of the building materials have been reclaimed from local deconstruction sites as framing, finishes and exterior cladding.

However, this project is not just a showcase of sustainable technology. It's also a home that address the needs of the occupant, a U.S war veteran. This design creates a healing environment through the use of all five senses to promote emotional and physical recovery. While inside the home, views to the outdoor garden and a soothing color palette make the home visually comforting. The continuity of materials and textures draws the occupant outside to the garden and deck. Outside, the senses of hearing, smell and taste are engaged through a water feature, scented herbs and flowers and carefully selected edible plants.

Up to this point, the team has concentrated efforts on getting the frame of the house installed and processing all the reclaimed materials for installation. Now that the steel structure and interior framing are ready, the building components are rapidly being delivered and installed. The first installation is the structurally insulated panels (SIPs) for the enclosure, then HVAC equipment, followed by roof and plumbing installation. Once these major components are installed it's all about finish materials. The team plans to ship the house on three flat bed trucks beginning in early August.

For more information and pictures of what the team is up to visit Team Capitol DC Harvest on [Facebook](#) or the [website](#)!

USGBC LEED team member Sarah Buffaloe is currently pursuing a Master of Science in Sustainable Design at The Catholic University of America.



Sarah Buffaloe

Materials and Resources Subject Matter Expert
U.S. Green Building Council



Member employees, USGBC staff

1 comment

[Leave a comment](#)



Jeremy Sigmon

Director, Technical Policy, U.S. Green Building Council

1 year 36 weeks ago

Great post, Sarah. I've been impressed with the project team and their progress. Go "Team Capitol DC"!

Leave a comment

Don't have an account? [Create one](#)

You must be signed in to leave a comment.

Email

Password

SIGN IN