NOMINATION OF PUBLIC INTERIOR PORTION OF BUILDING OR STRUCTURE
PHILADELPHIA REGISTER OF HISTORIC PLACES
PHILADELPHIA HISTORICAL COMMISSION

SUBMIT ALL ATTACHED MATERIALS ON PAPER AND IN ELECTRONIC FORM ON CD (MS WORD FORMAT)

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1. ADDRESS OF HISTORIC RESOURCE (must comply with an Office of Property Assessment address)

Street address: **100 S. Independence Mall West**
Postal code: **19106** Councilmanic District: **1st District**

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2. NAME OF HISTORIC RESOURCE

Historic Name: **Rohm & Haas Building**
Current Name: **Dow Building**

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3. TYPE OF HISTORIC RESOURCE

☒ Building Interior ☐ Structure Interior

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4. PROPERTY INFORMATION

Condition: ☐ excellent ☒ good ☐ fair ☐ poor ☐ ruins
Occupancy: ☒ occupied ☐ vacant ☐ under construction ☐ unknown
Current use: **Commercial Mixed Use**

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5. BOUNDARY DESCRIPTION

Please attach an interior plan with the boundary marked and written description of the boundary.

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6. DESCRIPTION

Please attach a description of the historic resource and supplement with current photographs.

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7. INVENTORY OF FEATURES AND FIXTURES

Please attach an inventory of all features including fixtures with their locations within the public interior portion indicated on architectural plans and/or annotated photographs (keyed to the plans).

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8. SIGNIFICANCE

Please attach the Statement of Significance.

Period of Significance (from year to year): from **_1965_____** to **_1965_____**
Date(s) of construction and/or alteration:**_1963-65; c. 2008; 2014-15_____**
Architect, engineer, and/or designer:**_Pietro Bellusci with the George M. Ewing Company___**
Builder, contractor, and/or artisan:**_Gyorgy Kepes_____**
Original owner:**__Rohm & Haas Company_____**
Other significant persons:_____

CRITERIA FOR DESIGNATION:

The historic resource satisfies the following criteria for designation (check all that apply):

☒ (a) Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past; or,

☐ (b) Is associated with an event of importance to the history of the City, Commonwealth or Nation; or,

☒ (c) Reflects the environment in an era characterized by a distinctive architectural style; or,

☒ (d) Embodies distinguishing characteristics of an architectural style or engineering specimen; or,

☒ (e) Is the work of a designer, architect, landscape architect or designer, or engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth or Nation; or,

☐ (f) Contains elements of design, detail, materials or craftsmanship which represent a significant innovation; or,

☐ (g) Is part of or related to a square, park or other distinctive area which should be preserved according to an historic, cultural or architectural motif; or,

☐ (h) Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of the neighborhood, community or City; or,

☐ (i) Has yielded, or may be likely to yield, information important in pre-history or history; or

☐ (j) Exemplifies the cultural, political, economic, social or historical heritage of the community.

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10. MAJOR BIBLIOGRAPHICAL REFERENCES

Please attach a bibliography.

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11. NOMINATOR

Name with Title **Benjamin Leech, consultant** Email **bentleech@gmail.com**
Organization **Preservation Alliance for Greater Philadelphia** Date **May 26, 2016**
Street Address **1608 Walnut Street, Suite 804** Telephone **(215) 546-1146**
City, State, and Postal Code **Philadelphia, PA 19103**
Nominator ☐ is ☒ is not the property owner.

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12. PROPERTY OWNER

Name **Keystone Property Group**
Organization
Street Address One **Presidential Boulevard, Suite 300**
City, State, and Postal Code **Bala Cynwood,, PA 19004**

PHC USE ONLY

Date of Receipt: 28 June 2016
☑ Correct-Complete ☐ Incorrect-Incomplete Date: 29 August 2016
Date of Notice Issuance: 30 August 2016
Property Owner at Time of Notice
Name: KPG-IMW Owner, LLC c/o Keystone Property Group
Address: One Presidential Blvd, Suite 300
City: Bala Cynwyd State: PA Postal Code: 19004
Date(s) Reviewed by the Committee on Historic Designation:
Date(s) Reviewed by the Historical Commission:
Date of Final Action:
☐ Designated ☐ Rejected

5. Boundary Description

The Rohm and Haas Building occupies a prominent corner lot at the southwest corner of Market Street and Independence Mall West (formerly 6th Street) in Center City Philadelphia. The public interior portions of the building comprising the subject of this nomination are located on the building's ground floor, which sits on a raised podium level approximately three to five feet above the surrounding sidewalk levels. The ground floor is divided into two distinct pavilion areas separated by an exterior colonnade bisecting the building. The north pavilion contains the building's main public lobby, while the south pavilion was originally a commercial rental space occupied for two decades by a Fidelity Philadelphia Trust Company (later First Philadelphia Trust) branch bank. Both areas satisfy the definition of an eligible "public interior portion" as set forth in the Philadelphia Historic Preservation Ordinance and defined in the Philadelphia Zoning Code, § 14-203 (252) as "an interior portion of a building or structure that is, or was designed to be, customarily open or accessible to the public, including by invitation," and which retains "a substantial portion of the features reflecting design for public use."

The building's main lobby measures 90 feet wide and 45 feet deep and is located in the front (eastern) portion of the north pavilion. The building's exterior envelope defines the northern, eastern, and southern boundaries of this area; its western boundary follows a full-height partition wall spanning nearly the full width of the space. The lobby measures 22 feet in height from the floor to the peaked vaults of the ceiling. The north end of the lobby extends an additional 15 feet to a full-height glass partition wall. At the southern end of the lobby an adjacent and attached elevator lobby extends an additional thirty feet in depth, at a width of 12 feet and a height of 10 feet. Excluded from the boundaries of this nomination are the remaining first floor areas of the north pavilion, which are not publicly accessible by design or use. Significant fixtures within these excluded areas-- specifically, three original light fixtures identical to ones included within the nomination boundaries-- are nominated under separate cover as "objects" following said definition in the Philadelphia Zoning Code, § 14-203 (195): "A

material thing of functional, aesthetic, cultural, historic, or scientific value that may be, by nature or design, movable yet related to a specific setting or environment."

