

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Armstrong Rubber Company Building

Other names/site number: Pirelli Building

Name of related multiple property listing:
N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. Location

Street & number: 500 Sargent Drive

City or town: New Haven State: CT County: New Haven

Not For Publication: Vicinity:

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide ___ local

Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title:	Date
State or Federal agency/bureau or Tribal Government	

In my opinion, the property ___ meets ___ does not meet the National Register criteria.	
Signature of commenting official:	Date
Title :	State or Federal agency/bureau or Tribal Government

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4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

- Private:
- Public – Local
- Public – State
- Public – Federal

Category of Property

(Check only **one** box.)

- Building(s)
- District
- Site
- Structure
- Object

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Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>1</u>	<u>0</u>	buildings
<u> </u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u> </u>	<u>0</u>	objects
<u>2</u>	<u>0</u>	Total

Number of contributing resources previously listed in the National Register N/A

6. Function or Use

Historic Functions

(Enter categories from instructions.)

COMMERCE/TRADE/business

COMMERCE/TRADE/organizational

Current Functions

(Enter categories from instructions.)

VACANT/NOT IN USE

7. Description

Architectural Classification

(Enter categories from instructions.)

MODERN MOVEMENT/Brutalism

Materials: (enter categories from instructions.)

Principal exterior materials of the property:

Foundation: CONCRETE

Walls: CONCRETE

Roof: ASPHALT, SYNTHETICS/Rubber

Other: GLASS, METAL

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Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Armstrong Rubber Company Building is an iconic Brutalist-style office building designed by internationally acclaimed architect, Marcel Breuer and structural engineer Paul Weidinger for the Armstrong Rubber Company in 1968-1969. The building is located on Long Wharf at the south edge of New Haven, Connecticut, adjacent to Interstate 95 (I-95) and New Haven Harbor. The building is comprised of two distinct components: a 2-story base that was designed to house research, development, and production functions, and a 5-story office tower (with four stories of offices and a mechanical level) that appears to hover above a 2-story void between the two masses; massive central and end piers carry the load of the structure above. The steel frame structure is clad in pre-cast and cast-in-place concrete wall panels that create facades defined by a distinctive interplay of light and shadow. The building has a flat roof. It is designed as an urban landmark that was intended to serve as a dramatic gateway to the city of New Haven. The property also includes a contributing free-standing 3-story concrete structure that originally displayed the Armstrong Rubber Company Sign. The structure is located near the northeast corner of the building and was designed and built concurrently with the Armstrong Rubber Company Building. It no longer holds the Armstrong Rubber Company signage.

Narrative Description

Setting

The Armstrong Rubber Company Building is sited on the northwest side of Sargent Drive within a commercial and business park setting. Located near the New Haven Harbor, the Armstrong Rubber Company Building is a defining building in the Long Wharf District. The district was part of an extensive urban renewal project in the mid-twentieth century that aimed to reactivate the waterfront south of downtown New Haven. The Long Wharf district still maintains its industrial setting as imaged in the 1960s. I-95 is located immediately east of the building. Beyond the highway is Long Wharf Drive and a wide cove that connects to the Mill and Quinnipiac rivers. New Haven Union Station, which services the local Metropolitan Transportation Authority (MTA) North line and Amtrak, and its affiliated train tracks and service area defines the west side of the Long Wharf industrial area. The area between the train tracks and Long Wharf features single- and multi-story steel-frame buildings with commercial, corporate, and hospitality uses. The Armstrong Rubber Company Building was to serve as a defining building for the redevelopment, especially located with a prominent view from I-95 for those passing to and from New York City. The Long Wharf redevelopment area is now primarily defined by a few large, industrial buildings of varying ages (some original to the 1960s redevelopment, some newer) and expansive parking lots.

The Armstrong Rubber Company Building parcel is irregularly shaped largely occupied by an expansive asphalt-paved parking lot. The lot is defined by Sargent Drive to the north and east, a twenty-first century

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industrial building to the south, and Brewery Street to the west. The expansive parking lot is in original to the construction of the building, though its exact date is unknown. The Armstrong Rubber Company Sign, an associated concrete structure that served as both storage in its base, and signage for the Armstrong Rubber Company Building, is located northeast of the building. The property is accessed by a two-lane road that extends northwest from Sargent Drive to Brewery Street. The New Haven waterfront surrounding I-95, which extends to the east side of New Haven Harbor, has remained the industrial heart of the city.

Armstrong Rubber Company Building (contributing building, 1968-1969)

The Armstrong Rubber Company Building is a monumental building designed to match the scale of the adjacent interstate highway and to attract the attention of passing motorists. The building design serves as a compromise between former New Haven Mayor Richard Lee and the Armstrong Rubber Company. It fulfilled Mayor Lee's desire for an architectural icon to represent New Haven from the new elevated I-95 while providing the warehouse space necessary for Armstrong Rubber. Known for its clear separation of functions, the steel-framed, concrete-clad structure features a two-story base designed to accommodate research and development laboratories for the production of automobile and airplane tires, and a five-story office tower and mechanical level which contained the Armstrong Rubber Company's corporate offices with a 2-story void separating the masses. To accomplish this architectural feat, structural engineers Paul Weidlinger and Matthys Levy of Weidlinger Associates worked with Breuer to create an innovative cantilevered steel truss structural system that suspends the office tower above the later truncated warehouse base (Photographs 1, 2, 7-9 and Figures 1-5, 7). The 17-foot-high void is supported by massive central and end piers that carry the load of the structure above (Photograph 13), including the precast concrete window walls, utilities, service systems and elevator shafts. The building extends 36 bays by 13 bays and has a flat roof.

The building faces east onto Sargent Drive. The dominant features of the façade are the 2-story void between the base and the office tower and the repetitive fenestration of 36 bays of closely spaced, rectangular-shaped window openings. The single-pane fixed metal windows are set deeply into prefabricated concrete panels to create shadow and a sense of depth (Photographs 1, 2, 5, 7-9). The contrast between open space, heavy concrete, and dramatic shadows accentuate the sculptural quality of the building. The only breaks in the geometric grid created by this pattern are the main entrance at the base and the mechanical level at the roofline. The main entrance system measures three bays wide and is centered on the elevation. A series of geometrically placed granite pavers provide ornament at the entryway, leading to a pair of metal-framed doors with metal panel infill set within a projecting entry vestibule with angled concrete walls. The entry doors are positioned beneath a wide, glazed transom. The vestibule is capped by a concrete canopy with a cement plaster soffit and is flanked on either side by large plate glass windows (Photograph 5). North of the vestibule, the building's date stamp is carved into the adjacent canted concrete wall, along with the names of the principal architects: "1969 MARCEL BREUER and ROBERT F GATJE Architects" (Photograph 6). The mechanical level is two stories in height and unfenestrated with concrete divisions located every two bays. Apart from the entrance bay, the west elevation is identical to the façade.

The pre-cast base and tower walls are constructed out of a type of Plasticrete called Mo-sai, a white cement mix with an exposed quartz pebble aggregate. The panels are angular and vary in size and design; they are arranged in a way that emphasizes vertical and horizontal lines (Photographs 1, 2, 7-9). The

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panels are modeled in Breuer's preferred crystalline form,¹ which has both a functional and aesthetic intent, as they provide protection from the sun and create variation in shadows depending on the time of day and location of the sun. Most panels are pebbled for a slight variation of the grayscale and to achieve a less than smooth surface texture.

The north and south elevations are dominated by centered end piers that support the upper floors (Photograph 7). The board-formed concrete panels retain the grainy imprint of their wooden plank molds. The end pier panels are differentiated from the rest of the building by projecting and recessed diagonal lines that indicate the vertical circulation found within the piers. Each has a single window at the eastern end of the pier. The piers are flanked by 6 bays of windows on the base and tower. The concrete panels at the mechanical level are molded to represent the diagonal steel trusses beneath the concrete. Two secondary entrances are located at the north and south elevations; each comprises a flush metal utility door with vision panels. The north entrance is accessed by a granite stair, and the south entrance features a glazed sidelight and transom accessed by a switchback ramp with granite pavers and concrete knee walls.

Interior

The Armstrong Rubber Company Building stands nine levels tall (includes the two open levels) with approximately 100,000 square feet of usable office space. The building's two-story base was designed to house the Armstrong Company's laboratories, model shops, and drafting rooms (Figures 8-9). Originally, a large two-story production wing and warehouse extended off the tower's western wall. This was removed in 2003. Additionally, selective abatement efforts were previously conducted. All of the original flooring, except for inlaid granite pavers in the entrance lobby, and all wall systems and ceilings were removed on the first and second floors. As a result, the existing unfinished spaces consist of open floor plates with exposed concrete walls, evenly spaced rows of heavy steel I-columns supporting steel I-beams, exposed corrugated metal ceilings, and poured concrete flooring (Photographs 11, 12). One of the areas left intact following the first and second floor abatement activities was the building's modest entrance lobby, which features granite floor pavers, a granite stair measuring almost 15 feet in width (Photograph 10), and a polished granite desk.

Floors five through eight were designed to house the Company's corporate headquarters (Figures 10-11). All four floors feature offices lining the perimeter walls. The office layout and configuration allowed for sweeping views of the New Haven Harbor and of the downtown skyline. Conference rooms, lavatories and programming spaces occupied the center of each floor plate. The eighth floor contained the kitchen and dining room, as evidenced by the existing quarry and ceramic tiles cladding the walls and floor (Photograph 24). The eighth floor also housed the executive offices, with the President and Chairman's offices in the southeast and northeast corners with expansive views of the harbor. Offices had high-end modern finishes, including wood and twine wall covers. Unfortunately, all finishes have been either removed or compromised beyond repair by asbestos. As noted above, existing finishes were partially removed due to previous abatement efforts which involved the removal of the original vinyl asbestos flooring and adhesive, baseboards, interior doors, and some wall systems. Extant finishes include painted

¹ The crystalline form is based on the arrangement of atoms in a crystal. In his lecture "Where do We Stand?" (Zurich, Switzerland, 1934), Breuer equates crystalline structures to "human laws and functions." The structures are geometric and three-dimensional in a rational form that is well-suited to the construction methods favored by Modern architects.

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plaster walls, gypsum wallboard and glass partitions, some wood paneled office walls, and acoustical tile ceilings with inset light fixtures (Photographs 15, 17, 18, 20-22).

