

The Scalloped Concrete Residence

Project Date: August 2022, construction completed

Project Size: 9,912 square feet

Project Location: Manhattan Beach, California

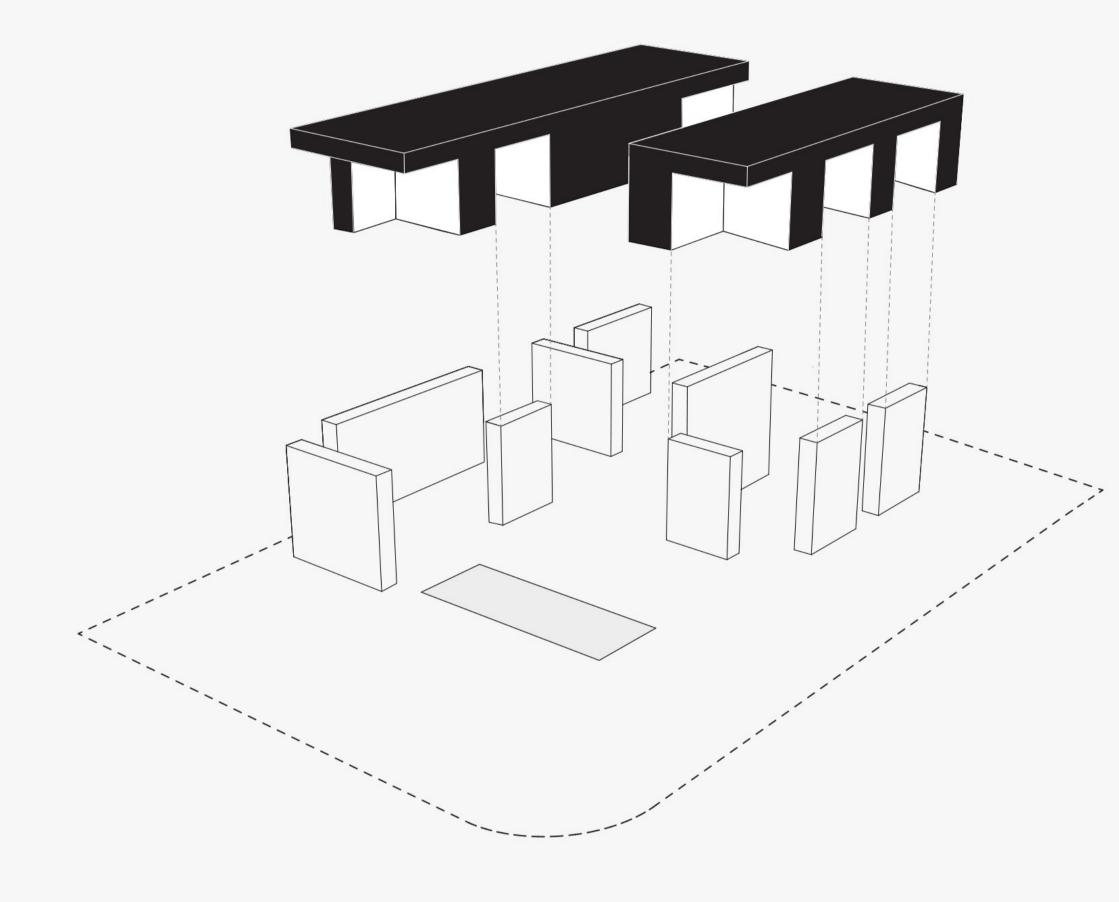
Site Conditions: 11,000 square foot suburban property, located at a prominent intersection, with expansive ocean views, surrounded by large, traditional homes.

Program: Single family home

Project Narrative: Recognized for its scalloped concrete walls, this residence embodies an exploration of raw materiality. Nine concrete walls anchor the project, defining its spaces, supporting its structure, and establishing its formal identity. As a counterpoint to this heavy material, two elevated cedar volumes float above, brining a spirit of delicacy and warmth to the home.

Urban Agenda: Though boasting impressive property values, this neighborhood is defined by repetitive, predictable, private mansions. Due to the planning code's "supplemental setback" nearly every house displays the traditional "wedding cake" silhouette, with a garage door facing the street. Open space is minimal and often related to a shadowy backyard. In contrast to this template, the design team reversed all these expectations. The home opens itself to the corner, bringing light and visibility to the neighborhood. The front yard is activated, becoming the primary outdoor space for the home. The garage is positioned in the rear of the property, allowing the street to be defined by landscape. The result is a glowing sense of transparency, which often makes pedestrians pause and smile.



