

An Ionic Engineering Feat in Early Manhattan:
The Chrysler Building on Lexington Avenue

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The Chrysler Building in Manhattan is an iconic skyscraper completed in 1930. Its planning and design stem from a time of prosperity which molded into a time of economic decline. It's origins of grandiosity and challenge allowed it to become so unique. In the time of skyscraper envy, the Chrysler was a tool of arrogance. Every facet of it was thought out to complete an artistic vision; and one that caught the eye of the world. Though 77 stories isn't an impressive feat anymore and ultra-modernity is taking over, the Chrysler Building remains a lusciously beautiful icon and historic reminder in the heart of New York City.

Significance

Many Americans have seen dozens of pictures and videos of the New York City skyline. They center around the sky giants of Manhattan and there sits the Chrysler. With a silver pyramid ornamented with triangular windows, it sticks out like a sore thumb with its elegance and glory. The building has served many purposes throughout its lifetime. With it being in East Manhattan, specifically at 405 Lexington Avenue, it is a prime location for anything.

Upon its opening, the top three floors were the site of a social club called The Cloud Club. It was a lunch/dining room and speakeasy with differing styles of design in each room.¹ The site catered to the ultra-wealthy with Tudor and Old-English décor.² With much of the building being office space, the club attracted company executives of the oil, aviation, automobile, and steel industries.³ It closed in 1979, however there were multiple attempts to re-open it as a lunchroom and a disco.

¹ Clare Patterson, Ruth Rosenthal (Producers), Terry Flaxton, Niel Cameron, Paul Tickell, & Sue Sudbury. (Directors). (1988 - 1996). *Building Sites: The Chrysler Building*.

² Michelle Young. Inside the Exclusive Former Cloud Club Atop the Chrysler Building. *Untapped New York*.

³ Patterson and Rosenthal

In addition to entertaining execs, the executives of the Chrysler also occasionally entertained the public. Drastic company changes often make the news and in 1960 the Chrysler corporation did exactly that. The company occupied the 56th floor and on July 7th, William C. Newberg, the president, handed in his resignation.⁴ The press jumped on this story and published the story and their suspicions in the New York Times July 11th.⁵ Other companies that leased in the building included the Crucible Steel Company that leased the entire 11th floor in 1929.⁶ Other mentions of the building occurred in modern television and movies such as *Men in Black 3* (2012).

The role of Manhattan's skyscrapers is evolving, especially with the work-from-home movement and the COVID-19 pandemic. Many office buildings are being partially converted into apartment buildings. The Chrysler may be undergoing this change currently. This does alleviate some of the housing need in the area but the age of the building has led to complaints from the residents. The elevators in many older skyscrapers are failing and need of frequent repair,⁷ which aren't very timely. It gives the residents much inconvenience which begs the question if you are getting your bang for your buck. Skyscraper apartments in Manhattan cost thousands for small spaces, but when the elevators fail, the privilege becomes more of a curse. Residents face slowdowns, immobility, and possibly delayed medical attention in an emergency.⁸ They also face the dilemma of whether to move out because how can one move out of a

⁴ *The New York Times*. 1960. "56th Floor Drama."

⁵ "56th Floor Drama"

⁶ *The New York Times*. 1929. "Chrysler Building Lease: Crucible Steel Company Takes the Entire Eleventh Floor."

⁷ James Baron, *Elevator Woes: Down in the Dumps on the 59th Floor*, 2022

⁸ James Baron

skyscraper without an elevator.⁹ This problem is exacerbated today by the supply-chain slowdowns due to the COVID-19 pandemic.

Architecture

The art of the Chrysler is what made it such a success. It has unique features other buildings lack and much of it is attributed to its Art Deco style. Art Deco is an art and architectural style that began in France in the early 1900s. It has elements from other art movements and is a form of ultra-modern style. The architect, William Van Alen, was able to channel his extravagant tastes with the Art Deco style to design the Chrysler Building. He incorporated large flashy pieces of marble and onyx along with other loud, but elegant embellishments to his design.¹⁰ He also accommodated Walter Chrysler's requests and added iconic automobile themed fixtures to the outside. The flashy-modern-French style of architecture inspired Van Alen and Chrysler to erect a show-stopping skyscraper that remains a unique piece of the New York City Skyline.

