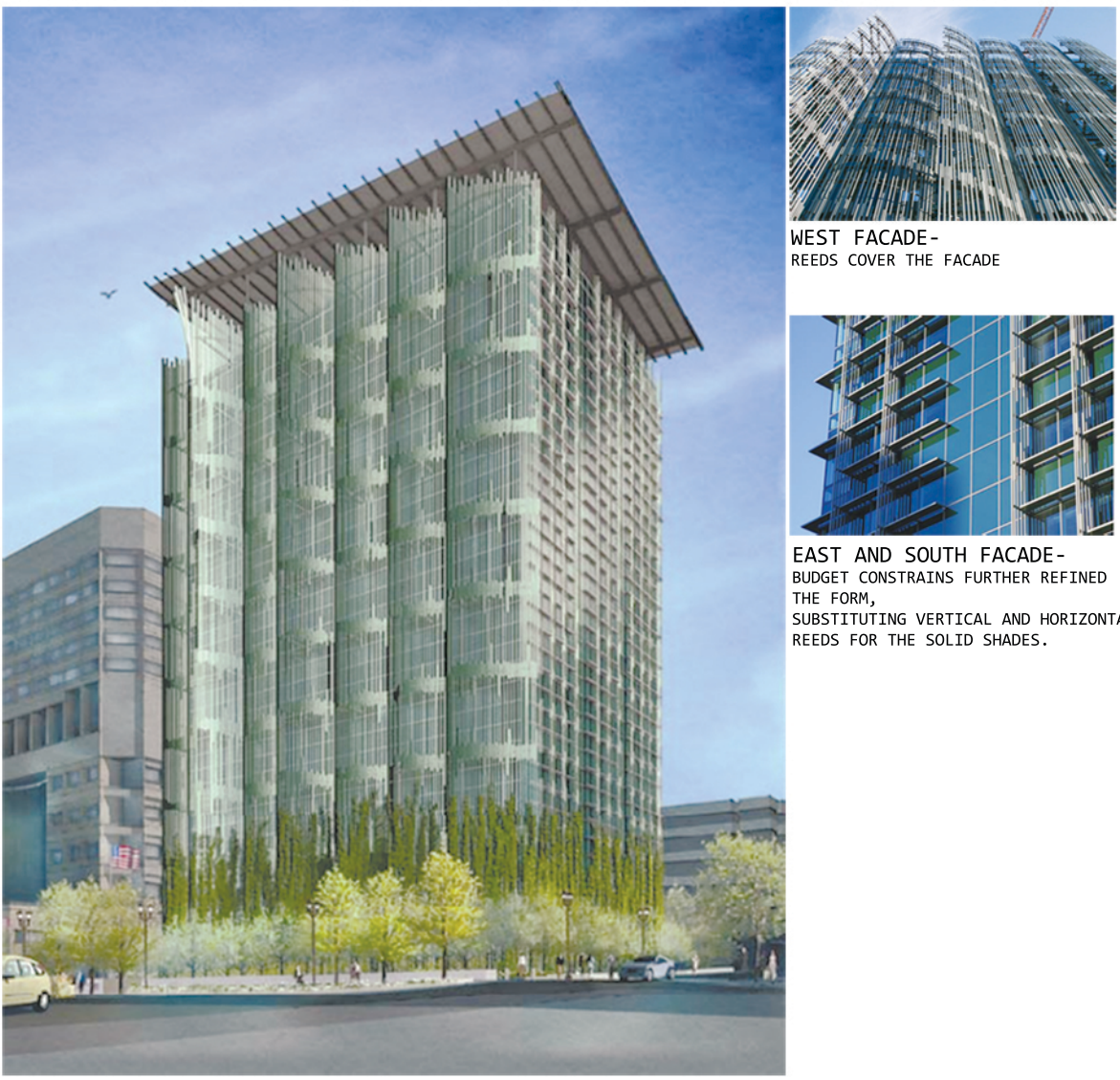




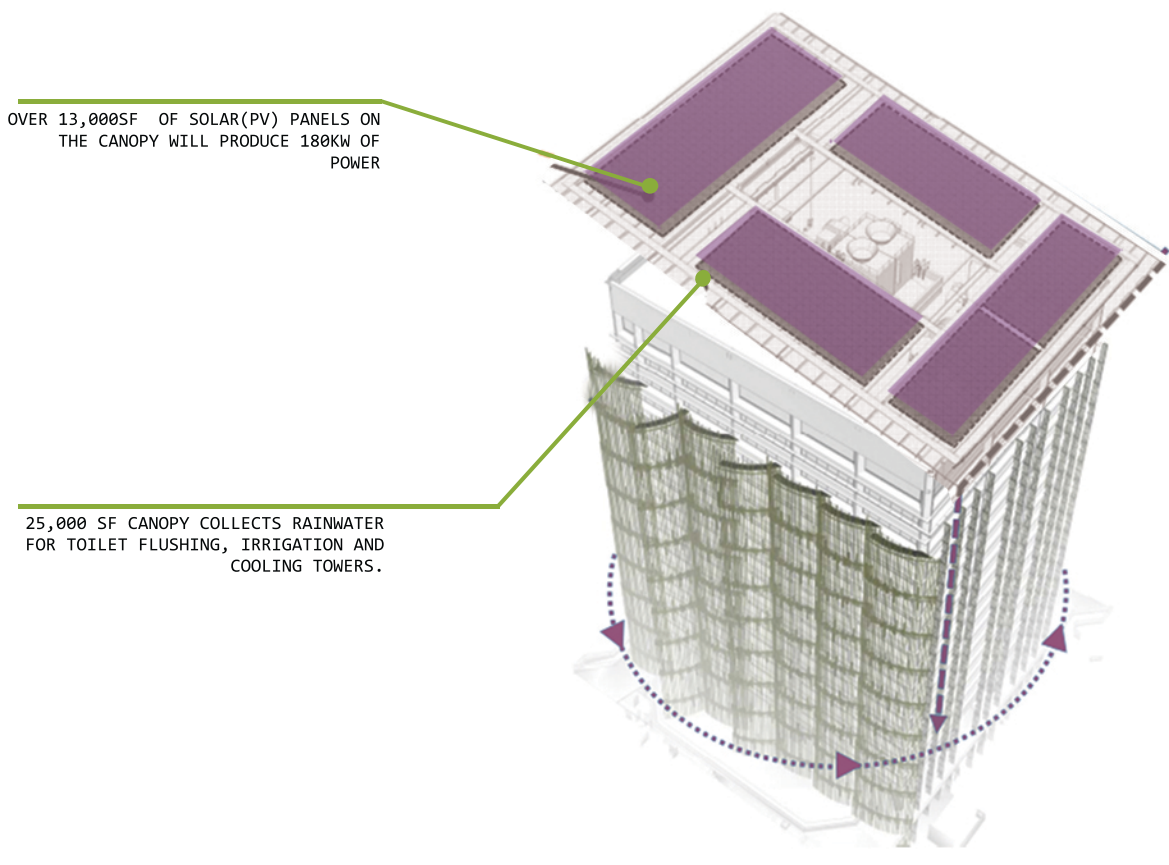
PROJECT 1 > EDITH GREEN-HEIDELL WYATT FEDERAL BUILDING
BY CUTLER ANDERSON AND SERA ARCHITECTS



