

# ARCHITECTURAL RECORD



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## Cassilhaus

Ellen Cassily Architect

Orange County, North Carolina

Alternately called “The Trapezoid House,” Cassilhaus comprises three trapezoidal volumes across a very steep and densely forested site with views of Duke University Forest and New Hope Creek. The design of the house followed a rigorous program-driven architectural process with an unusual thesis—beyond their basic living requirements, the art and design loving owners wanted to host an artist residency and art gallery on site.



### PEOPLE & PRODUCTS

- **Metal:** Galvalume standing seam metal roof  
Sheffield Metals (US Steel)
- **Wood:** Aluminium clad wood windows by  
Pella

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### Design concept and solution:

The three central program elements for the project were two independent living areas—a 3,000-square-foot main house and a completely self-contained 1,000-square-foot guest house/artist studio—as well as dedicated gallery and storage spaces to house an extensive photography collection.

Two living “pods”—a multi-level main house and a self-contained guest house programmed for month-long visiting artist residencies—are joined by a long bridging structure housing the photography gallery and master suite, all of which is encircled by a clerestory. The clerestory maximizes reflected light without allowing direct sunlight on the photography collection, and gives the appearance of floating roofs. The metal roof over the bridge, lowered at the main pod, brings southern light via a second clerestory into the owner’s living area to the north. The seamless integration of the main volumes affords visiting artists the ability to control their level of privacy from total isolation to intimate connection as well as enjoy common use of gallery, library, and laundry spaces.

Outdoor spaces are a major focus, incorporating a south-facing roof terrace with outdoor shower, screened porch, multiple decks, and an at-grade terrace. Views to the forest and stream are to the north. The site’s steep slope allowed for a walk-in basement level for art storage, utility, and mechanical spaces. A carport and stone landscape retaining walls built from site-excavated stone complete the program.

### Total construction cost:

Withheld

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