## The Aluminaire House

In 1930 Walter Sweet, co-chair of the joint Allied Arts and Industries and the Architectureal League of NY exhibition, asked A. Lawrence Kocher to come up with an idea for the biannual buildings products display. Kocher had been managing editor of Architectural Record since 1928, and thus had contact with people in the building products industry. At the previous League exhibition Kocher had made a full scale "modern architect's office space" which had been a popular success. Perhaps in relation to this, Kocher hired albert Frey, a 28 year old Swiss architect who had just arrived in the United States, having worked for Le Corbusier in Paris. The two proposed a model dwelling utilizing, and thus displaying, standard, "off the shelf" materials.

The design was influenced by the modern movement which had reached its zenith in Europe in terms of both image and its progressive political concern with housing. Albert Frey's experience in Le Corbusier's office provided the principle idea for a "maison minimum" which had been a common European concern for the housing problem of the industrial revolution city. In fact Kocher and Frey published an article in the same month's Architectural Record showing similar units in an inner city 'super block' organization. However, it also seems to have been influenced by the American growth of industrial mass production materials and the advanced representation of this in Bucky Fuller's work.

From 1930 to 1931 Kocher and Frey designed the house and negotiated to have the manufacturers or distributors assemble their components into the whole. It was assembled in ten days in the Grand Central Palace that was adjacent to Grand Central Station and opened on April 18<sup>th</sup>, 1931 for one week. Over 100,000 people toured the house.

It was widely reported in the popular press, much of which contained speculation about the future "way of life" it suggested. It also became part of on going debates about solutions to the housing issues in the United States.

The three story, 1,100 s.f. (excluding the garage and 460 s.f. of terrace) house measures 23'- x 28'- x 27'-3" high. The ground floor has an entry hall, off of a covered terrace and a garage with garage doors at each end of the car. From the entry hall one could see over the stair parapet, up through to the ceiling of the roof. Also, in view was the boiler, situated as a 20<sup>th</sup> c. art object in a semi-circular niche. At the top of the stirs, one entered the double height living room through the dining room. Off the dining room, with it's fixed in place, roll out table, was a stainless steel kitchen. Off the living room was the bedroom with a semicircular curtained exercise area and an open bath room. The toilet was housed in an aluminum framed cabin. Above the dining and looking over to the living room was a library or guest room with its own bathroom, precariously projected over the living room and a large outdoor terrace. A dumb-waiter connects the entry with the kitchen and roof terrace.

The principal material was aluminum which was used in the 6 - 5" diameter columns, the girders and beams (except where they didn't show) and the exterior panels. The alloy was mill finish i.e. unanodized, and the panels were 20 gauge, 1/32" thick and ribbed for stiffness. The frame was bolted together with aluminum bolts, washers and nuts. The other significant material was steel used in the wall girt system, the channel shaped floor decking, stairs and industrial windows. The walls were 3" thick with a 2" steel angle girt system hung off the girders and beams and ½" insulation board on both sides nailed to wood "nailers" attached to the girts. Building paper and the 48" x 58" metal panels were screwed with aluminum screws and washers to wood nailers in an overlapping pattern, revealing a 44" x 48" surface with a tartan grid of screws. Inside pastel colored rayon "Fabricoid" was applied like wall paper requiring no paint and was washable. The floor was linoleum throughout. Albert Frey, in an interview with us, said that they chose aluminum because it was quite new and had become a popular material used in all kinds of things from cars to jewelry. He liked the play on words, that Aluminaire combined aluminum and luminous. He had had a long fondness for the material, loving both its color and malleability. There was also an

expectation that it would become cheaper multi use material. Ironically it reached its zenith as siding imitating wood.

Henry Russel Hitchcock and Philip Johnson mounted the first exhibition on architecture at the Museum of Modern Art, "Modern Architecture; an international exhibition" in 1932. Only six examples from the United States were included. The Aluminaire house was exhibited with plans and a photograph on the Huntington site and was titled, Harrison House, Long Island. Clarence Stein, Henry Wright and Catherine Bauer curated the housing portion of the MoMA exhibition. Lewis Mumford wrote the introduction to that catalogue.

The house was also included in, "The International Style", 1932 MoMA book by Hitchcock and Johnson.

At the close of the show the Architect Wallace K. Harrison bought the house for \$1,000.and moved it to his property in Huntington, Long Island. It was disassembled moved to Huntington, Long Island and reconstructed on his property. It was in this "weekend" location that it has been best known. It took Harrison more than six months to rebuild the house and he immediately began to add onto it. Around 1940 the house was moved to a new location on the property

Wallace Harrison made additions to the Aluminaire House which soon became larger than the house. Harrison entertained many artists and architects at his expanding house, including Fernand Leger, Le Corbusier and Mies van der Rohe.

