

September 25, 2023

For immediate release

Mitsui Fudosan Co., Ltd.

Mitsui Fudosan Group's Consulting Service for Aging Property Revitalization**“Seismic Upgrade of Buildings Built to Previous Seismic Standards”×
“Realization of a Decarbonized Society”****Construction Begins on 7th REFINING ARCHITECTURE® Property,
a 46-Year-Old Rental Property Built to Previous Seismic Standards****An On-Site Tour of the REFINING ARCHITECTURE Seismic Reinforcement Site
Will Be Held on Thursday, October 12, 2023 in Bunkyo-ku**

Tokyo, Japan, September 25, 2023 –Mitsui Fudosan Co., Ltd., a leading global real estate company headquartered in Tokyo, has been undertaking a consulting service for aging property revitalization (hereinafter, “the Project”) which utilizes REFINING ARCHITECTURE advocated by SHIGERU AOKI Architect & Associates Inc. Mitsui Fudosan hereby announces that it has begun construction on what will become the 7th REFINING ARCHITECTURE property (a 46-year-old rental property in Bunkyo-ku, hereinafter “the Property”). In addition, a tour of the REFINING ARCHITECTURE seismic reinforcement site will be held on Thursday, October 12, 2023.

■ Social Context

According to a survey conducted by the Ministry of Land, Infrastructure, Transport and Tourism, this year, on the 100th year anniversary of the Great Kanto Earthquake which occurred in 1923, there are said to be 7 million*1 residential units nationwide without sufficient seismic resilience, and measures to further improve the quake resistance of buildings remain a social issue. Additionally, Japan has announced its aim to achieve carbon neutrality by 2050 and reduce greenhouse gas emissions by 46% by fiscal 2030 (compared to fiscal 2013), so the realization of a decarbonized society is becoming an urgent social issue as well.

(*1) From statistics compiled by the Ministry of Land, Infrastructure, Transport and Tourism in December 2022 in “Current status and targets of improving seismic resilience in residential homes and buildings” (Japanese only) (<https://www.mlit.go.jp/jutakukentiku/house/content/001580488.pdf>)

■ Issues faced by owners of aging properties and role of the Project

For owners of aging properties, the issues appear to be that conventional seismic reinforcement using seismic braces interferes with the exterior and livability of the property, so it is difficult to obtain investment returns because rent cannot be expected to rise, and the demolition and new frame construction required during reconstruction result in a large amount of CO₂ emissions.

The Project will raise the seismic resilience to levels required under current laws through seismic reinforcement that does not interfere with the exterior and livability of the property, a feature of REFINING ARCHITECTURE, and enable rent to be set at high prices by harnessing the product planning expertise cultivated by the Mitsui Fudosan Group, thereby improving business performance. Additionally, REFINING ARCHITECTURE reuses existing frames, which enables a reduction in construction costs as well a reduction in CO₂ emissions during construction by over 70% in comparison with the case of reconstruction*2.

Mitsui Fudosan will continue to actively promote the Project going forward, thereby helping to solve the social issues of seismic upgrades to buildings built to previous seismic standards and the realization of a decarbonized society.

(*2) Based on a related news release dated September 22, 2021: <https://www.mitsui-fudosan.co.jp/english/corporate/news/2021/0922/>

Issues faced in making seismic upgrades to buildings

- Seismic braces interfere with the exterior and livability of the property, making it difficult to obtain investment returns through rent increases

Issues faced in making contributions to a decarbonized society

- Large amount of CO₂ emissions released due to demolition required for reconstruction and new frame construction

Features of REFINING ARCHITECTURE, which achieves both seismic reinforcement and a decarbonized society

(1) **Seismic reinforcement with minimal impact on building design**

Walls and facilities are eliminated when they pose no problems for seismic functions, building weight is reduced, and seismic functions are improved without interfering with the exterior or livability of the property, thereby contributing to high rent and a high occupancy rate.

(2) **Enables long-term loans through various evaluations**

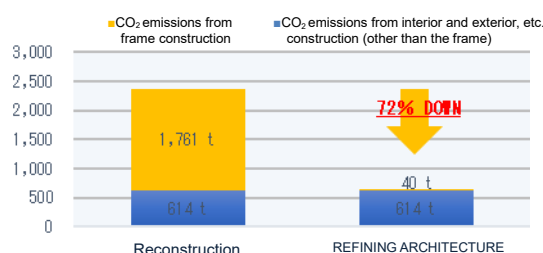
Obtaining a third-party service life assessment report and Certificate of Completion enables long-term financing equivalent to that of reconstruction

(3) **Low cost and reduced construction timeframe compared to reconstruction**

Since demolition and new frames are not required, the interior and exterior appearance and facilities can be renewed at approximately 70% of the cost in comparison to reconstruction. Construction timeframes can also be reduced.

(4) **Enables reduction of CO₂ emissions by over 70%**

Through the reuse of existing frames, CO₂ emissions resulting mainly from frame construction can be reduced by over 70% in comparison with reconstruction.