WEST FACADE-
REEDS COVER THE FACADE



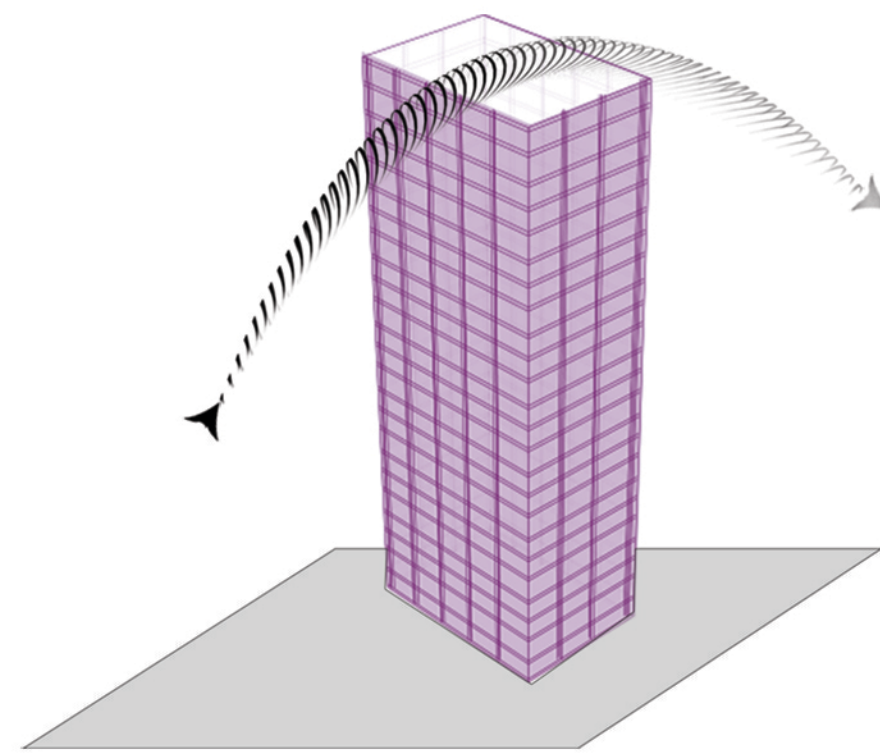
EAST AND SOUTH FACADE-
ROOF CONTAINING FURTHER REFINED
THE FORM,
SUBSTITUTING VERTICAL AND HORIZONTAL
REEDS FOR THE SOLID SHADES.



OVER 11,000 SF OF SOLAR(PV) PANELS ON
THE CANOPY WILL PRODUCE 100KW OF
POWER

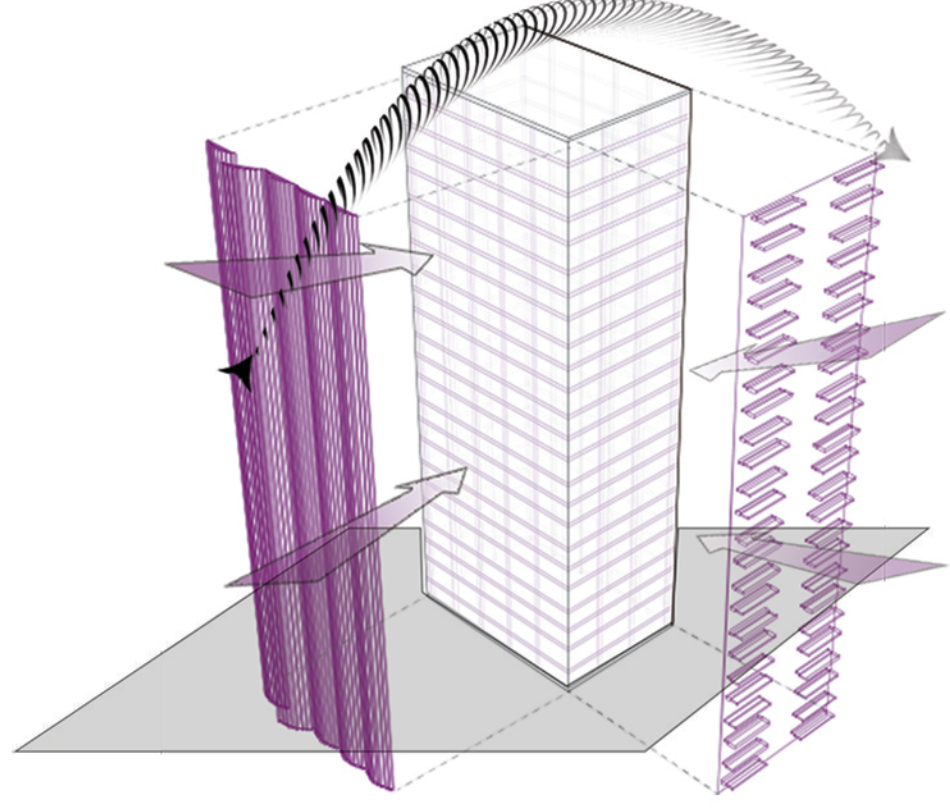
25,000 SF CANOPY COLLECTS RAINWATER
FOR TOILET FLUSHING, IRRIGATION AND
COOLING TOWERS.