William Van Alen was an American architect from Brooklyn, New York¹¹. His unique education and career was able to give him European and avant-garde influences which he utilized in his work. He practiced mostly in New York but was drawn to French architecture after spending time at designer Emmanuel Louis Masqueray's apprenticeship.¹² While working under him, Van Alen won the Paris Prize. He then chose to continue his studies at the École des Beaux-Arts in Paris¹³. There he learned of the Art Deco style and formed a more modernist and extravagant approach to his work. This made Van Alen have a unique approach to his design

⁹ Ibid

¹⁰ Landmarks Preservation Commission. 1978. *Designation List 118*. Public Hearing, 4

¹¹ Graig Delany (n.d.). *Architect William Van Alen: Chrysler Building, Works & Biography*. from Study.com

¹² Delany

¹³ Ibid

which was not always the best for his career. His style was sometimes too modern and striking for his American clients, and combined with his quieter personality, he couldn't sell his ideas. He partnered with a louder personality, architect Harold Craig Severance, and began a successful architectural firm which elevated his name among New York developers.¹⁴

Art Deco emerged in France in the early 1900s and was originally called Art Nouveau. It was a way to cultivate a more modern style while also preserving traditional elements to make it more universally tolerable. The style was mostly exhibited in furniture and housing accoutrements and later translated into architectural structures, such as the Chrysler Building. It took some elements from cubism and other art movements such as Italian Futurism¹⁵. In the way it simplifies objects to elementary shapes and adds patterns it is cubist; in the way it takes traditional designs and reinvents them with modern ideas and technologies, it is futuristic. It included Asian influences as well. European sculptures and furniture focused on ornate-intricate patterning or details and the inclusion of precious metals. East-Asian art at the time depicted nature more often with high contrasting colors. This illustration of nature was utilized by some Art Deco artists like Gabriel Argy-Rousseau.¹⁶ The popularity of the style allowed it to spread across Europe and to the U.S. and Asia. In Japan especially, the style took hold in the fashion industry with nods to several styles such as cubism.¹⁷

To us, viewers in the 21st century, Art Deco looks like what ultra-modern was in the 1920s. It places straight lines where there would traditionally be curved ones and adds curves where there traditionally would not be any. Too many curves, or too many straight lines was the

¹⁴ Ibid

¹⁵ Mario Amaya. (1978, April 1). The Delights of Art Deco. *Art & Architecture Archive*, pp. 278.

¹⁶ Amaya, 278-279

¹⁷ Nancy Hass, (2021, February 11). How Japonisme Forever Changed the Course of Western Design. *The New York Times Style Magazine*.

signature of Art Deco in that era. In all of these choices, it challenges the mind, which it probably what made it so intriguing and popular.

The unique furniture and artistic structures can also be attributed to the advancement of materials at this time. The Chrysler Building was a part of the rise of skyscrapers which were made possible from the invention of concrete and steel-framed buildings. The site itself is steel-framed, with a concrete core supplying stability and strength¹⁸. The exterior is built of brick; however the brick is only insulating and doesn't supply structural support. The popularization of steel, and especially stainless steel, allowed Van Alen to pursue his flashy designs in the building and the window and door frames were crafted out of stainless steel¹⁹, very ultramodern for the time.

Van Alen originally designed the building to be crowned with a copper dome, but Chrysler requested a more sleek design and the idea of a spire was introduced²⁰. The two wanted to make a statement in the skyscraper race in New York and in a quest for publicity, he had a 185-foot-tall steel spire constructed secretly in the fire shaft of the building²¹. In a blaze of glory, the spire was installed and unveiled to the city making it the tallest building in the world, that is for 11 months, due to the arrival of the Empire State Building in New York. It stood at 1046 feet, the tallest building in the world.²² Chrysler had succeeded.

The main entrance is quite grand, a 3-story high archway formed out of black marble that catches the attention on Lexington Avenue²³. The lobby continues the avant-garde characteristics

¹⁸ Engineering Timelines. (2020). *Chrysler Building*.

¹⁹ Engineering Timelines

²⁰ John B. Stranges, (2014). Mr. Chrysler's Building Merging Design and Technology in the Machine Age. *Journal of the International Committee for the History of Technology*, 3.

