The Chrysler Building
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May 4, 2004
CON 101
Abstract

Construction of the Chrysler Building began in 1928, a time when people and countries were racing to build the world’s tallest building. For a few short months the Chrysler Building held this title with pride. The Chrysler Building is surely the jewel in the crown of New York City’s skyline. Completed in 1930, the 77 story Art Deco skyscraper, the tallest in the world at the time, was finished and quickly became the symbol of big city glamour, excitement and style. Its cloud-piercing spire and gleaming, steel-clad ornaments depicting gargoyles, and hubcaps came to represent the thrill of the Machine Age at its most exuberant.
The Chrysler Building

When you walk through the streets of Midtown Manhattan, you can’t help but notice that there are gigantic skyscrapers all around you. If you take a closer look you will see a very large and unique building located at 405 Lexington Avenue. As you walk closer to this building you will see large gargoyles coming out of the building, and various car motifs incorporated into the brickwork of the walls. As you take in the sight of this magnificent structure you will realize that you are staring at the Chrysler Building.

Location of the Building

Construction of the Chrysler Building began on September 19th, 1928, and was completed on May 28th, 1930. It’s located at 405 Lexington Avenue between 42nd and 43rd Streets in New York, New York. It was originally designed by William Van Alen for a real estate and theatrical speculator named William H. Reynolds. Reynolds wanted to build the world’s tallest building. Van Alen’s original plans were for a very large building with “strongly romantic imagery.” (Stern, pg. 606) In 1928 all this changed. Reynolds sold Van Alen’s original plans and the building site to Walter P. Chrysler, who was the founder of the Chrysler Corporation.

Chrysler had a different vision for this building. Chrysler wanted his building to be the tallest in the world. This feat carried a lot of importance and prestige in society at the time this building was designed and built. Chrysler also wanted it to have decorations on the exterior of the building that carried a resemblance to his automobiles, and most
importantly he wanted the building to be extremely unique on both the interior as well as the exterior. (Stern pg. 608) When the construction was completed he had accomplished all of these goals.

**Culture and Society**

The construction, design and overall impact of the Chrysler building was successful in symbolizing and reflecting the society in which it was built. The lasting influence and overall impact of the Chrysler Building can be attributed to the fact that in many ways, the Chrysler Building served as a symbol of, if not only the period in which it was built; but of the overall American mentality which has consistently remained affixed on excess and competition.

During the 1920s, people were fascinated by towering buildings that were being built higher and faster than ever before. This meant that there was always a lot of publicity in the media when a taller building was built, and due to this fact, builders were racing to build the tallest building. Chrysler realized the publicity his company would gain by having the tallest building in the world, and he planned on having his building be it. It was a time of technical marvel as far as construction was concerned and it has always been a part of the American culture to have the most, the biggest, and the best. Chrysler was going to have all of these things.

Van Alen’s original building plans were for a fifty-six story tower that would be higher than another building that was also being planned at this time. This other building was the Lincoln Building at 60 West 42nd Street. Walter Carpenter, the designer of the Lincoln Building, then decided to make his building sixty-three stories. As a response to
this Van Alen moved his up to 67 stories. In the end, the Lincoln Building decided on
having only 54 floors. (The Midtown Book)

   It was at this point that Chrysler decided he would gain notoriety by having the
tallest building in the world, and he bought Van Alen’s plans from Reynolds. This was a
time of bragging rights between the rich businessmen such as Chrysler. Originally when
Chrysler took over the project he only wanted Van Alen to increase the height to 925
feet, but when he found out that the Bank of Manhattan was going to increase their
building to 927 feet with a new flagpole on its roof, Chrysler’s plans changed. Chrysler
then gave Van Alen the word to increase the height even more. What Van Alen came up
with was an even larger model, with a huge spire on top.

   This new model was going to be even higher than the Eiffel Tower, which was the
highest structure in the world at that point, at 1024 feet. (Stravitz pg. 46) This added
height was obtained with the new spire, which was kept a secret. This new 185-foot spire
was constructed inside of the building.

