Slate House

Baltimore, Maryland

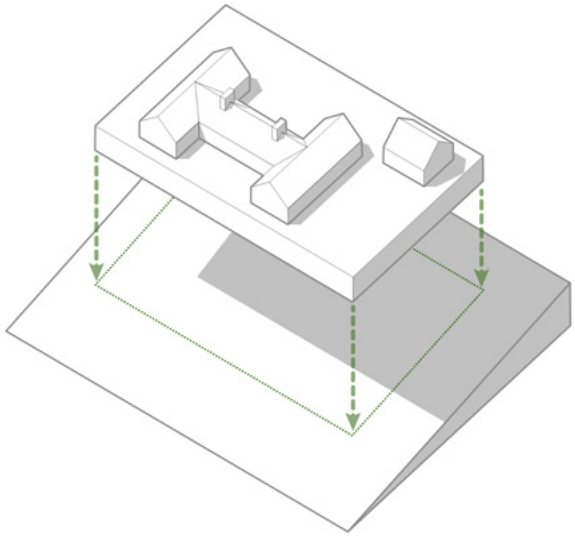
Residential

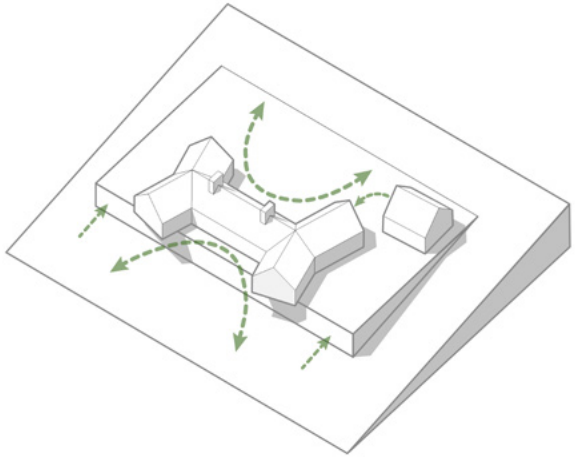
Situated on 3 acres and surrounded by Maryland Environmental Trust land, the Slate House is a **contemporary retreat** that respects the nature and legacy of the vast and densely wooded site. The new 7,000-square foot building replaces a late 60's, ranch-style house that was **destroyed by fire**.

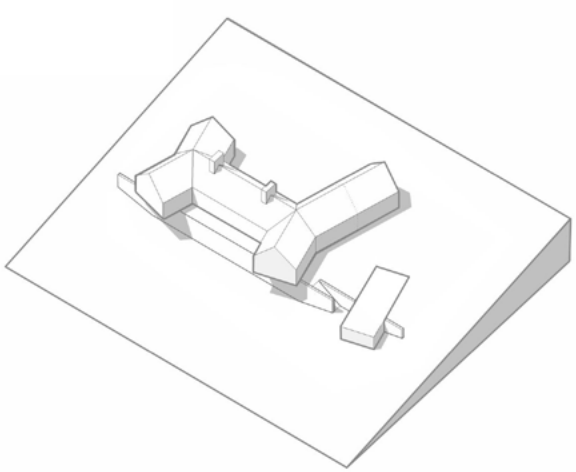
The recent house fire created a physical, emotional, and ecological shift between owners, land, and the surrouding ecology. Rising from the ashes of its predecessor, the design team set out to reconnect the site to the existing contextual environment. The home and gardens are designed as **a metaphor for healing, reflection, and relaxation**.