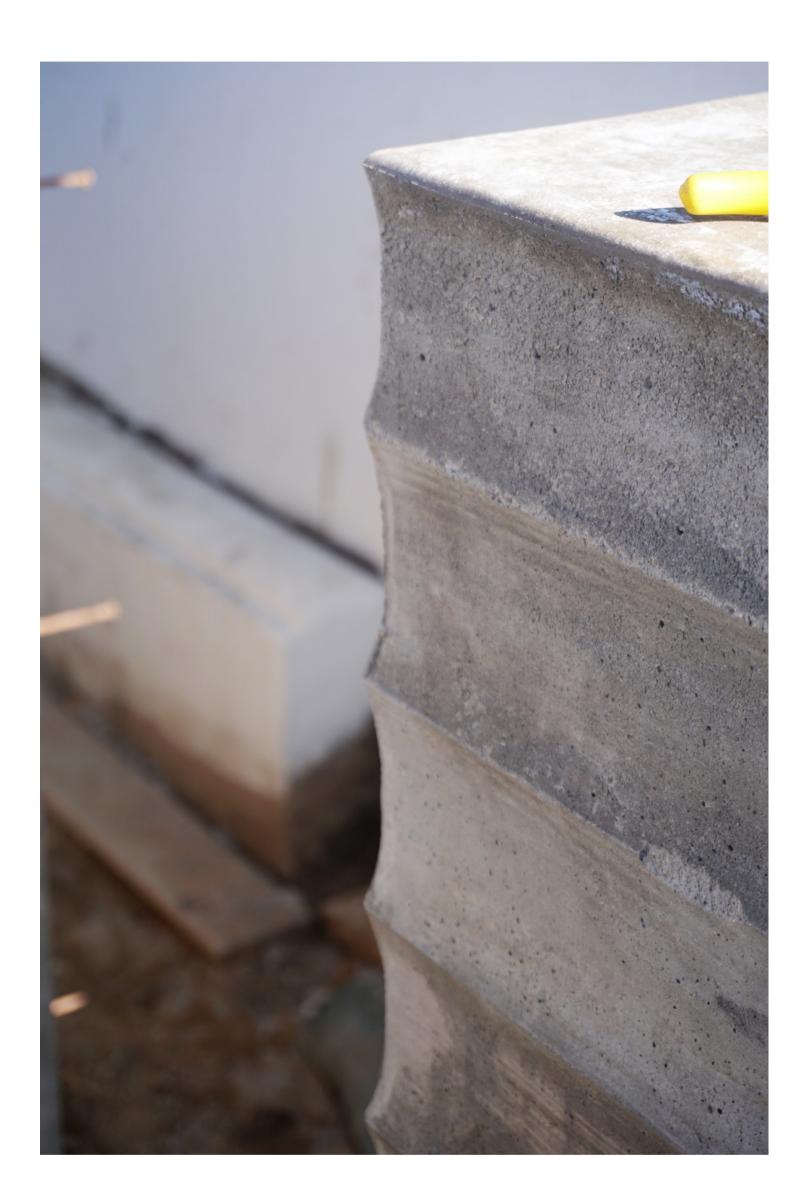


Design Challenge: Drawing inspiration from their roots in South Africa and Brazil, the client challenged the design team to create a home that brought intense thoughtfulness to the interaction between light and materials. These conversations resulted in a series of investigations:

Can the surface of a concrete wall be manipulated to evoke a feeling of softness? Can its edges invite movement and touch? Can its very form heighten a viewer's sensitivity to changes in light?

The design team explored dozens of iterations, often facing discouraging feedback from construction partners. Ultimately, a scalloped pattern that balanced delicacy and stability became the solution that defines the project.





Light & Material

Working closely with local craftsman, every variable of the concrete was tested and adjusted. The formwork was custom milled to accomplish the subtly curved silhouette. A unique color was used to bring more warmth to the home. The form ties were carefully planned to center on every fourth scallop. The finish height of every floor and ceiling was adjusted to perfectly align with the concrete coursing. And if you look very carefully, you will notice that the the vertical seams of the formwork align on every tenth course.





Authentic Expression

The consistent and reserved material palette stands in contrast to the intensity of the countless explorations of forms. The result is a quiet, singular composition, pairing indoor rooms with protected outdoor spaces.







