1. BUILDING NAME (Common) (Historic)
The Pirelli Building
The Armstrong Rubber Company Building

2. TOWN / CITY
New Haven

3. STREET AND NUMBER (and/or location)
500 Sargent Drive, adjacent to I-95

4. OWNER(S)
The Pirelli Armstrong Tire Corporation

5. USE (Present)
Office building

6. ACCESSIBILITY TO PUBLIC:

7. STYLE OF BUILDING
Late Modern

8. MATERIAL(S) (Indicate use or location when appropriate)

9. STRUCTURAL SYSTEM

10. ROOF (Type)

11. NUMBER OF STORIES
6

12. CONDITION (Structural)
Excellent |

13. INTEGRITY / LOCATION
ALTERTATIONS

14. RELATED OUTBUILDINGS OR LANDSCAPE FEATURES

15. SURROUNDING ENVIRONMENT

16. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS
See Continuation
17. OTHER NOTABLE FEATURES OF BUILDING OR SITE (interior and/or exterior)

1. A work by one of the greatest architects of the 20th century, seen by millions of people as they pass by on I-95.
2. A demonstration project for commercial development as part of the Model Cities Program.
3. Part of the unique Yale/New Haven legacy of buildings by major architects of the 20th century.

See continuation.

18. ARCHITECT

Marcel Breuer (with Robert Gatje)

19. HISTORICAL OR ARCHITECTURAL IMPORTANCE

1. Expresses many of the ideas and concepts found in the work of Marcel Breuer, one of the greatest architects and designers of the 20th century - a pioneer and master of the Modern Movement.
2. The two story void separating the tower from the base is an aesthetic innovation, a new way of expressing a differentiation of function, for which Breuer was noted. Void also was an innovation in forming connections between the building and landscape elements beyond.
3. Notable for its sculpting of precast concrete wall panels to give mass and texture to the surfaces of simple rectilinear forms.
4. Explores the plastic potential of concrete within a rational architectural order and an economical construction methodology.
5. Utilizes an innovative cantilever structure to suspend the office tower above the base of the building, and expresses the structural system in the design of the precast panels.

See continuation.

See continuation.

PHOTOGRAPHER
Robert Gregson

DATE
June 1997

VIEW
Multiple views (see attached)

NEGATIVE ON FILE

NAME
Members of:
The Alliance for Architecture

DATE
September '97

ADDRESS
70 Audubon Street, New Haven CT 06510

20. SUBSEQUENT FIELD EVALUATIONS

21. THREATS TO BUILDING OR SITE

☐ None known  ☐ Highways  ☐ Vandalsm  ☒ Developers  ☐ Other  See continuation.

☐ Renov  ☐ Private  ☐ Deterioration  ☐ Zoning  ☐  Explaination

HIST 6 REV. 5/83 (Black)
Interrelationship of Building and Surroundings

Key Points:

1. Conceived as landmark to mark the gateway to New England and New Haven.
2. Designed to address the scale of highway and to maintain architectural legibility for the passing motorist.
3. Scale and massing enables the building to form a link with the harbor, hence mitigating the separation of the city from the waterfront caused by the siting of the interstate highway.
4. Designed as a free-standing building in a park setting, a model for modern commerce in a new city form.

Narrative:

In line with the modernist idea of the transmuted primitive hut, the Armstrong Rubber Company Building stands free of its neighbors on a green lawn that was intended to represent a natural, though bucolic landscape. This setting was consistent with the notion that work, like the rest of life, could take place in a verdant park, rather than in the noisy, hard environment of the traditional, old city. Long Wharf was to be a model of just such a commercial park.

The commercial neighbors of the Armstrong Rubber Company Building, generally conformed to this ideal, but unlike the Armstrong Rubber Company, which was placed in a clearly expressed open space or clearing - these other buildings were conceived in a more conventional way: long and low they were set back from the street behind broad lawns like large houses on a traditional residential street rather than objects in the landscape.