   The new spire was kept inside of the fire shaft. Finally, after the Bank of
Manhattan had been changed to 927 feet, the spire was added. It was brought up to the
top of the building and riveted into place in only 90 minutes, and astonished the world.
The new height of the building was 1046 feet, which was the tallest structure in the world
until the Empire State Building was completed just months later. (Stern pg. 605)
The Spire

Construction of the Building

The methods of construction, the tools, and the equipment used were not very strange, due to the fact that this building was constructed in the twentieth century. Much of the work done on this building was done as it would be done today. Scaffolding was used to erect this building to the heights that it eventually reached. The vehicles used for transportation of steel girders and other supplies could not hold as much, so it took longer
to transport supplies. Tools needed for this project were not unlike tools used today. The main difference is that the workers at that time didn’t have the advanced power tools that we have today, so they were forced to use more manual labor. Girders and other supplies had to be lifted through a pulley system, without the help from machines and cranes that we use today. Even without some of the modern tools and supplies we have today, the Chrysler Building was built at a rate of four floors per week. (The Chrysler Building Website) This is a very impressive rate even by today’s standards.

The Chrysler Building’s frame was made of steel, which is standard for buildings of this size. Due to the height and size of this building, steel is needed because of its strength against various forces. The basic frame of steel may not seem as interesting today as it did then, but at the time any design that went higher than the buildings before it was cutting-edge. Skyscrapers were a newer idea, and designs for new buildings all had their own uniqueness.
**Materials**

As noted in the previous paragraph, steel was used for the frame of the building. But the interesting materials are the ones that were used on the exterior of the building, and on the interior work. The large amount of materials used to construct this building is amazing to think about. Some of these are: 20,961 tons of structural steel, 3,862 windows, 3,826,000 bricks, 2,788 doors, 446,000 tiles, 391,881 rivets, 794,000 pieces of partition block, 200 flights of stairs, two-fifths of a mile of aluminum railings, 35 miles of pipes, 15 miles of brass strip for jointing in terrazzo floors, 10,000 light bulbs, 750 miles of electric conductor wire, 52,000 square feet of marble wainscot, and 3,200,000 square feet of painted surface. (The Chrysler Building Website) The thought of all these materials is close to unbelievable. It is hard to imagine that all of this material exists within one city block.

**Exterior Design**

The exterior was covered in brick and Nirosta metal, which is a mixture of chrome, nickel and steel. This unique Nirosta metal was made by Krupp of Germany. (The Chrysler Building Website) The Chrysler Building was the first building to use this type of metal on its exterior. Incorporated into this exterior design are a band of abstract automobiles that are used as allusions to Chrysler’s autos. (Stravitz pg. 23)

The exterior details of this building must be seen from a distance in order to be fully appreciated. The top of the building is a large terraced dome, which Stern describes in his book as “an invention almost as allusive, bizarre, and sculpturally complex as a
church final by Borromini.” The large triangular-shaped windows set into the vaults in the spire were later illuminated at night, which is an awesome view from a distance.

On the 13th floor of the building’s exterior there are more decorations that are derived from Chrysler’s automobile symbols. There is a long line of figures that are meant to be hubcaps that are all along the building to the corners where there are huge winged-gargoyles that are designed after the radiator caps of the 1926 Chrysler automobiles. (Stravitz pg. 24)

On the 61st floor there are eight more gargoyles. These are constructed of stainless steel, just like the ones on the 13th floor, but are monstrous eagles that are placed in pairs at each of the building’s four major corners. These eagles were created by Cesley Bonestell, a well-known artist famous for his “space art”, and are modeled after the hood ornaments from the 1929 Chrysler Plymouth. (Stravitz pg. 24)
Interior Design

The interior of the building is even more unique than the exterior. The lobby was originally dark with dim interior light, but had lights added by a later owner in a massive 10,000 man-hour restoration project. (The Midtown Book) The interior design is of “Art Deco”, which is an abbreviation for “Exposition Internationale des Arts Decoratifs et Industriels Modernes.” The walls are constructed of Moroccan Rouge Flame marble, the floors are yellow sienna, and the trim is amber onyx and blue marble. (The Chrysler Building Website)

The ceiling of the lobby has a 97 by 110 foot mural entitled “Energy, Result, Workmanship, and Transportation”, and a painted view of the building itself. This mural was painted by Edward Trumbull on canvas at an offsite location and was brought in sections. Trumbull used actual workers who built the building as models for his mural. (The Chrysler Building Website)