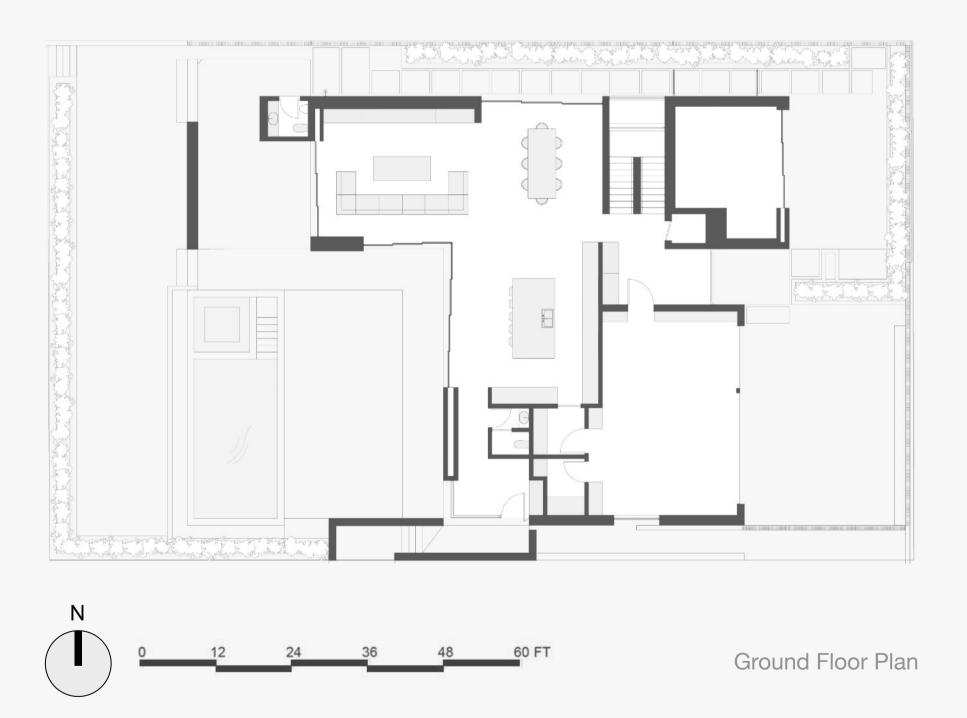
Material Duality

The scalloped concrete walls are conceived as primitive elements, native to the earth. In contrast, the cedar volumes are delicately perched above the site, creating an intentional void between the two characters.





Second Floor Plan



Resource Conversation

Energy use is offset by means of a rooftop solar array, integrated into the battery backup system. Large overhangs and recessed shade pockets provide protection from unwanted solar gain, especially on the south and west facades. Formwork was reused to limit construction waste. Low water landscaping was used throughout the site.







