



OMNI-ZYGO LLC

COMPREHENSIVE DESIGN SCIENCE

www.omni-zygo.com

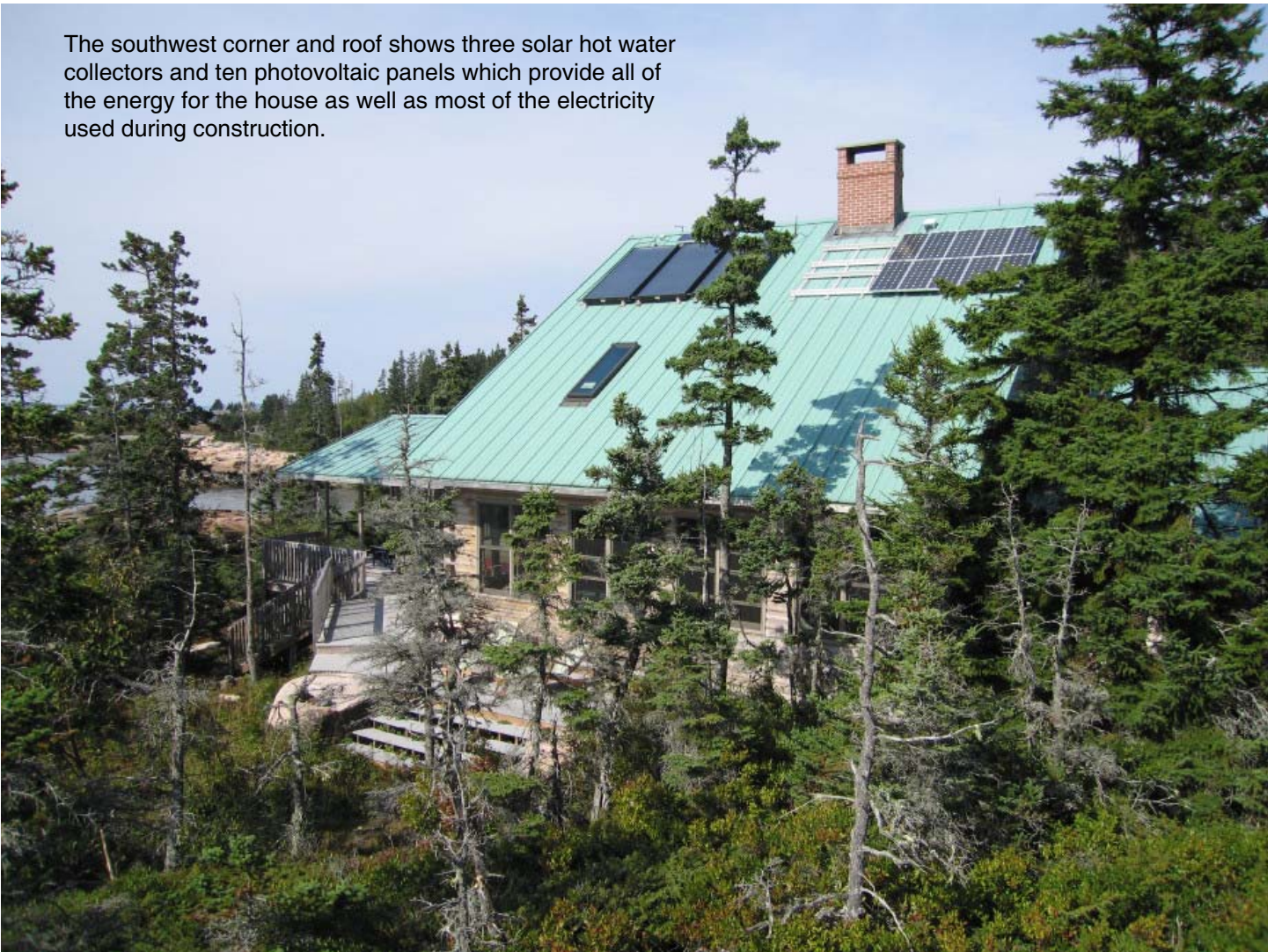
Zero Energy Residence

Gotts Island, Maine

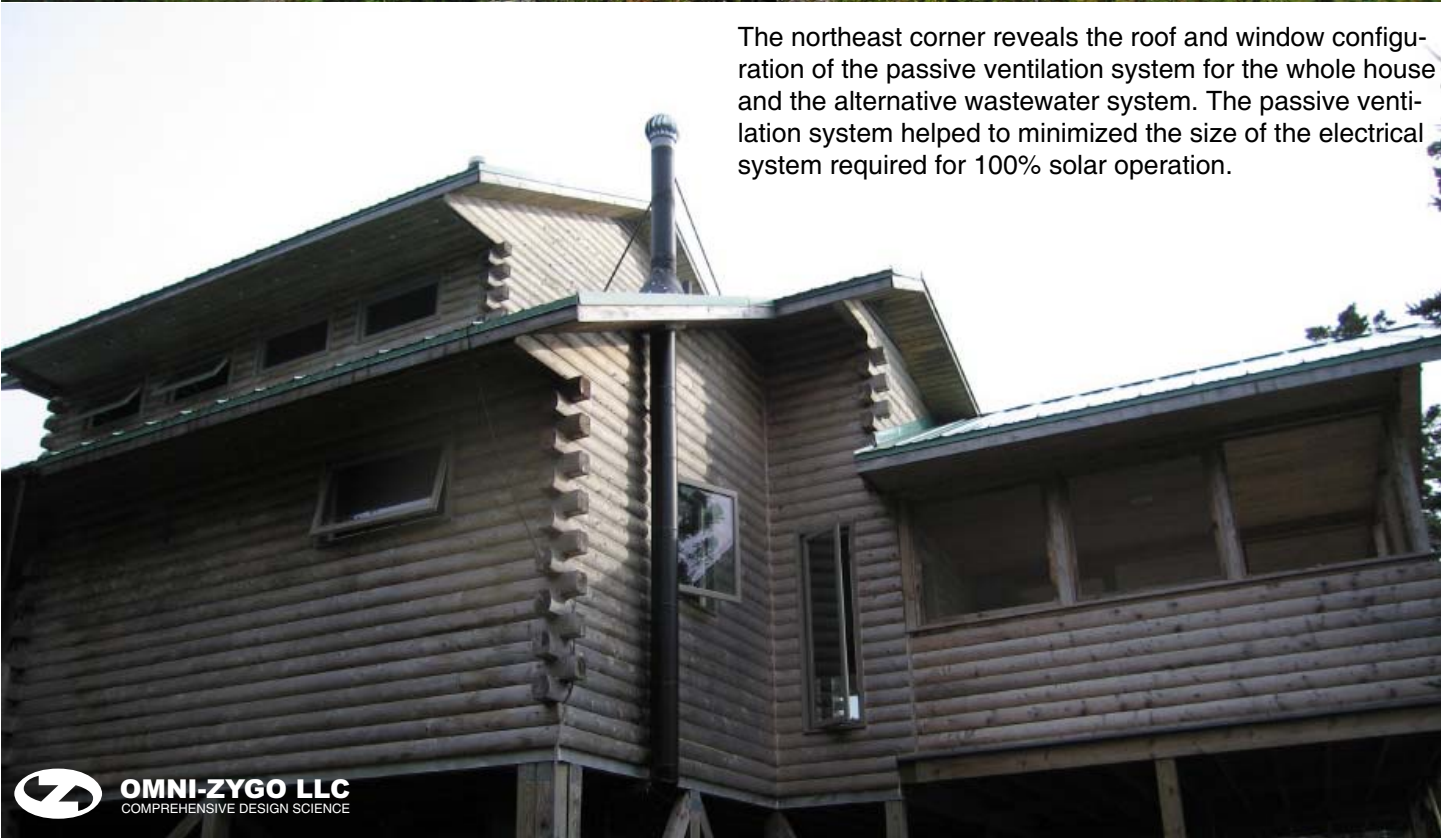
A prefabricated, carbon neutral,
'off-the-grid' solar home.



The southwest corner and roof shows three solar hot water collectors and ten photovoltaic panels which provide all of the energy for the house as well as most of the electricity used during construction.



The northeast corner reveals the roof and window configuration of the passive ventilation system for the whole house and the alternative wastewater system. The passive ventilation system helped to minimize the size of the electrical system required for 100% solar operation.

