

Case Study House No. 8



Anthony Rodriguez

Exterior Image Of the Eames House (1)

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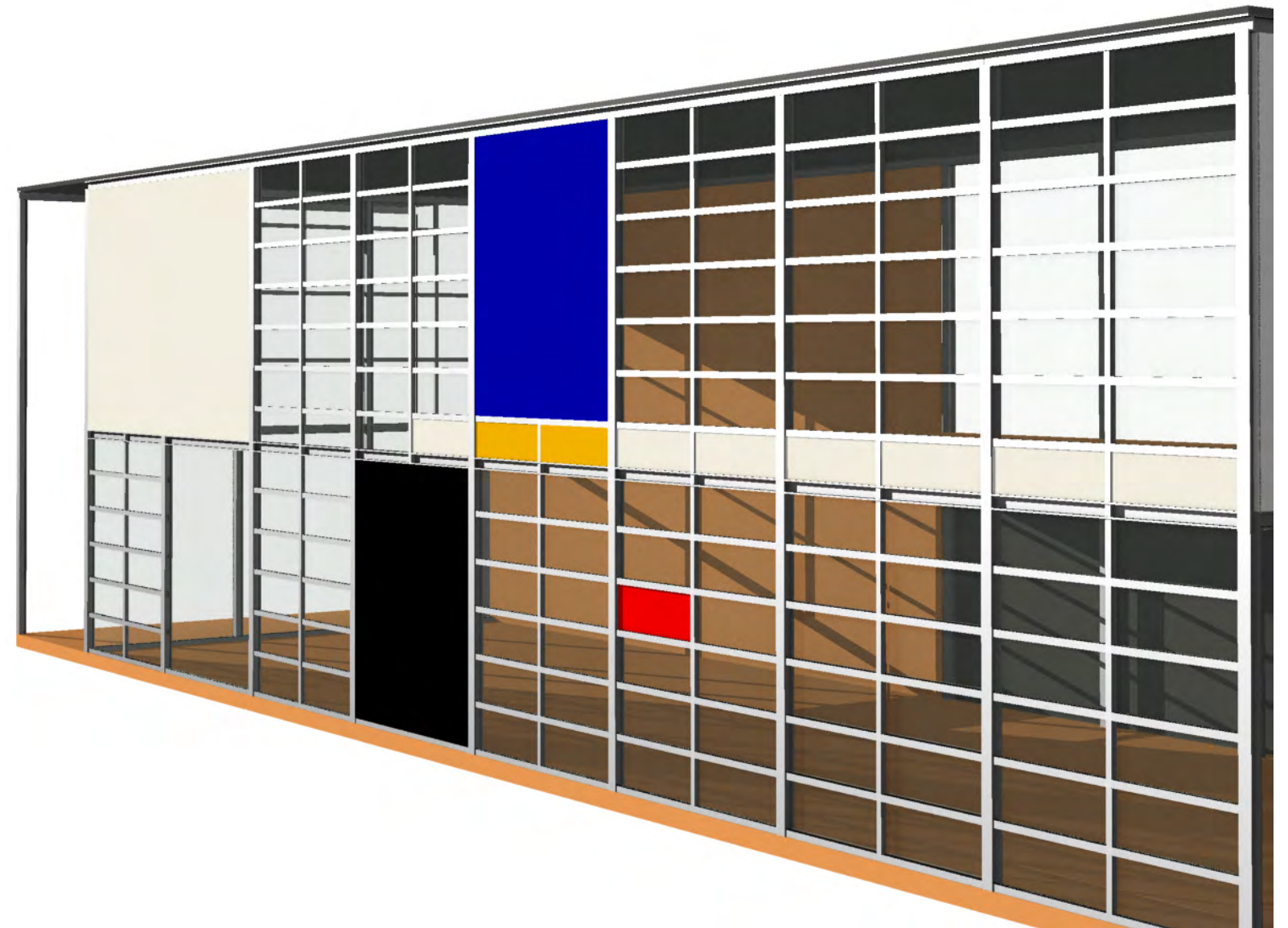


Interior Image Of the Eames House (2)