The building's historic commercial rental area occupies the majority of the 90-foot by 120-foot south pavilion, excluding only an el-shaped 45-foot by 45-foot service core defined by full-height interior partitions. The building's exterior envelope defines this area's perimeter on all sides, except for the interior boundaries defined by the five exposed faces of the interior core. Like the main lobby, the area measures 22 feet in height from the floor to the peaked vaults of the ceiling.

The covered colonnade which separates these two public interior portions is a character-defining exterior feature of the building's overall site nomination, also submitted under separate cover.

1965 Plan

c.2008 Plan

Boundaries of Public Interior Portion (measured at ceiling)

Plan sources: Architectural Record, *Jan. 1966; "Historic Preservation Certification Application, Parts 2/3,", June 12, 2006, Pennsylvania Historical & Museum Commission files.*

6. Description

The Rohm & Haas Building is a nine-story modernist office building designed by Pietro Belluschi and the George M. Ewing Company and constructed between 1963 and 1965. A regular grid of prismoidal, poured-in-place concrete columns supports the reinforced concrete frame of the building's upper stories and constitutes one of the principal character-defining architectural features of the building. Full-height glazing spans between these columns around the building's perimeter and through a central colonnade that divides the ground floor into two equally-sized, glass-enclosed pavilions. The eastern third of the north pavilion contains the building's main lobby area, which faces east towards Independence Mall [Figs. 1-2]. The south pavilion was designed for and historically used as a commercial rental space. Originally occupied by a Fidelity Philadelphia Trust Company branch bank, it currently contains a cafeteria [Figs. 6-9]. These two ground-floor spaces constitute the historic public interior portions of the building and are the subject of this nomination.

Within each interior space, the building's character-defining prismodial columns were designed to be exposed and freestanding, with large inverted pyramid-shaped capitals joining to form a continuous faceted concrete ceiling. This ceiling surface also extends beyond the pavilion walls as a folded concrete soffit beneath the cantilevered overhang of the building's upper floors, consciously de-emphasizing the transition between interior and exterior space. Inside and out, the concrete is a smooth, uniform and seamless finish, but left raw and unpainted. Both pavilion floors are paved in fields of brown brick bisected by granite bands following the column grid; this pattern is also continued into the exterior plazas which surround the building.

Both pavilions feature custom-designed Plexiglas chandeliers suspended from the centers of each ceiling bay. Designed by renowned artist and educator Györy Kepes (1906-2001) and original to the building, each identical fixture is a cruciform 16-foot by 16-foot assemblage of illuminated Plexiglas rods of varying lengths and diameters [Fig. 10]. There are eight chandeliers

in the south pavilion and three in the lobby of the north pavilion.[1] Each pavilion contains a central core containing stairwells, elevators, and auxiliary service spaces; these cores are expressed as independent masses enclosed by solid walls clad in teak wood battens.

The main lobby is entered from the south, through a set of doors facing the building's central colonnade. A non-original reception desk divides the first lobby bay from the rest of the lobby space to the north; it stands in the approximate location of an original reception desk removed and replaced c. 1980 [Fig. 1]. A bank of contemporary controlled access turnstiles separates the lobby entry from an elevator lobby to the west. A low, granite-walled island in the middle of the lobby originally contained an open stairwell to the basement level, but has since been floored over.

A teak-clad interior core wall extends nearly the full width of the lobby space, creating a dramatic backdrop illuminated by a row of prismoidal anodized aluminum sconces. Various doors cut into this wall are flush-mounted and finished in identical wood battens, concealing their appearance save for discreet bronze hardware [Figs. 3-4]. An open threshold at the southern end of this rear lobby wall leads to the attached elevator lobby, a 12-foot-wide, 30-foot-deep corridor lined with three facing pairs of elevators. Each elevator features flat aluminum doors, and the walls between elevator doors are faced in solid flat teak panels. The south wall of the elevator lobby features an original teak building directory; the north wall features an original Plexiglas and aluminum mail chute. The rear wall features four frameless glass doors below a four-panel teak spandrel. The ceiling is a coffered, diamond-patterned teak grid with two rows of recessed lights [Fig. 5].

In 2015, alterations to the north end of the lobby were made to accommodate a new commercial cafe tenant. These included the addition of a freestanding cafe counter, shelving, and various tables arranged on a diagonal axis in the lobby's open space. A new single-leaf doorway with an interior glass vestibule was constructed in the northernmost bay of the east

[1] An additional three chandeliers hang in the rear portion of the north pavilion, beyond the boundaries of this nomination; these are being nominated as "objects" under separate cover.

wall, new branded signage (a dove outlined in thin white wire) was added to the teak wall, and a sprinkler system added to the ceiling. In general, these changes respect the architectural character of the space were designed to be non-destructive and reversible [Figs 2-4].

The public interior portion of the south pavilion historically spanned the full length of its east, south, and west sides, wrapping the el-shaped service core in a modified C-shaped plan. Like in the north pavilion, the service core was defined by full-height walls clad in teak battens and illuminated with prismoidal sconces. The space was originally outfitted with various bank-related fixtures, including teller windows, banking desks, and a bank vault [Fig. 6]. These were all removed following the original tenant's vacancy in the 1980s and the subsequent c.2008 reconfiguration of the space as a cafeteria. A new curving, 15-foot-high partition surrounded and partially encases the central service core and three of the interior concrete columns at the center of the space, though all the historic finishes and fixtures were protected and left in place. New furnishings and fixtures were added to the space, and portions of the original flooring were covered in carpet and vinyl tiles [Figs 7-9]. These cafeteria alterations were reviewed and approved by the National Park Service as part of a qualified rehabilitation tax credit project, and were therefore determined sympathetic, reversible, and non-destructive of historic fabric.[2] In its current condition, the south pavilion retains the majority of its historic features, including its eight original Plexiglas chandeliers, all of its original perimeter windows, its exposed concrete ceiling, most of its original floor pavers, and the overall open floor plan of its original design.

[2] "Historic Preservation Certification Application, Parts 2/3,", June 12, 2006, Pennsylvania Historical & Museum Commission files.