Vertical access is provided by two runs of switchback stairs sited at the building's north and south walls, which provide egress from all floors of the building. Both stairs feature concrete stringers, terrazzo treads and risers, continuous hardwood handrails with steel guardrails, and wall-mounted hardwood rails. The stairs ascend to terrazzo landings at each floor and are enclosed by board-formed concrete panel walls (Photographs 14, 19). Light fixture mounts and exposed wiring remain at each floor (Photograph 14), and metal louvers are set within the concrete walls below the window openings at each landing. The north stairhall provides further access to an open tread metal stair at the ninth floor lightwell that leads to the roof. A passenger elevator and freight elevator are located together in concrete block shafts at the center of each floor plate (Photograph 16). Six-by-twelve-inch granite tiles clad the walls on either side of the elevator doors at each floor, and the interior of the passenger elevator features wood parquet accent walls.

Sign (contributing structure, 1968-1969)

The Armstrong Rubber Company sign is a free-standing structure located northeast of the Armstrong Rubber Company Building, near the entrance to the property (Photographs 1, 3-4, 9 and Figures 5, 6). It is constructed of concrete and is approximately thirty-six feet wide and forty-eight feet tall. The end walls have textured concrete in keeping with Breuer's aesthetic. Echoing the Armstrong Rubber Company building, the sign consists of two distinct parts separated by a void. It has a low, narrow base that contains an equipment room, with a larger rectangular volume above. The base is pierced by a door on its western end and a window on its eastern end, allowing for equipment to be stored in the structure. Half of the rectangular volume above the base is a void and the upper half is solid but has square openings on the east and west elevations. Sign lettering was attached to the upper portion of the structure, which is visible from the elevated highway and the street at grade. It originally featured Armstrong Rubber lettering and later held lettering that read Pirelli. Currently, there is LED signage mounted to the north elevation of the original structure advertising the nearby IKEA building.

Integrity

The Armstrong Rubber Company Building retains many original defining features, as well as a strong sense of the historic feeling and intent of the building and its design. The most iconic features associated with the building remain intact. These include key elements of Breuer's design. The building's strong presence as a gateway to New Haven in its proximity to I-95 and its relationship to the waterfront is unchanged, contributing to the building's integrity of location. The most notable features of the building's design—the highly distinctive separation of spaces by a 2-story void—made possible by an innovative steel truss suspension system remain intact, and the original pre-cast concrete panels continue to convey Breuer's design intention of protecting the interiors from sun while harnessing its light and shadows to sculptural effect, contributing to the building's integrity of design, feeling, and association. While the building is most celebrated for its exterior features, remaining interior finishes contribute to the building's overall integrity of materials and workmanship, including granite pavers at the entry, sculptural stairs with terrazzo treads and risers, passenger elevator lobby ornament including granite tiles cladding the walls on either side of the elevator doors at each floor, and wood parquet accent walls on the elevator interior. Upper floor finishes include painted plaster walls, gypsum wallboard some wood veneer office walls, and acoustical tile ceilings with inset light fixtures.

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Some historic features of the structure and site have been lost due to changes in ownership and asbestos abatement. The loss of the research and development wing, signage, some interior finishes, and original landscape features affects the overall integrity of the site. The industrial setting of the location did not change, and this continued industrial use required increased parking in the area. Unfortunately, this meant sacrificing some of the original grass landscaping that surrounded the building.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- A. Owned by a religious institution or used for religious purposes
- B. Removed from its original location
- C. A birthplace or grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years

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Areas of Significance

(Enter categories from instructions.)

ARCHITECTURE
COMMUNITY PLANNING & DEVELOPMENT

Period of Significance

1968-1969

Significant Dates

1968-1969

Significant Person

(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Breuer, Marcel (1902-1981)

Gatje, Robert F. (1927-2018)

Levy, Matthys, Weidlinger Associates, engineer

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Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Built in 1968-1969, the Armstrong Rubber Company Building is eligible for listing in the National Register at the state level under Criterion C in the categories of Architecture and Community Planning and Development. The building is a notable design by internationally renowned Modern architect, Marcel Breuer in collaboration with architect Robert Gatje and the structural engineering firm Weidlinger Associates, and it is a key site in the Long Wharf Development Area which was an important feature in New Haven's prominent mid-century urban renewal program. The building represents Breuer's masterful solution to the challenge of marrying the needs of the Armstrong Rubber Company for office and production space with the aspirations of city officials who sought a cultural landmark that would serve as both a physical and symbolic gateway to the City of New Haven as seen from the new Interstate 95 (I-95). Among the design solutions that served both clients was Breuer and Weidlinger Associates' design of a steel truss, concrete-clad structural system that allowed the office portion of the building to be visually suspended above the research and development laboratories. This provided a substantially sized building that was in keeping with the scale of I-95 and signaled to passing motorists the progressive modernity of the City of New Haven while also meeting the programmatic requirements of the Armstrong Rubber Company. The Armstrong Rubber Company Building is an intrinsic part of the New Haven legacy of modern architecture. The period of significance for the building is relegated to its period of construction, 1968-1969.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Criterion C: Architecture and Community Planning and Development

The Armstrong Rubber Company Building (Armstrong Rubber Building) was designed as a compromise between client and city development plans, structural engineer and grand architectural ideas, manufacturing requirements and monumental design. The building stands as a significant design solution to a complex problem of fulfilling a city's urban renewal requirements while satisfying the needs of the paying customer. At the end of the 1960s, the Armstrong Rubber Company needed more space to house their flourishing enterprise. Joseph R. Stewart, Vice-President of Armstrong, expressed interest in a piece of land along I-95 in the Long Wharf Development Area where its headquarters would be seen by passing motorists and its research and development laboratories could be showcased. The land was part of Mayor Lee's plan for a modernized industrial and manufacturing section of the city, and he had strict expectations of what would be built on the parcel. The company expected to build 2 to 3-story corporate offices at the front of the site and a 1 to 2-story building for research and development laboratories located at the back of the site, where noise from the operations could be contained.²

This proposal did not satisfy the Mayor of New Haven, Richard Lee, who envisioned an eighteen-story tower on the site. In Lee's view, the Long Wharf site would mark the gateway to New Haven for traffic coming off the Connecticut Turnpike (I-95) into the city. He insisted that "anything built on the site should have an architectural presence and be designed by a master."³ Lee stipulated that an architect of

² Robert Gatje, I.M. Pei. *Marcel Breuer: A Memoir*. (New York: The Monacelli Press) 2000, 211.

³ Gatje and Pei, 210.

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note must design the building. Breuer received the contract due to his lower bid and the recent successful (and under budget) completion of the Washington, D.C. headquarters for the U.S. Department of Housing and Urban Development (HUD).⁴ According to Robert Gatje, Breuer's architectural partner in the design of the new building, "Armstrong was unhappy and couldn't imagine building something it neither wanted nor needed."⁵ Breuer's challenge would be designing a building that satisfied the programmatic requirements of the Armstrong Rubber Company, while also completing the vision of Mayor Richard Lee.

Innovative Design Solutions by a Master Architect

The Armstrong Rubber Company was founded by George F. Armstrong in 1912 in a small loft in New Jersey. After a decade of steady growth, the company needed more space and purchased a small, defunct tire manufacturing concern in West Haven, Connecticut in 1922. The company prospered, particularly in the post-World War II era, when increasing numbers of Americans were reliant on their automobiles. By 1961, the Armstrong Rubber Company had become the fifth largest tire maker in the world, employing over 5,000 people. Armstrong's net sales jumped nearly 15% from 1968 to 1969, netting in excess of \$201 million.⁶ Their significant growth and expanding operation meant that by the end of the 1960s the company needed to build a new headquarters and plant.

The Armstrong Rubber Company Building is undoubtedly significant by association as a design by internationally acclaimed architect, Marcel Breuer (and his partner, Robert Gatje), but more specifically it derives significance from the unique solutions to a number of challenges that Breuer and his team achieved in his design. Among these was how to resolve the programmatic requirements of the Armstrong Rubber Company outlined above with the lofty vision of Mayor Lee for a large, culturally significant building. The site added to the challenge: ground level was about twenty feet below the level of the turnpike. Armstrong's original intent for 2 to 3-story buildings spread over the site would have resulted in a view of acres of rooftops from I-95. This reality led Mayor Lee to compromise and settled on requiring nothing short of a ten-story tower on the site. According to Gatje, Breuer listened to the concerns of Armstrong Company representatives and Mayor Lee and derived a solution almost immediately:

When he presented his thoughts after they had been drawn up, it was to propose that the office floors be put atop the two-story research and development wing at grade and then—in order to satisfy Dick Lee—that they be raised clear of the roof and 'hung from above,' leaving a two-story-high slot between the two building masses that could be filled with expansion space at a later time. Two levels of R&D plus two floors of air, with five floors of offices and a top level devoted to mechanical equipment between deep trusses, which were going to do the 'hanging,' equaled ten floors.⁷

Though Armstrong never anticipated a tower, an added benefit of Breuer's design to the company was an improved view of the New Haven Harbor and skyline from inside the building, as well as an eye-catching structure that would draw attention to the business. Breuer's design also served Mayor Lee in unexpected ways. Not only did he get a building of the scale he desired, but the two-story void made the building truly remarkable, both in its structural feat and the way the void bridges views of downtown with the

⁴ Rachel D. Carley, "Tomorrow is Here: New Haven and the Modern Movement," New Haven Preservation Trust, 2008, 37.

⁵ Gatje and Pei, 211.

⁶ "Armstrong Finds a Niche in the Tire Market." *Connecticut History.Org*. September 7, 2013. <https://connecticuthistory.org/armstrong-finds-a-niche-in-the-tire-market/>. (Accessed 5/2/2019).

⁷ Gatje and Pei, 211.

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harbor. In his evaluation of the Armstrong Building, Guy Nordenson, structural engineer and professor of architecture and engineering at Princeton University, likens the space within the void to a billboard for the city.⁸ Both Armstrong and Lee approved the innovative design. The only alteration was the reduction in office space from the proposed five floors, to four, at Armstrong's insistence to reduce cost. (Figures 1-4, 7-11) Breuer tried to argue in favor of building the 9th floor without finishing it, allowing for the possibility of expansion, but Armstrong insisted on its elimination. Gatje recalls that Breuer was disappointed in the disruption to the originally proposed proportions of his design but understood the realities of serving his clients.