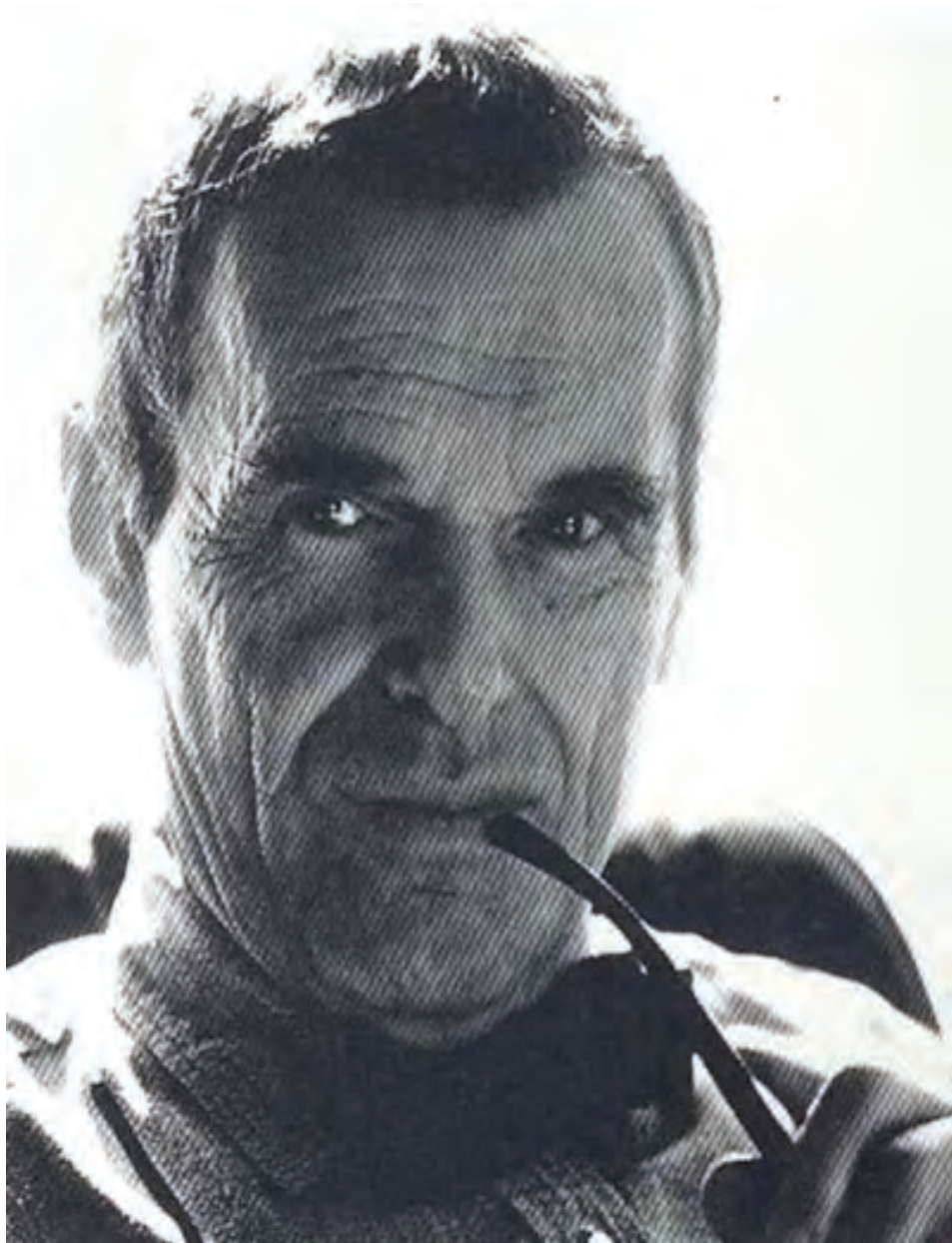
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Case Study House No. 8



1949, Charles and Ray Eames designed the Eames house



Charles Eames (2)

Charles Eames was born in 1907 in St. Louis, Missouri. He attended school there and developed an interest in engineering and architecture. After attending Washington University on scholarship for two years and being thrown out for his advocacy of Frank Lloyd Wright, he began working in an architectural office.

The Designers

Charles and Ray married in 1941 and moved to California where they continued their furniture design work with molding plywood. During the war they were commissioned by the Navy to produce molded plywood splints, stretchers and experimental glider shells. In 1946, Evans Products began producing the Eameses' molded plywood furniture. Their molded plywood chair was called "the chair of the century" by the influential architectural critic Esther McCoy. Soon production was taken over by Herman Miller, Inc., who continues to produce the furniture in the United States to this day. Another company, Vitra International, manufactures the furniture in Europe.

In 1949, Charles and Ray designed and built their own home in Pacific Palisades, California as part of the Case Study House Program sponsored by Arts and Architecture Magazine. Their design and innovative use of materials made this house a mecca for architects and designers from all over the world. It is considered one of the most important post-war residences built anywhere in the world.



