

R-House, Architectural Research Office and Della Valle Bernheimer This project is a two-story house that has a flexible layout that requires only the equivalent energy of a hair dryer for heating. R-House transforms a typical gabled roof into a simple folded surface that recalls the appearance and scale of neighboring houses. The passive solar strategy utilizes a well-insulated envelope, airtight construction, an efficient small heating system, controlled ventilation, and windows that optimize solar gain.

Team Credits:

Architecture Research Office

Stephen Cassell and Adam Yarinsky, Principals; Megumi Tamanaha, Associate; Design team: Melissa Eckerman, Jane Lea, Neil Patel, Anne-Marie Singer

Della Valle Bernheimer

Andrew Bernheimer and Jared Della Valle, Partners; Garrick Jones, Associate; Design team: Lara Shihab Eldin, Janine Soper

Transsolar Climate Engineering, New York

David White, Senior Engineer and Project Manager

Guy Nordenson and Associates Structural Engineers LLP

Guy Nordenson, Principal; Brett Schneider, Associate

Stuart-Lynn Company, Inc. Cost Estimators

Breck Perkins, Principal; Team members: Daniel Edelstein, Denis Vasin

Coen + Partners, Landscape Architects

Shane Coen, Principal

Live Work Home, Cook + Fox/Terrapin Bright Green This is a single-story, flat roof design that responds to the industrial and commercial character of the mixed-use neighborhood. The linear living space is highly flexible and can be transformed throughout the life of the home to accommodate the changing needs of the residents. The design can accommodate a family with children, extended family unit, or students or can easily be converted to function as a home-based small business or artist's studio. The house is constructed of structural insulated panels (sip) and is heated passively. Reflective screening and skylights allow light to fill the interior of the space with dappled lighting.

Team Credits

Cook+Fox Architects, LLP

Rick Cook, Partner

Design Team: Ilija Bentscheff, Tyler Caine, Pam Campbell, Mark Canfield, Simone DeConno, Guido Elgueta, Alice Hartley, Brandon Hendricks, Zoe Logan, Fred Metzger, Simon Rearte, Eugene Sun

Terrapin Bright Green

Bill Browning and Chris Garvin, Partners

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Edward DePaola and Andrew Mueller-Lust, Principals

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Steve Tupu, Principal

TED, Onion Flats This project uses conventional wood framing methods coupled with a thick shell and active solar heating to create an energy-efficient house. The heating system uses water heated through solar-tubing panels mounted on the roof and radiant tubing in all floors. The three-story, gabled-roof structure creates an atrium to pull heat out of the home during the summer months, making a space that is efficient year-round. The versatile design can easily be transformed into a two- to four-bedroom, a duplex, or a home office/studio with residence above. TED was designed so that it could be built in three different ways: 1. Stick framing 2. Modular 3. SIP panels.

Team Credits:

Onion Flats

Timothy McDonald, Howard Steinberg, Pat McDonald, John McDonald

Ted Singer

Jim Sanderson

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