²¹ Stranges, 8

²² Ibid

²³ Patterson and Rosenthal

with red Moroccan marble in the walls, floors, and columns²⁴. The elevators were also designed with Moroccan influences and are warm autumn colors with classic Art Deco gold arches.

To attribute the structure to Chrysler and his automobile company, Van Alen added scaled up representations of car parts as accoutrements to the outside of the building. He included radiator caps and gargoyles made of stainless steel built in a modern style²⁵ that almost references the steam-punk style. The gargoyles are made of stainless steel which incorporate hubcaps on the upper level corners. With these he also had a pattern of hubcaps on the side of the building which also formed a pattern with the surrounding bricks. This over-the-top execution of Art Deco is what made the Chrysler Building so iconic.

Art Deco designers often used murals as a unifying factor in their works. Van Alen and Chrysler were inspired to include a grand ceiling mural in the lobby of the building. They contracted famous American muralist Edward Turnbull to paint an image conveying modernist America with values of mobilization and innovation²⁶. The mural consisted of workers guiding machines and taking place in a car assembly line along with natural forces of fire and water being morphed into heat and steam. Chrysler also had a second worker themed mural painted for his private dining room.²⁷ It consists of a wall of black glass with white lines creating the figures making it look like it's chalk on precious obsidian. It also depicts workers of the automotive industry forging raw materials into precious commodities.

Economics

²⁴ Ibid

²⁵ Stranges, 8

²⁶ Stranges, 12

²⁷ Patterson and Rosenthal

This art conveyed Chrysler's values in American industry and possibly society as a whole. Much of the success in the Roaring Twenties was attributed to technological advancements which made strides in communication, food availability, and even domestic responsibilities. This included the invention of elevators and steel framed buildings, which in turn led to the invention of the skyscraper. With whirl of success, Chrysler's car company was also booming and he felt success was best crowned with a monument.

The project didn't originally belong to Walter P. Chrysler. In 1921, William H. Reynolds, a failed real estate developer, couldn't secure the funds to continue his project in his purchased site.^{28,29} Chrysler was looking for a new flagship for his automobile company and through his purchase of the site, he inherited a set of blueprints and Van Alen himself. The original blueprints had the site at 42 stories,³⁰ but the pair chose to revise the design to make the tower sleeker and the entire building taller.

Skyscrapers were a hot new invention and Chrysler took pride in ensuring his flagship of a building had integrity. The elevators installed claimed to have top speeds and operate quietly for tenant comfort.³¹ At the time, building construction claimed many lives. Chrysler was determined to not have deaths in this project, and he achieved it. He implemented protective fencing, steel netting between new floors, a telephone network to direct materials and workers, and a small medical facility on-site.³² Another feat he introduced was tubular framed scaffolds to protect workers from wind on the higher points of the structure.³³

²⁸ Stranges, 1

²⁹ Engineering Timelines. 2020. "Chrysler Building."

³⁰ Patterson and Rosenthal

³¹ Ibid

³² Engineering Timelines.

³³ Stranges, 12

His dedication to safety showed that he understood that all of his workers were responsible for his success. The world only had a population of 2 billion and the life expectancy was much shorter at the time. People valued each other's contributions more so, partly due to the lack of disposability of labor. This was the beginning of the machine age and manual labor was still very critical to society. In our era, we are more technology dependent and workers are more disposable due to population driven competition among other aspects. This has created a different culture and behavior of corporation executives. Chrysler behaved like 'an ethical rich person' in the way he respected people. He supplied his automotive workers with inexpensive life insurance, Christmas gifts, and emergency loans.³⁴ He didn't mentally isolate himself from the working class like many tycoons do today in America.

He also had several accoutrements technologies added. The spire was especially important to the designers and they ordered German stainless steel, Nirosta by Krupp Steelworks, to ensure the most pinnacle point never tarnished.³⁵ Underground the building connects to the subway system and to surrounding buildings.³⁶ This underground area was complete with carrier air conditioners which cooled the air around the subway and the first three floors of the building.³⁷ A 'hydrozone' water treatment facility was placed in the basement and filtered and bottled water for the entire site.³⁸

No corporate funds were used in the financing of the site.³⁹ Later Chrysler saw the building as a means of financial security for his sons.⁴⁰ The two never had a deep interest in cars

³⁴ Stranges, 15

³⁵ Stranges, 9

³⁶ Stranges, 10

³⁷ Ibid

³⁸ Stranges, 10-11

³⁹ Stranges, 7

⁴⁰ Stranges, 6

so taking a larger role in the company wasn't a realistic dream for them. They could instead be responsible for the leasing and upkeep of the building in addition to managing the building staff.⁴¹ It was a feasible well thought idea of how to secure success for one's progeny. Many millionaires today use a similar approach while others leave their loved ones with less surefire assets.

