

ARCH 3510

# Micro Apartment Precedents Research

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Cities have always attracted artists, writers, musicians, young professionals, and many other individuals seeking work and life experience; the time we live in is no exception. In fact, the number of singles looking for apartments to accommodate their lifestyle only continues to grow. As a result studio apartments have become scarce; unable to meet the demands of a growing population. In addition, the cost of housing in cities like New York significantly increases with each passing year. Now, the demand for affordable living arrangements has reached a point of climax.

Designers and Architects have been working, with the help of city officials, to create a new type single living space called a "Micro Apartment." The Micro can be described as a smaller version of a studio apartment. Designed as an affordable living unit for a single occupant, Micro Apartments are typically located in desirable locations, like that of Midtown Manhattan.

By sacrificing floor area and condensing apartment units, the cost of living in a studio apartment in a city environment can be significantly reduced. Generally, the public concern with Micro Apartments is that the compressed living space would be daunting, difficult, and uncomfortable to live in. However in some cases true, designers and architects are now working diligently to create the ideal Micro Apartment.

Many comfortable living spaces have been created from tiny footprints. Architects and designers have come up with clever, subtle, and at times ingenious solutions to the problem of a living space with a limited floor area. Not only that, but occasionally a particular design or layout can be put together so well that, not only does the space become comfortable, but desirable to live in as well. It is important for the designer/architect to remember that the micro apartment should not be composed solely as a solution to a problem, but also as an opportunity to create a truly desirable dwelling for a person to experience and enjoy.

-Maksim Drapey

# Microflat

by **Stuart Piercy + Richard Conner**

Year: 2003

Location: London, England

Unit Size: 344 sq ft

Link: [http://www.piercyconner.co.uk/?page\\_id=78&album=1&gallery=18](http://www.piercyconner.co.uk/?page_id=78&album=1&gallery=18)



**Much like New York City; it has become nearly impossible for singles, living on an average, salary to afford a comfortable living space in London.**

## **Cityscape:**

Microflat, imagined by Piercy + Co, is a response to the overinflated prices found in London's housing market. Capitalizing on the concepts of low cost and efficient design, the apartment complex stacks prefabricated units one on top of another. Full height windows, as well as balconies, are set on an angle to expose the occupant of each micro-unit to a full range of view. The cobbled streets, and cityscape unfold from the living room of every home. Low cost of construction and a condensed living spaces make the apartments affordable to own to whomever wants to experience life in the city.



The Single Unit



The Double Unit



**The mico-Unit:**

Each individual unit was designed to fit a small kitchen, a king size bed, living room, and a small bathroom. In addition to single living spaces, two bedroom apartments are available. Double apartments interlock in plan to effectively conserve floor area.

Full high windows immerse each apartment in direct and passive sunlight while smaller bedroom windows provide indirect sunlight from the exposed, corridor.

Using wall partitions, a well thought-out system of separation is composed. Effectively separating the spaces in the apartment produces a personal cognition of a larger and more comfortable living environment.

# BIEN VIVRE DANS 16M<sup>2</sup>

by **Julie Nabucet + Marc Baillargeon**

Year: 2012

Location: Paris, France

Unit Size: 130 sq ft

Link: <http://www.julienabucet.com/projects/appartement-16m2/>



## Urban Conversion:

Located in a Haussmann style house in Paris, France, This micro apartment belongs to what was once a larger living space. An interior conversion of a 130 sq ft master bedroom gave rise to this compact and efficient living spaces



**Shifting Interior:**

The split level floor plan shows yet another possibility for a well design separation of spaces. Ceiling heights of roughly 10 feet allow for this separation to occur.

The top level of this micro studio contains a kitchen, bathroom, and a bar/dining space with a view to the outside.

The lower platform serves as a universal space for living. A shifting coffee table hides to allow for more mobility in this lower space. In addition, a bed slides in and out of the elevated platform creating a couch when partially exposed.

Storage spaces can be found in various locations such as cabinets under the stair treads and along the walls.