Other more 'formal' architects might have complained loudly, but that wasn't [Breuer's] style. He recognized that Joe had a responsibility to his shareholders and respected the fact that he was trying hard not to derail the entire project...I seem to remember [Breuer] expressing regrets once on his first visit to the job site after the frame was up, but he never showed anything but pride in the result to Armstrong and Mayor Lee.⁹

Breuer's design innovation extends to the structure and skin of the building, the design of which was a collaboration between Breuer and his structural engineer. Matthys Levy of Weidlinger Associates was the project engineer for the Armstrong Rubber Company Building, and for most of Breuer's buildings in the 1950s and 1960s. The tower structure consists of steel framing clad in precast concrete panels with cast-in-place concrete poured over the heavy steel truss support system and the stair towers. According to Gatje, Levy argued in favor of a glazed office tower suspended above the concrete research and development wing, but Breuer insisted on a single material for architectural unity.¹⁰ Breuer did, however, concede that the steel frame could be expressed on the end towers, which have molded concrete panels that resemble the shape of the steel frame beneath the surface. The concrete panels that enclose the stair towers also give a nod to structure by expressing the location of the stairs with diagonal lines and shadows (Figure 7). The window panels were composed of white cement and a dark aggregate. When lightly sandblasted, the aggregate became exposed and the color was thought to pair well with the cast-in-place grey concrete that was poured around the truss work and stair towers. The precast panels with their deeply inset windows served the dual purposes of protecting the interior from sun as well as using its light and shadow to create a sculptural façade. Other structures completed by Breuer in the 1960s featured similar deeply inset windows: the IBM Laboratory in La Guade, France (1962) and the U.S. Department of Housing and Urban Development (HUD) in Washington D.C. (1966). Breuer even designed another building in New Haven during this period with similar inset windows: the Becon Engineering and Applied Science Center (1970) at 15 Prospect Park Street. He continued designing buildings in this style, most notably the Hubert H. Humphrey Building in Washington, D.C (1976).

The Modernist movement took advantage of new advances in technology and building materials, which allowed architects such as Breuer to experiment with their designs. Breuer was especially fond of concrete, and by 1963 he had developed three methods that expanded and enhanced the possibilities of incorporating concrete into Modern design. The first method involved the creation of an overall rough surface texture using irregular patterns in the sandblasted board forms and poured concrete. The second method employed faceted or modular precast design to fragment large, flat expanses of concrete, and the third method utilized a system of visible joints in the concrete forms. When combined, the three methods enhanced the visual nuances presented by light, shadow, and darkness, as each appeared to temporarily

⁸ Guy Nordenson, "Marcel Breuer: Structure and Shadow," in *Marcel Breuer Building Global Institutions*, ed. Barry Berdoll and Jonathan Massey (Zurich: Lars Muller Publishers, 2018) 2018, 118.

⁹ Gatje and Pei, 213.

¹⁰ Gatje and Pei, 212.

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alter the building's surface. All three methods were employed by Breuer in the Armstrong Rubber Company Building. Breuer preferred to represent the concrete and steel buildings in juxtaposition to natural forms, "in contrast to nature."¹¹ But his ability to blend the needs of clients with his own architectural predilections showed his deep understanding that architecture does not exist in a vacuum, and no matter how much Modernists extolled the importance of form following function and eschewing the messiness of life and nature, it will creep in at some point.¹² It brought him great success at the Armstrong Rubber Building, as he was able to listen and understand the needs of two clients on the opposite ends of the spectrum, as well as his structural engineer.

The sign structure, located just to the northeast of the building, is another example of the innovative design solutions Breuer employed in the Armstrong Rubber Company Building (Figures 5-7). When the Armstrong representatives approached Breuer about the design for a roof-top sign, Breuer responded that the building was so distinctive that it would not require signage but would just be known as the Armstrong Building. He argued further that a roof-top sign would interfere with the building's silhouette. Armstrong, and its investors, was not convinced. Architectural renderings of the building illustrate a period in which Breuer seems to have considered incorporating signage within the two-story void (Figures 1-2). Ultimately, Breuer proposed an ancillary 3-story structure that could be seen from the highway but that would not detract from the architectural integrity of the building. Armstrong approved the proposal, but here, as at the outset, Armstrong and the city clashed once more—the structure was not in keeping with a city ordinance that restricted the height of signs along the turnpike. The design team came up with a solution that would ultimately please both Armstrong and the city: he added a door and a window at the base of the structure, creating a storage shed—no longer a freestanding sign structure. The design was approved by the city. The structure itself is reminiscent of the main building in its materials and in its form—a base, a void, and an upper mass on which the signage was affixed.

The Armstrong Rubbery Building has outlived both the company whose name it bears and the city of New Haven's urban renewal experiment. Breuer and Levy were able to marry structural engineering ingenuity with Brutalism's vast expanses of concrete to create a structure that serves its main purpose: welcoming those passing by on I-95 to New Haven.

New Haven Urban Renewal (Mayor Richard Lee)

The Armstrong Rubber Building's design is deeply tied to the urban renewal program undertaken by New Haven in the 1950s and 1960s. Like many cities across the country in the early twentieth century, New Haven was facing a bleak future by the 1920s. The Great Depression hastened the decline, and by the end of World War II the city of New Haven was in desperate need of radical changes. Industry was crumbling and residents were following the nation-wide trend of moving to the suburbs, fueled by the growing automobile industry. Manufacturing, which had built New Haven into the commercial center for most of Southern Connecticut, was rapidly dwindling and moving to cheaper (and non-unionized) parts of the country in the South and West. Around this time, New Haven elected Richard C. Lee as mayor. He had a vision of turning New Haven into "a national laboratory for physical urban renewal."¹³ Mayors, city

¹¹ Guy Nordenson, "Marcel Breuer: Structure and Shadow," 119-120.

¹² Marcel Breuer, "Speech at the Symposium 'What is happening to Modern Architecture?'" in *Marcel Breuer, Architect and Designer*, Peter Blake (New York: Museum of Modern Art, 1949), 122.

¹³ Lizabeth Cohen, *Saving America's Cities: Ed Logue and the Struggle to Renew Urban America in the Suburban Age*, (New York: Farrar, Straus and Giroux), 2019, Introduction.

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planners, and architects were proposing vast changes to urban landscapes in hope of saving America's urban cores.

Richard C. Lee (1916-2003) was a life-long resident of New Haven with a vision for his city. Born in 1916 to a working-class family, Lee took a reporter job at the New Haven Journal-Courier after graduating high school. He was elected as a city alderman at the age of 23, and by the age of 33 was running for mayor of New Haven. His first two bids were unsuccessful, but in 1953 his strong vision and passion for the betterment of New Haven won him the election. He served as Mayor of New Haven from 1954-1970, but his influence on the landscape of the city – though somewhat marred in the decades following – lived on well after he left office.¹⁴

Lee's 1953 campaign for mayor was run on the idea that he would "renew" New Haven and bring it back to its former glory.¹⁵ What set Lee apart from his rivals was his understanding that while everyone wanted to help New Haven, there was no central plan and "no unity of approach."¹⁶ One firm believer in Lee's promise, Ed Logue, then an aspiring Yale law student, joined the campaign to try and bring real change to the city. Lee was so impressed with Logue, he hired Logue as his executive secretary once he won the election. By 1955, Lee appointed Logue as the development administrator of the New Haven Redevelopment Agency. Together, Lee and Logue undertook one of the most expansive urban renewal projects in the nation. In her book on Logue and his legacy of urban renewal, Lizabeth Cohen describes Logue and Lee's collaboration:

Logue's brilliance at garnering newly available federal urban renewal funds, combined with Lee's intimate knowledge of New Haven, made them an irrepressible and nationally admired team who could boast that they were attracting more federal dollars per capita to New Haven than any other American city was getting.¹⁷

The federal government was not blind to the problems facing the country's urban centers. They realized federal funding could help rebuild many failing urban cores and passed significant acts in the 1930s, 1940s, and 1950s to help finance projects. Lee and Logue were able to tap into the Housing Acts of 1937, 1949, and 1954 as well as the Federal-Aid Highway Act of 1956 to fund their radical urban renewal plan. The Housing Acts, primarily of 1949 and 1954, provided federal money to tear down urban slums and build new housing in their place. During his campaign in 1953 for mayor, Lee visited the "slums" of New Haven (primarily Oak Street and Wooster Square), and he was appalled at the condition the people were living in.¹⁸ Substandard urban housing was a national issue, and the new federal acts were aimed at providing a decent and healthy living option to every citizen in the form of new modern buildings. New Haven's early adoption of urban renewal and dedicated leader allowed them to have the highest per capita federal urban renewal funding through the 1950s and 1960s. While they were able to receive significant federal funding, Lee and Logue also acknowledged that private investments were still going to be necessary. Their plan for urban renewal, though, put Logue and his redevelopment agency in complete control of planning projects and applying for government aid.¹⁹ This would become a point of contention for companies like Armstrong Rubber who did not want their building designs and budgets heavily dictated by the mayor's office.

¹⁴ Connecticut History, "Richard Lee's Urban Renewal in New Haven," CT Humanities, July 28, 2020, <https://connecticuthistory.org/richard-lees-urban-renewal-in-new-haven/>.

¹⁵ Cohen, *Saving America's Cities*, Introduction.

¹⁶ Cohen, *Saving America's Cities*, 25.

¹⁷ Cohen, *Saving America's Cities*, 14-15.

¹⁸ Douglas W. Rae, *City, Urbanism and Its End*, (New Haven: Yale University Press) 2003, 323.

¹⁹ Cohen, *Saving America's Cities*, 26-27.

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In order to receive federal aid, the city had to have a plan in place for how the funds were to be used. Tasked with creating a plan that would drastically change the future of New Haven, Logue drew upon the existing plans proposed by his Yale Law School professor Maurice Rotival in 1941. The plans placed the emphasis on the automobile, updating the city's means for distribution (Rotival's original plan included what would later become I-95).²⁰ Logue's urban renewal strategy focused on increasing and improving automobile access through the city and into downtown, retaining and growing its manufacturing industry, and creating new postindustrial economic opportunities.²¹ Another important facet of their plan was separating functions into different parts of the city through strategic zoning. City zoning was not a new theory, but it was one that gained popularity amongst Modern city urbanists and planners for its ability to neatly organize functions. The newly filled in land at Long Wharf provided 350 new acres to build industrial buildings separated from downtown commercial and residential areas.²² This allowed manufacturing companies like Armstrong the space to expand while maintaining easy proximity to transportation. It was a strategy directly aimed at competing with the cheap, large plots of land available in the suburbs.