Interestingly enough, the multimillion-dollar structure doesn't pay taxes. The deed to the building does not include the land which it sits upon. It is instead owned by Cooper Union to which the owners pay to rent the land.⁴² Cooper Union is tax-exempt and hence, the building doesn't pay property taxes.⁴³

In 2008, the government of Abu Dhabi bought a 90% stake in the building for \$800 million.⁴⁴ This seemingly smart investment didn't end up paying off surprisingly. In 2019, the building was sold for only \$150 million to Austrian property developers Signa Holding and the New York firm RFR Holding.⁴⁵ There are a number of factors which contribute to the drop in price but all of them are speculation. Firstly, commercial real estate is decreasing in demand which left the office building only at 80% capacity.⁴⁶ Secondly, Amazon.com, Inc. planned to sign a lease which later fell through, lowering the promise of the property.⁴⁷ Additionally Cooper Union was rumored to be in financial trouble and raised the rent for the building.⁴⁸ These among other dilemmas of New York real estate made the property less attractive to investors. Today, the decline of commercial real-estate is even steeper with life being moved online from the COVID-

⁴¹ Ibid

⁴² Matt Roper, *Secrets of Chrysler Building revealed as skyscraper goes on sale for £1billion*, 2019

⁴³ Matt Roper

⁴⁴ Nick Mafi, *New York's Chrysler Building Sells for Much Less Than It Was Purchased for a Decade Ago*, 2019

⁴⁵ Mafi

⁴⁶ Ibid

⁴⁷ Ibid

⁴⁸ Ibid

19 pandemic. And it does not only affect millionaire property owners. The decline leads to lower activity in other facets of economy like the hospitality, restaurant, and retail service industries.

Conclusion

The United States Department of the Interior added the Chrysler to the National Register of Historic Places in 1976.⁴⁹ In May 1978, the United States Landmark Preservation Commission held a public hearing on the designation of the Chrysler Building's ground floor as a national landmark.⁵⁰ The hearing was repeated in July 1978 and here the site was declared a landmark.⁵¹ The building is a relic of the Art Deco style and its execution was deemed to be done impeccably and created a beautiful timeless design that captured both the style and the ideals of America at the time. The grandiose features of foreign marble and the Americanist mural above very much create a unique space that make a dent in American history.

Architect William Van Alen and automotive millionaire William Chrysler built a monument to illustrate modernity, American values, and the Chrysler Corporation's success. Its construction was an intricate well thought out operation that shocked the world upon its unveiling. It became the tallest building in the world for less than a year but after its defeat, the structure has always had a place in New York's most important buildings. Its Art Deco elements make it look like no other building in the skyline or in the interior. Recently the move away from commercial real estate has rendered it less valuable in dollars, but has remained the same beautiful and timeless American landmark.

⁴⁹ George F. Emery, "H3417-772." In *New York NHL Chrysler Building Archives*, by Department of the Interior. National Park Service., 14. 1976

⁵⁰ Landmarks Preservation Commission. 1978. *Designation List 118*. Public Hearing, 1

⁵¹ Landmarks Preservation Commission, 1

Appendix A.



Image 1. A photo of the dining room in The Cloud Club with its original décor in 1930⁵²

⁵² Division General Research. 1930. "Dining Room, The Cloud Club." The New York Public Library. *New York Public Library Digital Collections*.