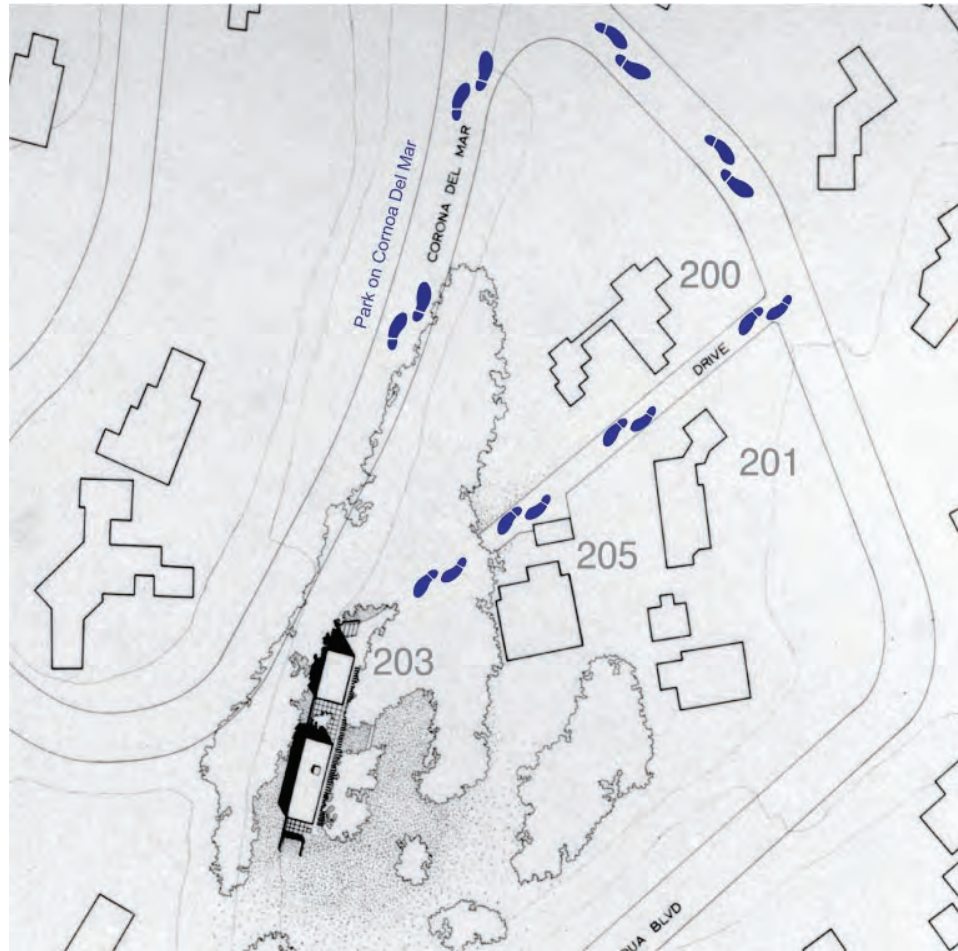
Charles and Ray Eames (3)

Ray Eames (4)



Ray Kaiser Eames was born in Sacramento, California in the middle of the century's second decade. She studied painting with Hans Hofmann in New York before moving on to Cranbrook Academy where she met and assisted Charles and Eero Saarinen in preparing designs for the Museum of Modern Art's "Organic Furniture Competition." Charles and Eero's designs, created by molding plywood into complex curves, won them the two first prizes.