One of the most lasting legacies of Lee and Logue's urban renewal plan is the Mid-Century Modern architecture it built. Government funding during the mid-twentieth century was given with the understanding that blighted and crumbling buildings would be torn down and new modern buildings would replace them. Lee was able to finagle such a large quantity of federal funding in part because "he could offer up the kind of vision that the feds were looking for: an urban army to call in the bulldozers, knock down the bad stuff and put up something pretty in its place."²³ Both Lee and Logue wanted the city's new buildings to announce their modern and dramatic approach to rebuilding. The pair also took their interest in Modern architecture a step further and wanted to focus on attracting master architects to design the new buildings to bring even more attention to New Haven's rebirth. They were able to attract many of the top Modernist architects of the time, supported in part by Yale University's School of Architecture.²⁴

Mayor Lee and Logue's plans for urban renewal were well funded, well planned, and for the most part fully carried out through the 1960s. In the 1960s, official city delegations, architects, engineers, planners, and many others came through New Haven to see the "success" of its urban renewal project.²⁵ But the legacy of New Haven's urban renewal has been left with a complicated history. Many blighted cities across the country followed in New Haven's footsteps and undertook large urban renewal strategies in the mid-twentieth century. One of the main tenants of this philosophy, though, was demolishing "blighted" buildings and the forced relocation and displacement of many residents. The process never lived up to its promise, and instead of building decent housing for lower-income residents who were displaced, new higher-income producing housing was built instead.²⁶ The displaced residents ended up moving into other dilapidated neighborhoods, only perpetuating the cycle.²⁷ Lee failed to recognize that new buildings and roadways would not solve New Haven's underlying issues, and therefore no amount of government

²⁰ Cohen, *Saving America's Cities*, 27.

²¹ Cohen, *Saving America's Cities*, 28.

²² Cohen, *Saving America's Cities*, 30.

²³ Laurence D. Cohen, "Urban Renewal's Mad Scientist," *Hartford Courant* (Hartford, Connecticut), February 9, 2003.

²⁴ Cohen, *Saving America's Cities*, 32.

²⁵ Cohen, *Saving America's Cities*, 35.

²⁶ Cohen, "Urban Renewal's Mad Scientist."

²⁷ Rae, *City, Urbanism and Its End*, 357.

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spending on urban renewal would create lasting change.²⁸ The Long Wharf Redevelopment attracted new industry, but ultimately it was not enough to replace the number of lost jobs. In later years, Lee and Logue would ultimately agree that their urban renewal plan for New Haven had largely not lived up to their hopes for the city.²⁹

Long Wharf Redevelopment

The plot of land that interested the Armstrong Rubber Company for its expanded new corporate headquarters was located in the Long Wharf District, a redevelopment area that was a key part of Lee and Logue's ambitious planning efforts for New Haven. The parcel was one of the last available lots in Long Wharf, and with its industrial zoning and proximity to I-95, it was the logical choice for their new building. Long Wharf and its surrounding area have been an integral component of transportation changes in New Haven. The first known iteration of Long Wharf was built at the end of the seventeenth century during the initial growth of New Haven. Long Wharf and the surrounding area became a commercial hub for the city, and the wharf was built and expanded upon throughout the next century and a half. By the later nineteenth century new wharfs with better facilities were constructed to serve the new railroad lines and Long Wharf went into a period of decline. The New York, New Haven and Hartford Railroad purchased the wharf in 1890 to expand their operation and prevent impacts from the Long Wharf public right-of-way. The railroad company cleared the buildings from the north of the wharf to expand its freight yard tracks and perpetuated the areas decline.³⁰

Over the next few decades Long Wharf and the surrounding area further descended into decline, until the Connecticut State Highway Department decided to use the land along the waterfront to expand U.S. Route 1. The private use of automobiles expanded so rapidly after World War II that the state had to drastically expand many of its larger roadways. The proposed plan for Route 1 became known as the Harborfront Relocation Project, and work began with the dredging of the New Haven Harbor in 1949 to enable large vessels to use the port. The resulting fill was used to create a bed for the future elevated road, frontage roads, and further infill between the freight train tracks and the wharf. By 1953, while work was underway, the Harborfront Relocation Project became part of the creation of the Greenwich-Killingly Expressway, which a few years later was renamed the Connecticut Turnpike, and later Interstate-95.³¹

The new expressway project opened up the opportunity for the City of New Haven to undertake an urban renewal project in the land created by Long Wharf. The Long Wharf Redevelopment was carried out by the New Haven Redevelopment Agency in the mid-1960's. The project was the most ambitious of Lee's administration and was regarded as a major engineering and planning achievement at the time. It was the only urban renewal project undertaken by Lee that was not federally funded and was heavily zoned to create an industrial hub with easy access to utilities and transportation. The project was able to receive state funding through the 1958 Public Act 8, which funded non-residential projects in Connecticut that were part of urban renewal plans.³² This reclamation area was planned as a showcase of modern industry at the entrance to the city. The redevelopment project opened up new opportunities for manufacturers and businesses in the New Haven area, a ploy by the city to woo companies to stay in

²⁸ Rae, *City, Urbanism and Its End*, 333.

²⁹ Cohen, *Saving America's Cities*, 66.

³⁰ Bruce Clouette, "Historical and Archaeological Assessment Survey: Long Wharf Pier Structure, New Haven, Connecticut," Archaeological and Historical Services, Inc, March 2008, 7-13.

³¹ Clouette, "Long Wharf Pier Structure," 14.

³² Rachel D. Carley, "Tomorrow is Here: New Haven and the Modern Movement," New Haven Preservation Trust, 2008, 34.

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New Haven.³³ Logue believed that skilled workers, transportation, and proximity to suppliers would no longer suffice to attract manufacturers to cities. While Long Wharf did provide new easier transportation with the completion of I-95, Logue also focused on replacing “factory buildings which are obsolescent, or worse’ with new-style, horizontally sprawling plants in proper industrial corridors.”³⁴ The waterfront became a park, and the historic remains of Long Wharf were left untouched. The parcel of land that the Armstrong Rubber Company bought was one of the last pieces of the Long Wharf Redevelopment Project.³⁵

In her guide to the architecture and urban design of New Haven, Elizabeth Mills Brown describes the Long Wharf Project as “the modern city advertising itself, an imposing lineup of architect-designed factories and commercial buildings in which landscaping and architectural standards have been fostered by the city. She concludes, “the city brilliantly seized the opportunity to create a motor-age industrial park on its new front doorstep.”³⁶ The other industrial buildings in the Long Wharf Redevelopment were primarily low-profile, simple Modern industrial structures. One of the first buildings located in Long Wharf was the Sargent and Co. Building (1964) designed by the local firm of Orr, DeCossy, Winder & Associates. The building more closely resembles Armstrong Rubber’s original design wish with a prominent tinted-glass two-story office structure along Sargent Drive and a large manufacturing warehouse behind. The other major structure built in the first years of Long Wharf was the Long Wharf Market Buildings (1965). The two parallel buildings were only two stories and was designed also by local architecture firm Granbery, Cash & Associates. The buildings were surrounded by trees and grass, leading to a more suburban feel made possible by the large amount of land set aside by the city for industrial use. They represented the new, professional industrial park Lee wanted, but none reached the monumentality of the Armstrong Rubber Building.³⁷

New Haven Mid-Century Modern Architecture

Urban renewal of the mid-twentieth century is most often recognized through large swaths of highway and stately, sometimes imposing, Modern buildings. New Haven, as the “ideal” example of urban renewal at the time, sought the biggest and brightest names in architecture, engineering, and design to complete its new structures that were to define the rebirth of the city. Yale University was the first institution to bring Modernism to New Haven, with its completion of Eero Saarinen’s Ingalls Hockey Rink in 1957. Yale President, Whitney Griswold, led a deliberate program by the university to commission and build works by the country’s most noted architects. Following Yale’s example, Lee and Logue engaged many of the same architects that were working for Yale to contribute to the rebuilding of New Haven. Some of these architects were teachers in the School of Architecture at Yale, which at the time, was one of the two most vital and creative schools of architecture in the United States. Like Griswold, Lee wanted to create a showplace of the best of the age while also protecting the city from being overshadowed by the Ivy League university.³⁸

³³ Clouette, “Long Wharf Pier Structure,” 15.

³⁴ Cohen, *Saving America’s Cities*, 31.

³⁵ Clouette, “Long Wharf Pier Structure,” 15.

³⁶ Elizabeth Mills Brown. *New Haven: A Guide to Architecture and Urban Design*. (New Haven and London: Yale University Press) 1976, 22-23.

³⁷ Carley, “Tomorrow is Here,” 38-39.

³⁸ The information on New Haven’s legacy of Modern architecture is excerpted with edits from the Connecticut Historic Resources Inventory Form completed in 1997 by the Alliance for Architecture.

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New England had become a hub of Modern architecture in the late-1930s with the hiring of Walter Gropius as the director of the Harvard University Graduate School of Design (GSD). With the closing of the Bauhaus School in Weimar in 1933, many prominent Modernist were out of work and came to the United States looking to escape the rise of the Nazi party and to find work. Gropius brought Marcel Breuer (1902-1981) to the Harvard GSD.³⁹ Breuer was born in Hungary in 1902, he attended the Bauhaus as an architecture student from 1920 to 1924, and he was a teacher at that institution from 1924 to 1928. The Bauhaus, which was a crucible for the development of modern design in the early twentieth century, relied on a pedagogical method that stressed direct knowledge of crafts and materials. This is reflected in Breuer's architectural work through his experimental use of concrete to play with shadow and create contemporary architectural shapes. During the Bauhaus period Breuer became known for furniture design. In 1928 he designed the continuous bent steel tube cantilever chair, the Cesca or Breuer chair, which was an influential, and frequently copied piece of furniture designed in the twentieth century.

Breuer practiced as an architect in Berlin, Germany until 1932 when he left for England. During this first professional period, Breuer built very little due to the economic and political instability in Europe at the time. He was invited to the U.S. in 1937 by Walter Gropius, and Breuer began teaching at Harvard in 1938. Breuer was able to form an architectural partnership with Gropius. Among the houses designed by Breuer and Gropius between 1938 and 1946, several were highly influential in the development of modern architectural residential design in the United States and in other countries. Peter Blake, an architect and architectural critic, wrote of Breuer that these houses were "noted for their assimilation of the tradition of New England building to the demands of the new architecture."

