



Gap Inc. Headquarters

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ENVS 634

William McDonough



- One of the leading architects in the field of ‘green design’.
- Tries to balance ecology, equity and economy.

Mission

- Gap Inc. Management came to McDonough in the early 1990's to plan a design for the headquarters that was first and foremost an efficient place to work, but combined with the added benefits of being gentle on the environment and a hospitable place to work.

The Site

- The landscape is 12 acres of rolling hills, fields of scrub sage, wild grasses and stands of oak trees.
- The building was designed to evoke the surrounding terrain; and to highlight the diverse features that distinguish the ecosystem of California's coastal prairie.
- The site is not undisturbed, but it has been treated with respect.



The Roof

- The roof is the defining sustainable design feature.
- It is a 69,000 ft² green roof covered in native grasses and wildflowers.
- The design of the undulating roof has a fundamental effect upon the building's:
 - design profile
 - physical relationship to its surroundings
 - mechanical performance
 - acoustical and thermal comfort
 - storm water management.



The Building

- The pre-cast concrete and glass building itself – is designed to blend in with the soft slopes of the surrounding hillsides.
- The exterior walls of the building consist of more glass than concrete, an obvious first step toward letting the sun shine in.
- To keep the building cool in summer and warm in winter, these windows are double-paned and coated with a high-performance heat blocking agent.



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The Building

- The structure is 195,000 ft² and accommodates over 500 employees.
- The building consists of three connected office “bays” extend up the hillside, flanked by a four-level, mostly underground parking terrace.
- Each of the three bays of offices and workstations is built around a two-story, landscaped atrium that is designed to bring a bit of the outdoors in.



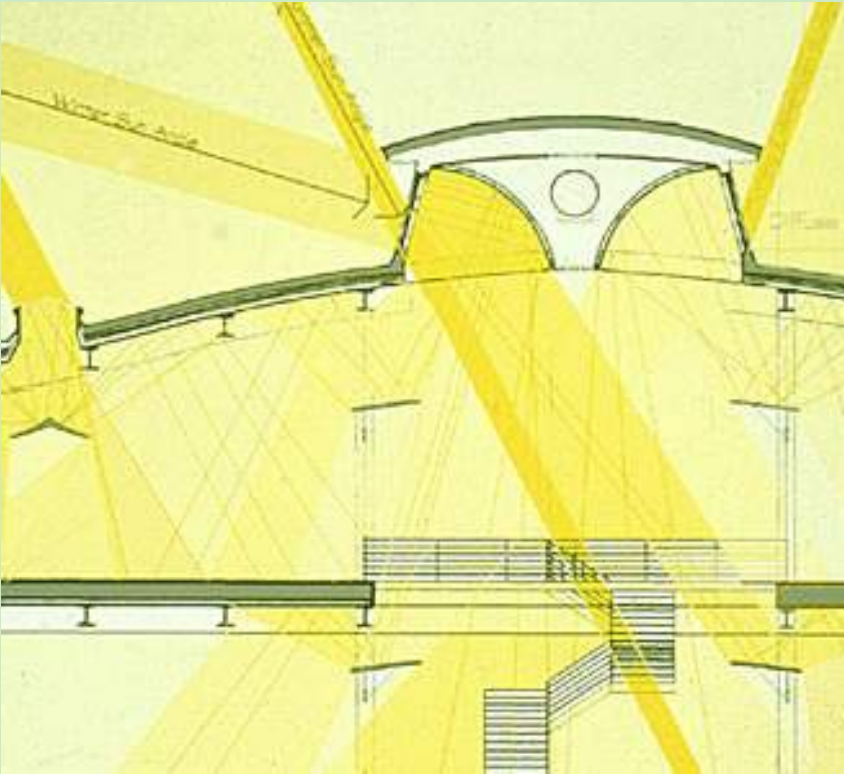
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The Light

- The atrium bays allow for generous daylighting.
- No office of workstation is situated more than 30 feet from a perimeter window or atrium, ensuring that every employee has access to natural light.
- When artificial lighting is needed, high-efficiency, dimmable lamps are computer-activated to fill in gradually for the fading daylight.



The Air

- Air quality was naturally a primary concern due to the fact that the employees spend the majority of their work-week indoors. With this in mind:
 - Windows that actually open were installed along the perimeter of the building – an obvious feature that has become all too unusual in modern office designs.
 - The floors of the building are actually raised, and conceal a flexible network of air-ducts and electrical and communication wiring. Fresh air is drawn into the building, blown across the decks, and fanned into the offices’ interior “breathing zones” via adjustable grilles located on the floor.
 - Employees receive clean air right at their workstations , and – thanks to a simple exhaust system that draws oxygen-depleted air and other pollutants up and out of the building – it remains clean throughout the day.
- Throughout the offices, builders used low-toxicity paints, carpets and tile adhesives, as well as formaldehyde-free particle board.

Numbers

- The Roof

- Studies showed initial costs to be about 130% of a conventional roof, however, annual operating costs are just 70% of a conventional roof.
- The mass of the roof attenuates sound transmission by up to 50 Db, providing an acoustic barrier to the air traffic.

- Use of Energy

- The Gap Headquarters is, according to Pacific Gas & Electric, the second most energy efficient building in their territory.
- The building is 30% more energy efficient than the strict California State laws demand.

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