

Arch 464
ECS
Spring 2008

Name _____

Quiz #1

"Vacation Home Gallery Lighting"

For this problem you are the daylighting consultant for vacation home owners Cristina Grajales and Isabelle Kirshner. Now that they've settled into their acclaimed upstate New York vacation home, they've decided to transform the two-story high, east-facing entry space into a mini-gallery to house a small collection of paintings, sculpture, and travel memorabilia. Your task is to intervene tastefully to assure that the daylighting in the space is appropriate for the artwork.

The owners have asked you to critique the existing conditions and to recommend a scheme for improving the daylighting in the space. The entry has shaded windows on three sides and two skylights. The east glass is protected by the extension of the perforated corrugated stainless steel screens which shade the north and south glazing. These screens are held away from the building's walls, filtering the elements of wind, light, sun, and view.

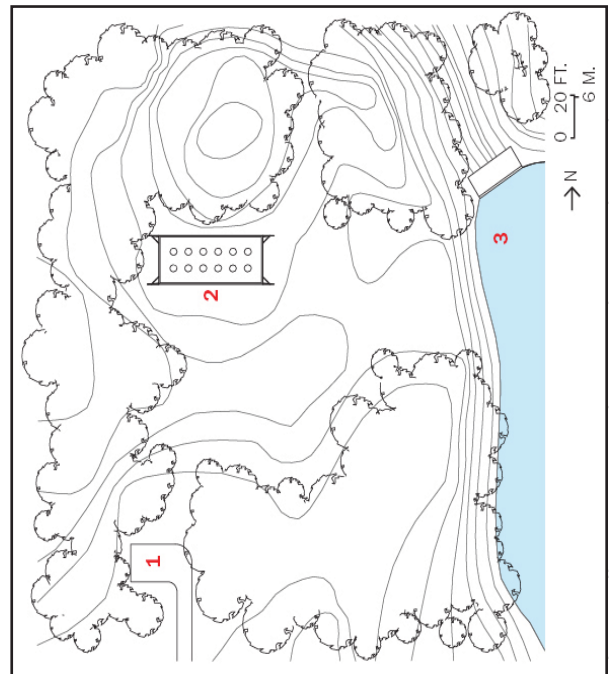
Salt Point, NY is at 42 degrees north latitude and has a humid climate with cold winters and muggy summers.



Livingroom view through screened porch to the forest beyond.



The perforated screen on the south facade seems solid in the daylight.



The site plan shows the clearing to the south and east of the home.

Photos, illustrations, and text: Architectural Record, January 2008.

The Salt Point House was written up by Beth Broome in the January 2008 issue of Architectural Record and photographed by Scott Frances of ESTO. Their text and photos as well as architectural drawings are given below and on the following pages to help you understand the building.

By Beth Broome

For five years, Manhattan residents Cristina Grajales and Isabelle Kirshner rented a rustic former hunting cabin in Dutchess County, New York, for weekend getaways. The couple fell in love with the place and hoped someday to buy it. When they learned that the owners were not interested in selling, they were crestfallen. But their spirits soon lifted when they found an idyllic 9-acre parcel of land on a small, stream-fed pond a few miles away in the hamlet of Salt Point. Now all they needed was an architect.

The couple, a gallery owner/design consultant and a lawyer, respectively, had admired the work of Manhattan-based architect Thomas Phifer, but only from a distance: Grajales had seen his Taghkanic Residence in *Elle Decor*. "I was scared to call him because I was afraid he was already too famous," she says. As fate would have it, the two were introduced at a fund-raising event they attended. "It was destiny," says Grajales, who added that Phifer did not seem deterred by either the small size of the house they hoped to build or their budget.

Grajales and Kirshner's demands were basic: They wanted their new house to do everything the old cabin did—it should be small,

easy to maintain, and affordable. The program should also be similar and include two bedrooms and baths; a bunk/study room; a large, open living area; and, importantly, a screened porch. "It was an ideal challenge," says Greg Reaves, a partner at Thomas Phifer and Partners, of the simple requirements. "It was a project we could really get into and work out the details."

Like a great meal, Salt Point House is made up of a few carefully selected ingredients thoughtfully put together. In the most basic terms, the 2,200-square-foot house is a wood-framed, stained cedar box punctured with skylights and lined in maple plywood with glazing on its short sides and a perforated corrugated-stainless-steel skin on its long sides. "Not exactly a one-liner," says Reaves, "but what you see is what you get."