In 1946, Breuer left Harvard and Gropius to start a practice in New York. One year later he built the first of two houses in New Canaan, Connecticut, where he lived.⁴⁰ Four of his students from Harvard eventually followed him to New Canaan and designed houses for themselves and their neighbors. The group – Breuer, John M. Johansen, Landis Gores, Philip Johnson, and Eliot Noyes – became known as the Harvard Five and left their mark on southern Connecticut architecture.⁴¹ Modernist in the Northeast formed a tight-knight group, often socializing, vacationing, and working together. The Harvard Five left their mark on New Haven as well. Johansen's Helene W. Grant School (1964) and Dixwell Avenue Congregational Church (1967, listed in the National Register of Historic Places) have both become important components of New Haven's Mid-Century Modern architecture inventory. Johnson designed what was then the tallest building in New Haven with Richard Foster – the Kline Science Buildings completed in 1967. Noyes Associates designed the Long Wharf Park in 1976-1977.

Breuer's Modernist circle extended beyond the Harvard Five and included structural engineer Paul Weidlinger, whose firm worked closely with Breuer on the Armstrong Rubber Building. Weidlinger was also a Hungarian immigrant forced out of Europe by the impending World War. In Breuer he not only found a professional partner but someone who could understand the personal struggles of living in a different country. Weidlinger had a strong resume, having worked under Corbusier and with many other

³⁹ Mid-Twentieth Century Modern Residences in Connecticut MPDF, CT SHPO, United States Department of the Interior, National Park Service, 9.

⁴⁰ See "Marcel Breuer House II," National Register of Historic Places nomination form by Jenny Fields Scofield and Virginia H. Adams (National Park Service, U.S. Department of the Interior, 2010) for more information about Breuer's house design.

⁴¹ Nancy Finlay, "Who Were the Harvard Five – And What Do They Have to do with Connecticut?" Connecticut Historical Society, July 15, 2014, <https://chs.org/2014/07/who-were-the-harvard-five-and-what-do-they-have-to-do-with-connecticut/>.

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prominent Modern architects, including Gropius and Gordon Bunshaft.⁴² They first worked together on the St. Francis de Sales Church in Muskegon, Michigan (1948). Their professional relationship grew, and eventually Breuer convinced Weidlinger to join the Modernist group that vacationed on Outer Cape Cod. Weidlinger built houses that faced Breuer's on Higgins Pond in Wellfleet, Massachusetts. Weidlinger grew a strong structural engineering firm in New York City known as Weidlinger Associates, and the firm collaborated often with Breuer on his commissions.⁴³ While Weidlinger was the principle of the firm, his associate Matthys Levy was often the project engineer for Breuer.

Within his own firm, Breuer, as principal, designed each project in collaboration with his staff. The Armstrong Rubber Building was overseen by Robert Gatje, one of several partners in Breuer's architectural practice in New York. Gatje had a long and successful architectural career working for two AIA Gold Medalists, Breuer and Richard Meier, as well as in his own practice. He was born in Brooklyn, NY in 1927 and received his B.Arch in 1951 from Cornell University. He was a Fulbright scholar at London's Architectural Association school in 1951-52, after which he was hired as a draftsman by Breuer.⁴⁴ He worked in Breuer's office until 1982, rising to associate and partner. He was involved in the design of the Institute of Advanced Study in Princeton, NJ, New York University in the Bronx, as well as the IBM research center in La Gaude, France. He eventually became the resident director of Breuer's European office and oversaw the design of a residential quarter in Bayonne, France and the Flaine ski resort, which has been listed on the French Historical Monuments Survey. He served as president of the New York Chapter of the AIA from 1975-1976. Following Breuer's retirement, Gatje formed an architectural office with Tician Papachristou and Hamilton Smith, both former Breuer designers. Gatje joined Richard Meier's firm in 1987 where he worked until 1995.⁴⁵

The major portion of Breuer's practice in New York was focused on the design of buildings for educational institutions, the government, corporations, and the church. He was the architect for the UNESCO building in Paris, the headquarters for HUD in Washington, DC, the Whitney Museum in New York, St. John's Abbey and University, in Minnesota, and the University of Massachusetts Campus Center at Amherst. In Connecticut he was architect for the Litchfield High School, the Torin Corporation in Torrington, and in New Haven for the Becton Engineering and Applied Science Center at Yale as well as the Armstrong Rubber Company Building. Breuer was a modern architect, however his interest in the vernacular – in the use of local materials and methods – which became evident in his New England houses, and was apparent very early in his career –and can be seen informing his larger works. Breuer lived in New Canaan until 1976. He received the AIA Gold Medal for his contribution to architecture in 1968. He died in 1981.

Breuer and the other Modern architects designing in New Haven found urban renewal a prime candidate for the many of the guiding theories of Modernism. City and urban leaders wanted buildings that demonstrated their modernity. Modernism relied heavily on the new construction materials and methods that emerged during this time, especially steel and concrete construction. Large expansive window systems were also now possible and further pushed the buildings towards something new and different. Part of New Haven's urban renewal plan required smaller lots and buildings to be torn down and combined to create large, empty lots along highways that required larger, streamlined buildings.⁴⁶

⁴² Matthys P. Levy, "Paul Weidlinger," in *Memorial Tributes Volume 12: National Academy of Engineering* (Washington, DC: The National Academies Press, 2008), 329-331.

⁴³ Jenny Fields Scofield and Virginia H. Adams, Paul Weidlinger House National Register of Historic Places Nomination, National Park Service, U.S. Department of the Interior, 2014.

⁴⁴ "Obituary, Gatje—Robert Frederick," *The New York Times*. April 4, 2018.

⁴⁵ Justin Chan. "Obituary, Robert F. Gatje, 1927-2018," *Architectural Record*. April 5, 2018.

⁴⁶ Rae, *City, Urbanism and Its End*, 352.

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Modern architecture would also represent the city's rebirth and its move into its next phase.⁴⁷ Rather than the stuffy, highly decorated but dilapidated buildings that had begun to define New Haven, the sleek, paired-down, concrete structures were a visual representation of the drastic change Lee was hoping to create. Built towards the end of Lee's tenure as mayor of New Haven, the Armstrong Rubber Building became the culmination of years of experimenting to find the best combination of Modern design and his urban renewal vision. Renowned Modern architects and designers such as Eero Saarinen, Paul Rudolph, Breuer, Louis Kahn, Kevin Roche, John Dinkeloo, Edward Larrabee Barnes, Philip Johnson, John Johansen, and Gordon Bunshaft all contributed structures to New Haven's Modern architecture inventory.⁴⁸

New Haven's collection of Modern architecture is speckled throughout the city, demonstrating the wide reach of Lee's urban renewal undertaking.⁴⁹ Due to the high number of Modern architects practicing in the area, the buildings represent a wide range of Modern styles. Brutalism, with its large concrete masses and minimized windows, can be found in other projects in New Haven beyond the Armstrong Rubber Building. To the north of the Armstrong Rubber Building is the Oak Street Connector, one of Lee's more ambitious urban renewal projects. New buildings were erected along the street, including two Brutalist structures: Crawford Manor (Paul Rudolph, 1965) and the Yale Laboratory for Epidemiology and Public Health (Philip Johnson, 1965, renamed Yale School of Public Health). To the northwest of the Armstrong Rubber Building, along the new Oak Street Connector, sits the Knights of Columbus Building (Kevin Roche, John Dinkeloo and Associates, 1967-1969). While covered in clay tile to create a unique appearance, the building was designed to serve a similar purpose as the Armstrong Rubber Building – it is highly visible from intersecting highways and was a welcoming sign to the “new” New Haven.⁵⁰ As the first skyscraper in New Haven, the building's scale seemed to jar with the rest of the city, but it suited and was necessary for the large elevated swaths of highway now cutting through town.⁵¹

The Armstrong Rubber Building has served its purpose as an identifier for New Haven since 1968 even though Armstrong Rubber left the building in 1980. The expanding success enjoyed by the Armstrong Rubber Company through the 1960s began to slow not long after the company moved into its monumental new headquarters. An economic recession and severe gasoline shortages in the 1970s drastically reduced the number of drivers on the road, resulting in a diminishing demand for tires. Just a decade after opening the plant, Armstrong closed the West Haven facility in 1980, one of seven operating in the country at the time; 600 workers lost their jobs. The facility operated as a warehouse until Armstrong's parent company, the Armtek Corporation, sold Armstrong to the Italian tire manufacturer, Pirelli S.p.A in 1988. The acquisition resulted in the creation of the Pirelli Armstrong Tire Corporation.⁵² In the late 1990s, Pirelli began to phase out the Armstrong brand and the Breuer-designed building was vacated when the occupants departed New Haven.⁵³ In 2003, the property was

⁴⁷ Rae, *City, Urbanism and Its End*, 356.

⁴⁸ Rachel D. Carley, “Tomorrow is Here: New Haven and the Modern Movement,” New Haven Preservation Trust, 2008, 2.

⁴⁹ For a more complete inventory of New Haven Modern Architecture, visit www.newhavenmodern.org which houses the Connecticut State Historic Preservation Office Historic Resource Inventory for each structure.

⁵⁰ “Knights of Columbus Building,” New Haven Modern, accessed August 17, 2020, <http://newhavenmodern.org/knights-of-columbus-building>.

⁵¹ Carley, “Tomorrow is Here,” 28.

⁵² Armstrong. *About*, 2019. Electronic resource, <https://www.armstrongtire.com/about-armstrong/>, accessed May 2019.

⁵³ Armstrong *About*, 2019; Tim Nelson, “A Marcel Breuer Building Owned by IKEA Could Become a Hip New Hotel.” *Architectural Digest*, 27 April 2018. Electronic document, <https://www.architecturaldigest.com/story/marcel-breuer-ikea-pirelli-tire-building-could-become-ahip->

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purchased by IKEA Property Inc.⁵⁴ Shortly thereafter, IKEA constructed a large building to the southwest of the Armstrong Rubber Company Building. As part of the new construction, IKEA demolished the research and development laboratories of the Armstrong Rubber Company Building for surface parking, leaving the existing tower, which has remained vacant.

Breuer, Gatje, Levy, Weidlinger, Lee, and the Armstrong Rubber Company all left their mark on the design of the Armstrong Rubber Building. The building is a relic of what urban renewal could be, even though the building also represents the city's failure to retain manufacturing enterprises into the later part of the twentieth century. But even with economic shifts in New Haven, the building and its design has remained an important part of the Long Wharf landscape and of the greater New Haven Mid-Century Modern inventory.

new-hotel, accessed May 2019.