RAINWATER HARVESTING SYSTEM



DIRECT SUNLIGHT TO THE WEST FACADE

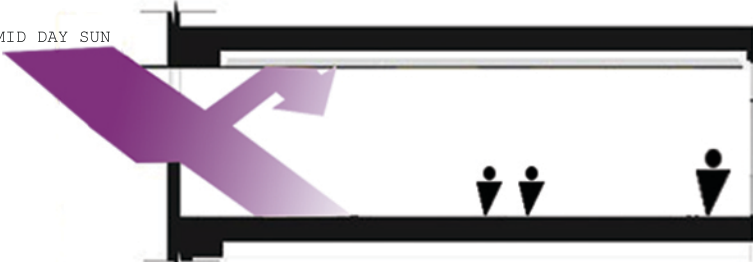
FACADE SUN MOVEMENT



REEDS INSULATED IN THE FACADE TO REDUCE
THE DIRECT SUNLIGHT



REEDS INSULATED IN THE FACADE TO REDUCE THE DIRECT SUNLIGHT



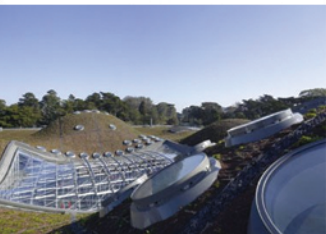
REEDS INSULATED IN THE FACADE TO REDUCE THE DIRECT SUNLIGHT

DAYLIGHT SECTION

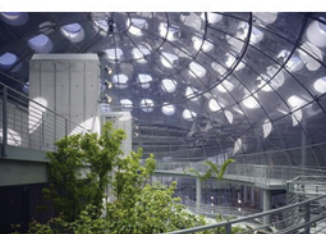


PROJECT 2 > CALIFORNIA ACADEMY OF SCIENCES, SAN FRANCISCO
BY RENZO PIANO

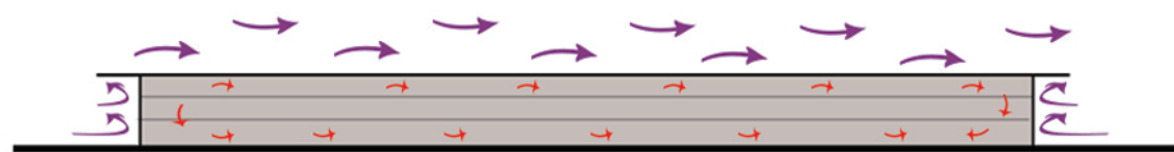
Piano's goal was to create a sense of transparency and connectedness between the building and the park through both a careful selection of materials and a thoughtful arrangement of space. Glass is used extensively in the exterior walls, allowing visitors to look through the museum to the surrounding green space of the park along both the east-west axis and the north-south axis of the building.



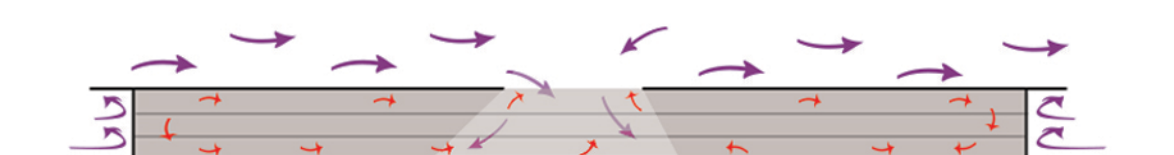
THE ROOF PROVIDES EXCELLENT
INSULATION.



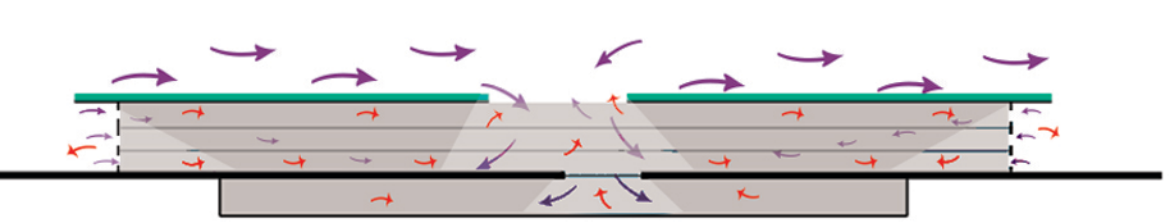
THE ROOF IS BORDERED BY A
GLASS CANOPY CONTAINING
69,000 PHOTO VOLTIC CELLS.