Marcel Breuer designed the building to match the scale of the interstate highway. It is a landmark that marks the entry to New Haven and to New England. The void space, placed approximately at the height of the highway, weaves the horizon, with the hills and downtown beyond, into the very mass of the building, so causing to building to act as the centroid of the geographical bowl in which New Haven is located. The tower, disengaged from its base below, also serves to visually bridge the highway, which is a barrier between city and the water, to help establish a link between these two.
Other Notable Features of Building or Site

New Haven led the nation's cities in developing the strategies of the Model City movement of the post-war period, and spent more, per capita, than any other city in the country. The Armstrong Rubber Company Building was designed as part of the Long Wharf Project, which was carried out by the New Haven Redevelopment Agency in the mid-1960's, and is the dominant element in this city precinct. The Long Wharf reclamation project was the most ambitious project of Haven during the Model Cities era and was the closing phase a long history of reclamation of the New Haven harbor for commercial uses, and was in itself a major engineering and planning achievement.

As part of the Long Wharf project, the New Haven harbor was dredged in 1949 to enable large vessels to use the port, and the resulting fill was used to create a bed for the Connecticut Turnpike and a broad band of land between the new road way and the former dock land and industrial area. This reclamation area was planned as a "showcase" of modern industry at the entrance to the city (Elizabeth Mills Brown). The Armstrong Rubber Company, an important New Haven corporation at the time, joined other major New Haven companies, to build office and factory buildings at Long Wharf. Since the redevelopment was a public initiative, the city administration, not the Armstrong Rubber Company, chose the internationally recognized architect, Marcel Breuer to design their corporate offices and laboratories. Its neighbors to the west include the Sargent Company, Blakeslee Concrete, and Sero Shirt. Sargent was recently acquired by Assa Abloy, the Blakeslee building now houses both the Regional Water Authority and Gateway Community College, and Sero is now the New Haven Register.

The Armstrong Rubber Company Building exhibits many of the design concepts that characterized Marcel Breuer's work (see below), and is seen by millions of people every year as they travel along the interstate highway through New Haven. It is, therefore, easily the most readily visible and prominent work of architecture by a twentieth century architectural master in the whole of Connecticut.

The Armstrong Rubber Company Building is also an intrinsic part of the New Haven legacy to modern architecture and urban design. These buildings were designed by many of the most significant American architects of the period, including Louis Kahn, Paul Rudolph, Philip Johnson, Eero Saarinen, and Marcel Breuer. While many of the buildings are considered the finest works by these architects, it is their collective expression of the ideals and aspirations of the modern period in architecture and urban design that is unmatched in the eastern US.
Beginning with the completion of Eero Saarinen’s Ingalls Hockey Rink in 1957 Yale University, led by the the President, Whitney Griswold, embarked on a deliberate program to commission and build works by the country’s most noted architects. At the same time, facing the decline of its industries, the City of New Haven was endeavoring to reshape itself for the future, funded by the Model City Program. Following Yale’s example, the New Haven city administration, led by Mayor Richard C. Lee, engaged many of the same architects as were working for Yale to contribute to the rebuilding. Many of these architects were also 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 US. Like Griswold, Lee wanted to create a showplace of the best of the age. The outcome of this period is a grouping of architecture and urban design that is of enormous beauty and importance as a collective artifact for appreciation and for study.

As a commercial building, in a commercial office park, and adjacent to the interstate highway, the Armstrong Rubber Company Building does not possess the lavishness of material, detail, or setting, enjoyed by many of the other significant works of architecture built in New Haven by Yale or for the City of New Haven in the post-war period. It is nevertheless a vital expression of the aspirations and vision of the city and its leadership during that period, a measure of the ambition to remake the city of New Haven, the idea of the city, and the image of the city.
The Armstrong Rubber Company Building - Architectural and Historical Significance

The Armstrong Rubber Company Building is a work of significant architecture for its aesthetic innovation, as an urban landmark, and as part of the oeuvre of a Connecticut architect, whose importance to the development of modern architecture and design is recognized worldwide.

The architect of the Armstrong Rubber Company Building, Marcel Breuer was an Hungarian, and an early student, then teacher at the Bauhaus in Dessau, Germany. At the Bauhaus, which was the crucible for the development of modern design in the early twentieth century, Breuer was a seminal figure as a design innovator; primarily as a designer of furniture. Subsequently, after his arrival in the US in 1937, he quickly became a leader in the development and maturation of the modern style. (See Biographical Notes below.) At his death Breuer was named as one of the six most important architects of the modern period, along with Frank Lloyd Wright, Le Corbusier, Walter Gropius, Mies van der Rohe, and Richard Neutra. Of this group, only Breuer built in New Haven. In addition, he was a resident of Connecticut from 1948 until his death in 1981, and is judged to have been deeply influenced by New England building traditions in the development of his work.