While the north and south elevations are relatively solid—interrupted only by long strip windows at eye level that frame horizontal views of the landscape—the east and west facades have floor-to-ceiling glazing and fully open to the outside. The east side, where a double-level entry room and stair reside, faces the woods, and the west side, which houses the living area downstairs and two bedrooms upstairs, looks out through a double-height screened porch onto the pond. A utility core occupies the house's center, with storage and baths upstairs and down, and the kitchen on the ground level. A transparent glass bridge, which connects the two bedrooms, can induce vertigo—indeed, the family dog

Project: Salt Point House, Salt Point, New York
Architect: Thomas Phifer and Partners—Thomas Phifer, principal;
Greg Reaves, project partner; Joseph Sevens, project architect
Engineer: Weidlinger Associates
General contractor: Kevin W. Beck

PHOTOGRAPHY: © SCOTT FRANCES/ESTO

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refuses to cross it. It allows natural daylight from the skylights (there are 12 in all) to penetrate down to the kitchen, helping to define this section of the house.

The skylights are operable, as are many of the windows, allowing the house to breathe and admitting the sounds from outside: a whooshing from the pond's small waterfall and the rustling of leaves in the wind—a pleasant accompaniment to the popping and ping-pong of the stainless-steel panels as they warm in the sun on an autumn morning. This feature, in combination with siting respectful of prevailing winds and the thermal buffer created by the skin, obviates the need for air-conditioning. Inside, durable maple plywood lines the floors, walls, and ceilings. Kevin W. Beck,

the local builder on the job, fabricated the cabinetry and low-slung furniture, in maple plywood as well, which is complemented by select pieces from the owners' collection. The effect of one material rendered over and over again is visually powerful.

But most powerful of all is the stainless-steel veil, composed of custom-made panels that float 6 inches off the house on aluminum extrusions. The architects sought an inexpensive shading device that would also gently reflect the landscape, responding to the colors and light as the seasons change. They considered glass and flat stainless-steel panels but liked the transformative effects of the perforated corrugated stainless steel. They mocked-up several panels with different perforations to find

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the right balance of opacity and transparency. From outside, the treatment appears as a solid surface and takes on the qualities of a projection screen as shadows from the nearby trees dance across it. When there is light behind the screen, it dematerializes, becomes sheer—an effect which is especially apparent when inside looking out.

The clients didn't immediately embrace the idea of this unorthodox curtain. "I was nervous about feeling claustrophobic, about losing the views," says Grajales. But the architects were persistent and, in the end, she and Kirshner were convinced. "Of course, you always want to show off your child," says Grajales of her home. "But the response has been so incredibly overwhelming. One of my clients walked in and burst

into tears—that's the kind of reaction our house causes." While the Salt Point House bears little resemblance aesthetically to the old hunting shack, it has carefully mimicked—and even augmented—many of the effects of the much-endearred abode. "It is magnificent," says Grajales, "but, more importantly, we love it." ■

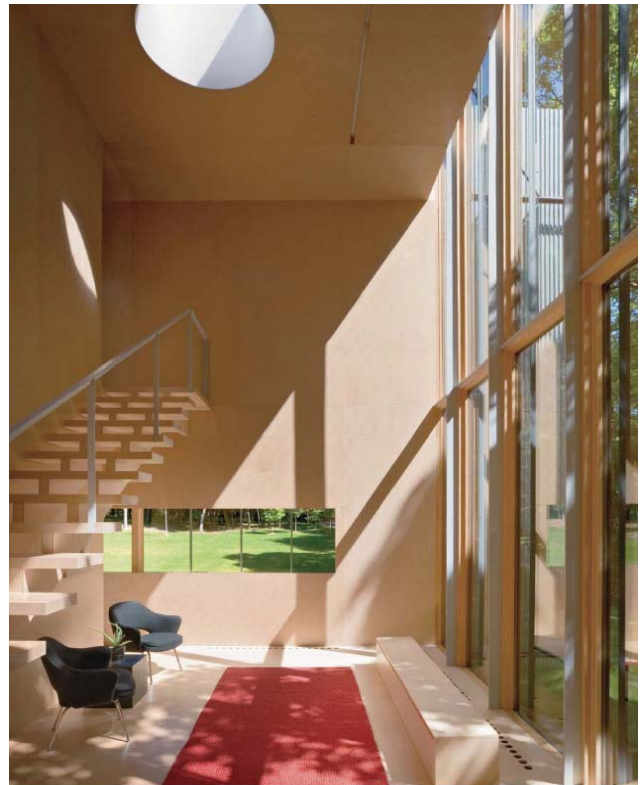
Sources

Windows and doors: Marvin
Skylights: Insula-Dome
Locksets: Schlage
Hinges: Rajack

Cabinetry: Neo Cabinetry

Custom woodwork: Kevin W. Beck
Lighting: LaMar Lighting
Sinks, toilets: Duravit; Toto
Plumbing fittings: Vola; Speakman

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The two-story entry space as viewed externally from the east and internally from south.

3 pts

1. Citing the text on page 2 and visual evidence in these photo, describe three (3) lighting and comfort problems posed by the design of the entry/mini-gallery to-be.