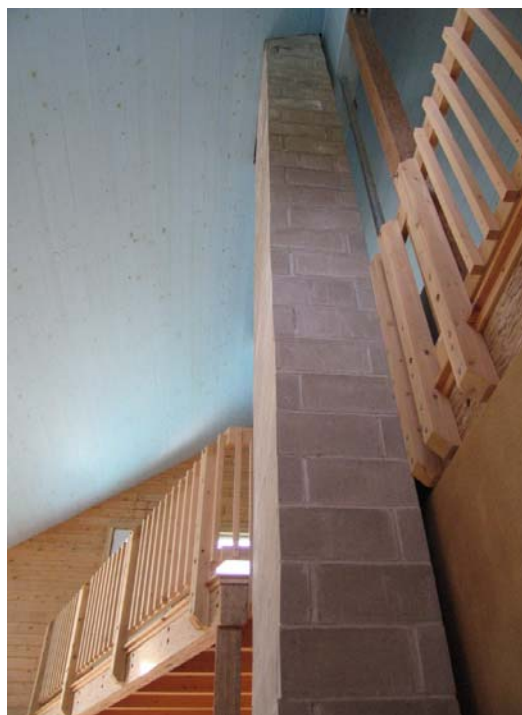


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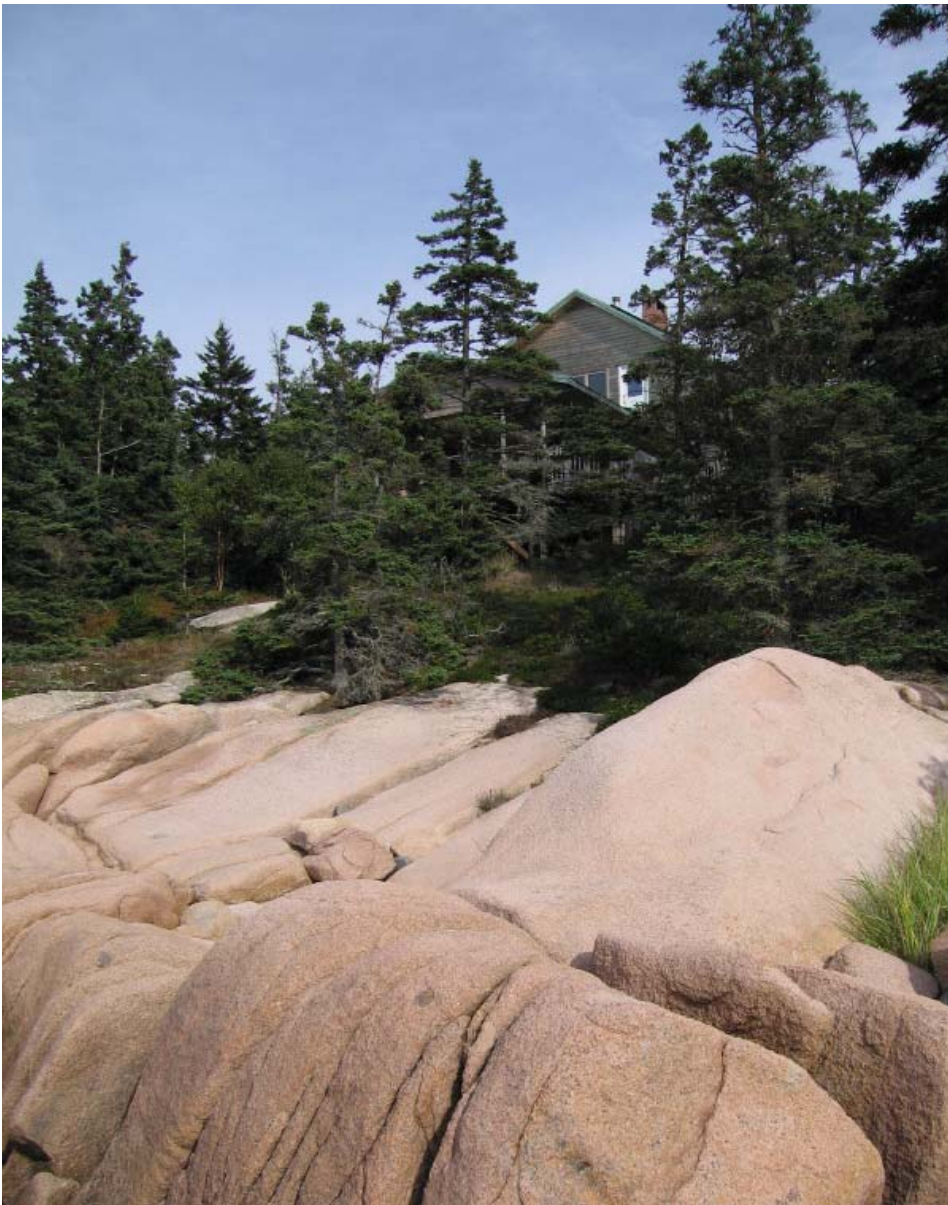


(Above) Parallam® and pre-cut Doug Fir loft structure arrives predrilled and numbered for easy assembly.

(Left) Site built staging and winch system enables the positioning and installation of prefabricated trusses and other structural elements of the kit without the use of heavy machinery.



Interior materials includes wheat-board, local Sacco Pine ceilings and floors, non-toxic paints, and other natural finishes.



Site analysis and placement of a solar home is critical. An additional challenge for this project was to hide the building while providing spectacular vistas of the landscape. Photographing the building is extremely difficult. Successful siting rendered the residence nearly invisible, while the cost of solar systems are minimized by optimal orientation and plan configuration.

View of the residence from high tide mark facing northeast (left), view from screened porch facing west (lower left), and view from second floor facing west (below).

