Hearst Tower – New York City

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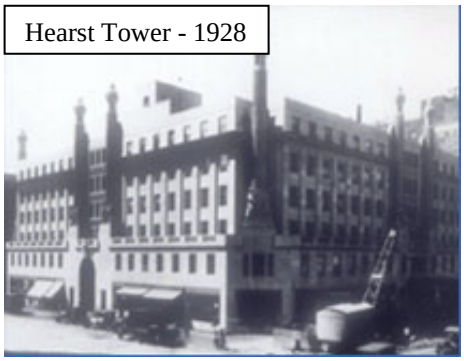
Hearst Corporation (www.hearst.com) is one of the nation's largest diversified communications companies. Its has major media interests that span nearly 200 magazines around the world, including *Cosmopolitan* and *O, (The Oprah Magazine)*; 12 daily newspapers, including the *Houston Chronicle* and *San Francisco Chronicle*; 28 television stations; as well as a controlling ownership in the leading cable networks, Lifetime, A&E, The History Channel and ESPN.

In the late 1990's, the dot com boom and advances in cable networking fueled an expansion of Hearst's growth. Soon it became apparent that their 40,000 square foot corporate headquarters, located at 300 West 57th street in New York City, was not keeping up with the company's growth. In early 2000, the Board of Directors approved the construction of a new corporate headquarters at the place of its current facility.

HEARST BUILDING HISTORY

The original Hearst Corporation's headquarters on 57th street and 8th avenue in New York City was completed in 1928. The six-story building was commissioned by the late founder William Randolph Hearst. The building was designed by Joseph Urban, an architect who was also the brilliant set designer for William Randolph Hearst's movies and the architect for the Ziegfeld Theatre. The building itself took approximately one year to build at a cost of 2 million dollars – about the equivalent of 90 million dollars today. Most notable were the eight phallic columns which contained figures at their base representing the arts and sciences - a fitting place for a newspaper and magazine empire that both informed and titillated its audience. A part of the architectural costs went into designing the building so that it could eventually support an additional office tower. The proposed plans to build nine additional stories above the existing building were submitted in 1936. However, due in part to the Great Depression, the idea

Hearst Tower - 1928



of a nine story addition was not pursued. So, in a sense, the small office building had a grandiose base that was created for a tower that was never erected. The building remained this way - virtually untouched - for the next 60 years and by 1988, the Landmark Preservation Commission designated the building to be a Landmark Site in New York City.

PRESERVING THAT HISTORY….


Hearst Tower - 2001

It took nearly 75 years for the Hearst Corporation to implement W. R. Hearst's original tower concept. In doing so, Hearst set in motion a radical design that would not only set precedent for the City of New York, but also preserve a historical landmark site at the same time. Construction began in 2001. It was the first new construction project to break ground in New York City after the tragedy of September 11th. In October 2006, about three and a half years after breaking ground, Hearst Tower celebrated its grand opening.

One of the greatest challenges faced by the Hearst Corporation in developing their new tower involved respecting the preservation aspect of the original landmark building. In order to proceed with the plans for their tower, Hearst first needed permission from the Landmark Preservation Commission. To obtain their approval, Hearst knew they needed a design which maintained parts of the original building. Hearst proposed that the famous façade of the original structure be maintained and the new tower be erected within the remaining area. The original dimensions of the building's footprint were approximately 200 by 200 feet, while the tower's footprint was to be 160 by 120 feet – fitting inside the original structure. After review of the rather unique plan, the Landmark Preservation Commission approved the proposal.

The tower was primarily designed to serve as a new home for the nearly 2,000 Hearst Corporation employees in New York City, which previously had been scattered in rented spaces throughout the city. The tower allowed the corporate offices to all be

united and, in addition, offered features like a subsidized fitness center, a corporate café, a theater, a broadcasting studio and a digital photography center. The cost of the tower was approximately 500 million dollars.

HEARST GOES GREEN

The Hearst Tower was designed by Foster and Partners of London, England. The 42-floor structure embodied a diagrid design, (a word contraction of diagonal and grid). This allowed for more natural light to come inside the office building while getting rid of the need for an extra 2,000 tons of steel that a regular frame would necessitate.