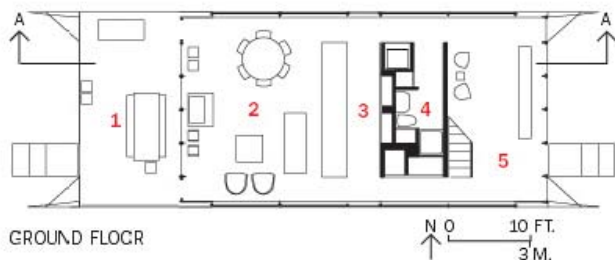


View through the south window into the entry.

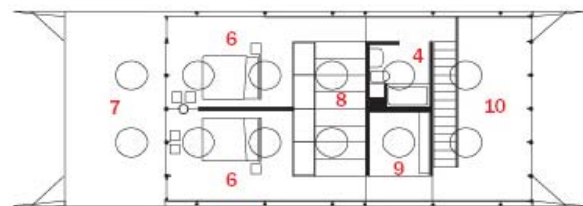
3 pts 2. Point out and explain three (3) daylighting solutions for the space. Use (draw on) the plans and section below to make your comments clear.



- | | |
|-------------------|------------------------------|
| 1. Screened porch | 6. Bedroom |
| 2. Living area | 7. Open to porch below |
| 3. Kitchen | 8. Glass-floored hall |
| 4. Bathroom | 9. Study |
| 5. Entry hall | 10. Open to entry hall below |



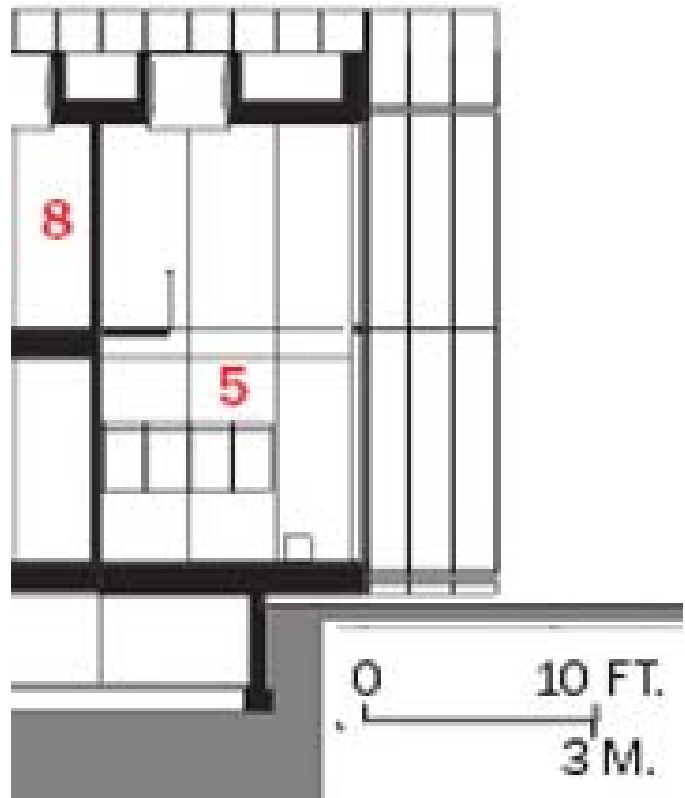
GROUND FLOOR



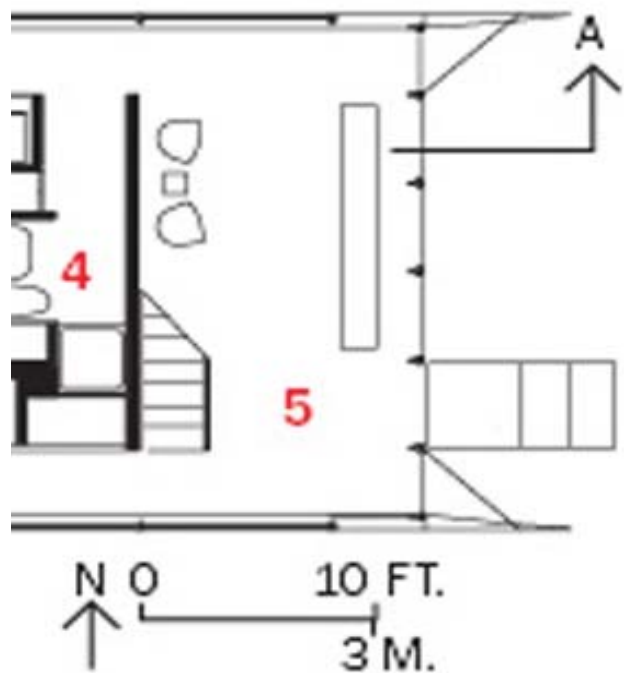
SECOND FLOOR

3. Show your remodeling features in the plan section below. Indicate where you'd place three large paintings and one large stone sculpture in this space. Show the light distribution at about 9am on a sunny June morning.

4 pts



West to east section shows north wall in elevation.



In plan and section, 5 is the entry hall/mini-gallery.