Responding to Natural Disasters

Policy and Concept

Natural disasters such as major earthquakes and typhoons threaten our way of life. Climate change has resulted in frequent destructive typhoons and extreme weather over recent years. As a result, interest is rising faster than ever in the safety of real estate, which is a foundation of our lives.

As a real estate services provider, the Tokyo Tatemono Group believes that improving resilience against disasters in ordinary times and providing safety and comfort to our customers and other stakeholders are important responsibilities.

Developing Resilient Real Estate

Climate change and other factors have been causing greater wind and flood damage in recent years. The Tokyo Tatemono Group has applied designs and adopted equipment in our office buildings and residences in preparation for presumed future disasters, including typhoons, floods, and major earthquakes.

The Tokyo Tatemono Nihonbashi Building (Chuo-ku, Tokyo; completed in February 2015) has a seismic isolation structure (first basement floor: column-head seismic isolation) to ensure high earthquake resistance. The building is equipped with an emergency generator that can operate for 72 hours, supplying 15 VA/m^2 of power in the event of a power failure. The building also features countermeasures against guerrilla rains and the Arakawa River flooding its banks. The disaster prevention center, its central function, is located on the second floor. The electrical substation and emergency power generator are installed on the roof, enabling continuous operation of the power supply without interruption, even in the event of flooding.

Brillia Shonan Tsujido Seaside Park (Fujisawa City, Kanagawa Prefecture; completed in March 2019) is the first private condominium in Fujisawa City to receive a subsidy for the construction of tsunami evacuation facilities. It features a 400m^2 tsunami evacuation facility that can be used by nearby residents. The rooftop evacuation facility will allow not only condominium residents but also members of the local community to evacuate in the event of a tsunami. With capacity for approximately 660 people, the facility provides a safe location to wait until the tsunami recedes.

Tokyo Tatemono Nihonbashi Building

Brillia Shonan Tsujido Seaside Park

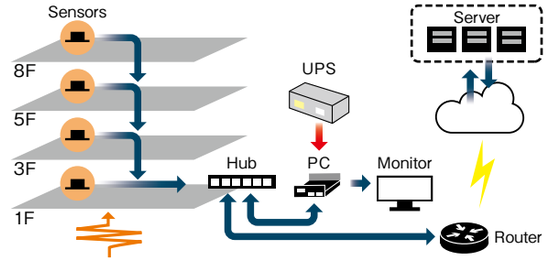
Implementing a Disaster Damage Measurement: System to Guard Buildings Against Disasters

In the Commercial Properties business, we implement both hard measures (earthquake-proofing of the buildings we own as well as enhancement of emergency power sources, etc.) and soft measures (distribution of disaster stockpile goods to tenants and the installation of batteries for recharging mobile phones, etc.) for disaster response. We are working to enhance these disaster prevention policies, BCP support, and other measures.

Buildings owned by Tokyo Tatemono are equipped with systems using an array of sensors to rapidly determine building deformation (degree of damage) and confirm the safety of the building after an earthquake. This system allows us to determine the safety and danger of an upcoming earthquake at the foreshock phase, even for a series of major foreshocks and shocks such as those that hit during the 2016 Kumamoto Earthquake.

Buildings managed by Tokyo Tatemono are served by a Disaster Status Monitoring System. Field staff and Tokyo Tatemono personnel can access this system via the internet and share information quickly about the situation on the ground. After information is shared, the system also allows instructions to be provided for actions to take depending on the scenario. Training exercises are also conducted at night with this system, as a disaster could come at any time, day or night.

Disaster Damage Determination System



This system uses data from multiple vibration-detecting sensors to calculate and determine the degree of damage. After installation, this system collects and stores all information from subsequent seismic events, automatically calculating the cumulative damage to the building structure. Even for an earthquake with multiple, strong foreshocks and shocks, the system can make a determination of the safety level of the earthquake based on foreshocks.

Environment

Responding to Natural Disasters

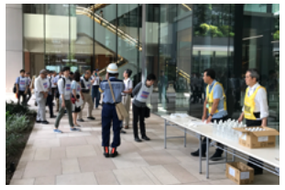
Support for Stranded Commuters During Disasters

When major earthquakes or other disasters occur, public transportation functions may halt, stranding commuters. At the large-scale office buildings managed by the Tokyo Tatemono Group, we have prepared support mechanisms for tenants. We have entered into agreements with local municipalities and developed systems, structures, and resource stockpiles in anticipation of scenarios in which stranded commuters require housing.

» Facilities with capacity for receiving stranded commuters

- Tokyo Square Garden (Chuo Ward, Tokyo, completed in March 2013)
- Otemachi Tower (Chiyoda-ku, Tokyo, completed in April 2014)
- Hareza Tower (Toshima-ku, Tokyo; completed in May 2020)

Tokyo Square Garden



Training for accommodating stranded commuters at Tokyo Square Garden

Strengthening of Disaster Prevention Measures in the Residential Business: Introduction of the Brillia Disaster Prevention Guidelines

As part of the Comfort From Day One theme, the Brillia brand offers disaster prevention measures unique to each property. Actions are divided into three phases to ensure appropriate action: normal, disaster, and post-disaster.