7. Inventory of Features and Fixtures

Historic Features and Finishes

1. Glazed exterior walls (typically ten-light assemblies w/ anodized aluminum muntins) - Throughout
2. Glass and metal exterior doors - Throughout
3. Reinforced concrete prismoidal columns (engaged perimeter and freestanding interior) - Throughout
4. Exposed concrete ceiling - Throughout
5. Brick floor pavers and granite flooring - Throughout
6. Teak-clad full-height partition walls - Throughout
7. Teak interior partition doors with bronze hardware - Throughout
8. Teak wall panels - North pavilion elevator lobby
9. Teak ceiling - North pavilion elevator lobby
10. Frameless glass doors - North pavilion elevator lobby
11. Aluminum elevator doors - North pavilion elevator lobby

Historic Fixtures

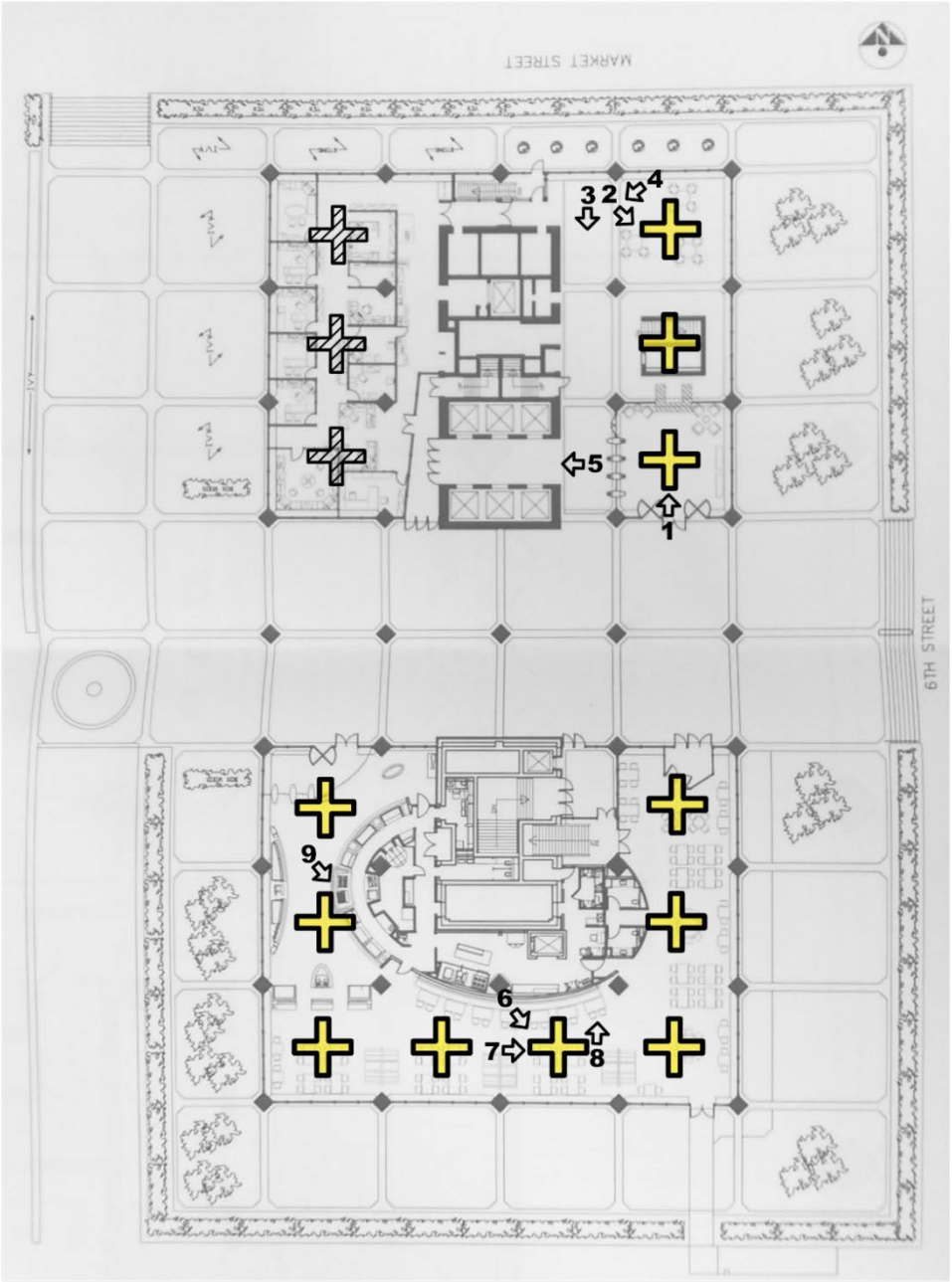
A. Plexiglas chandeliers (3 in north pavilion, 8 in south pavilion)
B. Anodized aluminum wall sconces - Throughout
C. Teak building directory - Elevator lobby
D. Plexiglas and aluminum mail chute - Elevator lobby

Non-contributing features, fixtures, and finishes

a. Carpet flooring - Throughout
b. Cafeteria fixtures, furniture, etc. - South pavilion
c. Curved cafeteria partition wall - South pavilion
d. Reception desk - North pavilion
e. Cafe fixtures, furniture, etc. - North pavilion
f. Wall-mounted dove mural - North pavilion
g. Interior glass room dividers - North pavilion
h. Interior entry vestibules - North and south pavilions
i. Controlled access turnstiles - North and south pavilions
j. Window treatments – North and south pavilions

8. Annotated Photographs

Photo Key



Light fixtures included in interior nomination

Light fixtures nominated under separate cover as objects

Plan source; "Historic Preservation Certification Application, Parts 2/3,", June 12, 2006, Pennsylvania Historical & Museum Commission files

Figure 1: Main (north pavilion) lobby, facing north, 2016. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; 6) teak partition wall; A) Plexiglas chandeliers. Non-contributing features include: a) carpet flooring; d) reception desk; i) controlled access turnstiles; j) window treatments.

Figure 2a: Main lobby facing southeast, 2014 (prior to café alterations). Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; A) Plexiglas chandeliers. Non-contributing features include: a) carpet flooring; d) reception desk; j) window treatments. Lobby furniture not original and no longer extant.

Figure 2b: Main lobby facing southeast, 2016. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; 5) brick and granite flooring; 6) teak partition wall; A) Plexiglas chandeliers; B) wall sconces. Non-contributing features include: b) café fixtures and furniture; f) wall-mounted dove; g) interior glass room divider; h) interior vestibule; j) window treatments.

