



Disaster Preparedness in Condominiums

Approximately 9 million Tokyo residents live in communal housing such as condominiums. If the damage is minor in a condominium that meets seismic resistance standards, you may be able to shelter at home. In order to continue sheltering at home, each household and the entire condominium must be prepared. Mutual assistance through mutual cooperation with residents living outside of the condominium is also essential. First, let's learn the strengths and weaknesses of condominiums.

Strengths of condominiums

Seismic-resistant structure

Condominiums that meet seismic resistance standards may suffer cracks or damage due to strong shaking, but they are less likely to collapse compared to buildings built to old seismic resistance standards and sheltering at home is more likely to be possible.



Weaknesses of condominiums

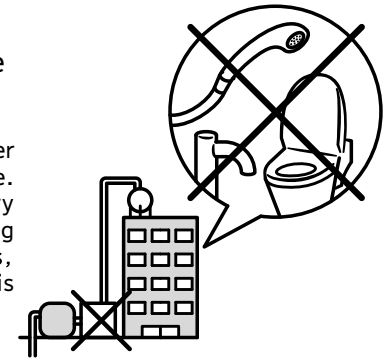
Elevators cannot be used

Occupants may be trapped if an elevator stops between floors due to a major earthquake or power outage, and residents on higher floors, the elderly, and wheelchair users may not be able to return to their home from outside. Also, if restoring the elevators takes time, there may be problems with access to and from the first floor.



Water supply and common facilities cannot be used due to power outages

If pumps stop working due to a power outage, it will lead to a water outage. Additionally, equipment necessary for ensuring safety, such as lighting in common areas and fire alarms, may also stop working, so caution is required.



Toilets cannot be used

There is the possibility that sewage pipes are damaged by an earthquake. If a resident on an upper floor uses the toilet without noticing that the sewage pipe is broken, sewage will overflow on the floors below, causing considerable trouble and bad odors. Do not use the toilet until you are told by the administrator that it may be flushed.

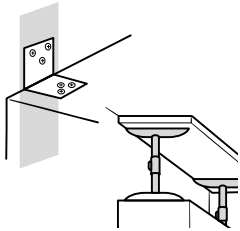


Long-period Ground Motion

When long-period ground motion occurs in a high-rise condominium, slow and large swaying occurs, which can cause furniture to fall over.

If an earthquake occurs (regular preparation)

It is important to always be prepared in case an earthquake occurs.



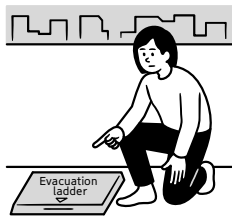
Ensure your home's safety and secure furniture

Secure the furniture in your home to ensure safety in the event of an earthquake. Using fittings such as L-brackets provides greater safety. Pole devices (tension rods) can also be used in rental housing where the walls cannot be damaged, or on walls with a light-gauge steel substrate.

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Secure evacuation routes and check emergency stairs

Do not use an elevator when moving from floor to floor during an evacuation, and instead use the emergency stairs. This is because even if the elevator is working, there is a possibility that it will stop suddenly due to the earthquake detection sensor functioning, a malfunction, or power outage, and you may become trapped. Confirm the location of the emergency stairs in advance.



Evacuation ladder

Evacuation ladders are installed in condominiums as an emergency escape route from the evacuation hatch on the floor of the balcony. Confirm in advance where they are located on your floor.



Breakable wall

If a disaster occurs, kick or strike with a hard object the balcony wall that has a sign which says "Break here to evacuate in an emergency" in order to pass through it. Do not place anything in front of the breakable wall.

Fire extinguishing (fire extinguisher, fire hydrant)

The entire condominium may become uninhabitable if a fire or gas leak occurs in one unit. As preparation for a fire breaking out, regularly check the location of fire extinguishers and fire hydrants.



Stockpiling

The elevators in a condominium may stop working due to a major earthquake or power outage, making it difficult to get to and from the first floor. Therefore, it is recommended that each residence stocks up on one week's worth of water, food, and daily necessities in order to shelter at home.