In accordance with the Brillia Disaster Prevention Guidelines, we created disaster prevention manuals unique to each property. We also hold disaster prevention seminars, evacuation drills, and life-saving courses for management staff. These daily preparations are leading to stronger awareness of disaster prevention.

We have implemented a number of measures to increase earthquake resistance and mitigate disasters to ensure safety. These include wall bases that prevent furniture from falling, earthquake-resistant unit doors, and emergency lights at floor level during power outages. AED stations are also standard equipment in communal spaces. In addition, we have equipped each residence with Brillia-original chair-style disaster prevention backpacks, packed with key items that will help in critical moments, such as a multi-function radio and portable toilet.

It is also important that community residents help each other in times of disaster. We have set up stock areas for disaster goods and stockpiled items, including manhole toilets, water purifiers, and power generators. These items are placed in common spaces for mutual aid during evacuations.

These guidelines received the Good Design Award in the Service Design Category in 2011, highly commending our efforts in raising awareness about disaster prevention on a daily basis, as well as our improvement of mutual prevention awareness between residents.

» Phase 1: Normal Times (Prepare)

- Disaster prevention briefings
- Making original prevention backpacks standard equipment for all units
- Creating original disaster prevention manual

» Phase 2: Disaster (Protect)

- Installation of foot lights in corridors
- Installation of elevators with earthquake countermeasure functions
- Installation of wall bases to prevent falling furniture
- Unit doors with quake-resistant frames

» Phase 3: Post-Disaster (Preserve)

- Storage of emergency supplies in emergency stock areas
- Installation of AED (Automated External Defibrillator) units

Original prevention backpacks

Environment

Responding to Natural Disasters

Emergency Bath Facilities

The Ofuro no Osama chain is a chain of Japanese-style bathhouses developed by Tokyo Tatemono Resort. The primary aim of these bathhouses is to offer a soothing space that is an important, integrated part of the local community. As a means to this end, Ofuro no Osama entered into an agreement with the cities of Ayase and Ebina in Kanagawa Prefecture to allow the use of Ofuro no Osama bathing facilities in the event of an emergency.

Thanks to this agreement, anyone affected by an earthquake or other disaster may use bathing facilities at three Ofuro no Osama locations (Ebina, Kozashibuya Ekimae, and Seya) located in and around the two aforementioned cities.

Ofuro no Osama, Ebina Store

Ofuro no Osama,
Koza Shibuya Ekimae Store

Ofuro no Osama, Seya Store (exterior)

Ofuro no Osama, Seya Store (indoor bath)

Fire Brigade Training and First-Aid Courses

As part of soft-measure initiatives for disaster prevention, the Tokyo Tatemono Group hosts fire-fighting and other training and courses to enhance our ability to respond to disasters.

Fire brigade training is conducted once or twice yearly for the purpose of strengthening voluntary disaster prevention systems. In this training, participants follow the instructions from members of the local fire brigade as they engage in several hands-on exercises for earthquake and fire response. These exercises include initial response, first-line fire-fighting, rescue and lifesaving, transporting injured persons and evacuation drills.

Furthermore, the Group company fire squad trains on a daily basis. For many years, the squad has participated in the Self-Defense Fire-Fighting Drill Review Board held by the Nihonbashi Fire Department, earning five wins to date. (The competition was cancelled in 2020 due to the coronavirus pandemic.)

As of the end of December 2020, 299 Tokyo Tatemono employees and 604 Tokyo Fudosan Kanri employees have completed the lifesaving course, which includes first aid. Tokyo Tatemono has received a certificate of excellence from the Tokyo Fire Department, in recognition for promoting first aid training among its employees.

Self-Defense Fire-Fighting Drill Review Board

Joint Training for Earthquake Disaster Response (Including Group Companies)

The Tokyo Tatemono Group has established a basic policy for earthquake response, called the Basic Plan for Earthquake Measures. We have prepared manuals for initial response, stockpiling, and employee safety confirmation.

Each October, group companies conduct joint drills on earthquake countermeasures to confirm chain of command, division of responsibilities, information gathering and communications, and employee safety confirmation. In 2020, in anticipation of the declaration of a state of emergency to prevent the spread of COVID-19, we used online communication tools to remotely set up an earthquake countermeasure headquarters (i.e., set up an earthquake countermeasure headquarters that could be operated by staff working from home).

In recent years, climate change and other factors have been causing greater wind and flood damage. We have therefore been conducting windstorms and floods drills that simulate the flooding of the Arakawa River in order to improve our ability to respond to windstorms and floods.