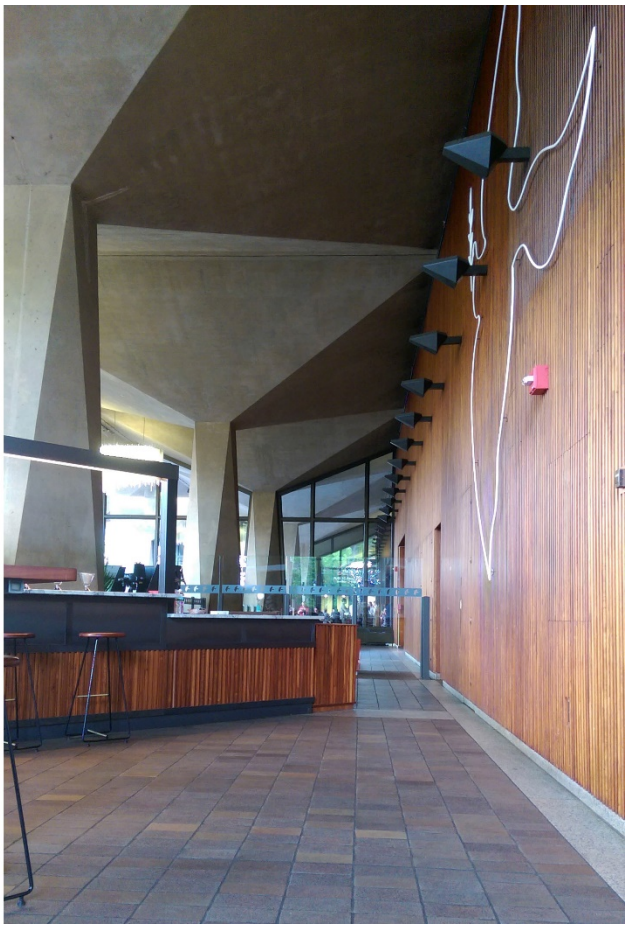


Figure 3a (left): Main lobby facing south, 2014.
Figure 3b (right): Main lobby facing south, 2016. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; 5) brick and granite flooring; 6) teak partition wall; 7) teak doors with bronze hardware; A) Plexiglas chandeliers; B) wall sconces. Non-contributing features include: b) café fixtures and furniture; f) wall-mounted dove; g) interior glass room divider; and h) interior vestibule.

Figure 4: Main lobby facing southwest, 2016. Contributing features depicted include: 3) prismoidal columns; 4) exposed ceiling; 5) brick and granite flooring; 6) teak partition wall; 7) teak doors with bronze hardware; B) wall sconces. Non-contributing features include: b) café fixtures and furniture; f) wall-mounted dove; and g) interior glass room divider.

Figure 5: Elevator lobby, facing west, 2014. Contributing features depicted include: 8) teak wall panels; 9) teak ceiling; 10) frameless glass doors; 11) elevator doors; C) building directory; D) Plexiglas mail chute. Non-contributing features include: a) carpet. *Photo courtesy of Brad Maule.*

Figure 6: South (bank) pavilion, facing southeast, 1965. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; A) Plexiglas chandeliers. Banking fixtures no longer extant.

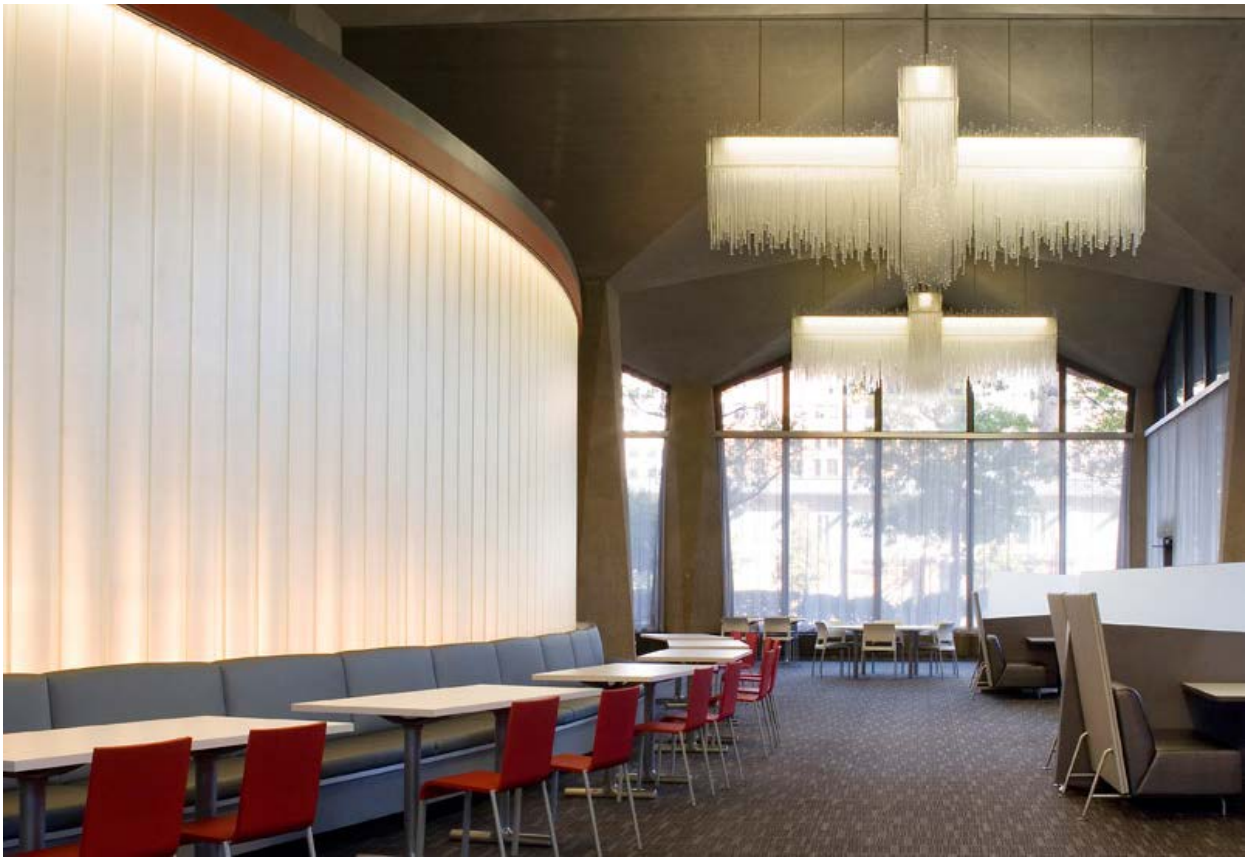


Figure 7: South (cafeteria) pavilion, facing east, c.2010. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; A) Plexiglas chandeliers. Non-contributing features include: a) carpet; b) cafeteria furniture; c) curved partition wall; j) window treatments.