# Apartment I

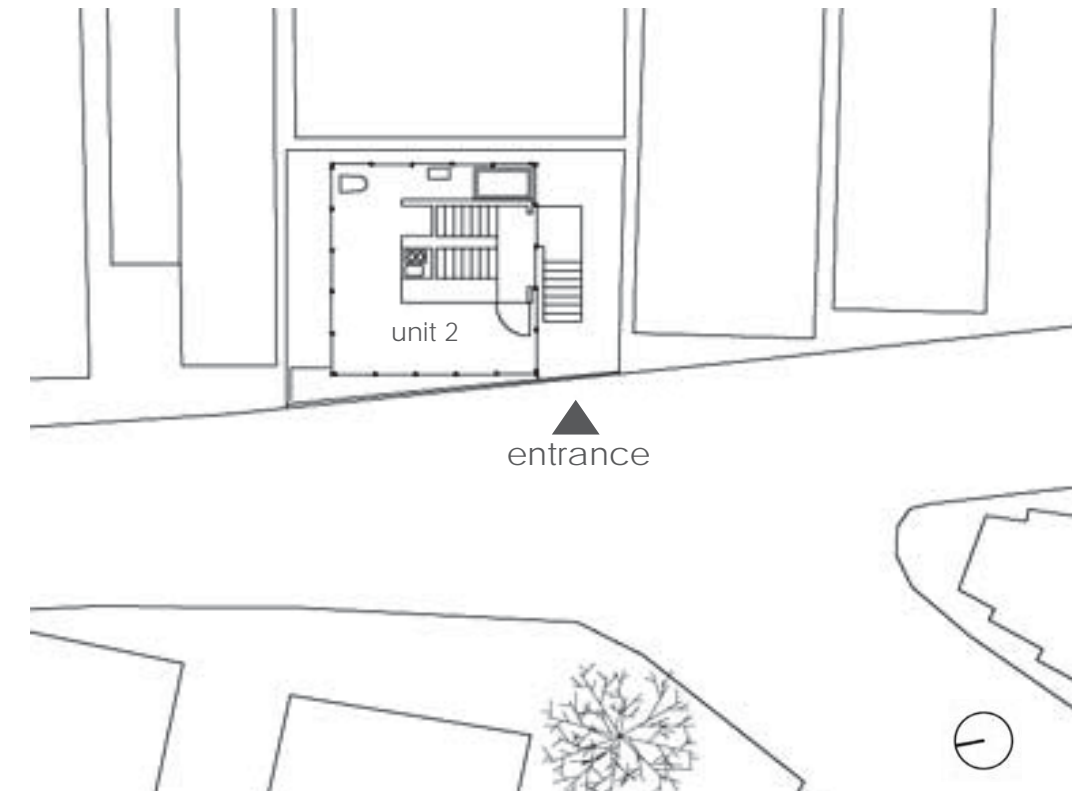
by Kumiko Inui

Year: 2007

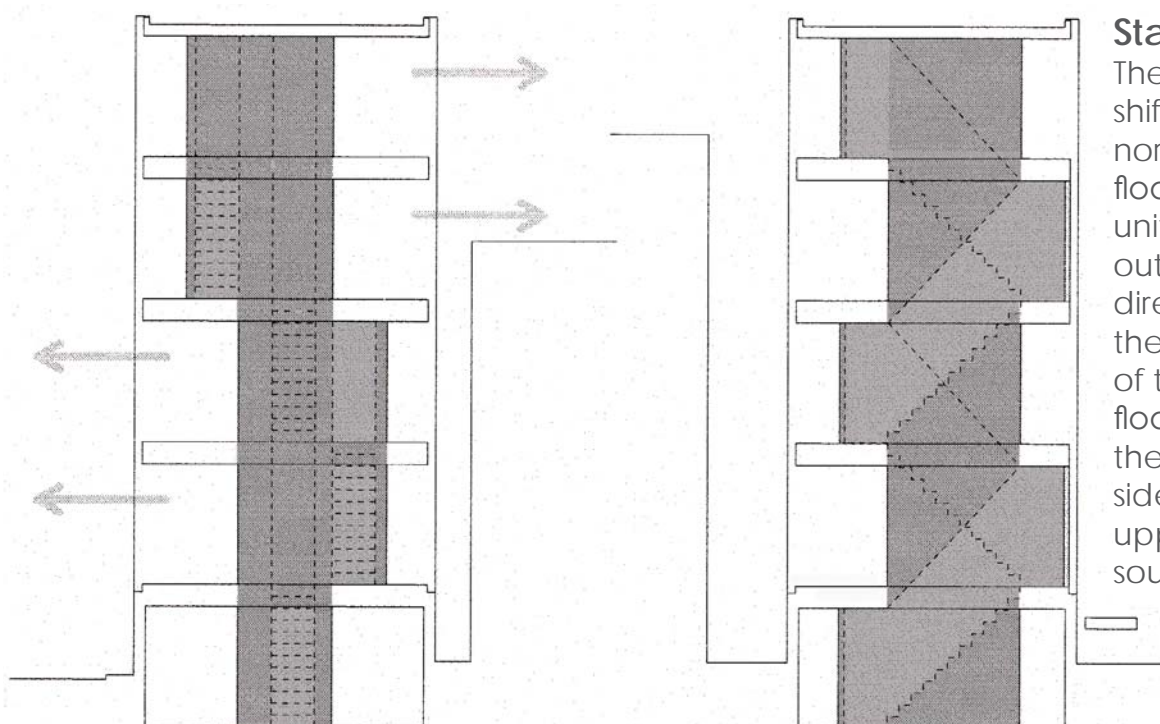
Location: Tokyo, Japan

Unit Size: 20 sq m (215 sq ft)

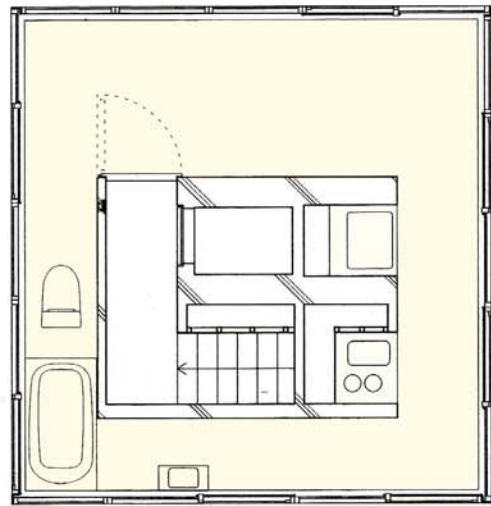
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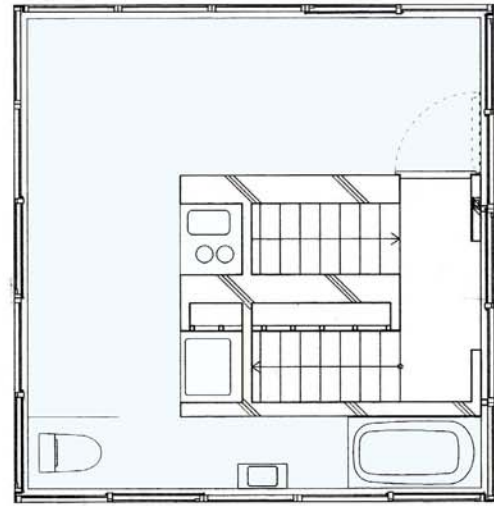
**Site:**  
The building consists of 5 units layered on top of each other on a 48sq m (516.7 sq ft) property. Located in downtown Tokyo, the building is designed to benefit from the urban context by opening fully onto their surroundings with the glass facade - physically connecting residential space and city life.



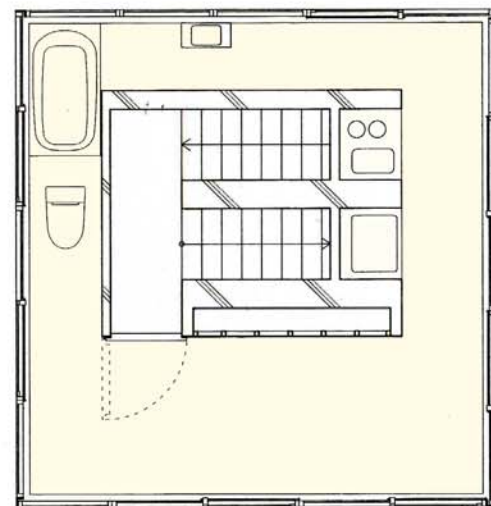
**Stair core:**  
The stair core shifts towards north on the 4th floor, making the units opening out to different directions. The the widest space of the ground floor unit faces the street on north side, while the upper level faces south.