Location

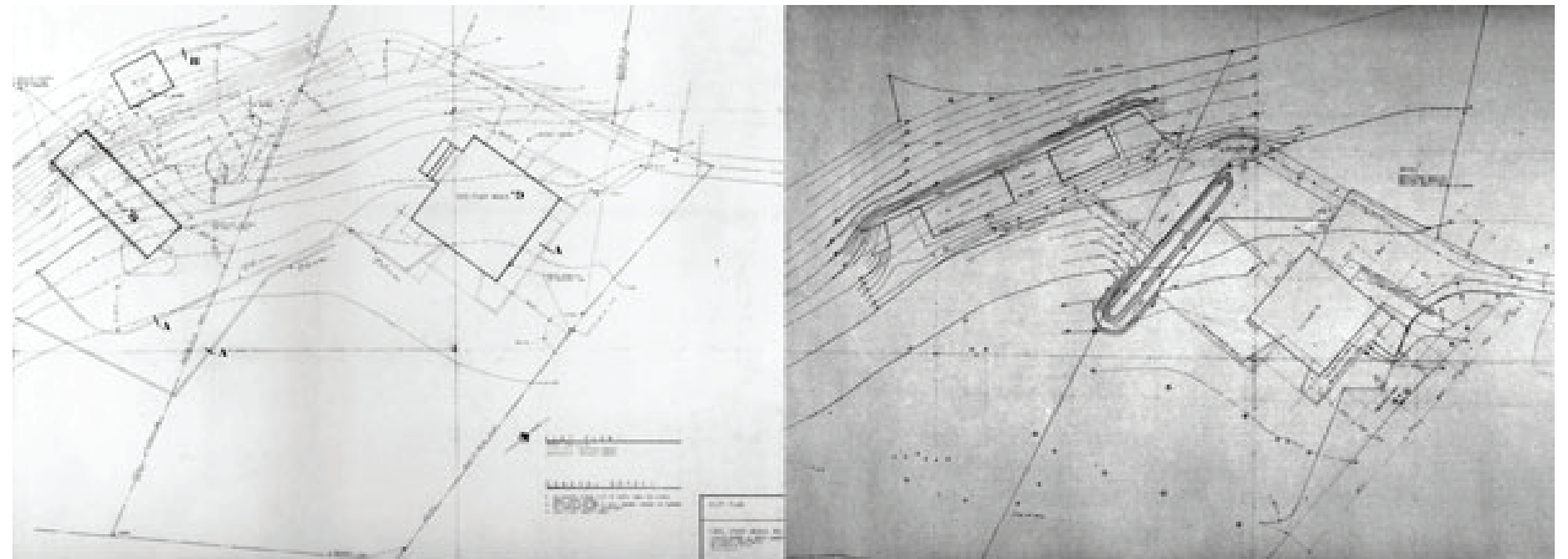


Site map (7)

The Eames House is located at 203 Chautauqua Blvd., Pacific Palisades, CA 90272. There is no parking at the House.

The Eames house is built on a 1.4 acre lot in Pacific Palisades, just across the Pacific Coast Highway from the sea. The north side of the lot slopes up to a wooded bluff; in the middle is a grassy meadow.

The house is situated on a three-acre site on top of an 150-foot cliff that overlooks the Pacific Ocean. The site is a flat parcel on otherwise steep land that creates a retaining wall to the west. The response to this condition was a concrete retaining wall that ties together the two boxes separated by a courtyard that make up the parti of the residence.



Sketch site map (8)

History



Eames House in Production (5)



Charles and Ray Eames (6)

The Eames house was part of the Case Study House Program. This program was ran by John Entenza publisher of Arts and Architecture magazine.

This program was designed to express man's life in the modern world.

Houses were built and furnished by materials and techniques are from World War II

The first plan for the Eames house was called the Bridge house designed by Charles Eames and Eero Saarinen.

War had become short and during this time Charles and Ray Eames fell in love with the meadow.

Charles and Ray Eames had set up a new problem in order to come up with the way to design it.

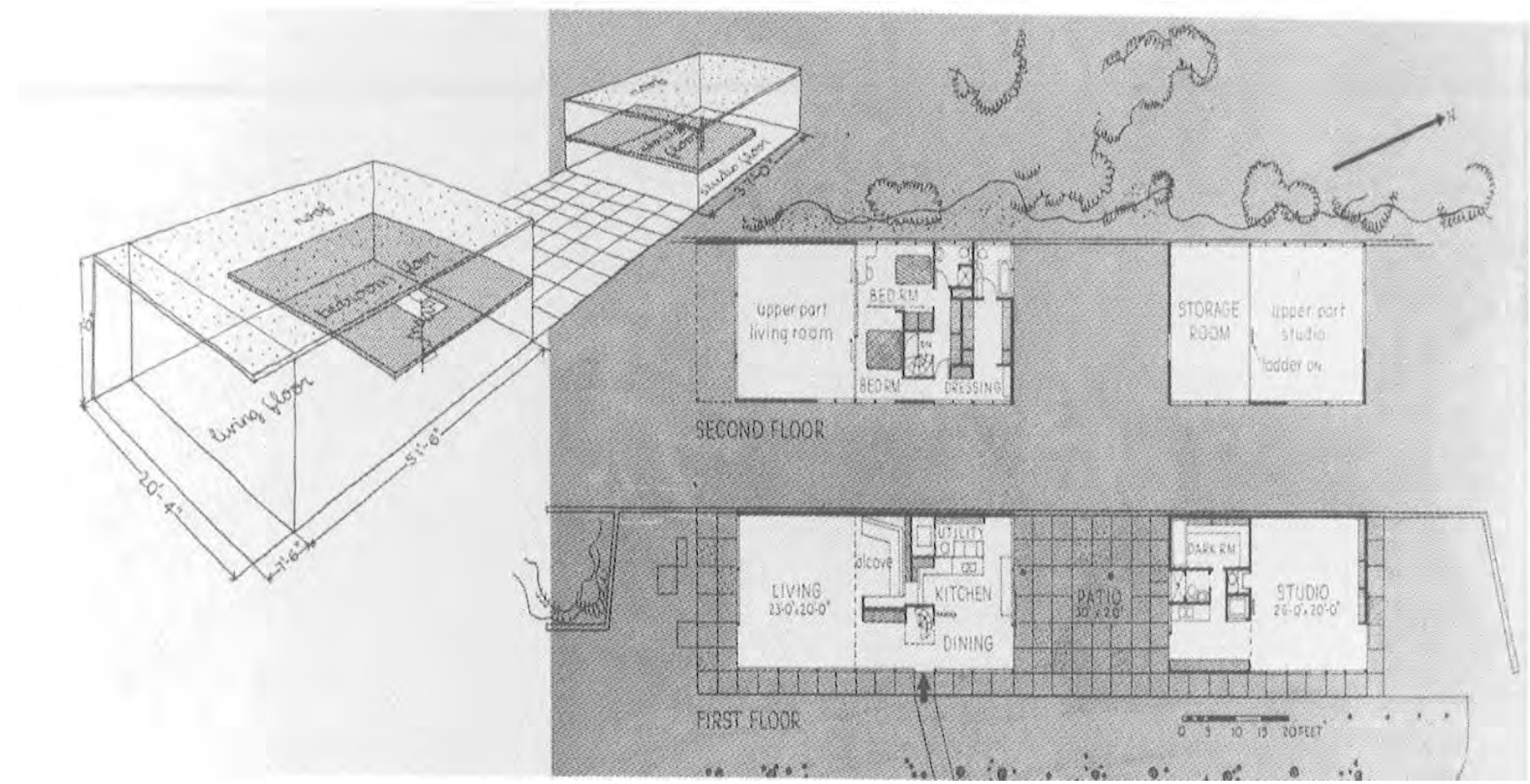
The problems were for not compromising the meadow and to maximize volume with minimal materials.