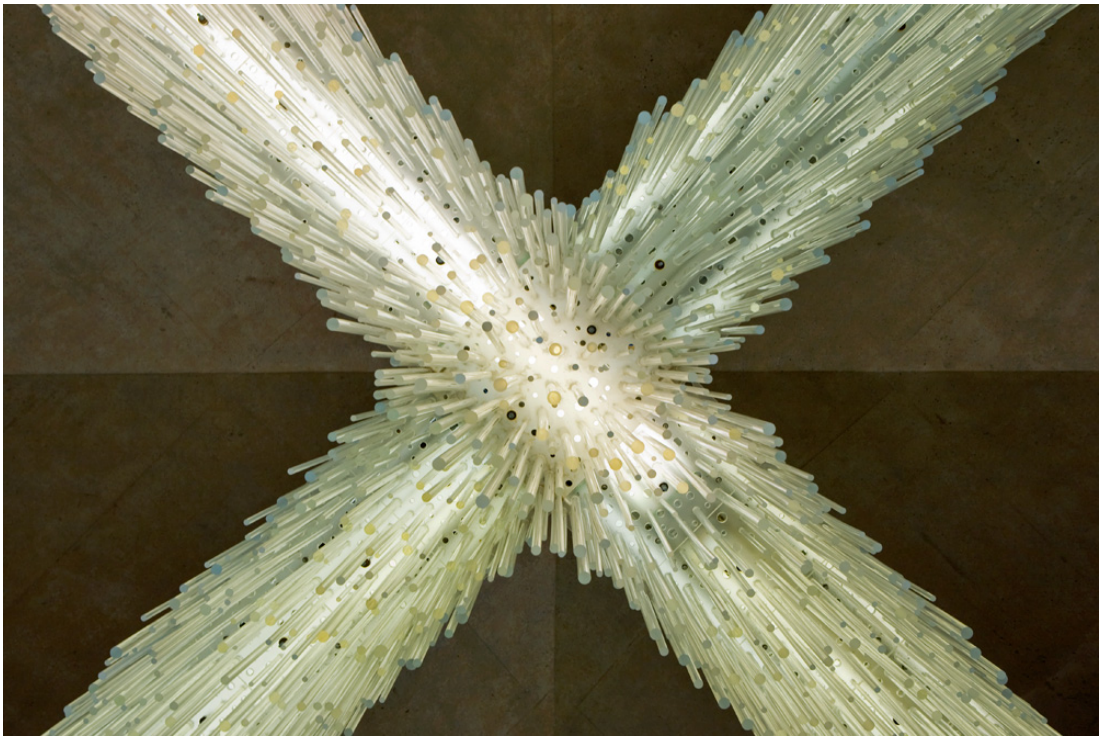
Photo http://www.cosciamoos.com/cma-projects/commercial/rohm-+-haas-dining-facility/

Figure 8: Cafeteria facing north, c.2010. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; A) Plexiglas chandeliers. Non-contributing features include: a) carpet; b) cafeteria furniture; c) curved partition wall; h) interior vestibule; j) window treatments.

Photo http://www.cosciamoos.com/cma-projects/commercial/rohm-+-haas-dining-facility/

Figure 9: Cafeteria facing southeast, c.2010. Contributing features depicted include: 1) Glazed exterior walls; 3) prismoidal columns; 4) exposed ceiling; A) Plexiglas chandeliers. Non-contributing features include: a) carpet; b) cafeteria fixtures; c) curved partition wall; j) window treatments.

Photo http://www.cosciamoos.com/cma-projects/commercial/rohm-+-haas-dining-facility/



Figures 10a, 10b: Typical Plexiglas chandelier details.
Top photo courtesy Brad Maule.

9. Significance

The Rohm & Haas Building, a nine-story office block designed by Pietro Belluschi in collaboration with the George M. Ewing Company, is an architecturally and historically significant modernist icon commissioned by one of twentieth-century Philadelphia's leading corporations, the specialty chemical manufacturer Rohm & Haas Company. Developed in close cooperation with the Philadelphia Redevelopment Authority and the Philadelphia City Planning Commission under Edmund Bacon, the Rohm & Haas corporate headquarters was the first new building to be constructed along the recently-cleared Independence Mall. The building broke ground in 1963 and was completed in 1965; in 2007, at only 42 years of age, it was individually listed on the National Register of Historic Places "for its exceptional importance in the area of architecture as one of Philadelphia's premier examples of the modern movement style of architecture and the work of a nationally significant architect."[3] The Rohm & Haas Building is being nominated under separate cover to the Philadelphia Register of Historic Places, a designation which does not include any jurisdiction over the building's significant ground floor interiors. As these spaces are integral to the building's architectural character and significance, and were designed to be customarily open or accessible to the public, including by invitation, they are therefore eligible for designation as "public interior portions" under the Philadelphia Historic Preservation Ordinance by meeting the following criteria as established Section 14-1004 (1):

> A: Has significant character, interest, or value as part of the development, heritage, or cultural characteristics of the City, Commonwealth, or nation or is associated with the life of a person significant in the past;
>
> C: Reflects the environment in an era characterized by a distinctive architectural style;
>
> D: Embodies distinguishing characteristics of an architectural style or engineering specimen;

[3] Hamilton, Cynthia Rose. "Rohm and Haas Corporate Headquarters," National Register of Historic Places Registration Form. December 20, 2006, Section 8, p. 1.

and

E: Is the work of a designer, architect, landscape architect or designer, or professional engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth, or Nation.