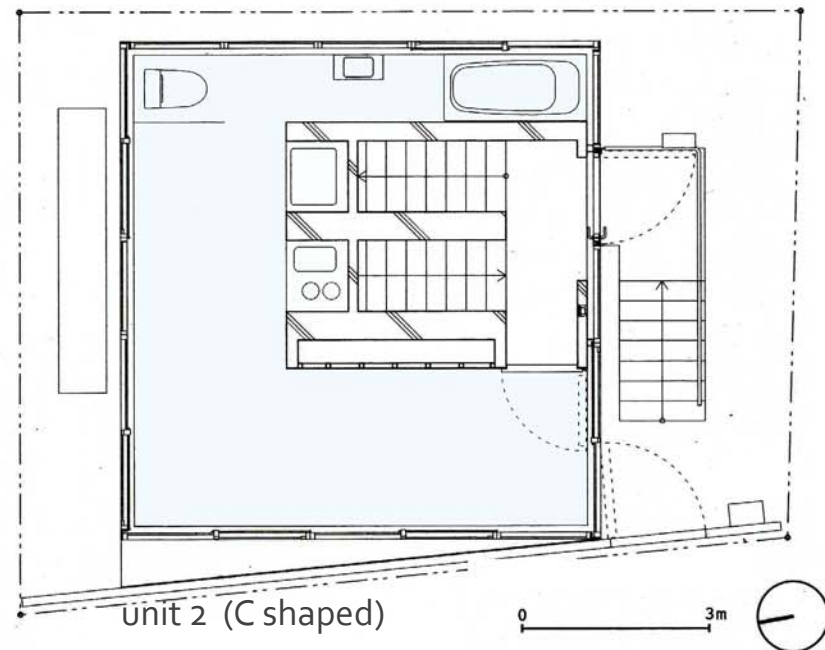
unit 5 (O shaped)



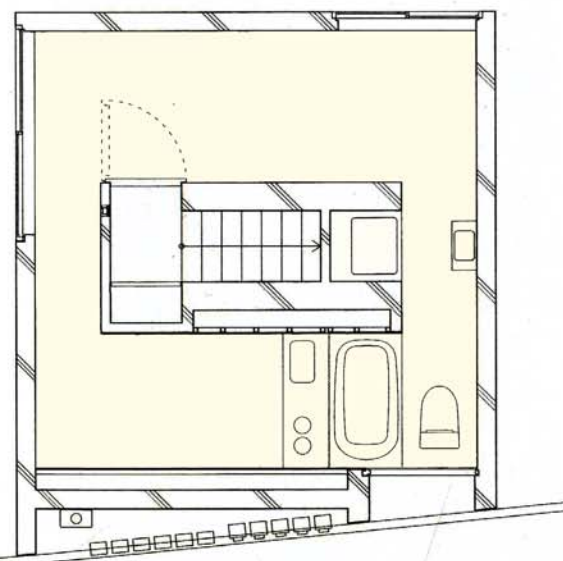
unit 4 (C shaped)



unit 3 (O shaped)



unit 2 (C shaped)



unit 1 (O shaped) - semi-basement level

### PlanW

The stair core goes up through the middle of the units, creating "O" shaped units and "C" shaped units, which help separate or connect activities without using partitions. The kitchen and washing machine are concentrated around the stair core, while the bathroom is located in the parameter of the plan.

Although it's merely 20 sq m (215 sq ft) and the ceiling height is the minimum allowed, 2.1m (6.89ft), the glass exterior wall helps the space feel larger.