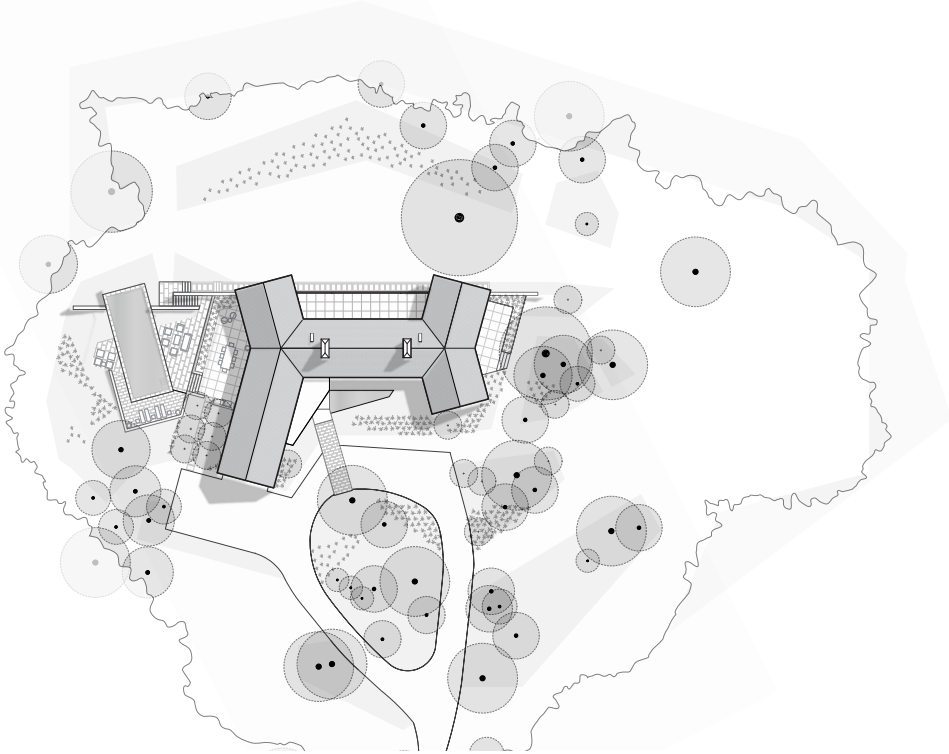
The design employs an archetypal gable form, a geometric extrusion that is both reductive and minimal, that yields cathedral ceilings emphasizing the verticality of the trees. Dark slate shingles wrap the sides and roof as a **protective shell**. Charred wood siding caps the gable ends evoking the **memory** of the former home. Both materials contrast with the open, light-filled volumes of the interior. Large expanses of mahogany framed window walls maximize views of the surrounding forest, **blurring interior and exterior spaces**. Clean and direct geometries combine with natural materials of stone, wood, steel, and water to express **rawness and simplicity.**

Former Home Destroyed by Fire





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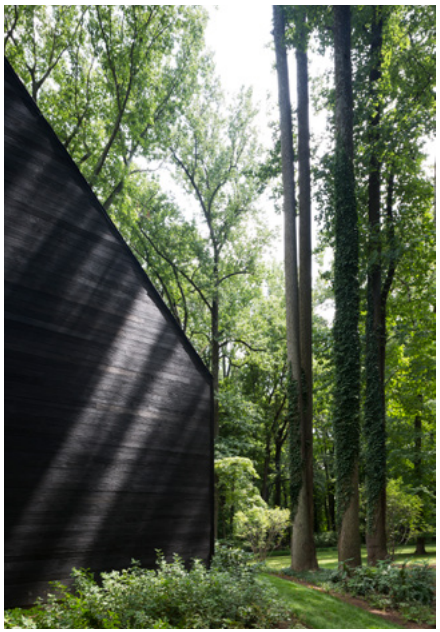