The spaces covered in this interior nomination include eleven original and highly significant Plexiglas chandelier fixtures designed by accomplished artist and educator Györy Kepes. Three additional fixtures also survive within non-public areas of the building, and are therefore being nominated to the Philadelphia Register as historic objects under separate cover. Though not an eligibility requirement for either historic public interiors or historic objects, both nominations address spaces and features that are highly visible from the exterior public right-of-way by virtue of the building's architectural design and site orientation.

Pietro Belluschi (1899-1994)

At the time of the Rohm & Haas commission, Pietro Belluschi was dean of architecture at the Massachusetts Institute of Technology and had recently designed (with Walter Gropius and Emery Roth & Sons) the highly-controversial Pan Am Building in New York City, then the largest office building in the world. A leading proponent and practitioner of modernism, Belluschi first gained national attention with his Equitable Building in Portland, Oregon (1944-1948), one of America's first International-style glass curtain wall office blocks. Credited with more than 1,000 designs over the course of a seven-decade career, Belluschi received the American Institute of Architects' prestigious Gold Medal in 1972 and the National Medal of Arts from the National Endowment for the Arts in 1991. In addition to his large-scale office towers, Belluschi is also widely celebrated for a series of smaller-scale houses and churches that reflected a more

intimate, regionally-inspired approach to modernist design.[4] The Rohm & Haas Building is Belluschi's most significant Philadelphia-area work, though he also designed the Temple Adath Israel synagogue in Bala Cynwyd (with Charles Frederick Wise, 1956-7), the parking garage adjacent to the Rohm & Haas Building (with the George M. Ewing Company, 1966), and the University Lutheran Church of the Incarnation (with Alexander Ewing & Associates, 1969) in West Philadelphia.

Belluschi was born in Italy and studied engineering at the University of Rome before attending Cornell University as an international exchange student in the early 1920s. Remaining in the United States following his graduation with a degree in civil engineering, Belluschi eventually settled in Portland, Oregon as a draftsman in the office of A.E. Doyle. He became the firm's chief designer following Doyle's death in 1928; in 1931 he completed the Portland Art Museum, his first high-profile project and a stylistic departure from the firm's typical historicist oeuvre. Growing increasingly attuned through the 1930s and 1940s to the modernist approaches of Ludwig Mies van der Rohe, Walter Gropius and Le Corbusier, his portfolio of houses, offices, university buildings and shopping centers across the Pacific Northwest eventually attracted a national following. In 1951, MIT selected Belluschi to head its prestigious School of Architecture and Planning, a position he held for fourteen years while also maintaining an active design consulting practice.[5]

Györy Kepes (1906-2001)

At Belluschi's suggestion, the Rohm & Haas Company commissioned fourteen large light fixtures for the building's ground floor from Györy Kepes, a fellow MIT faculty member and a pioneering figure in the then-nascent genre of "light art." Kepes is best known today for his prolific writings on art theory and visual perception, and for his legacy in establishing MIT's

[4] Goldberger, Paul. "Pietro Belluschi, 94, an Architect of Major Urban Buildings, Dies," *New York Times*, Feb. 16, 1994.
[5] "Oral History Interview with Pietro Belluschi," Aug. 22-Sept. 4, 1983, Smithsonian Archives of American Art," http://www.aaa.si.edu/collections/interviews/oral-history-interview-pietro-belluschi-11614.

Center for Advanced Visual Studies, a cross-disciplinary research institute dedicated to the integration of arts and advanced technology. His *Language of Vision*, a popular college textbook first published in 1944, generated thirteen editions and was translated into four languages.[6] He is celebrated in some circles today as "one of the most influential minds of the early modernist era" and even, in his MIT obituary, as "the greatest pioneer in the marriage of art and technology in America, if not the world."[7]

Born in Selyp, Hungary in 1906, Kepes studied painting at the Academy of Fine Art in Budapest before moving to Berlin in 1930 to pursue filmmaking and photography under Laszlo Moholy-Nagy, a seminal figure in the Bauhaus movement. In the turbulent run-up to World War II, Kepes followed Moholy-Nagy first to London (1936) and then to Chicago (1937), where he joined the faculty of Moholy-Nagy's New Bauhaus School, a precursor to the Illinois Institute of Technology's acclaimed Institute of Design. He began teaching at MIT in 1945, where he authored numerous texts and taught continuously until his retirement in 1972. Beyond academia, many of his most prominent works were site-specific architectural installations commissioned by corporate clients, including a kinetic neon wall mural for the facade of a Radio Shack store (Boston, 1950), a programmed light sculpture for the KLM Airline ticket office in Saks Fifth Avenue (New York, 1959) and lobby sculptures for the Pan-Am Building (New York, 1963). Kepes also collaborated with Belluschi on stained glass installations for at least two major ecclesiastic commissions: Church of the Redeemer (Baltimore, 1959) and St. Mary's Cathedral (San Francisco, 1964-1969).[8]

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[6] Erikson, Erik et. al. *Georgy Kepes: Works in Review.* Boston: Museum of Science, 1973, p. 23.
[7] "Gyorgy Kepes, founder of CAVS, dies at 95," *MIT News,* Jan. 16, 2002; Poulin, Richard. *Graphic Design and Architecture: A Twentieth-Century History.* Beverly, Mass.: Rockport Publishers, 2012, p. 135
[8] Poulin, p. 135; Orosz, Márton. "Light as a Creative Medium in the Art of György Kepes," *The Pleasure of Light: György Kepes and Frank J. Malina at the Intersection of Science and Art*. Budapest: Ludwig Museum of Contemporary Art, 2011, p. 55; Erikson, pp. 61-62.