⁵⁴ Bridget Cogley, "Brutalist Breuer building owned by IKEA could become hotel in Connecticut." *Dezeen*, 26 April 2018. Electronic document, <https://www.dezeen.com/2018/04/26/brutalist-marcel-breuerpirelli-tire-building-new-haven-connecticut-hotel-ikea/>, accessed May 2019.

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9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Adams, Virginia H., Jenny Fields Scofield, Laura L. Kline, and Melissa Antonelli. *Mid-Twentieth Century Modern Residences in Connecticut, 1930-1979*, National Register of Historic Places Nomination Form. On file, National Park Service, Washington, D.C., 2010.

Alliance for Architecture. Connecticut Historic Resources Inventory Form. *The Pirelli Building/The Armstrong Rubber Company Building*, New Haven, CT, 1997.

Architecture without Rules: The Houses of Marcel Breuer and Herbert Beckhard, Masello D. W.W. Norton, NY 1993.

Armstrong. *About*, 2018. Electronic resource, <https://www.armstrongtire.com/about-armstrong/>, accessed September 2018.

Armstrong Finds a Niche in the Tire Market.” Electronic resource, *Connecticut History.Org*. September 7, 2013. <https://connecticuthistory.org/armstrong-finds-a-niche-in-the-tire-market/>, accessed May 2019.

Blake, Peter. *Marcel Breuer, Architect and Designer*. New York: Museum of Modern Art, 1949.

Blake, Peter. *Marcel Breuer: Sun and Shadow: The Philosophy of an Architect*. New York: Dodd, Mead and Co., 1951.

Bergdoll, Barry with John H. Beyer. *Marcel Breuer: Bauhaus Tradition, Brutalist Invention*. The Metropolitan Museum of Art Bulletin, Summer 2016. The Metropolitan Museum of Art (the Met): New York, NY, 2016.

Breuer, Marcel and Tician Papachristo. *Marcel Breuer: New Buildings and Projects*. New York: Praeger, 1970.

Brown, Elizabeth Mills. *New Haven: A Guide to Architecture and Urban Design*. (New Haven and London: Yale University Press) 1976.

Carley, Rachel D. “Tomorrow is Here: New Haven and the Modern Movement.” New Haven Preservation Trust, 2008.

Chan, Justin. “Obituary, Robert F. Gatje, 1927-2018,” *Architectural Record*. April 5, 2018.

Cogley, Bridget. “Brutalist Breuer building owned by IKEA could become hotel in Connecticut.” *Dezeen*, 26 April 2018. Electronic document, <https://www.dezeen.com/2018/04/26/brutalist-marcel-breuerpirelli-tire-building-new-haven-connecticut-hotel-ikea/>, accessed September 2018.

Cohen, Laurence D. “Urban Renewal’s Mad Scientist.” *Hartford Courant* (Hartford, Connecticut), February 9, 2003.

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Cohen, Lizabeth. *Saving America's Cities: Ed Logue and the Struggle to Renew Urban America in the Suburban Age*. New York: Farrar, Straus and Giroux, 2019.

Clouette, Bruce. "Historical and Archaeological Assessment Survey: Long Wharf Pier Structure, New Haven, Connecticut." Archaeological and Historical Services, Inc, March 2008.

Connecticut History. "Richard Lee's Urban Renewal in New Haven." CT Humanities, July 28, 2020, <https://connecticuthistory.org/richard-lees-urban-renewal-in-new-haven/>.

DOCOMOMO. Explore Modern, Register, Pirelli Tire Building. Electronic resource, <https://www.docomomo-us.org/register/pirelli-tire-building>, accessed September 2018.

Droste, M et al. *Marcel Breuer Design*. Hamburg: Taschen, 1992.

Finlay, Nancy. "Who Were the Harvard Five – And What Do They Have to do with Connecticut?" Connecticut Historical Society, July 15, 2014, <https://chs.org/2014/07/who-were-the-harvard-five-and-what-do-they-have-to-do-with-connecticut/>.

Gatje, Robert and I.M. Pei. *Marcel Breuer: A Memoir*. (New York: The Monacelli Press) 2000.

Georgia Trust for Historic Preservation. *The Georgia Trust for Historic Preservation Announces its 2017 List of State's Ten 'Places in Peril,' 2016*. Electronic resource, <https://www.georgiatrust.org/pressreleases/the-georgia-trust-for-historic-preservation-announces-its-2017-list-of-states-ten-places-in-peril/>, accessed October 2018.

Green, Josh. *Touring Marcel Breuer's Central Atlanta Library, prior to renovations*. Curbed Atlanta, 8 June 2018. Electronic resource, <https://atlanta.curbed.com/2018/6/8/17430404/central-atlanta-library-marcel-breuer-photos>, accessed October 2018.

Hawthorne, Christopher. "Disposable Architecture", *Metropolis Mag*, n.d. Electronic document, <https://www.metropolismag.com/ideas/preservation/disposable-architecture/>, accessed September 2018.

Levy, Matthys P. "Paul Weidlinger." In *Memorial Tributes Volume 12: National Academy of Engineering*. Washington, DC: The National Academies Press, 2008.

Metropolitan Museum of Art (The Met). *Visit, The Met Breuer, 2000–2018*. Electronic resource, <https://www.metmuseum.org/visit/met-breuer>, accessed October 2018.

Nationwide Environmental Title Research (NETR). *500 Sargent Drive, New Haven, CT, 1934–2014*. www.historicaerials.com.

Nelson, Tim. "A Marcel Breuer Building Owned by IKEA Could Become a Hip New Hotel." *Architectural Digest*, 27 April 2018. Electronic document, <https://www.architecturaldigest.com/story/marcel-breuer-ikea-pirelli-tire-building-could-become-a-hip-new-hotel>, accessed September 2018.

Armstrong Rubber Company Building

New Haven, CT

Name of Property

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New Haven Colony Historical Society. *New Haven, Reshaping the City 1900-1980*. (Charleston, SC: Arcadia Publishing) 2002, 2004.

New Haven Preservation Trust, New Haven Modern. Armstrong Rubber Company, n.d.. Electronic resource, <http://newhavenmodern.org/armstrong-rubber-co>, accessed September 2018.

Nordenson, Guy. "Marcel Breuer: Structure and Shadow," in *Marcel Breuer Building Global Institutions*, ed. Barry Berdoll and Jonathan Massey (Zurich: Lars Muller Publishers, 2018) 2018.

"Obituary, Gatje—Robert Frederick," *The New York Times*. April 4, 2018.

Pasnik, Mark, Michael Kubo, and Chris Grimley. *Heroic: Concrete Architecture and the New Boston*. The Monacelli Press: New York, NY, 2015.

Public Archaeology Laboratory (PAL). *Roxbury Modern, Preliminary Historic Context 1960–1980*. Prepared by PAL for Urban Edge, 8 July 2016.

Rae, Douglas W. *City, Urbanism and Its End*. New Haven: Yale University Press, 2003.

Ryan, Susan. Connecticut Historic Resources Inventory Form. *Armstrong Rubber Co.*, New Haven, CT, 1980.

Scofield, Jenny Fields and Virginia H. Adams. *Marcel Breuer House II*, National Register of Historic Places Nomination Form. On file, National Park Service, Washington, D.C., 2010.

Scofield, Jenny Fields and Virginia H. Adams. *Paul Weidlinger House*, National Register of Historic Places Nomination Form. On file, National Park Service, Washington, D.C., 2014.

Smithsonian. *Archives of American Art, Marcel Breuer papers, 1920–1986*, 2018. Electronic resource, <https://www.aaa.si.edu/collections/marcel-breuer-papers-5596>, accessed October 2018.

Syracuse University Libraries. *Marcel Breuer Digital Archives, Armstrong Rubber Company, Headquarters, 1968–1970*, 2018. Electronic resource, <http://breuer.syr.edu/project.php?id=549>, accessed October 2018.

University of Connecticut (UConn). *Maps and Geographic Information Center (MAGIC), Coastal Infrared Aerial Photography Indexes*, 1974, n.d. Electronic resource, http://magic.lib.uconn.edu/connecticut_data.html#apindex1970, accessed October 2018.

Previous documentation on file (NPS):

Armstrong Rubber Company Building
Name of Property

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- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____
- recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- State Historic Preservation Office
 - Other State agency
 - Federal agency
 - Local government
 - University
 - Other
- Name of repository: _____

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreege of Property 2.8 acres

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: _____

(enter coordinates to 6 decimal places)

1. Latitude: 41.296814 Longitude: -72.918196
2. Latitude: Longitude:
3. Latitude: Longitude:
4. Latitude: Longitude:

Armstrong Rubber Company Building
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Or
UTM References

Datum (indicated on USGS map):

NAD 1927 or NAD 1983

- | | | |
|----------|-----------|-----------|
| 1. Zone: | Easting: | Northing: |
| 2. Zone: | Easting: | Northing: |
| 3. Zone: | Easting: | Northing: |
| 4. Zone: | Easting : | Northing: |

Verbal Boundary Description (Describe the boundaries of the property.)

The Armstrong Rubber Company Building property includes two parcels that total 2.8 acres. The first parcel includes the office building and parking lot between the building and Sargent Drive. The west boundary is defined by the western edge of the sidewalk on the west elevation. The north boundary is defined by common drive that leads to Ikea's parking lot to the west of the Armstrong Rubber Building. The second parcel encompasses the Armstrong Rubber Company sign and the parking lot to the north of the building. The west and north boundary is defined by Sargent Drive.

Boundary Justification (Explain why the boundaries were selected.)

The nominated boundaries include the original tower and sign structure designed by Marcel Breuer on the site.