They ended up using the same off the shelf parts but ordered one extra beam.

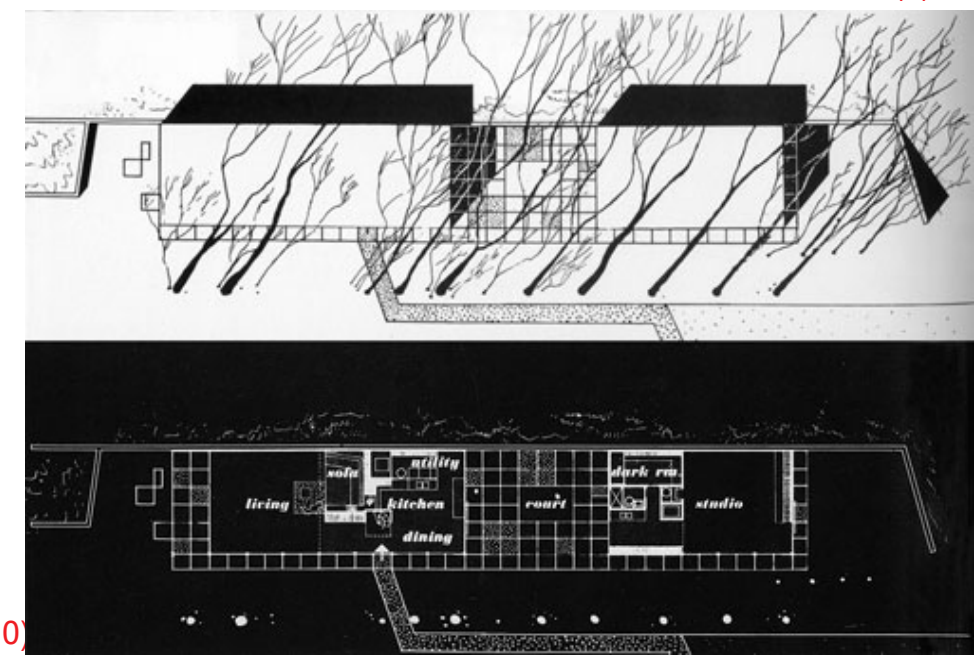
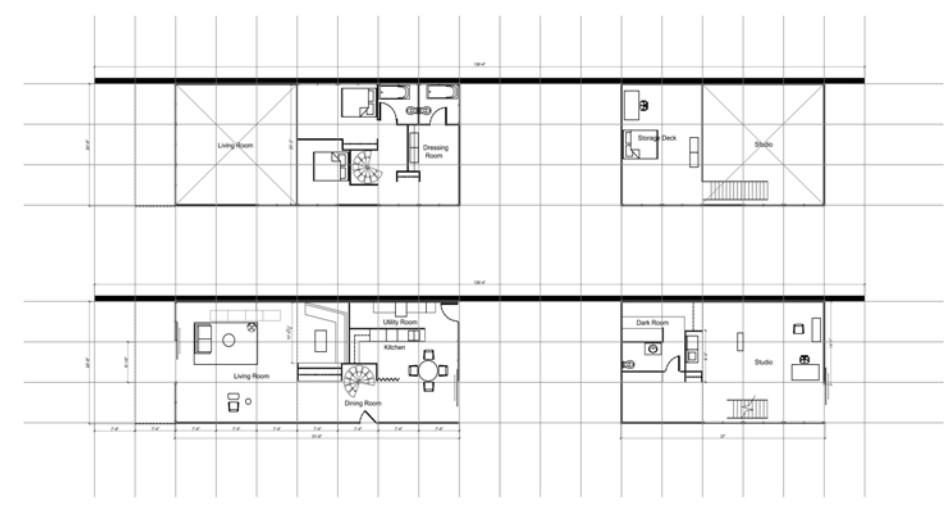
A new design has integrated the surrounding landscape.