# Nakagin Capsule Tower

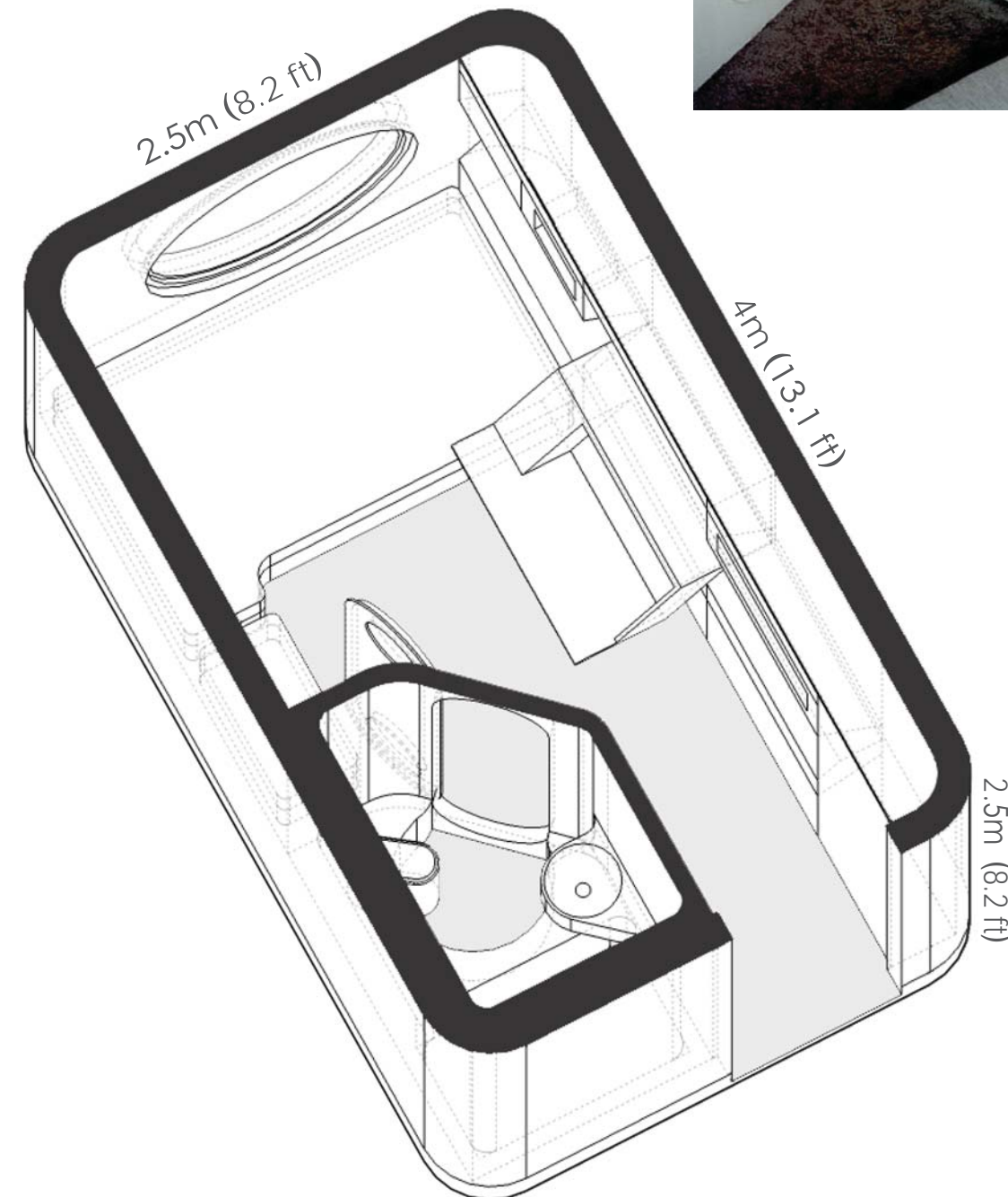
by Kisho Kurokawa

Year: 1972

Location: Tokyo, Japan

Unit Size: 107.6 sq ft (10 sq m)

Link: [www.kisho.co.jp/page.php/209](http://www.kisho.co.jp/page.php/209)



