Building a Passive House for an Active Family
Susan Guthridge-Gould

Abstract:
Homeowner Susan Guthridge-Gould is building a Shaker-inspired Passive House for her family of four. Her photo-based presentation documents every step from design with Dennis Wedlick Architect to construction using SIPs and Glu-lams to work the family did themselves to keep costs down. Building a home that meets the highest standards in energy-efficiency is a happy ending to a story that started in the mid-1970s when utility companies proposed building a nuclear power plant on the land, which has been farmed by her family at least eight generations.

About the house: The blower door test at rough-in achieved a result of 0.1 ACH at 50 pascals, which exceeds the Passive House Standard, recognized as the most stringent building standard in the world. The house is part of the NYSERDA High Performance Development Challenge with engineering provided by The Levy Partnership. It is pre-certified and on track to be the second certified Passive House in the state.

The interactive presentation will answer these questions:
• What are the 5 key elements of a Passive House and why did we decide to build one?
• How did the construction process go, step-by-step?
• What would we do the same or differently?
The presentation draws on the blog www.newhudsonvalley.com

Relevance to green building: A Passive House uses about 90 percent less energy than a conventionally constructed equivalent because it virtually heats and cools itself. Heat recovery ventilation system. Airtight envelope. Glu-lams, SIPs, Neopor insulation, recycled staircase and cabinets, zero VOC paints, and Intus triple-pane windows. Residential building science.

Bio:
Susan Guthridge-Gould
Susan Guthridge-Gould plans to move into her new Passive House in Spring 2013, with her husband, two young children and the dog promised as a reward for good cheer throughout construction. Susan writes and edits for United Nations agencies and the International Union for Conservation of Nature’s Commission on Education and Communication. She is principal of Beyond Jargon LLC and holds a master’s degree in journalism from the S.I. Newhouse School of Public Communications at Syracuse University. She resides in Stuyvesant, NY.