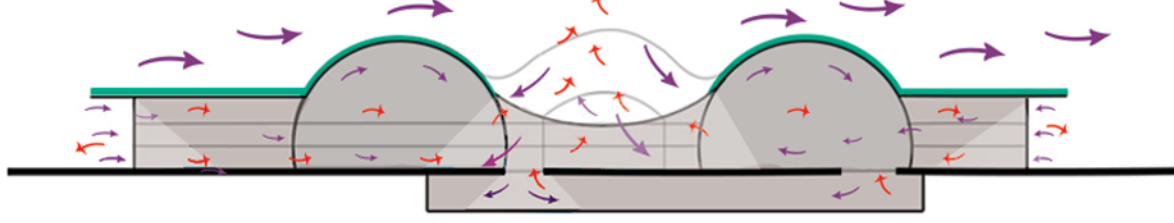
FORM WITH NO SUNROOF
NO SUFFICIENT LIGHT AND AIR VENTILATION



FORM WITH SUNROOF
HOT AIR CAN ESCAPE OUT WHICH ALLOWS ENOUGH VENTILATION AND ALSO REDUCES THE USE OF ARTIFICIAL LIGHTING



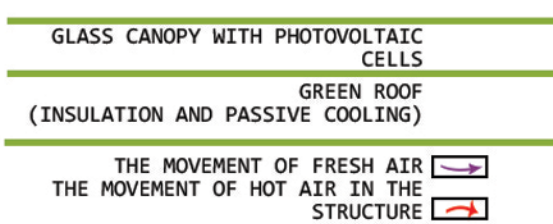
FORM WITH SUNROOF & GLASS AND CONCRETE WALLS
HOT AIR CAN ESCAPE OUT WHICH ALLOWS ENOUGH VENTILATION AND ALLOWS NATURAL LIGHT TO ENTER THE STRUCTURE, USING LESS OF ARTIFICIAL LIGHTING.



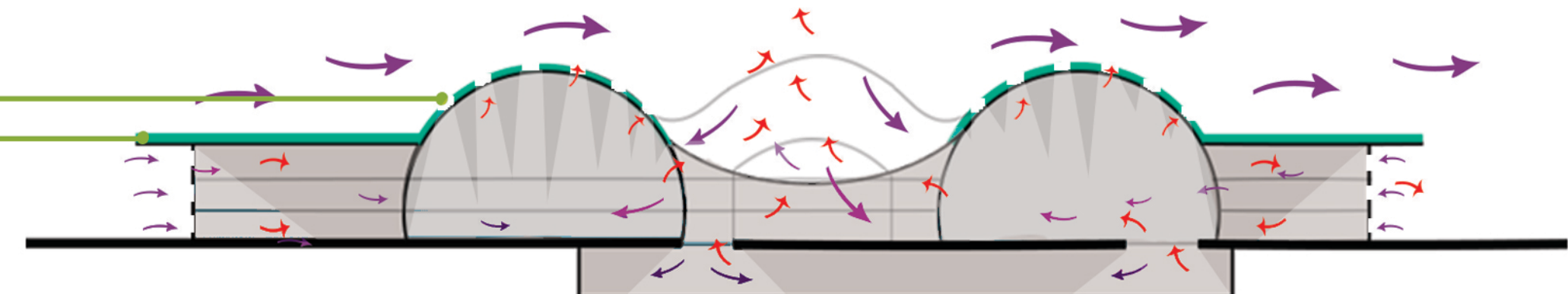
FORM WITH SUNROOF & GLASS AND CONCRETE WALLS
HOT AIR CAN ESCAPE OUT WHICH ALLOWS ENOUGH VENTILATION AND ALLOWS NATURAL LIGHT TO ENTER THE STRUCTURE, USING LESS OF ARTIFICIAL LIGHTING.
SPHERES MANIPULATES THE MOVEMENT OF AIR.