## The extensive pre-fab:

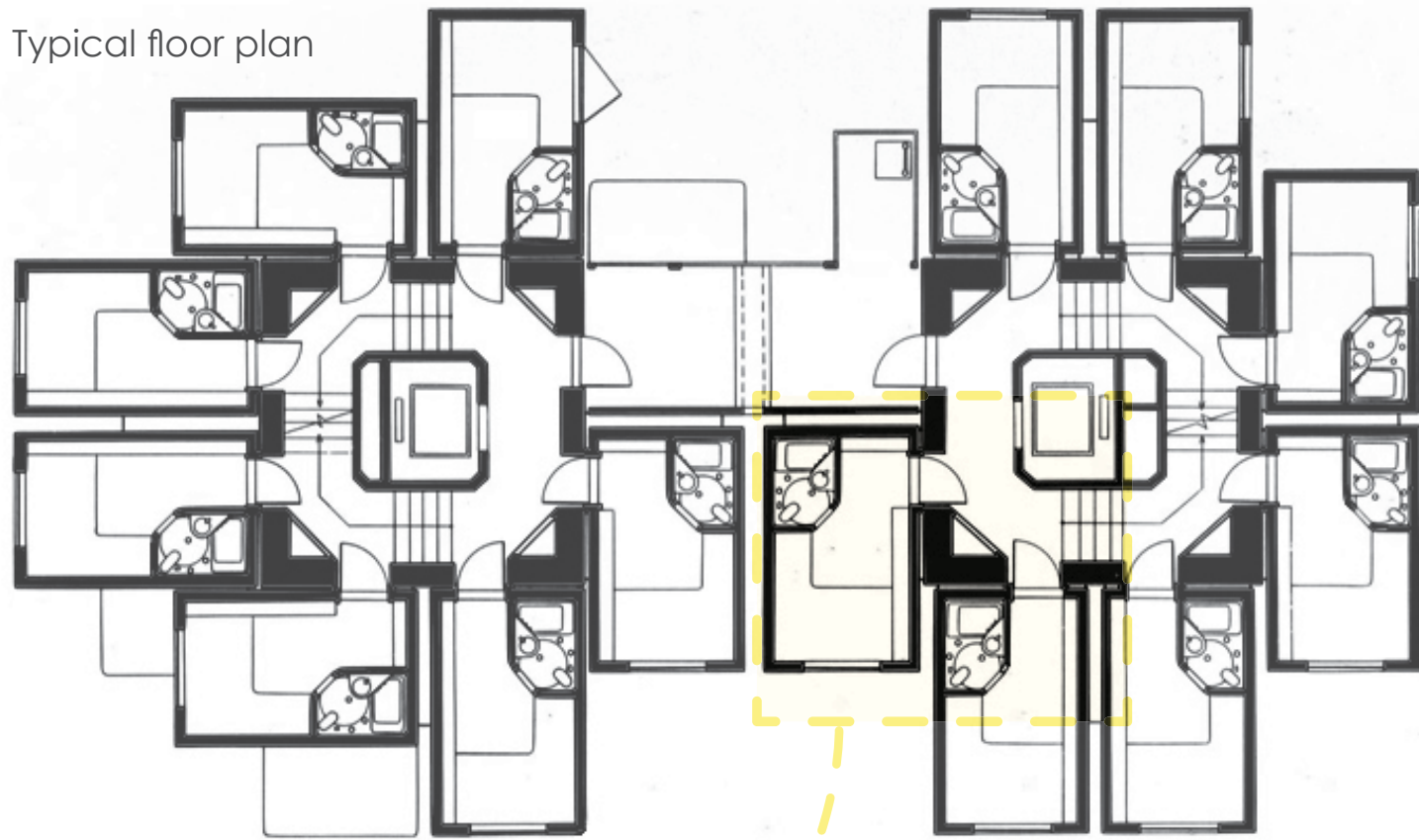
The capsules were fully prefabricated off-site and transported by trucks with the furniture, appliances and bathrooms already built inside.

## The capsule:

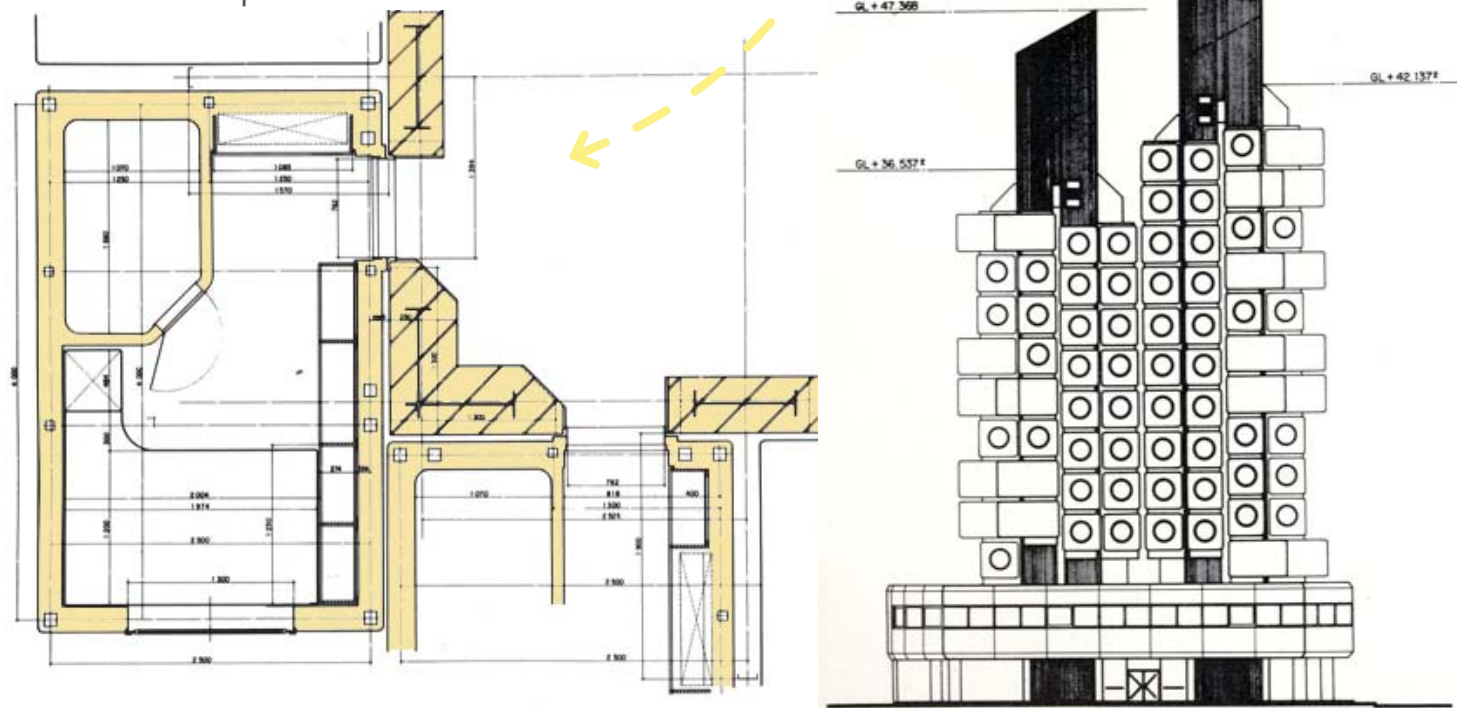
The building consists of 140 of this unit that has its own exterior shell. Each unit came with the custom built-in furniture including a desk, TV, AC, radio, phone, refrigerator, bed, even a calculator. Each unit features an operable round window.