Designed to form a strong eidetic image, instantly legible in the landscape beside the highway to motorists passing by at high speed, the Armstrong Rubber Company Building is notable for the two story void which separates the three story base from the four story tower above. Not incidentally, this void captures New Haven, as in a snapshot, to link the building with the downtown beyond, so defining the building as an element on the edge of the city and as gateway to the city. To achieve this separation of the tower from its base, the tower is suspended from above by cantilever trusses.

The cladding of the building is buff-colored, pre-cast concrete. Most of Breuer’s large buildings were clad with pre-cast panels, which, while a not uncommon innovation of the twentieth century, were developed to a high form by Breuer. In the pre-cast concrete panel, many of Breuer’s architectural investigations came together. From the mid-1920’s Breuer had been interested in prefabrication and panelized construction. His ‘Kleinmetallhaus’ of 1925, was designed as a system of panels, prefabricated in steel, for assembly from a kit. The much later Case Study House in California, designed by Charles and Ray Eames, themselves noted furniture designers - resembles Breuer’s house design to an uncanny degree.
Breuer was interested in exploring the qualities and possibilities inherent in materials and methods that were commonly used. It has been noted, for instance, how quickly Breuer came to understand the economical New England stick and membrane tradition of construction in residential design. In contrast with small, wood structures, however, Breuer believed that large buildings needed to express mass commensurate with their large scale. He saw in the plastic possibilities of concrete the capability to create on the exterior of large buildings strong modeling effects, using sun and shadow to give the form and depth - the qualities of mass - which he believed their scale demanded. Using pre-cast concrete and by shaping the reusable forms in which the panels were cast, he showed that a wide variety of panels could be produced, virtually infinitely replicable in number, that possessed great sculptural power. This is seen at the Armstrong Rubber Company Building on all facades, where panels are differentiated to express a range of conditions, including the variety of interior functions, the structural form, and the formal organization of the design as a whole.

Holding the building in dynamic balance is a sculptural, reinforced concrete sign. Similar in concept to the freestanding carillon Breuer designed for St. John’s Abbey, in Collegeville, Minnesota. According to Breuer’s design associate, Robert Gatje, it was designed as a response to the wish of the Armstrong Rubber Company to place a large sign on the top of the building to be seen from the highway. Breuer was opposed to placing a sign on the building, but the company, not always sympathetic to the architect, insisted that it had to have a large sign. A large free-standing sign, the only option, was not permitted by the City’s planning code, so Breuer countered with the structure seen today - a sign which contains at its a base a small room, complete with window, thereby qualifying as a building, which was permitted.

Much of Breuer’s work was characterized by the differentiation of function, with discrete forms serving particular functions, linked by transition spaces. Typically, however, this expression occurred in plan - on the horizontal plane. The Armstrong Rubber Company Building is one of the very few examples anywhere of this expression of different functions by the separation of forms in the vertical dimension by creating a clear negative form to the void created. It is possible that Breuer was inspired by the Japanese Metabolist architects of the mid-sixties, who experimented with this concept in unbuilt projects. This association with Metabolism, however, is properly to be considered as epiphenomenal. The interest of the Metabolists in
the compartmentalization of different functional elements and the expression was predicated on the expression of change. Breuer, as a modernist, explored the ideas of structural innovation and the differentiation of function throughout his career, and in this regard, this building building is representative.

The Armstrong Rubber Company Building is not viewed as Breuer’s best large building. It is the Whitney Museum in New York that is accorded this status, and which has received the greatest attention. Moreover, by the time The Armstrong Rubber Building was finished, the architectural winds were blowing in a different direction, and the heroic formmakers of the modern movement were beginning to look dated. It was not a good time for a modernist, in particular, to be trying something new - and in the Armstrong Rubber Building there was something new. The creation of the positive void or hole, aligned with the horizon, was a genuine aesthetic innovation, which attempted to address a formal architectural problem that was still new - the need to mediate between the scale of the highway and the scale of the city and city form. Breuer’s solution, which, as described above, was to utilize the concept of the differentiation of function, effected the scale shift, giving a large scale legibility to the building as a landscape element, while maintaining its nature as a place for human use, with human scale. At the time, however, novelty of this kind was not of interest to the architectural culture, and the attention of the critics lay elsewhere. As a work of architecture, however, the Armstrong Rubber Company Building is rare and significant for its use of the positive void in this manner.
Biographical Notes - Marcel Breuer