11. Form Prepared By

Armstrong Rubber Company Building

New Haven, CT

Name of Property

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name/title: Roysin Younkin and Kendra Waters with Alisa Augenstein

organization: Macrostie Historic Advisors (with PAL)

(Edited by Jenny Scofield CT SHPO)

street & number: 263 Summer Street, 6th Floor

city or town: Boston state: MA zip code: 02210

e-mail: ryounkin@mac-ha.com

telephone: 617- 499-4009

date: 2-8-2019 & 5-17-2019

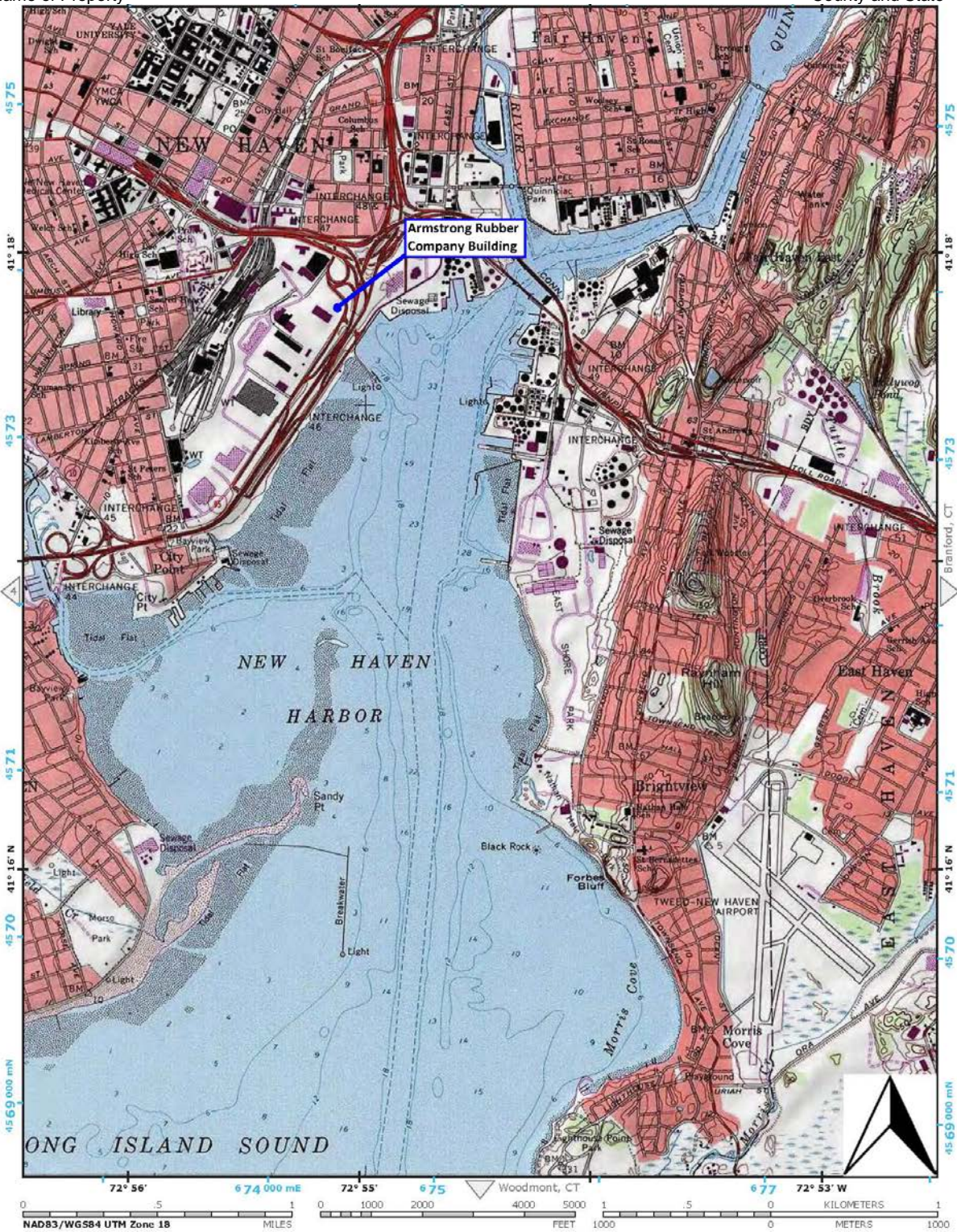
Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Armstrong Rubber Company Building
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Source: National Geographic Society, 2016
Figure 1. USGS Map, 2016. Latitude: 41.296814, longitude: -72.918196.

Armstrong Rubber Company Building
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Source: Esri World Imagery

Figure 2. Number 1 is the Armstrong Rubber Company Building, Number 2 is the historic sign.

Armstrong Rubber Company Building
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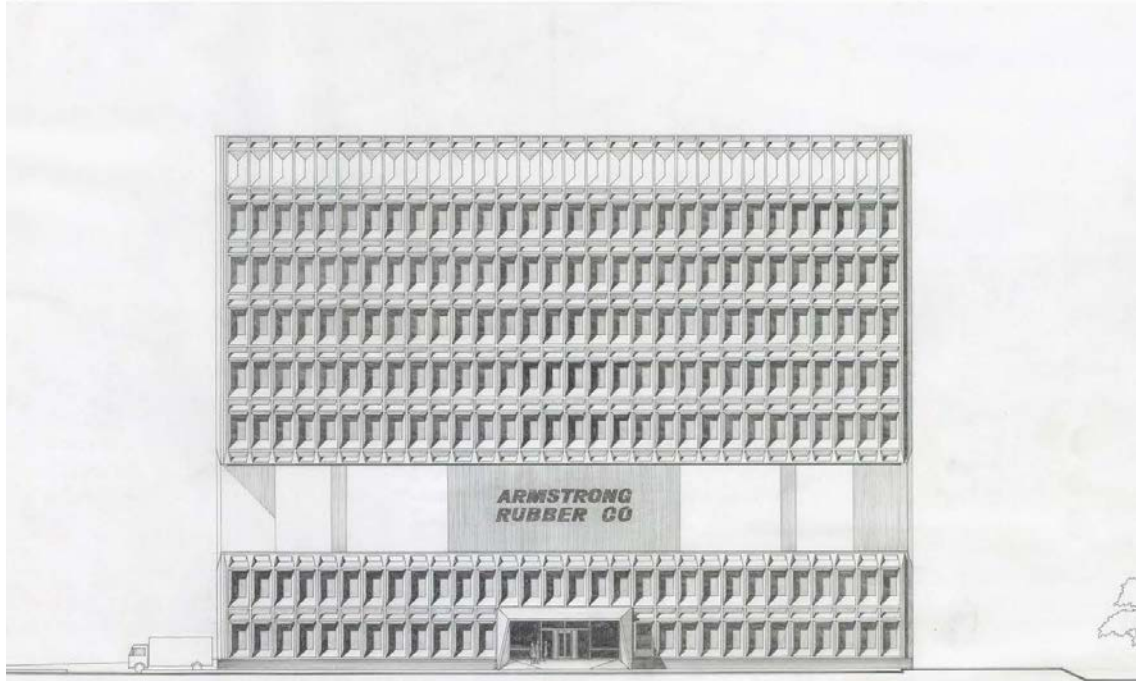


Figure 3: Armstrong Rubber Company, Headquarters, 1967-1970 (Source: Marcel Breuer Digital Archive, Syracuse University)



Figure 4: Armstrong Rubber Company, Headquarters, 1967-1970 (Source: Marcel Breuer Digital Archive, Syracuse University)

Armstrong Rubber Company Building
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Figure 5: Construction photograph of the Armstrong Rubber Company Building, view towards east elevation, 1969 (Source: Marcel Breuer Digital Archive, Syracuse University Libraries 2018)



Figure 6: Construction photograph of the Armstrong Rubber Company Building, view towards east elevation, 1969 (Source: Syracuse University Libraries 2018)

Armstrong Rubber Company Building
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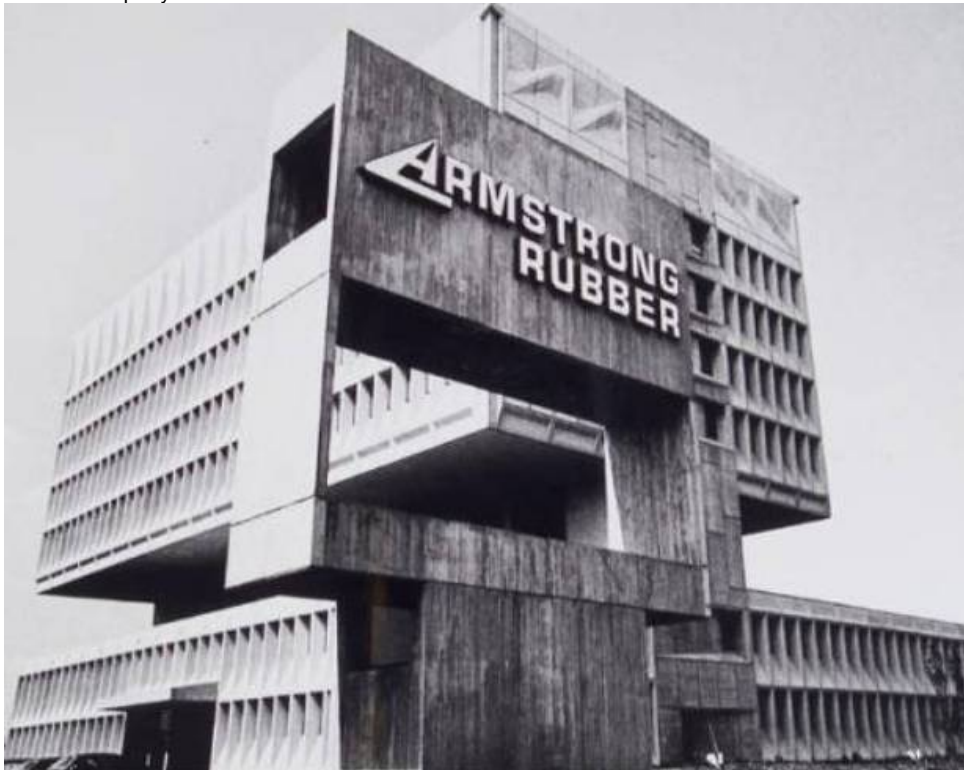


Figure 7: Armstrong Rubber Company Building and Sign ca. 1968 (Source: New Haven Museum)



Figure 8: Armstrong Rubber Company Building and Sign, 1965-1970 (Source: Smithsonian Archives of American Art, Marcel Breuer papers, 1920-1986)

Armstrong Rubber Company Building
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Figure 9: Armstrong Rubber Company Building and Sign, 1973 (Source: New Haven Modern, New Haven Preservation Trust)