The architects also utilized many other new and innovative ideas throughout the building. In doing so, it became the very first building in New York City to receive a Gold Rating under the Leadership in Energy and Environmental Design (LEED) by the U.S. Green Building Council. The architecture makes use of several design ideas that save energy. An example of this is the limestone atrium floor that has a polyethylene tube inside it which can heat and cool the atrium by running either warm or cold water through it. Another architectural design that was implemented into the structure was a three story waterfall in the atrium, called "icefall", which cools the atrium in the summer and provides humidity in the winter. The water that is used in this waterfall and in the atrium floor is collected from rainwater falling off the roof.

The Hearst Tower's structural system consists of a triangular diagrid perimeter. Each diagrid is four stories tall. This innovation transfers both gravity loads and lateral loads and eliminates the need for vertical columns on the exterior of the building. The absence of columns in the corners of the building provides great panoramic views from the interior. No vertical steel beams were used in construction, which is a first for a North American office tower. In addition to giving the tower a unique architectural design, the diagrids provides the building with superior structural efficiency.

Old & New Structure – from inside

The structural materials used in the Hearst Tower include 12,000 tons of steel framing and concrete filling in the mega columns. Due to the unique diagrid framing

system, the tower used 20% less steel than would have been required for a traditionally framed steel building. An amazing 90% of the steel used in construction came from recycled material. Keeping with the recycling theme, Hearst and its team of building professionals went to great lengths to collect and separate recyclable materials. As a result, about 85 percent of the original structure was recycled into the new building.

One of the largest contributors of the building's LEED certification was the creative use of rainwater. The building collects up to 14,000 gallons of rainwater at a given time, and stores it in a tank in the basement. As previously mentioned, this rainwater is used for the air conditioning and heating system whereby water is pumped through the limestone floors to either chill or heat the area as required. The water is also fed into a special pumping system to irrigate plants and trees both inside and outside the building. It is estimated that the rainwater provides the building with more than half of the water needed for the entire tower. Collecting the rainwater reduces the amount of rainwater dumped into the City's sewer system by 25 percent.

Another innovative design are the "low-E" windows. These serve to increase the amount of natural light that enters the building while keeping out the radiation that causes heat. The optimization of natural light has been demonstrated in recent studies to have important, positive effects on occupant health, quality of life and productivity. Also installed are lighting sensors that monitor the amount of natural light entering the building and limits the amount of artificial light added to the building in order to optimize energy conservation. Motion sensors were installed to turn off lights and computers when an area wasn't occupied. In addition, the building uses ultra high efficiency heating and air-conditioning equipment that uses outside air for cooling and ventilation for 75 percent of the year. These and other energy-saving features increase the energy efficiency by 22 percent compared to a standard office building. This is especially critical in a city like New York, where rapidly growing electricity demand sometimes overwhelms the local power supply. Hearst Tower is also completely wireless, which eliminated the need for miles of network cable wiring.

To further maximize the use of natural light, the tower was designed to include as few internal walls as possible. The walls that do exist are coated with low vapor paints. Workstations and offices are furnished with desks, chairs and other furniture that is

formaldehyde free. Concrete surfaces are furnished with low toxicity sealants.

For New York City, the Hearst Tower is a first of its kind. For Hearst employees and visitors, it means a healthier, more inviting and more productive working environment. For New York City's major corporations and building developers, Hearst has set a higher standard for building green.

THE UGLY SHADE OF GREEN

I couldn't end this paper in good conscious without commenting on the plethora of opinions I encountered on the web while doing my research about the Tower's appearance. Since its completion, the Hearst Tower has been included in almost every survey by New Yorkers, architects and the press as the "Ugliest Building in New York". It has been referred to as looking like a space ship landing on the original Hearst building to a handheld accordion dropped on its side by a drunken street musician. Other criticism came from neighbors who find it strange that a building that calls itself "green" leaves the lights on all night, even on weekends. Others familiar with the buildings "green" attributes admitted they couldn't criticize New York's first "green" building regardless of its appearance, with one person likening it to meeting Mother Theresa and telling her she has ugly teeth. With all the praises heaped on the building for its environmental friendliness, there is still something to be said for a building being aesthetically pleasing as well.

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