The Rohm & Haas Building: interior expressions of modernism

Belluschi designed the Rohm & Haas Building as a consulting architect in collaboration with the local George M. Ewing Company and the interior design firm of Saphier, Lerner, Schindler, Inc. Belluschi was responsible for the building's overall form, structure, and principle material details. The Ewing Company was primarily responsible for translating Belluschi's design concepts into construction documents and overseeing construction, while Saphier, Lerner, Schindler was involved primarily in the selection of furnishings, fixtures, and finishes for the building's upper-floor offices.[9]

The ground floor interiors of the Rohm and Haas Building are a unique reflection of Belluschi's mastery of design principles first popularized by Le Corbusier, Mies van der Rohe, other pioneers of International Style modernism, as well as a more personal architectural vision within this modernist tradition. The building's base is clearly expressed as an open grid of structural columns carrying the overhanging mass of upper floors, following Le Corbusier's famous edict, first advanced in his 1926 manifesto "Five Points Towards a New Architecture," that a modern building should be supported not by solid load-bearing walls, but by a regular grid of columns, or *pilotis*, to raise its mass off the ground and allow its surroundings to flow underneath it.[10] Project correspondence highlights Belluschi's concern that the ground floor envelope be as transparent as possible in order to emphasize this open grid, even to the point of challenging the necessity of any horizontal muntins in the glazing between exterior columns (a practical necessity he reluctantly conceded).[11] Belluschi further blurred the demarcation of interior and exterior spaces by carrying key interior finishes (the concrete ceiling, the teak-lined interior partitions, the brick and granite floor, etc.) across the building's perimeter threshold and into the exterior. Likewise, no differentiation was made in the design or finish of the

[9] Hamilton, pp. 8.6-8.8.
[10] Curtis, William J.R. *Modern Architecture Since 1900, Third Edition.* New York: Phaidon Press, 1996, p. 176.
[11] Hamilton, p. 8.20.

building's structural columns, regardless of whether they stood engaged as part of the exterior wall, or freestanding within the exterior colonnade or interior pavilions.

While this approach was broadly characteristic of modernist ideology in the postwar era, Belluschi's handling of the structural columns themselves was highly sophisticated and distinctive. Because the column grid of the upper floors was offset from the base columns to accommodate the building's cantilevered perimeter, the load of the upper floors transferred to the interstices of the base columns instead of directly on top of them [see Fig. 11]. A civil engineer by training, Belluschi believed this lateral weight should be expressed structurally and insisted on the faceted, prismoidal shafts and oversized pyramid capital forms to highlight these diagonal load lines, despite the fact that their construction would cost 70% more than conventional cylindrical or square columns.[12] Like Mies van der Rohe's Seagram Building, whose facade was clad in non-structural bronze I-beams to evoke its concealed internal skeleton frame, Belluschi's pyramid capitals are not strictly functional, but rather an architectural expression of an underlying structure. The resulting folded and faceted surfaces also create dynamic patterns of light and shadow that lend a distinctive rhythm and character to the building's interior volumes.

Belluschi also developed exact specifications for the concrete mix, using Delaware River sand for a specific tonal value and to acknowledge the building's regional context. Elaborate pour-in-place methods were refined through a series of full-scale mockups; plastic-coated plywood forms were tongue-and-grooved to eliminate any visible seams or joints, and the forms were constantly vibrated during formation to achieve a uniform, monolithic finish. Lightly sandblasted to remove any traces of release agent after formation, the finished columns and ceiling surfaces were otherwise left raw and untreated on both the interior and exterior.[13]

[12] Ibid., p. 8.10.
[13] Ibid., p. 8.10.

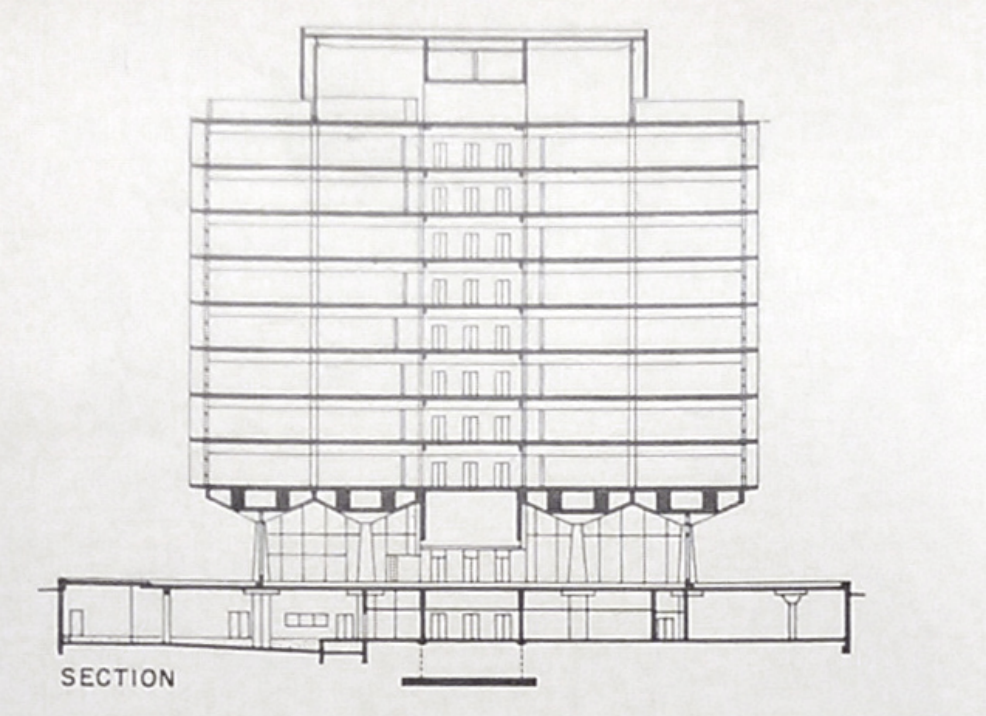

Figure 11: Building section illustrating loads on prismoidal ground-floor columns. *Architectural Record,* Jan. 1966.

Figure 12: Alexander Ewing (left) and Pietro Belluschi (right) during construction, c.1964. *Elegance on the Mall*. Philadelphia: Rohm & Haas Company, 2007.

To balance the cool character of the concrete, Belluschi wrapped the building's interior cores with a warm teak wood cladding, selected in part for its suitability for both interior and exterior environments. The generous height of the ground floor ceilings was further emphasized by the teak's ribbed pattern of square battens running uninterrupted from floor to ceiling; even the doorways and vents in these walls continued the striped pattern to create a uniform textured backdrop. As one of the leading proponents of regionalism within the modern movement, Belluschi frequently integrated wood into his designs, particularly in his residential and ecclesiastic commissions across the Pacific Northwest.[14] Its use here, in a much different geographic and programmatic context, further highlights the architect's affinity with the material.