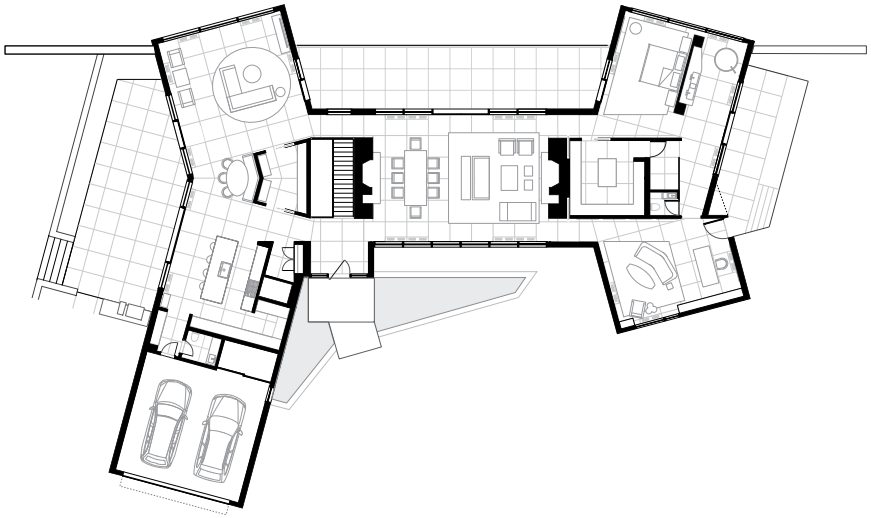

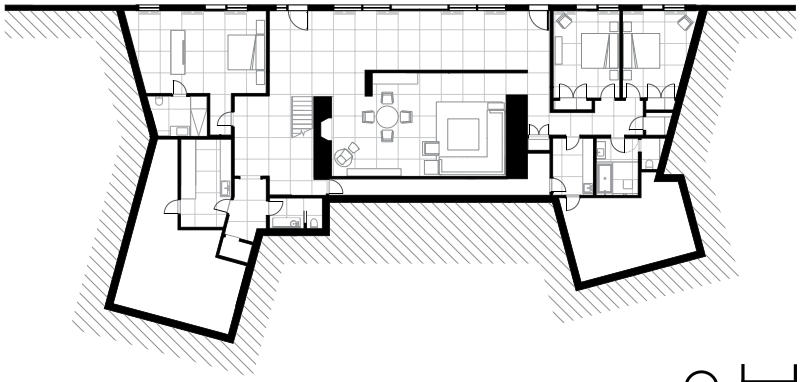

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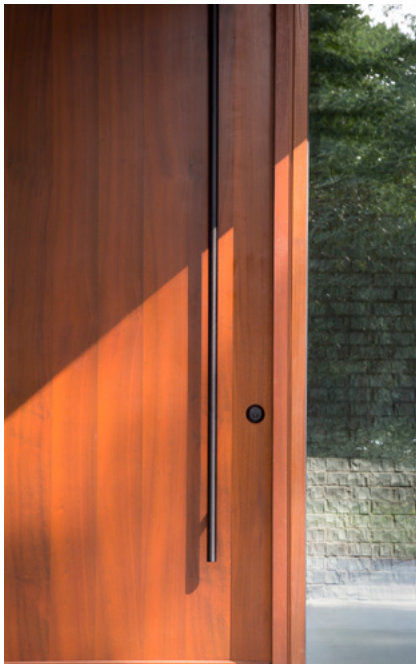