Image 2. An arial photograph of the Chrysler Building in 1988.⁵³

⁵³ Marilyn Bridges, *Chrysler Building, New York City*. 1988



Image 3. A collection of Art Deco pieces⁵⁴

⁵⁴ Amaya, 280-281



Image 4. A photo of the Chrysler Building's early construction⁵⁵

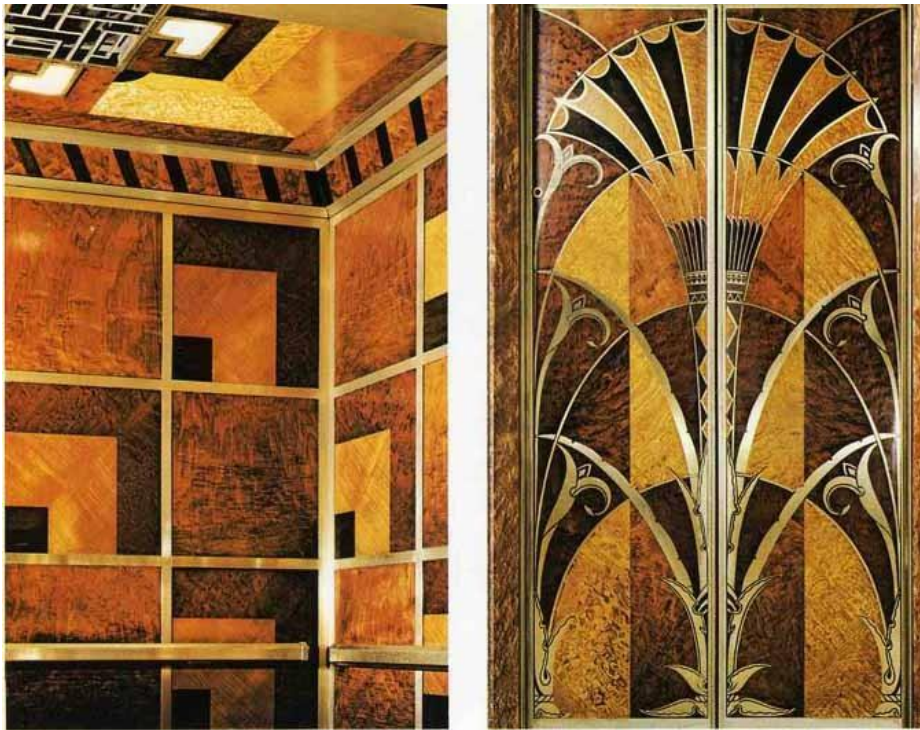


Image 5. The lobby elevators⁵⁶

⁵⁵ Van Alen, William. (n.d.). *Chrysler Building* [Images].

⁵⁶ Michelle Sveiven, (2010, December 22). *AD Classics: Chrysler Building / William Van Alen*.



Image 6. A photograph of the stainless-steel automobile themed decorations on the building⁵⁷



Image 7. A portion of the lobby's ceiling mural⁵⁸

⁵⁷ Stranges, 9

⁵⁸ Sveiven



Image 8. The women's toilet at the Texas Oil Co. office on the 22nd floor in their original condition.⁵⁹



Image 9. The men's toilets at the Texas Oil Co. office in their original condition.⁶⁰

⁵⁹ Wurts Bros. (New York, N.Y.). *Chrysler Building, Women's Toilet, Texas Oil Co., 22nd Floor.*

⁶⁰ Wurts Bros. (New York, N.Y.). *Chrysler Building, Men's Toilet, Texas Oil Co., Urinals.*