Key Dimensions

- The size of the residence area is 1,500 sq. ft.
- The studio is 1,000 sq. ft.
- There's a grid of 7'-4" divided horizontally throughout the entire house.
- Vertically the grid goes 6'-10".
- Bays are 20' by 7'-4" and rise 17'.
- 4" H columns set 7'-4" apart horizontally.
- Each bay is defined by 2 rows of H columns set 20'-1" apart evenly vertically.
- There are 12" open web joists that run across the width of the house.
- An 8' tall retaining wall sitting behind the entire length house.
- 3'-4" standard width windows.
- 1.4 acre lot in the Pacific Palisades.
- Residence is 8 bays wide and studio is 5 bays wide.
- The courtyard is 4 bays wide, connecting the studio and residence.



Eames House Dimensions (9)



Site Plan and Negative Floor Plan(10)

Interior Spaces



Eames House Interior (11)

The northern portion of the residence, the kitchen, and the utility areas open onto the central court.

The configurations of mirrors the arrangement of the service core and darkroom in the studio component is directly opposite.

Double-height, Glass-paneled interior spaces occupy the outermost portions of each component.

That creates alternating positive and negative spaces.

Smaller interior spaces, like the upstairs bathrooms and bedrooms, have well-placed glazed panels that provide light without compromising privacy.

Design of the house reflects space, light, and flexibility.

The double height spaces allow for certain spaces to be created and create multipurpose spaces.

Sliding partitions in the upstairs bedroom areas for maximum flexibility.

A rhythm between double height and single height spaces creating public and private spaces within the living area and the studio, but not strictly.

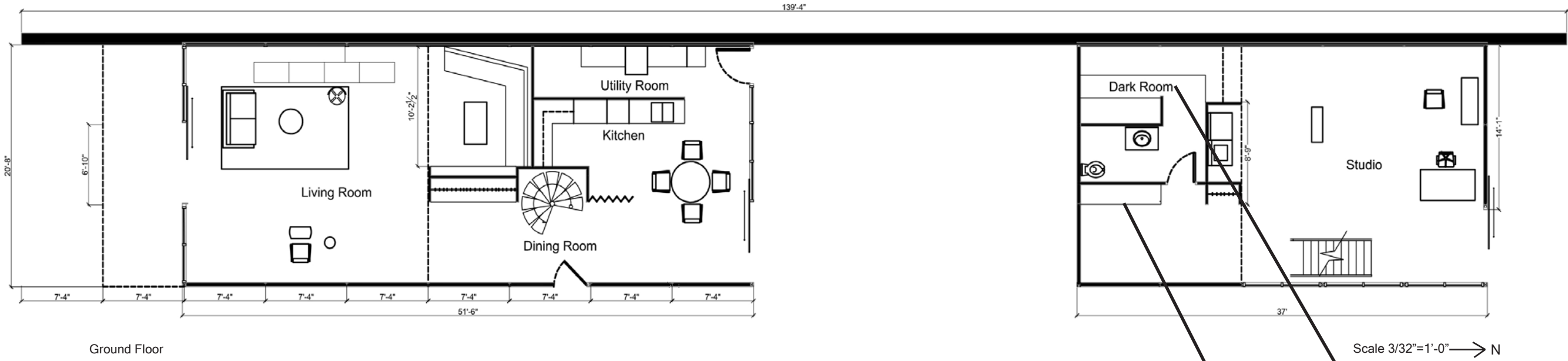
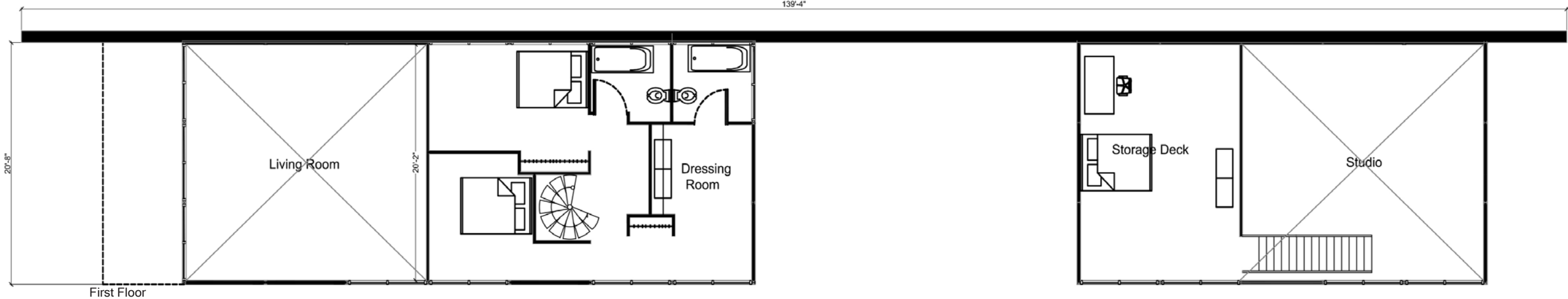
Panels allow light to flow in to the house, and the trees in front allow shade to help keep the inside more cooler.