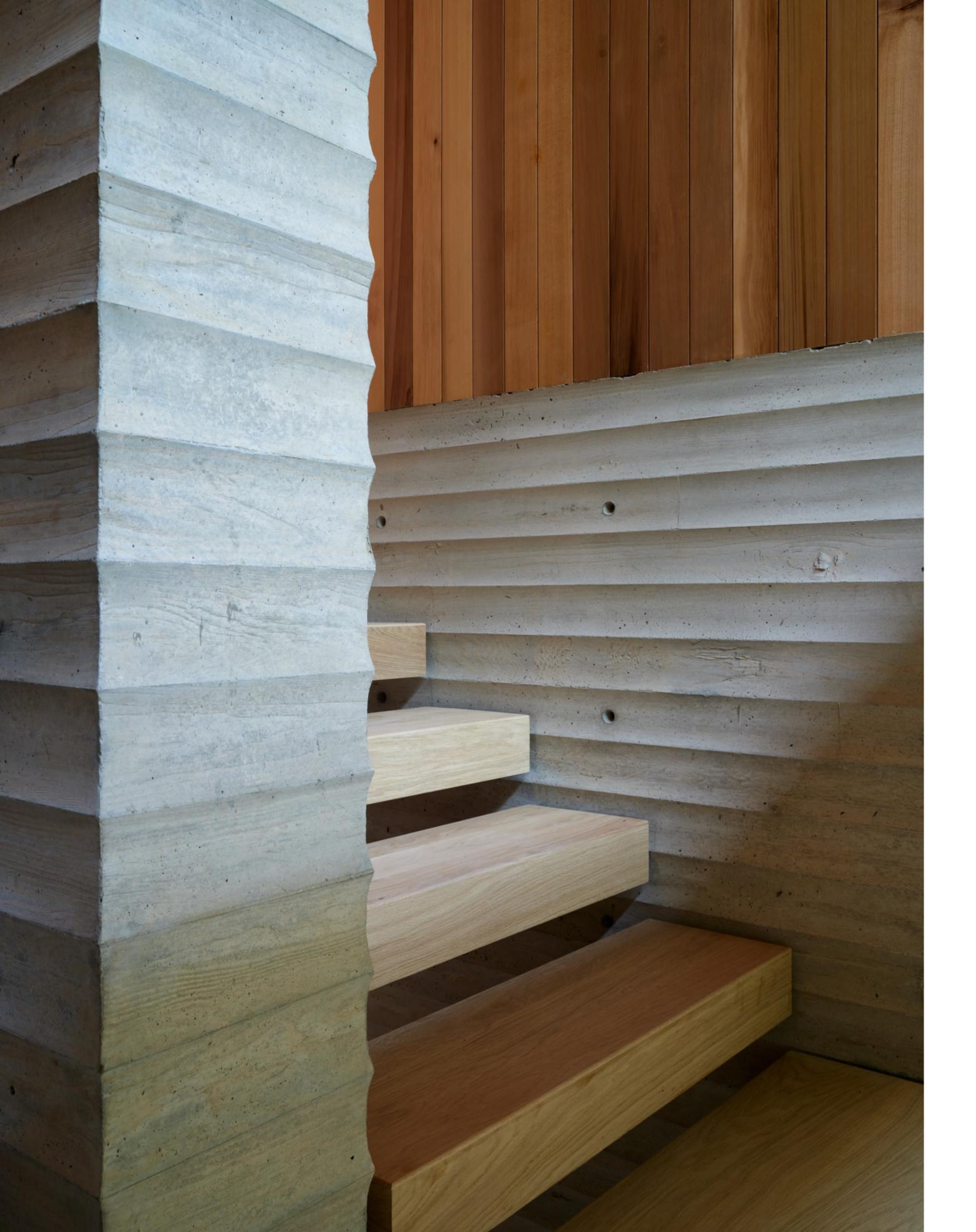


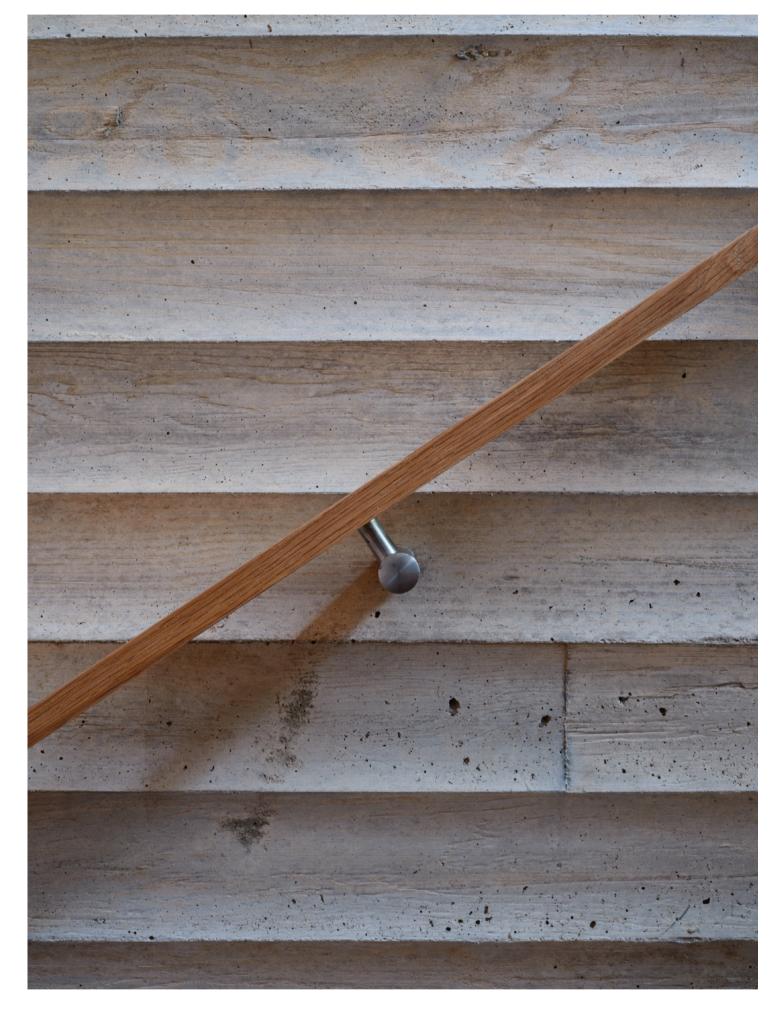
Form vs. Space

The primary interior stair represents the culmination of material tension. The concrete wall is simultaneously is a floating form (positive) and the boundary of the space (negative).

Occupants circulate around the centered concrete wall, while the void of the staircase of established by the concrete walls at the perimeter.







Precision and Imperfection

The precision of planning stands in contrast to the beautiful imperfection of the concrete.



Short Views Pocketing doors and narrow gardens create unexpected moments of nature and light.





Heavy & Light Concrete serves as the finish floor surface, while cedar dances on the ceiling above.





Thank you for your consideration