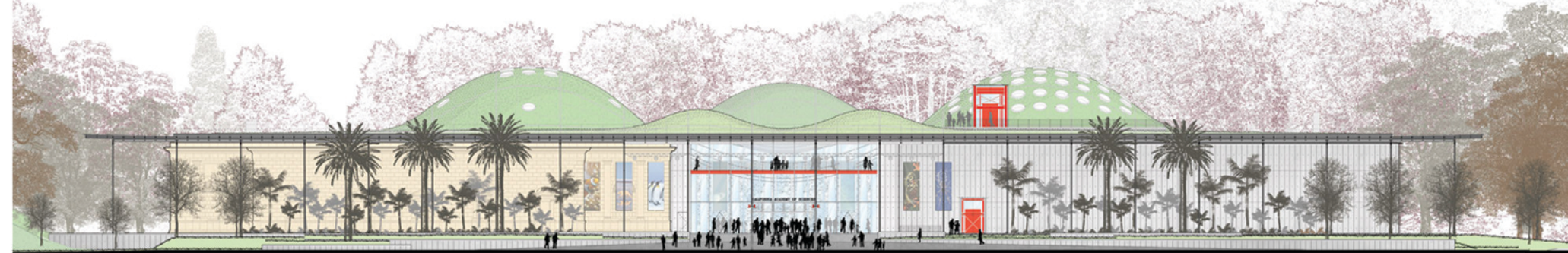
PIANO'S DESIGN WAS INSPIRED BY THE CONCEPT OF METAMORPHICALLY LIFTING UP A PIECE OF THE PARK AND SLIDING THE MUSEUM UNDERNEATH.



GLASS CANOPY WITH PHOTOVOLTIC CELLS
GREEN ROOF (INSULATION AND PASSIVE COOLING)
THE MOVEMENT OF FRESH AIR
THE MOVEMENT OF HOT AIR IN THE STRUCTURE

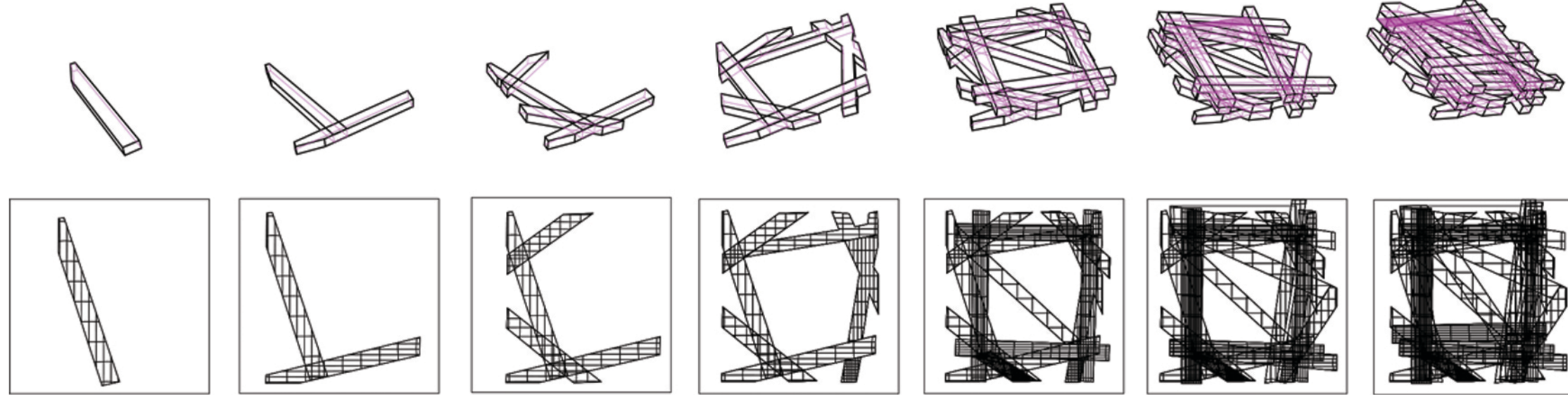


THE ICONIC HILLS ON THE ROOF WERE DESIGNED NOT ONLY FOR VISUAL IMPACT BUT ALSO FOR ENERGY CONSERVATION. THESE HILLS, WHICH FEATURE SLOPES IN EXCESS OF 60 DEGREES, WILL DRAW COOL AIR INTO THE OPEN PIAZZA AT THE CENTER OF THE BUILDING, NATURALLY VENTILATING THE SURROUNDING EXHIBIT SPACES. A SERIES OF CAREFULLY CONFIGURED CABLES WILL PREVENT THESE SLIM COLUMNS FROM BENDING. THE CONCRETE FOR THE WALLS AND FLOORS IS UNTREATED, CONTINUING THE EMPHASIS ON NATURAL MATERIALS. THE GREEN ROOF IS DESIGNED TO REDUCE STORMWATER RUNOFF, PROVIDE INSULATION, AND CREATE HABITAT FOR BIRDS AND INSECTS.