The use of wood and the glass in the house provide a warm and comfortable feeling within the house.



Eames House Interior view (12)

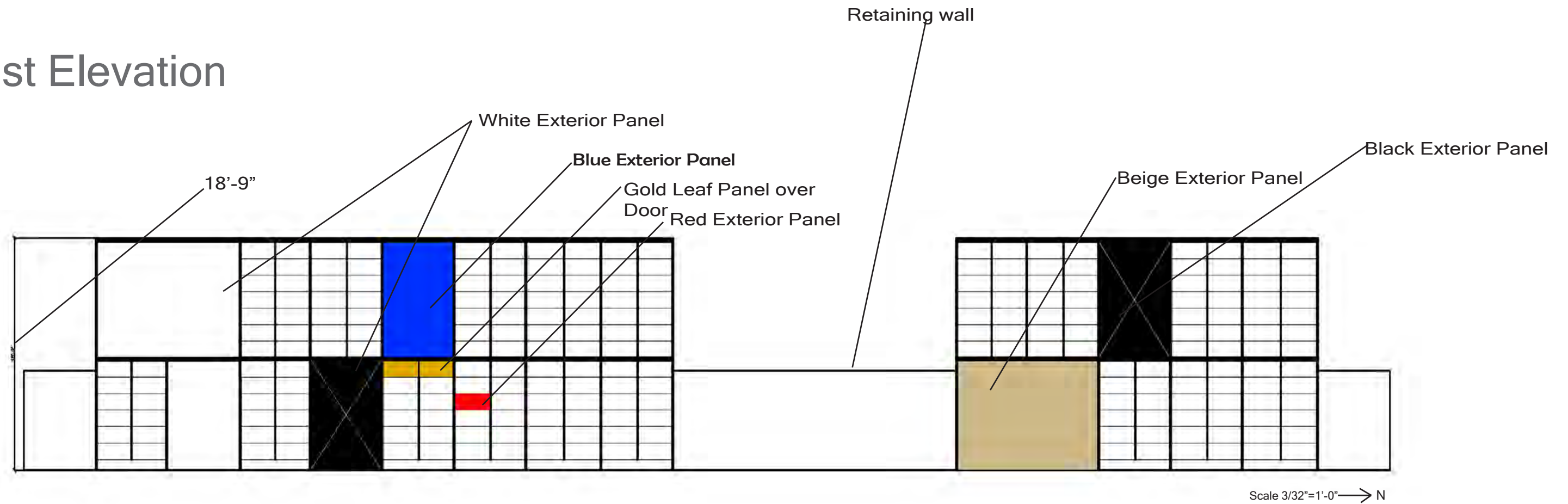
Ground Floor and First



Kitchen

Now a powder room

East Elevation



Panels resemble Mondrian paintings that are attached to the prefabricated materials within the house.
 Colors of black, white, blue, red, and yellow are put as panels throughout.
 The panels are also influenced by a Japanese theme throughout the house as well.
 Bays have plaster, plywood, asbestos, glass and pylon.
 Steel framing made to support the structure and help set guides for each bay.
 Gold leaf panel indicates the entrance to the house.



Eames House Rendering Exterior (13)

Materiality

Materials that related to the war that was going on throughout the time.

Panels in relation to the Mondrian paintings also bringing in japenese influence.

Materials used in order to help speed up the process by using prefabrication.

Main materials within the house are the Steel I-beams, glass, and the colored panels.

Other materials such as wood panels, concrete walls, wood block floors, and wooden staircase within the house as organic materials.

Windows and doors are made of industrial aluminium framing.

The roof and terrace are made of steel.

Prefabrication pushed the production of the house to be built within 90 hours.

Steel framing was used in the structure as the prefabricated frame

Inside materials of the house are in relation to the nature of the outside.

Foundation of the house is concrete, and roof was asphalt.

The walls are a mixture of Glass Stucco, wood, asbestos, metals and synthetics.



Eames House Exterior Web Joist (14)



Eames House Interior View from Outside (16)

The roof has continuous material by the extention into the porch.

Outdoor space created by the deep over-hang beyond the south facade of the residence the size of a bay. (7'-4")

White linoleum tile in the residence and the studio.

Bathroom has black and white linoleum tiles.

Metal deck roofing.

the rear wall is made up of solid panels.

Canvas covered wood partitions in the studio.

Square wood paneling upstairs in the sudio.

In the studio, the ground level has wood floors and the first floor has the white tiles.