At some point in the 1940's the house was moved to another location on the Harrison property. The new site was on a hillside and required changes to the ground floor. A conventional basement was built replacing the ground floor and a terrace projecting from the living room was added to adapt it to a sloping topography. Thus the whole original ground floor was removed. The house was also altered to increase the number of bedrooms by enclosing the roof terrace and infilling the double height living room.

The property was sold to Harold and Hester Diamond in 1974. By this time bore little resemblance to the exhibition house of 1931. Wallace Harrison died in 1981. The property was again sold to Dr. Joel Karen, who applied for and received a demolition permit to remove the Aluminaire House in 1986, in order to "develop" the property. This was protested by architects and historians. Plans for demolition of the house resulted in an outcry of protests from architects and preservationists, including Paul Goldberger who wrote in the New York Times, March 8, 1987.

In 1987, Professor Michael Schwarting, Chair of the New York Institute of Architecture, School of Architecture, and Dean of Architecture Julio M. San Jose of NYIT proposed to dismantle the house and reconstruct it on the Central Islip campus of NYIT as part of the curriculum. He negotiated both with the Owner to remove it, and with New York Institute of Technology to accept it. Dr. Karen gave the house to NYIT on the understanding that it would be removed as quickly as possible.

Through New York Institute of Technology he obtained a \$130,000. Matching grant from New York State Department of Parks Recreation and Historic Preservation to dismantle, move and rebuild the house with students on a site adjacent to the School of Architecture. As director of the project, Professor Schwarting with Professor Frances Campani, the existing house was documented and an Historic Structures Report was produced to rebuild it. The work was executed by Architecture students in courses taught by Schwarting and a contractor as adjunct teacher. When complete it was to be on the National Register and a museum, open to the public and managed and maintained by the School. It would serve as a demonstration of the history of the search for ways to create affordable housing. NYIT also received a second \$70,000. matching grants for the project from NYS Department of Parks, Recreation and Historic Preservation.

Professor Schwarting and Campani worked with students to document the house as found. The students deconstructed the house, starting with the later additions, and documented it again at each removal of

material. The components of the house were labeled, moved to Islip, cleaned and stored in an empty wing of the Sunburst building, where the Department of Architecture was located.

A specific site is chosen at NYIT and approved by NYS DPRHP. As part of the Aluminaire House course, students analyzed housing proposals of the 20<sup>th</sup> century and reconstructed the house. Foundations were constructed and erection of the structural frame was completed in 1992.

Work continued on the house with both student and professional labor. The work was paused for lack of funding in 1996. In 2004 NYIT discontinued most of its academic programs at the Central Islip Campus, including Architecture. Students and faculty transferred to the Old Westbury or Manhattan campuses. The land where the Aluminaire House is located was put up for sale.

NYIT hosted a public lecture and celebration for the house. Kenneth Frampton was the speaker. In attendance were Philip Johnson, Tod Williams, Stephen Holl, Joan Ockman, Michael Manfredi, Alex Kouzmanoff, Terry Riley, Joseph Rosa and others. There was an annual Aluminaire House lecture and picnic each April after this event; lecturers included Christian Otto, Michael Graves, Tod Williams, Julian de la Feunte, Charles Gwathmey, Michael Sorkin, Michael Schwarting and others. NYIT hosted a public lecture and celebration for the house. Kenneth Frampton was the speaker. In attendance were Philip Johnson, Tod Williams, Stephen Holl, Joan Ockman, Michael Manfredi, Alex Kouzmanoff, Terry Riley, Joseph Rosa and others. There was an annual Aluminaire House lecture and picnic each April after this event; lecturers included Christian Otto, Michael Graves, Tod Williams, Julian de la Feunte, Charles Gwathmey, Michael Sorkin, Michael Schwarting and others.

New York Institute of Technology transferred the House to The Aluminaire House Foundation which was formed in 2010, to relocate, restore and maintain the Aluminaire House as a museum. In April 2012, the House was again dismantled in one week and is stored in a container.

From 2011 to 2014, Campani and Schwarting Architects developed a site plan for the house to be located on a vacant lot once occupied by a Phipps playground at 39<sup>th</sup> Avenue and 50<sup>th</sup> Street, opposite Sunnyside gardens to the West and Phipps Houses to the north. Sunnyside Gardens and Phipps Houses are important housing proposals contemporary with the 1931 Aluminaire House. Within an Historic District in New York City, plans were submitted to NYC Department of Buildings and a hearing with the NYC Landmarks Preservation Commission occurred in October 2013 and January 2014. The LPC decided not to support the proposal.