Marcel Breuer is one of the most significant architects and furniture designers of the twentieth century, and is a true master of architecture and design. Born in Hungary in 1902, he attended the Bauhaus as an architecture student from 1920 to 1924, and 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, and this emphasis on the physical is one would be reflected in later years by Breuer in the Armstrong Rubber Company Building. 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 is arguably the most important influential, and most copied piece of furniture designed this century.

From 1928 to 1937, Breuer practiced as an architect, first in Berlin, Germany, then in England, having left Germany in 1932 due to rise of Nazism. 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, the former head of the Bauhaus, and then Chairman of the Department of Architecture at Harvard. Breuer began teaching at Harvard in 1938, at the same time went into partnership with Gropius. Among the houses designed by Breuer and Gropius between 1938 and 1946, there number several that were highly influential in the development of modern architectural residential design in the US 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. This house was as influential as the early houses in Massachusetts. Breuer went on to design 10 houses in Connecticut, and yet more houses Pennsylvania, New York, Massachusetts, on Long Island, and in Maine. The major portion of his 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 and 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 such as the Armstrong Rubber Company Building.

Breuer lived in New Canaan until 1976. He received the AIA Gold Medal for his contribution to architecture in 1968. He died in 1981.

Buildings by Marcel Breuer in Connecticut

Residential:

Breuer House I, New Canaan, 1947
Breuer House II, New Canaan, 1951
Stillman House I, Litchfield, 1950
Stillman House II, Litchfield, 1965-66
Stillman House III, Litchfield, 1973
Gagarin House I, Litchfield, 1954/5
Gagarin House II, Litchfield, 1973-74
Soriano House, Greenwich, 1969
Clark House, Orange, 1949
Caesar Cottage, Lakeville, 1952

Educational:

Yale University, Becton Engineering and Applied Science Center, New Haven, 1965-69
Litchfield High School (of 3 school projects in Litchfield), Litchfield, 1954-1956

Corporate:

The Torin Corporation, Torrington, 1962
The Armstrong Rubber Company, New Haven, 1965-69

Of the sixteen extant Breuer structures in Connecticut, the Armstrong Rubber Company Building is one of the few to have remained unaltered since its dedication. Breuer's own houses were radically redesigned and doubled in size by their subsequent owners. Stillman I has an addition, the Clark house has undergone extensive, insensitive renovation, and the Litchfield schools were altered beyond recognition (two have been taken out of service, and one now faces demolition by the State to make way for a new county courthouse). In contrast, the exterior of the Armstrong Rubber Company Building is unchanged except for the addition of a handicap ramp at the front of the building.
The Armstrong Rubber Company Building was designed by Marcel Breuer in collaboration with Robert Gatje. Gatje was one of several partners in Marcel Breuer's architectural practice in New York. In this practice, as is common, Breuer, as principal, designed each project in collaboration with his staff, who were responsible for developing and executing the projects for Breuer. As is usual in such collaborations, the contribution of each can be contested, in general, however, it is usual for the major design idea to be conceived by the principal, in this case, Breuer.
Sources

Marcel Breuer: Architect and Designer, Blake P., Architectural Record/MOMA, NY 1949

Marcel Breuer: Sun and Shadow: The Philosophy of an Architect, Peter Blake (ed) Dodd, Mead and Co., NY 1951


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

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

The building is located on the site of a proposed shopping mall. The developer of the proposed project is the New England Development Corporation, Massachusetts.
1. The Armstrong Rubber Company Building: View from I-95 - Southbound

2. The Armstrong Rubber Company Building: View of front elevation from Sargent Drive
3. The Armstrong Rubber Company Building: View of north elevation showing separation of administration offices.

4. The Armstrong Rubber Company Building: North (side) elevation of administration offices.
5. Pirelli B  
- Rubber Company Building: View from north showing

6. The Armstrong Rubber Company Building: Detail of north wall
7. The Armstrong Rubber Company Building: Detail of north wall - precast concrete panels