Eames House Interior (8)



Eames House Studio Interior (15)

Relationships



Eames House Courtyard (17)



Eames House Interior Stairs (18)

Some of the relationships within the house are made by the designer and the design.

The design of the house matches the furniture made the designers themselves.

The designers being husband and wife included furniture that matched the influence of the house.

Panels, wood, and glass were the simple things they utilized within the house and on the house as well.

The double height spaces that connect within the living area and the studio themselves.

A vertical connection from the studio and living room. (From one to another)

The designers brought some of the nature influence into the house.

The privacy spaces are semi enclosed so that those within the rooms can have privacy within their own house.

The 8 foot tall wall was made so that the meadow would not be interrupted.

There desire to maintain the meadow allowed for the mixture of inside and outside by the mixture of the materials.

Influence to connect the inside and outside was created by the courtyard that is divided between the living area and studio.

References

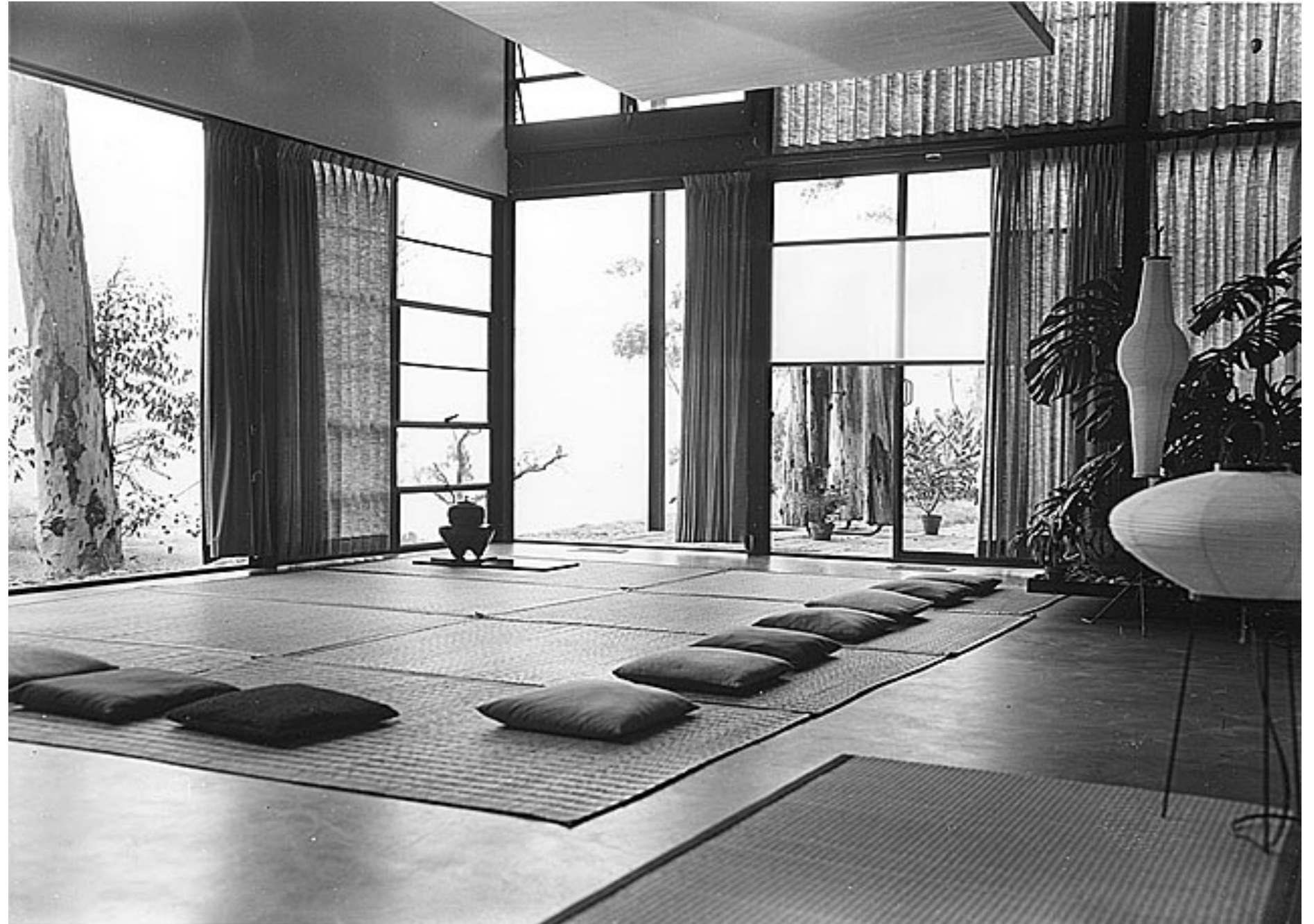
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Painting Of the Eames House (19)



Interior Black and White picture Of the Eames House With the Designers Inside (20)



Interior Black and White picture Of the Eames House (21)