There are thirty-two elevators in the building, and each one is unique. The doors of these elevators use woods from all around the world, such as: Japanese ash, English gray hare wood, and Oriental walnut. The interiors are designed with American walnut, dye-ebonized wood, satinwood, Cuban plum-pudding wood and curly maple. At the time the Chrysler Building’s construction, these elevators had the longest shafts, and were supposed to be some of the fastest in the world. These elevators were designed by the Otis Elevator Company. (Stern pg. 609)(The Chrysler Building Website)

The sixty-sixth through sixty-eighth floors contained what was called the Cloud Club, which is now closed. The members of this club were executives in the automobile, aviation, steel, and oil industries. These rooms were: a Georgian lobby, Tudor lounge
and coffee rooms, a Breton taproom, and a series of private dining rooms which had walls lined with photo murals based on industrial themes. The main dining room was located in the first of the terraced domes that formed the building’s crown. It had columns made of blue marble with ground and etched glass, and the vaulted ceiling had clouds above the New York skyline painted on it. (Stern pg. 609)

**Labor Force**

The labor force at this time in New York was very strong. During the first year of construction, the Great Depression had not quite hit yet, but there were still plenty of people in the city who were looking for jobs. Despite the fact that this was to be the tallest building in the world, and people were to be working at great heights, there were still plenty of workers. The construction site was amazingly safe for its time. During the entire construction of this building there was not one casualty, which was unheard of for construction of skyscrapers at that time. (The Chrysler Building Website)

With a building of this size and complexity, different parts of the construction were handled by different contractors. One example of this was the Otis Elevator Company, which was mentioned earlier. This means that the workforce came from different fields and specialties such as: carpenters, masons, electricians, and plumbers. Van Alen designed the buildings and chose the different contractors that would be used. Strangely, in a show of poor construction ethics, it is believed that Van Alen was bribed by some of these contractors. It was because of this suspicion that Chrysler refused to pay Van Alen his fees when the project was finished. Van Alen sued, but dropped his suit shortly after. (The Midtown Book)
After the Chrysler Building project Van Alen never worked on a major project again. This could have been due to several things; the depression had begun in the final year of the project, and many clients shied away after Chrysler’s claims that Van Alen took bribes from contractors. Whatever the case may be, Van Alen will always be world-renown for his design of the Chrysler Building. (Stern pg. 610)

**If It Were Built Today**

The Chrysler Building was built between September 19th 1928 and May 28th 1930. Although this is almost a century ago the construction of this building is not very different than the construction of skyscrapers today. The builders of this great building used many of the same techniques that we still use and will continue to use in the future. A good example of this is scaffolding which was used to erect this enormous building that is today the world’s 17th tallest. Also we still use steel as the frames of our tall buildings. We may have manufactured new composite materials but we still use steel for its strength, effectiveness and lower cost.

In 2004 we have more advanced tools and machinery. Instead of lifting with pulleys, we have construction cranes that can lift heavy components to great heights. This allows us to move larger objects easier, higher and faster than could be done in 1928. We also have more advanced transportation equipment than they had in the 20s. As opposed to making many trips with their smaller trucks and trailers, with a very low payload we can use flatbed trailers and dump trucks to move parts, waste and debris. Today we often see parts of buildings being pre-fabricated at offsite locations and being transported and reassembled at the building site. This makes construction of the parts easier, quicker and of course more cost efficient.
I think that because this building site is located in a major city, with direct access to waterway, today we could have built this building faster and with more efficiency. We could have fabricated large parts of the buildings off-site and used our superior shipping to move them to the actual building site. This was not an option for the builders or the Chrysler Building. The limited transportation available to them required most of the materials to be assembled on site.

In 2004 we have superior power tools compared to that of the 1920’s. This would have many advantages when constructing a building of this scale today. We could rivet, screw, and nail things together faster and with less effort than the workers were able to at the time of the Chrysler Buildings construction.

But most importantly, today we have computers and other advanced technologies, which the builders of the 20’s and 30’s would not have even imaged. We can draft, estimate, computer animate, and even computer simulate different situations that they had to figure with a pencil, paper. In 2004 we build miniature models of the skyscrapers we design, and then we test them in wind tunnels. We know how the building is going to react under certain situations before we even break ground. In the 20’s and 30’s they were building these buildings larger every time, and each building brought a new challenge and a new discovery. One of the biggest advantages we today is that we have the knowledge of our ancestors on how to build projects like this. We can learn from others failures and successes. We can use history and latest technologies to produce skyscrapers, bigger, faster and more efficient then ever before.
Bibliography


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