■ Overview of the Property

The Property, which will be the 7th REFINING ARCHITECTURE property, is a 46-year-old shared residence. It was discovered that the size of the property would have to be reduced if it were rebuilt due to restrictions such as sun-shadow regulations that were not in place at the time of its initial construction. Meanwhile, seismic reinforcement using seismic braces presented the problems of interfering with the exterior and livability of the property, making it difficult to obtain investment returns as rent could not be expected to increase.

At this time, the building scale will be maintained through the use of REFINING ARCHITECTURE, while seismic reinforcement with minimal impact on the building design will enable layout composition and product planning fit to the current rental market, and rent setting at prices on par with a newly constructed property. Additionally, the reuse of existing frames eliminates the need for demolition costs and new frame construction, and makes it possible to reduce construction costs as well as CO₂ emissions. Mitsui Fudosan Residential Lease Co., Ltd. plans to handle subleasing following the completion of construction.

■ Exterior<Before / After>

Before



After

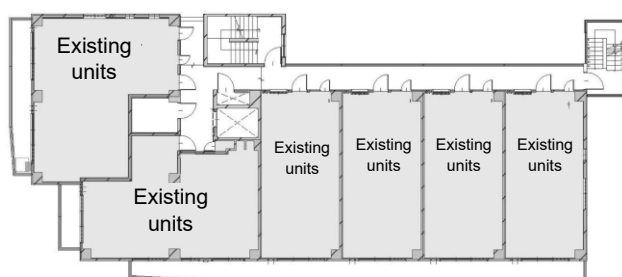
Perspective drawing



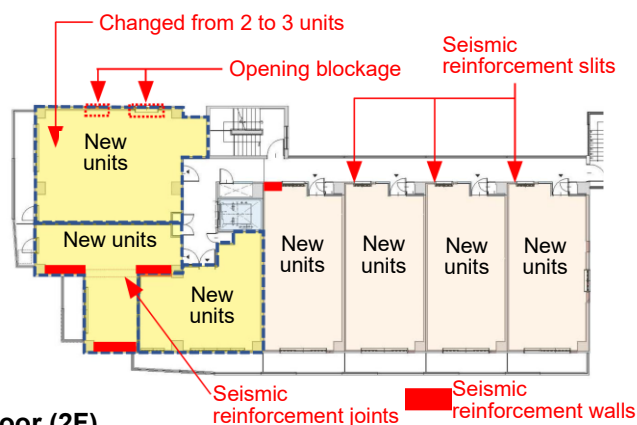
■ Compatibility between product planning fit to the rental market and seismic reinforcement plans

The property previously had a basic layout of six-units on a standard floor, but to meet the needs of current residences and the needs of the rental market in the surrounding area, the layout was changed to seven units with a rich variety of floor plans in order to improve business performance and achieve stable occupancy rates. Furthermore, Mitsui Fudosan has adopted the seismic reinforcement technology of SHIGERU AOKI Architect & Associates in order to achieve this plan, which has notably resulted in a flexible layout without the use of seismic braces.

Before



After



Standard floor (2F)

■ Image of reinforcements

Seismic reinforcement wall



Opening blockage

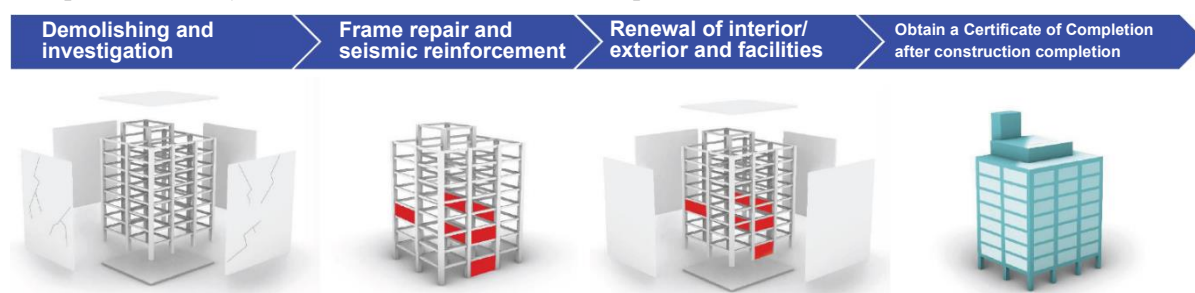


【Property Overview (Planned)】

Location	4-19-1 Hon-komagome, Bunkyo-ku, Tokyo
Access	11-minutes' walk from Hon-komagome Station on the Namboku Line 12-minutes' walk from Tabata Station on the JR Yamanote Line
Zoning	Commercial area
Site area	Approx. 5,920.2 ft ² (approx. 550 m ²)
Building purpose	Rental housing (39 units) (previously 32 units), 2 store sections
Structure	1 floor below ground, 1F steel reinforced concrete structure, 2F-7F reinforced concrete structure
Total floor area	Approx. 25,510.5 ft ² (approx. 2,370 m ²)
Building area	Approx. 3,767.4 ft ² (approx. 350 m ²)
Building certification application / Certificate of Completion	Obtained Certificate of Verification of Building Construction (Construction type: large-scale remodeling) / Scheduled to obtain Certificate of Completion
Reinforcement plan	Guarantee Is (Seismic Index of Structure) of 0.6 through new installation of damper walls
Architectural firm	SHIGERU AOKI Architect & Associates
Construction firm	NIHON KENSETSU CO., LTD.
Schedule	April 2023 Began construction March 2024 Construction scheduled for completion (Existing building completed in 1977, 46 years since construction)