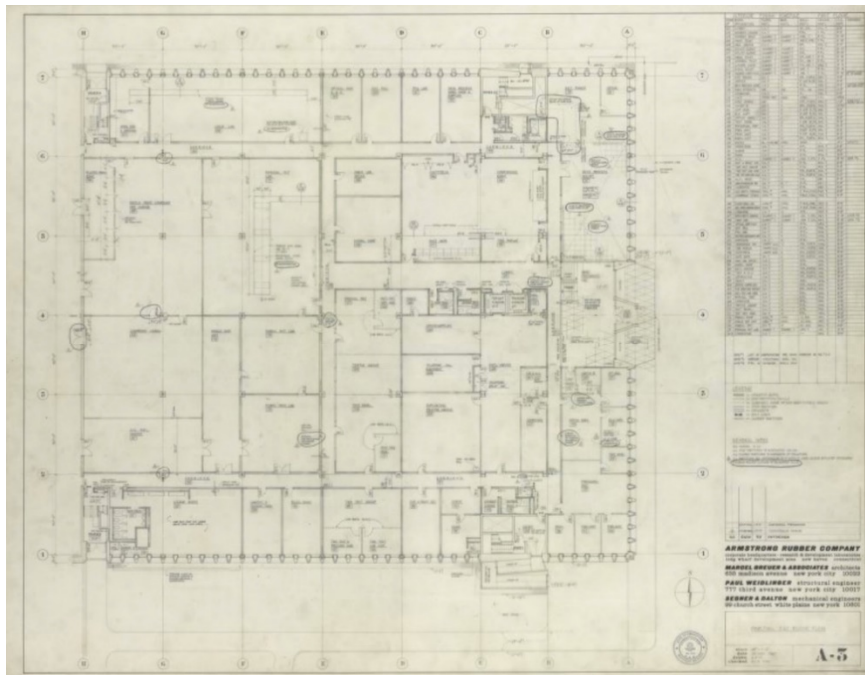


Figure 10: Partial First Floor Plan (tower base) (Source: Marcel Breuer Digital Archive, Syracuse University)

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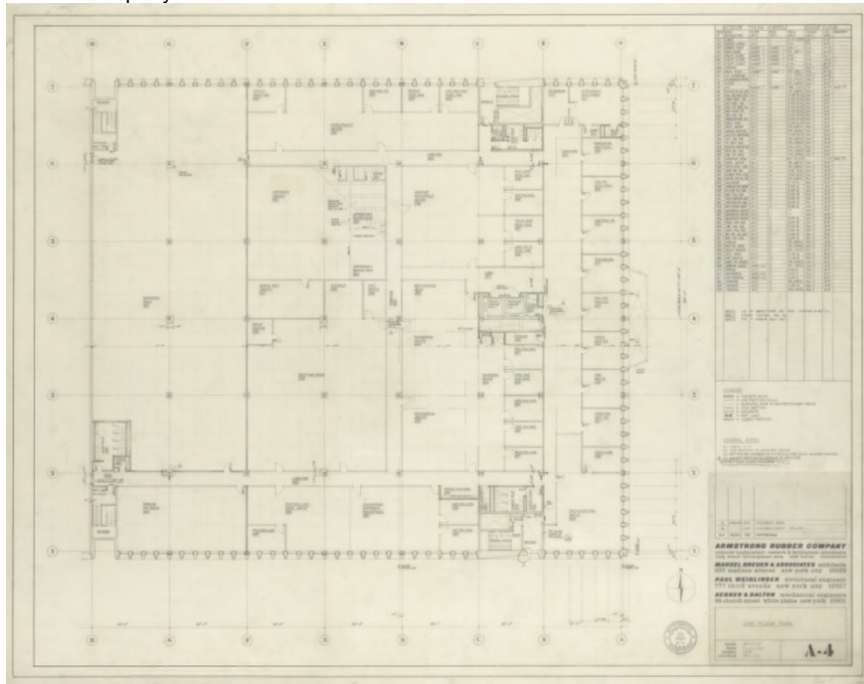


Figure 11: 2nd Floor Plan (Source: Marcel Breuer Digital Archive, Syracuse University)

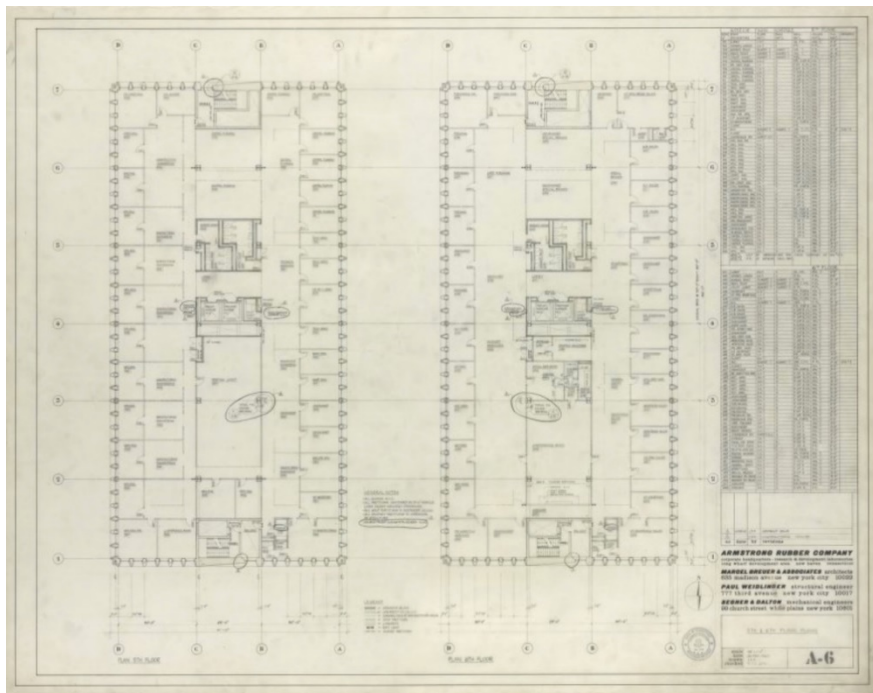


Figure 12: 5th and 6th Floors (Source: Marcel Breuer Digital Archive, Syracuse University)

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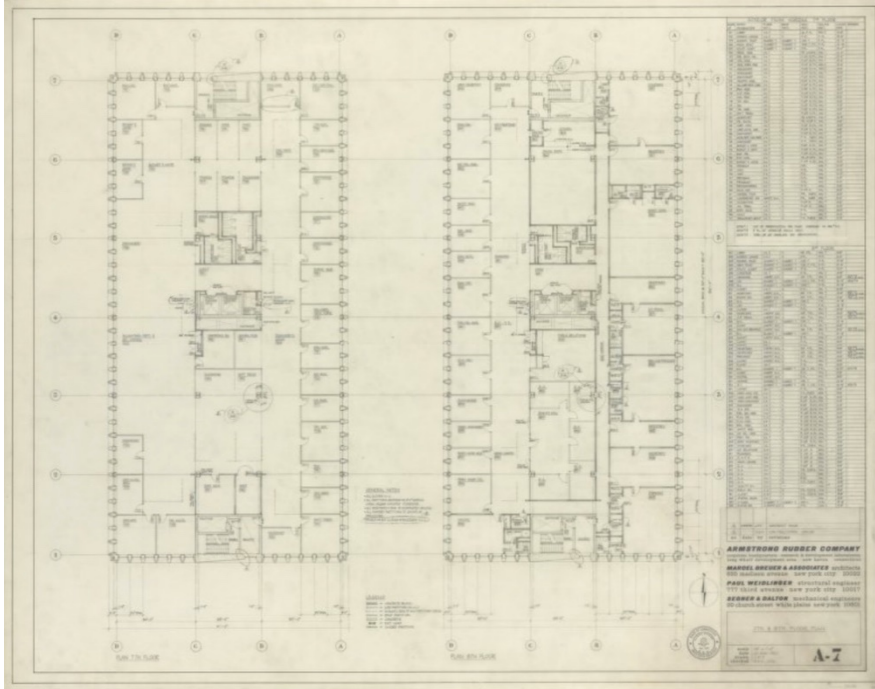


Figure 13: 7th and 8th Floors (Source: Marcel Breuer Digital Archive, Syracuse University)

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Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Armstrong Rubber Company Building
City or Vicinity: New Haven
County: New Haven
State: Connecticut
Photographer: Alisa M. Augenstein, The Public Archaeology Laboratory, Inc;
Kim Smith, MacRostie Historic Advisors
Date Photographed: September 2018; May 2019

Description of Photograph(s) and number, include description of view indicating direction of camera:

- 1 of 25. East elevation, facing west.
- 2 of 25. East and north elevations, facing southwest.
- 3 of 25. Sign structure, south elevation, facing north.
- 4 of 25. Sign structure, north elevation, facing southeast.
- 5 of 25. East elevation entrance, facing northwest.
- 6 of 25. East elevation detail – date stamp and architect information.
- 7 of 25. South elevation, facing north.
- 8 of 25. South and west elevations, facing northeast.
- 9 of 25. West and north elevations, facing southeast.

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- 10 of 25. First floor lobby stair.
- 11 of 25. First floor.
- 12 of 25. Second floor.
- 13 of 25. Low roof capping podium base.
- 14 of 25. Fourth floor stairhall.
- 15 of 25. Fifth floor office.
- 16 of 25. Sixth floor elevator lobby.
- 17 of 25. Sixth floor office.
- 18 of 25. Sixth floor office.
- 19 of 25. Seventh floor, main stair landing.
- 20 of 25. Seventh floor corridor, view towards former offices.
- 21 of 25. Seventh floor office.
- 22 of 25. Eighth floor office.
- 23 of 25. Eighth floor corridor.
- 24 of 25. Eighth floor, former kitchen space.
- 25 of 25. Eighth floor office.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.



1. East elevation, facing west



2. East and north elevations, facing southwest



3. Sign structure south elevation, facing north



4. Sign structure, north elevation, facing southeast



5. East elevation entrance, facing northwest



6. East elevation detail - date stamp and architect information



7. South elevation, facing north



8. South and west elevations, facing northeast



9. West and north elevations, facing southeast



10. First floor lobby stair



11. First floor



12. Second floor



13. Low roof capping podium base



14. Fourth floor stair hall



15. Fifth floor office



16. Sixth floor elevator lobby



17. Sixth floor office



18. Sixth floor office



19. Seventh floor, main stair landing



20. Seventh floor corridor, view towards former offices



21. Seventh floor office



22. Eighth floor office



23. Eighth floor corridor



24. Eighth floor, former kitchen space



25. Eighth floor office