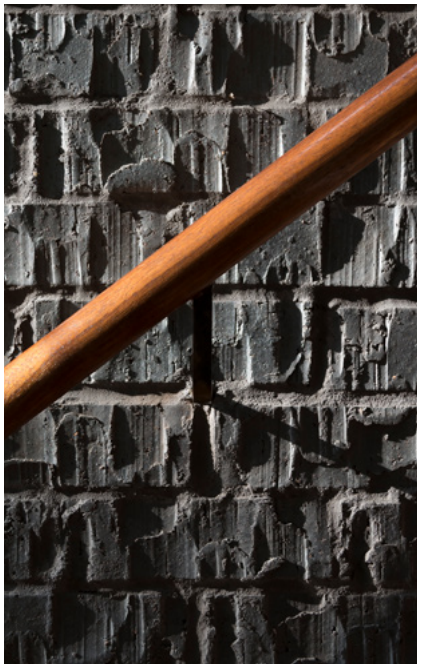

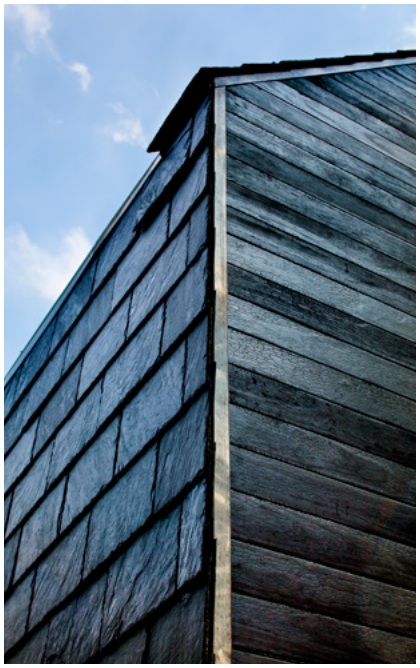

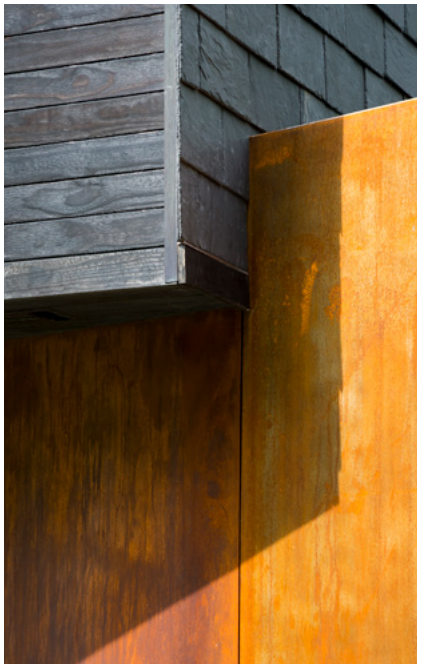

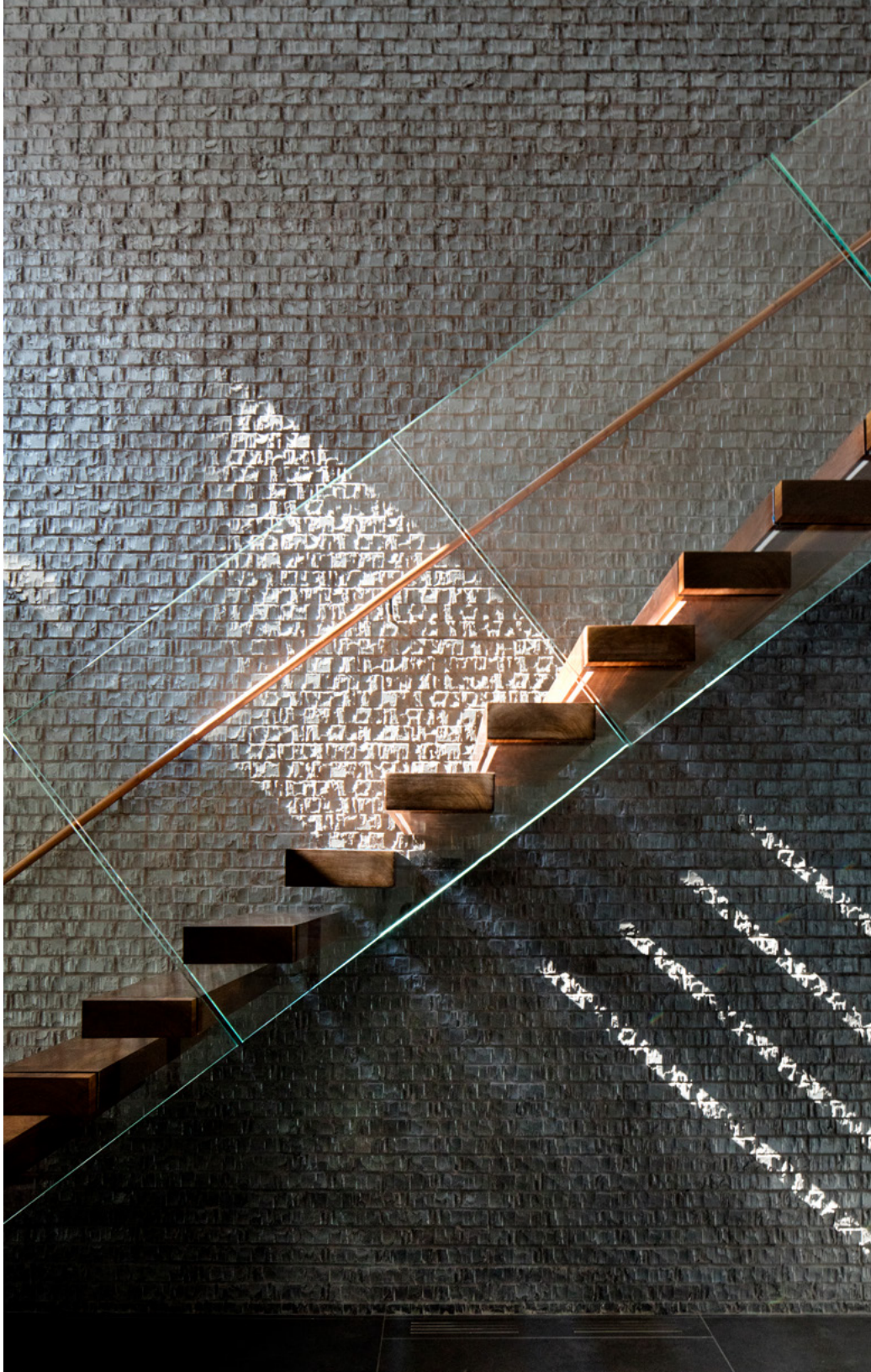







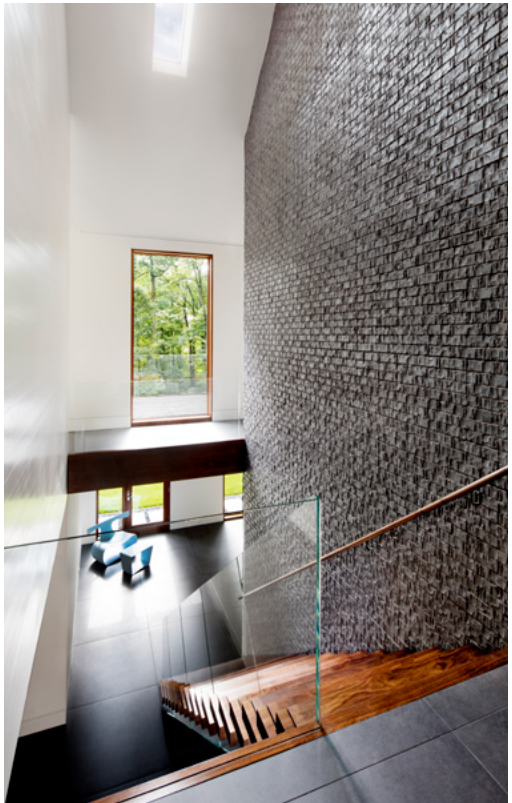


Additional Project Information

Resiliency Features

Since the original house was lost to a fire, it was extremely important to the clients that this new home was extremely durable and resilient. Super-insulated walls, design for natural ventilation, ground-source heating, and abundant incorporation of glazing for natural light help to reduce requirements for supplied energy. The property is sourced by well water with a septic and is not reliant on the city infrastructure. The naturally aging cladding of slate, metal, and charred wood requires low maintenance. Shou Sugi Ban is the traditional Japanese technique of burning wood for preservation. As an extremely durable material, the slate cladding provides for a 100 year roof.

Environmental Performance

All windows and doors open for cross breezes in the summer to reduce the requirement for air conditioning. The house's super insulated walls and insulated glass help to retain heat in the winter. Multiple fireplaces provide natural heat in the winter. A geothermal ground source heat pump feeds into the houses radiant hydronic floors throughout. Insulated, low-e glazed windows help reduce solar gain while allowing natural light to fill the spaces during the daytime and reduce energy loads.

The project exceeded the requirements of the 2012 International Energy Construction Code with an R-49 roof assembly, R-36 wall assembly, and windows with a .35 U-Factor.

Innovative Design and/or Construction Features

This home design incorporates multiple custom features that elevate the experience for the individuals.

Unique details include:

- incorporation of radiant floors below monumental slate tiles with water-jet cut tile floor grilles
- cantilevered stair with locally fabricated stair treads and railling and integral lighting
- hidden copper gutter system
- cantilevered building masses over coreten steel retaining wall