【Ref. 1: About “REFINING ARCHITECTURE”】

“REFINING ARCHITECTURE” is a method of building revitalization unique to SHIGERU AOKI Architect & Associates. Through this method, the property is completely demolished aside from existing frames and seismic resilience is raised to levels required under current laws and regulations through frame repair and seismic reinforcement, revitalizing it to nearly the same level as a newly constructed property. The major distinctions separating this method from renovation are that efforts are made to extend the building’s lifespan and that a Certificate of Completion is newly obtained once construction is completed.



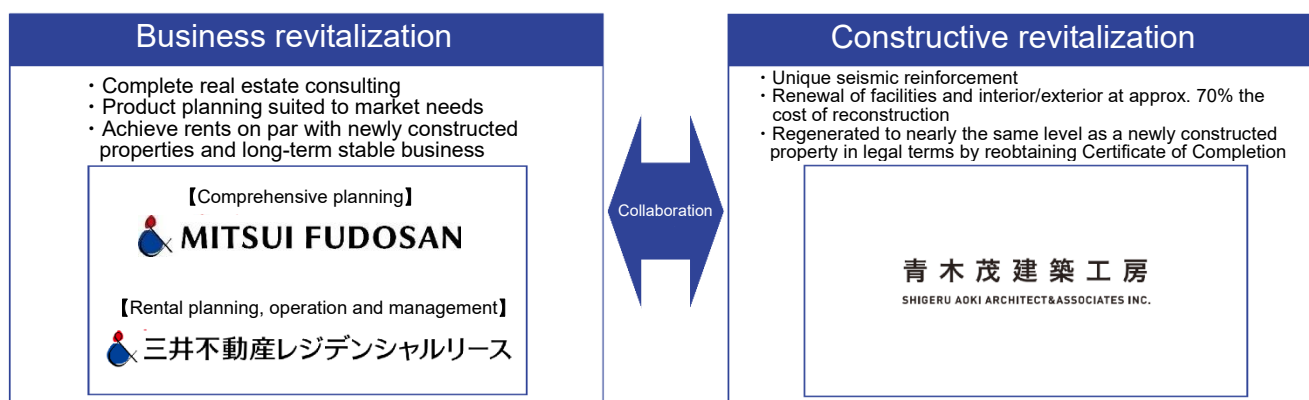
• REFINING ARCHITECTURE/ Countermeasures against aging/ Mitsui Let's – Mitsui Fudosan (Japanese only)
https://lets.mitsuifudosan.co.jp/anti_aging/refining?utm_medium=qr&utm_source=owned&utm_campaign=20230925refiningnews&utm_term=mf&utm_content=news

【Ref. 2: About the “consulting service for aging property revitalization”】

Mitsui Fudosan is undertaking a consulting service for aging property revitalization harnessing SHIGERU AOKI Architect & Associates’ construction method of REFINING ARCHITECTURE

The Project, which is aimed at owners of aging properties, particularly those built to previous seismic standards, will not only strive for constructive revitalization but support all aspects up to business revitalization, including consulting for solving real estate-related issues, product planning, and rental management and operation, and solve the various issues involved with aging properties through collaboration with the Mitsui Fudosan Group.

■ Structure of the Project



■ Mitsui Fudosan Group's Contribution to SDGs

https://www.mitsuifudosan.co.jp/english/esg_csr/

The Mitsui Fudosan Group aims for a society that enriches both people and the planet under the principles of coexist in harmony with society, link diverse values and achieve a sustainable society, and advances business with an awareness of the environment (E), society (S) and governance (G), thus promoting ESG management. By further accelerating its ESG management, the Group will realize Society 5.0, which the Japanese government has been advocating, and contribute significantly to achieving the SDGs. Additionally, the Group formulated the following Group guidelines related to “Realize a Decarbonized Society” and “Diversity & Inclusion Promotion” in November 2021, and “Biodiversity” in March 2023. The Mitsui Fudosan Group will continue to work toward solving social issues through neighborhood creation.

【References】

- Group Action Plan to Realize a Decarbonized Society
<https://www.mitsuifudosan.co.jp/english/corporate/news/2021/1124/>
- Formulated Diversity and Inclusion Promotion Declaration and Initiatives Policy
https://www.mitsuifudosan.co.jp/english/corporate/news/2021/1129_02/
- Mitsui Fudosan Group Biodiversity Policy
<https://www.mitsuifudosan.co.jp/english/corporate/news/2023/0413/>

* The initiatives covered in this press release are contributing to three of the UN's SDGs.