Bibliography

- Amaya, Mario. 1978. "The Delights of Art Deco." *Art & Architecture Archive*, April 1: 278-283. Accessed March 2022. <https://www.proquest.com/magazines/delights-art-deco/docview/1366997264/se-2?accountid=9920>.
- Barron, James. 2022. "Elevator Woes: Down in the Dumps on the 59th Floor." *The New York Times*, March 29. Accessed 2022. <https://www.nytimes.com/2022/03/29/nyregion/elevator-woes-down-in-the-dumps-on-the-59th-floor.html>.
- 1988 - 1996. *Building Sites: The Chrysler Building*. TV Series. Directed by Terry Flaxton, Neil Cameron, Paul Tickell and Sue Sudbury. Produced by Clare Patterson and Ruth Rosenthal. Performed by Stephen Bayley. Accessed 2022. <https://www.youtube.com/watch?v=t8HeDCjWtJ0>.
- Bridges, Marilyn. 1988. "Chrysler Building, New York City." City College of New York. *The David and Lenore Levy Collection of Contemporary Photography*. New York City. Accessed 2022. <https://jstor.org/stable/community.14706440>.
- Delany, Graig. n.d. "Architect William Van Alen: Chrysler Building, Works & Biography." *Study.com*. Accessed April 2022. <https://study.com/academy/lesson/architect-william-van-alen-chrysler-building-works-biography.html>.
- Division General Research. 1930. "Dining Room, The Cloud Club." The New York Public Library. *New York Public Library Digital Collections*. New York City. Accessed May 2022. <https://digitalcollections.nypl.org/items/b2087c01-5a1a-809c-e040-e00a18060a60>.
- Emery, George F. 1976. "H3417-772." In *New York NHL Chrysler Building Archives*, by Department of the Interior. National Park Service., 14. New York City: United States Department of the Interior. <https://catalog.archives.gov/id/75315842>.
- Engineering Timelines. 2020. "Chrysler Building." *Engineering Timelines*. Engineering Timelines. Accessed March 2022. <http://www.engineering-timelines.com/scripts/engineeringItem.asp?id=1516>.
- Hass, Nancy. 2021. "How Japonisme Forever Changed the Course of Western Design." *The New York Times Style Magazine*, February 11. Accessed 2022. <https://www.nytimes.com/2021/02/11/t-magazine/japonisme-paris-western-design.html>.
- Landmarks Preservation Commission. 1978. *Designation List 118*. Public Hearing, The Landmarks Preservation Commission, New York City: Landmarks Preservation Commission. Accessed 2022.

- Mafi, Nick. 2019. "New York's Chrysler Building Sells for Much Less Than It Was Purchased for a Decade Ago." *Architectural Digest*, March 12. Accessed 2022.
<https://www.architecturaldigest.com/story/new-york-chrysler-building-sells-less-than-purchased-decade-ago>.
2021. *All Things Architecture | The Race to Build the Chrysler Building*. Short Documentary. Directed by Steve Park. Produced by Architecture by Design. Performed by Steve Park. YouTube. Accessed March 2022. <https://www.youtube.com/watch?v=Cu6fT0IpuKQ>.
- Roper, Matt. 2019. "Secrets of Chrysler Building revealed as skyscraper goes on sale for £1billion." *Mirror*. January 10. Accessed March 2022.
<https://www.mirror.co.uk/news/us-news/secrets-chrysler-building-revealed-skyscraper-13839545>.
- Stranges, John B. 2014. "Mr. Chrysler's Building Merging Design and Technology in the Machine Age." *Journal of the International Committee for the History of Technology* 1-19. Accessed March 2022.
- Sveiven, Megan. 2010. *AD Classics: Chrysler Building / William Van Alen*. December 22. Accessed March 2022. <https://www.archdaily.com/98222/ad-classics-chrysler-building-william-van-alen>.
- The New York Times*. 1960. "56th Floor Drama." July 11: 71. Accessed 2022.
- The New York Times*. 1929. "Chrysler Building Lease: Crucible Steel Company Takes the Entire Eleventh Floor." October 30: 49. Accessed 2022.
- The New York Times*. 1931. "Lexington Avenue Block Front Sold: Syndicate Acquires Big Plot Between 46th and 47th Streets for 52-Story Building." July 6: 36. Accessed 2022.
<https://www.proquest.com/hnpnewyorktimes/docview/99323803/225875FBB3EE43B5PQ/15?accountid=9920>.
- The New York Times*. 1937. "Plans Television Station: Columbia System Would Use Top of Chrysler Building." April 2: 25. Accessed 2022.
- Wurts Bros. 1930. *Chrysler Building, Men's Toilet, Texas Oil Co., Urinals*. Museum of the City of New York, New York City. Accessed 2022.
<https://jstor.org/stable/community.12098604>.
- Wurts Bros. 1930. *Chrysler Building, Women's Toilet, Texas Oil Co., 22nd Floor*. Museum of the City of New York, New York City. Accessed 2022.
<https://jstor.org/stable/community.12078465>.
- Young, Michelle. 2020. "Inside the Exclusive Former Cloud Club Atop the Chrysler Building." *Untapped New York*. February 19. Accessed 2022.

<https://untappedcities.com/2020/02/19/inside-the-exclusive-former-cloud-club-atop-the-chrysler-building/>.