Yet the most striking material in the ground floor design is arguably neither concrete nor teak, but acrylic Plexiglas, the Rohm & Haas Company's signature product and the primary material in a custom-designed set of chandeliers designed for the space by Györy Kepes. Like Belluschi, Kepes was drawn to the Rohm & Haas commission for the opportunity to experiment with this relatively new material. Plexiglas was first invented by Rohm & Haas scientists in the 1930s and developed commercially as a moldable, shatterproof glass substitute for the automobile industry and home furnishings. Production shifted almost exclusively to military applications during World War II, where the material proved indispensable (and extremely profitable) in the manufacture of airplane cockpit and gun turret canopies. Following the war, Rohm & Haas again rediversified its Plexiglas production as it sought new markets and developed new applications, including automotive components, product displays, illuminated commercial signage, home furnishings and fixtures, and scientific equipment.[15] For Rohm & Haas, incorporating Plexiglas into the design their new building was a significant opportunity to showcase the material in a highly visible setting and to test experimental new applications.

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[14] Goldberger.

[15] Blaszczyk, Regina Lee. *Rohm and Haas: A Century of Innovation.* Bainbridge Island, Wash: Fenwick, 2009, pp. 16-24; Hochheiser, Sheldon. *Rohm and Haas: History of a Chemical Company.* Philadelphia: University of Pennsylvania Press, 1986, pp. 75-6.

Working closely with Belluschi, the Ewing Company, and Rohm & Haas engineers, Kepes devised an elaborate scheme for cruciform, stalactite-like chandeliers suspended from the vaulted apex of each perimeter bay, highly visible from the building's exterior. Each sixteen-foot fixture features 2,083 round Plexiglas rods of varying lengths and diameters arranged around a concealed cold cathode light box. Light is diffused both laterally for a glowing veil-like effect, and directed downward through the exposed round ends of each rod. According to Kepes, the design "took months and months of intense work, making model after model, test after test, to create a solution which finally had the quality I hoped for."[16]

Upon its completion, the Rohm and Haas Building garnered wide praise, and the building's interiors figured prominently in this positive critical assessment. Kepes' lobby chandelier graced the April 1966 cover of *Charrette: The Pennsylvania Journal of Architecture*, which reviewed the building as "one of the best designed structures erected recently in Pennsylvania."[17] A January 1966 feature in *Architectural Record* echoed this sentiment in a flattering eight-page spread which included photographs of the south pavilion bank space and chandelier details.[18] And writing for the *Philadelphia Evening Bulletin*, architecture critic Michelle Osborne (in consultation with Romaldo Giurgola) also highlighted the integration of interiors and exteriors in the building's design: "[B]ecause of the rhythm of its parts-- louvers, panels, windows of tinted solar glass, and the concrete colonnade-- and because of its restrained height, there is a classic overtone consistent with Independence Hall. And this in-and-out rhythm of its surface accords well with the inside-outside idea of the ground floor."[19]

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[16] Hamilton, p. 8.10.
[17] Van Trump, James D. "Elegance on the Mall: The Rohm & Haas Building in Philadelphia," *Charette: The Pennsylvania Journal of Architecture*, April 1966.
[18] "Private Building Respects Public Site," *Architectural Record,* January 1966, pp. 141-148.
[19] Osborne, Michelle. "Meeting the Problem of History," *Philadelphia Evening Bulletin,* April 16, 1965.

Conclusion

The “inside-outside idea of the ground floor” remains one of the Rohm & Haas Building’s primary character-defining features, reflecting prevailing modernist design theories and the particular vision of both its architect and client. As one of Philadelphia’s most significant modernist interior spaces, the public interior portions of the building as outlined in this nomination therefore merit listing on the Philadelphia Register of Historic Places by satisfying Criteria C and D. The involvement of Pietro Belluschi and Györy Kepes, both nationally-acclaimed and influential modern designers, likewise satisfies Criteria E. Satisfying Criterion A, the incorporation of Plexiglas into the design of the building, most spectacularly in its Kepes-designed chandeliers, symbolizes the importance of that material to the success of the Rohm & Haas Company, one of twentieth-century Philadelphia’s most distinguished and consequential corporations. The spaces’ current configurations, though modified for contemporary uses and tenants, nevertheless preserve their most notable characteristics and features, including their open column grid, folded ceiling vaults, original material finishes, and original fixtures, all of which contribute greatly to the overall architectural and historic significance of the building.

10. Bibliography

Blaszczyk, Regina Lee. *Rohm and Haas: A Century of Innovation.* Bainbridge Island, Wash: Fenwick, 2009.

Curtis, William J.R. *Modern Architecture Since 1900, Third Edition.* New York: Phaidon Press, 1996.

Erikson, Erik et. al. *Georgy Kepes: Works in Review.* Boston: Museum of Science, 1973.

Goldberger, Paul. "Pietro Belluschi, 94, an Architect of Major Urban Buildings, Dies," *New York Times,* Feb. 16, 1994.

"Gyorgy Kepes, founder of CAVS, dies at 95," *MIT News,* Jan. 16, 2002. http://news.mit.edu/2002/kepes

Hamilton, Cynthia Rose. "Rohm and Haas Corporate Headquarters," National Register of Historic Places Registration Form. December 20, 2006.

"Historic Preservation Certification Application, Parts 2/3,", June 12, 2006, Pennsylvania Historical & Museum Commission files.

Hochheiser, Sheldon. *Rohm and Haas: History of a Chemical Company.* Philadelphia: University of Pennsylvania Press, 1986.

"Oral History Interview with Pietro Belluschi," Aug. 22-Sept. 4, 1983, Smithsonian Archives of American Art, http://www.aaa.si.edu/collections/interviews/oral-history-interview-pietro-belluschi-11614.

Orosz, Márton. "Light as a Creative Medium in the Art of György Kepes," *The Pleasure of Light: György Kepes and Frank J. Malina at the Intersection of Science and Art*. Budapest: Ludwig Museum of Contemporary Art, 2011.

Osborne, Michelle. "Meeting the Problem of History," *Philadelphia Evening Bulletin,* April 16, 1965.

Poulin, Richard. *Graphic Design and Architecture: A Twentieth-Century History.* Beverly, Mass.: Rockport Publishers, 2012.

"Private Building Respects Public Site," *Architectural Record,* January 1966, pp. 141-148.

Van Trump, James D. "Elegance on the Mall: The Rohm & Haas Building in Philadelphia," *Charette: The Pennsylvania Journal of Architecture*, April 1966.