



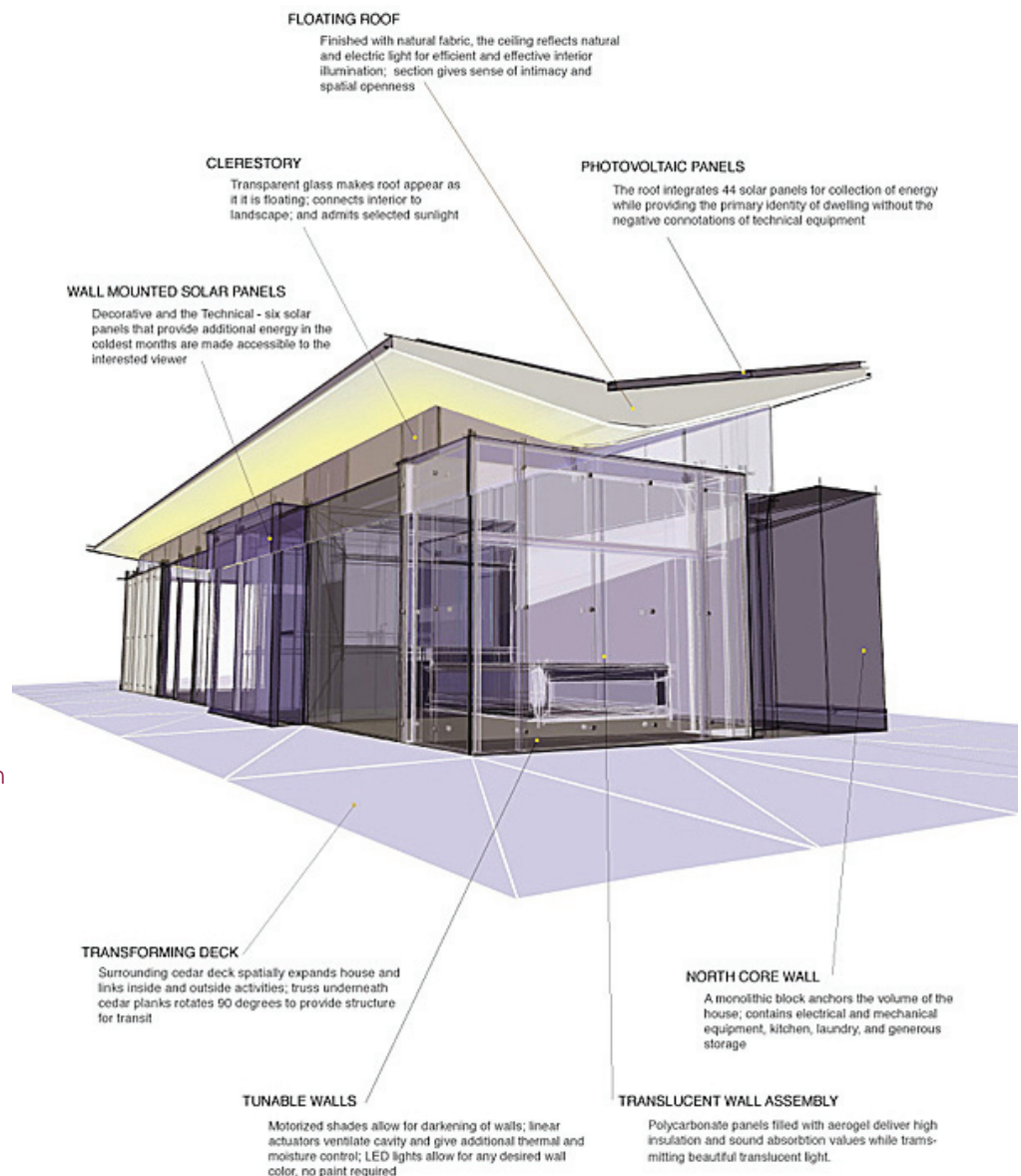
S O L A R H O U S E 2 0 0 5

Welcome to the award-winning Virginia Tech Solar House that students and faculty in the Colleges of Architecture and Urban Studies, and Engineering designed and built for the 2005 U.S. Department of Energy Solar Decathlon. The Virginia Tech Solar House has won numerous awards, including: Best Architecture, Best Livability, Best Daylighting, Best Electric Lighting, and fourth overall at the Solar Decathlon; a 2006 Honor Award from the Virginia Society of the American Institute of Architects (AIA); an AIA Presidential Award; and a National Council of Architectural Registration Boards Honorable Mention for the Creative Integration of Practice and Education in the Academy. The house has been featured nationally on ABC's "Extreme Makeover: Home Edition," on PBS's "This Old House," on HGTV's "I Want That!," in a DIY network documentary about the 2005 Solar Decathlon, in "Popular Mechanics" magazine; and in "Dwell" magazine, among others.

For more information:
http://www.vt.edu/spot-light/20061204_solar.php

INNOVATIONS INCLUDE:

- A translucent wall assembly that transmits beautiful natural light and delivers high insulation and sound absorption value
- Tunable walls that control moisture, temperature, and light transmission while allowing any desired color, no paint required
- A compact, efficient plan that offers spatial generosity
- Architectural form that subsumes the connotations of technology with elegance and grace
- An integral roof/ceiling that expresses the collection of energy, provides intimacy and psychologically expands the volume of the house past its small footprint
- Nighttime identity that symbolically radiates back the energy collected during the day
- A surrounding deck that links inside and outside, establishes presence on the site, and serves as a structural element for transportation
- Radiant floor heating throughout the house, quiet, no moving air, the highest quality heat
- High pressure heat pumps that efficiently heat water for the radiant system
- Sustainable materials that contribute to the quality of space and healthy environments





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BENEFACTORS

Solar Gold \$20,000+

- Recognition Research
- Hanbury, Evans, Wright, and Vlattas

Solar Silver \$10,000–20,000

- Virginia Department of Mines, Minerals and Energy
- Lockheed Martin Corporation
- Clark Nexsen
- Moseley Architects
- Office of the VP for Research, Virginia Tech

Solar Bronze \$2,000–9,999

- Georgia Anne Snyder-Faulkingham
- American Electric Power
- Dominion Foundation
- Joseph R. Loring
- Spacevest
- Atlantic Constructors, Inc.
- Kohn Pederson Fox
- Bob and Jane Paxton
- William Seth Cross
- H C Yu & Associates
- E. G. Middleton, Inc.
- Aristides Maza Tirado

Solar Copper \$500–1,999

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- Weyerhaeuser-Lyptus Floor
- Weyerhaeuser Cedar One

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- Virginia Department of Mines, Minerals and Energy, Energy Division
- Charles Elks of Mechanical Equipment Sales
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- Charter Plastics
- April Alcohol
- FHP Manufacturing
- Mo Johns
- Brian Walsh of Solar Connexion
- Martin Brothers Contractors
- Virginia Tech Facilities

Science Museum of Virginia

- Tom Petet
- Barry Lewis
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- Laura Hughes
- Lynn Corona
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HOSTED BY:



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