Typical floor plan



Unit blow-up



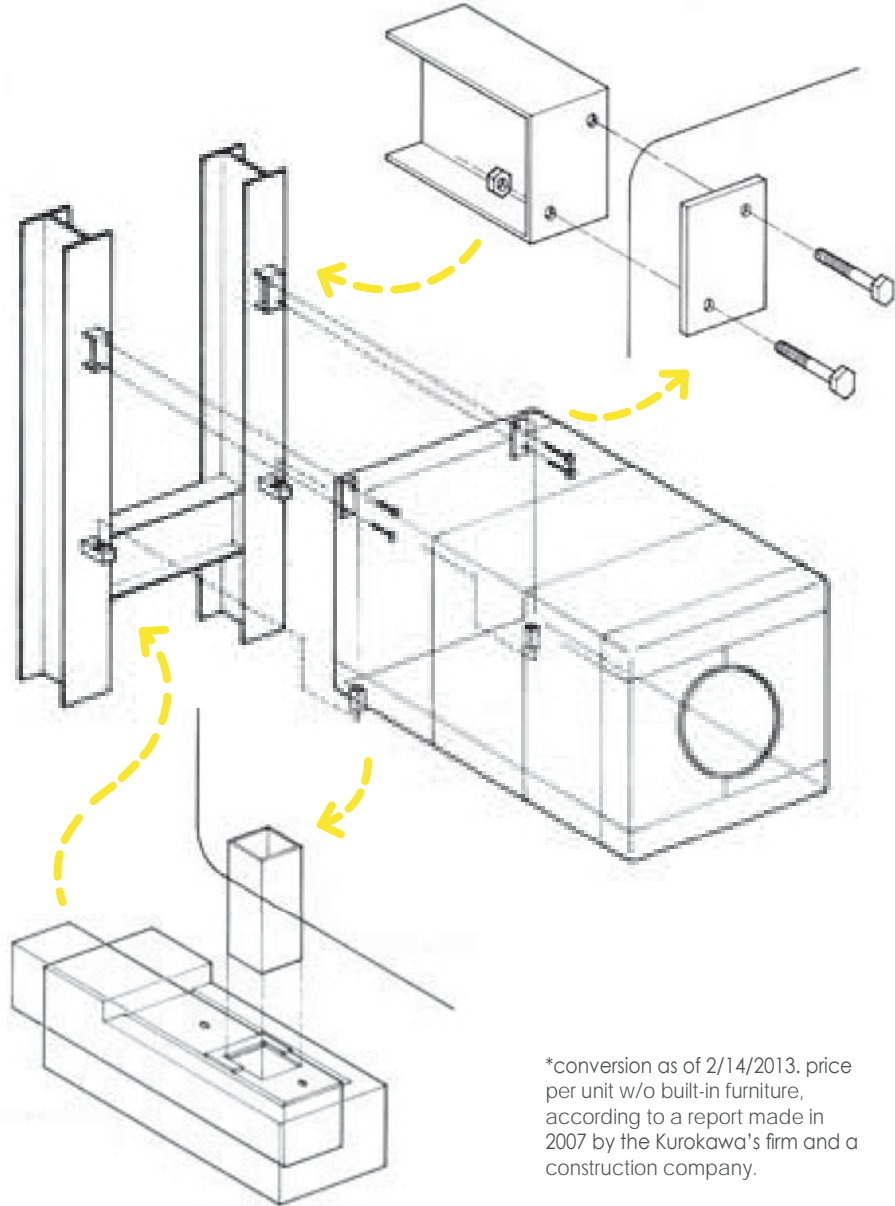
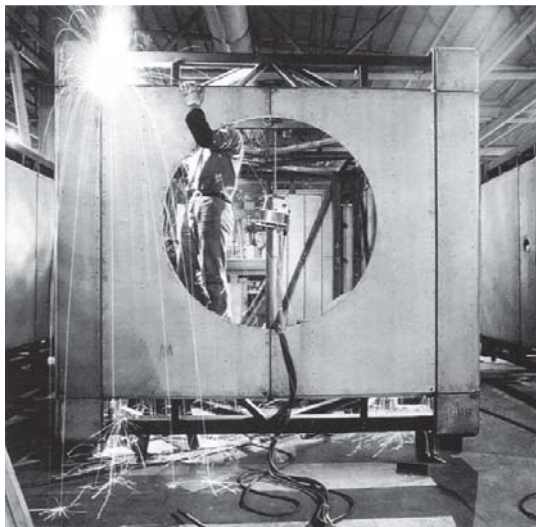
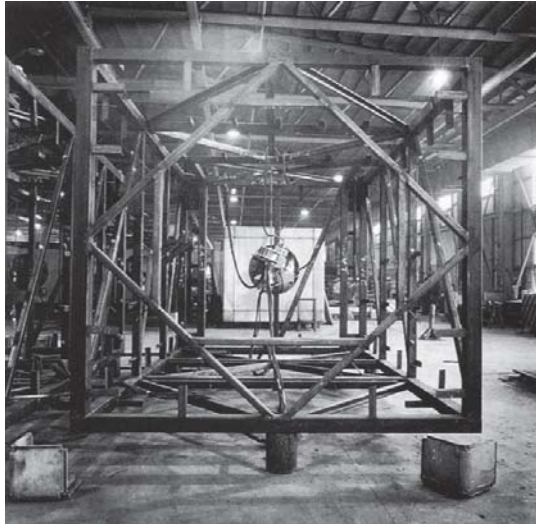
### Living in the Capsule:

The capsules were designed for business people to use as a (second) residence or private office. This excessively small living units made sense in this particular location, as 'Nakagin' translates to 'in the middle of *Ginza*, the priciest neighborhood in Tokyo.



## 'Metabolism'

The capsules were one by one attached to one of the two steel framed concrete towers by 4 high tension bolts on top corners and 2 brackets on the bottom while being pulled up by crane. Since they don't put load on the other units on the lower levels nor receive any load from upper levels, each unit was meant to be **individually replaceable** when the unit gets old or the needs for the building change -- the then new approach for Japanese architecture young Kurokawa started (**the Metabolism movement**). The theory was that this building would last 200 years if the capsules were replaced every 25 years.



\*conversion as of 2/14/2013. price per unit w/o built-in furniture, according to a report made in 2007 by the Kurokawa's firm and a construction company.

## The Reality

As of today in 2013, none of the replacement had been made - for 40 years. The ceilings leak, and none of the built-in AC units or the TV work anymore. The major two reasons that lead this faulty situation are the economic crisis and the change of unit owners. The building owner company went bankrupt, and the building was bought by an American hedge fund who thought the building would be fine for another while without units renewal. Moreover, the current owners got the capsules through heritage, so while their grand fathers or fathers loved owning the capsules, they had merely inherited them and were not very interested in paying 7.8M yen = US\$83.4K\* for capsule replacement. It has now decided the building will be torn down. This decision was made, ironically, the same year Kurokawa passed away (2007).