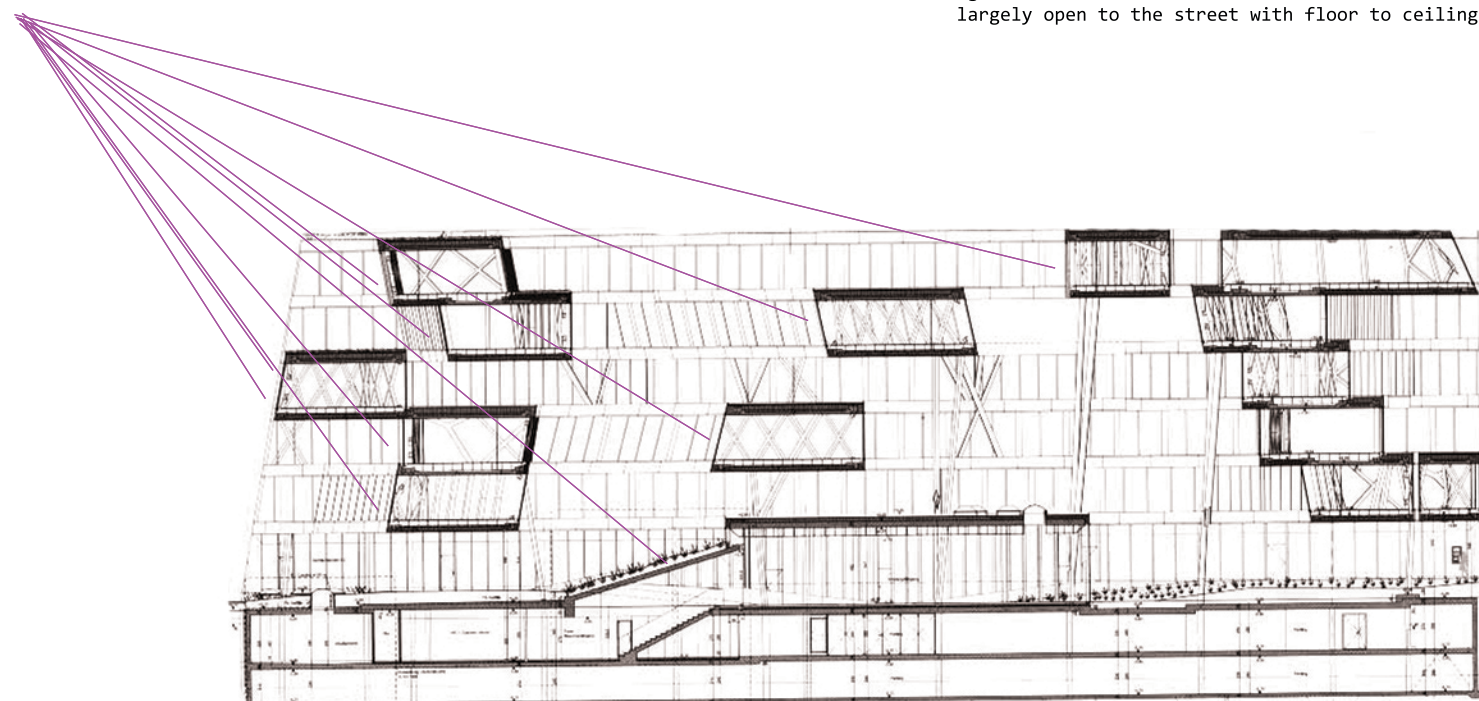


PROJECT 2 > CALIFORNIA ACADEMY OF SCIENCES, SAN FRANCISCO
BY HERZOG DE MEURON

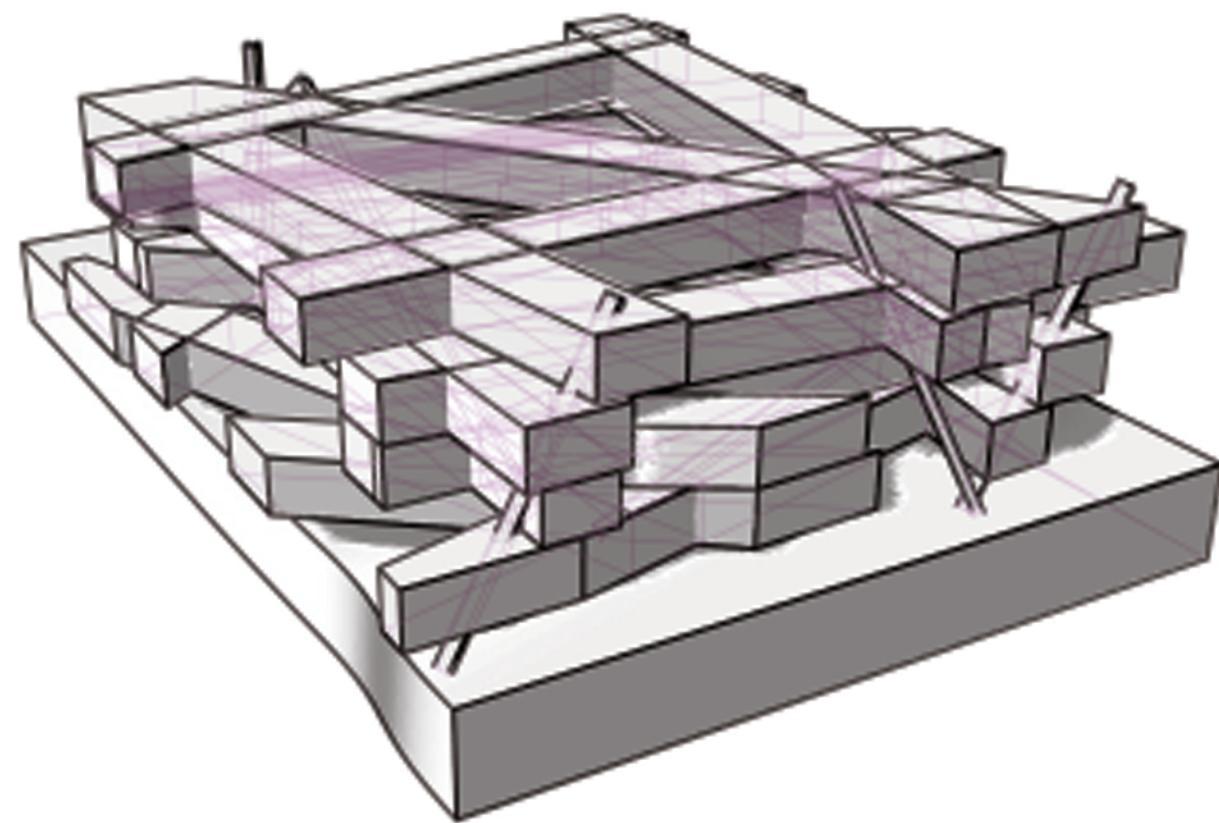
The architecture stands for innovation, openness and communication. Although chaotic in appearance, the slabs meet at four different crossing points per floor organized around static demands and programming. The load-bearing structure of steel frames is 8x8m or 10x10m in height behind the facade but still faintly visible. The glass facade part being compact in this carbon neutral building is used as the simplest use of electricity. Several geos are revealing energy in the form of solar power. A part of the energy is produced from photovoltaic cells. Another particularity of this building is the green roof designed by the artist Titta Sloss which goal is to take up the transparency of the building.



from roof areas generated from the offset stacking of the modules are planted with grass on conceived as roof terraces on the third and fifth floors. Largely open to the street with floor to ceiling triple glazing



The angled windows as those on the lower floors incline upwards and those on the upper floors downward to better capture and utilize solar heat and incorporated photovoltaic cells for electricity.



This fundamental principle is based on a strict regularity: in the four corner points, where the "office beams" meet, are the core zones through which access is provided to the whole building.