Be prepared with "daily stockpiling"

The key to stockpiling is to always have a little extra of the items you regularly use (daily stockpiling). The items and quantities you need to stockpile will vary depending on factors such as the structure and age of your family. Use the Tokyo Stockpiling Navi to check what your family should stockpile and prepare accordingly.

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Emergency Bag

In preparing an emergency bag, it is important to think about what each of you would need, and select items to be put in the bag.

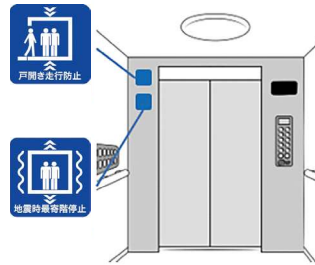
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- Portable toilet
- Headlights
- Helmet (a foldable type is convenient)
- Raincoat
- Disaster preparedness whistle
- Towel
- Water (one or two 500ml bottles)
- Masks
- Jelly drinks, etc.
- First aid supplies
- Portable phone charger (dry cell type, solar rechargeable type)
- Water bag
- Dry-cell batteries
- Leather/rubber gloves

Responding to elevators and lifelines stopping

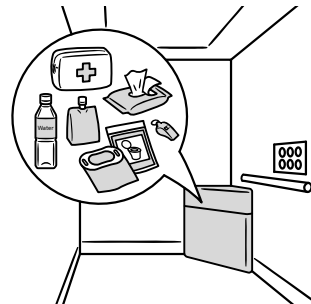
Elevator safety measures

In August 2012, the Ministry of Land, Infrastructure, Transport and Tourism began a voluntary system of displaying signs in an easily seen location inside elevators, so that general users can easily tell whether the elevator has a safety device installed or not. Check whether your condominium's elevators have such displays. When an elevator equipped with such a device detects an earthquake, it immediately stops at a nearby floor and opens its doors. If your building's elevators do not have such a device, if an earthquake occurs be sure to press the buttons for all floors to stop the elevator immediately.



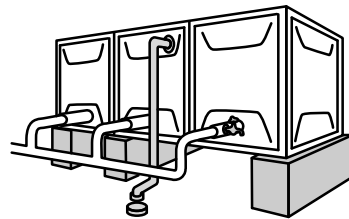
Install an emergency cabinet

Install an emergency cabinet and stock it with drinking water, food, portable toilets, etc. on the assumption that people may be trapped in the elevator for a long time.



Secure water in a condominium

In condominiums, if the water is cut off for an extended period of time, it will be difficult to secure drinking water and water for daily use, making it difficult to shelter at home. Therefore, consider ways to secure water for your building, such as underground water tanks or elevated rooftop water tanks.

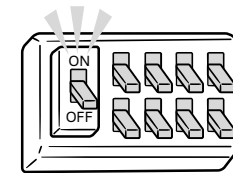


Source: Building Performance Standardization Association, <https://www.seinokyo.jp/evs/sm/>

Respond to power and gas outages

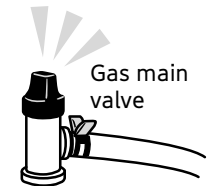
If a power outage occurs during a disaster, unplug appliances and turn off the circuit breaker.

* If the power is left on, it may cause a fire when the power is restored. Also consider installing an earthquake-tripped circuit breaker. ➔ Pages 82, 88



Circuit breaker

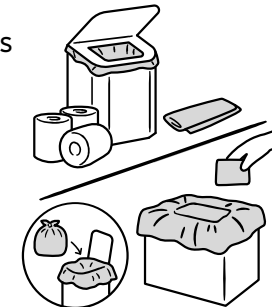
If strong shaking or a gas leak is detected, the micom-meter (intelligent gas meter) will automatically shut off the gas. A micom-meter is installed inside the meter door, in the common hallway next to the entrance.



Gas main valve

Prepare portable toilets

After a disaster, if a resident on an upper floor uses the toilets without noticing that the sewage pipes are damaged, sewage will overflow on the floors below. Do not use the toilet until the pipes have been checked. Do not forget to prepare portable toilets and emergency toilets in your disaster stockpile.



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Promote mutual assistance

There are many people living in a condominium. If there is a problem, consulting with and helping each other is a great source of strength.

Improve disaster preparedness

Be familiar with each other

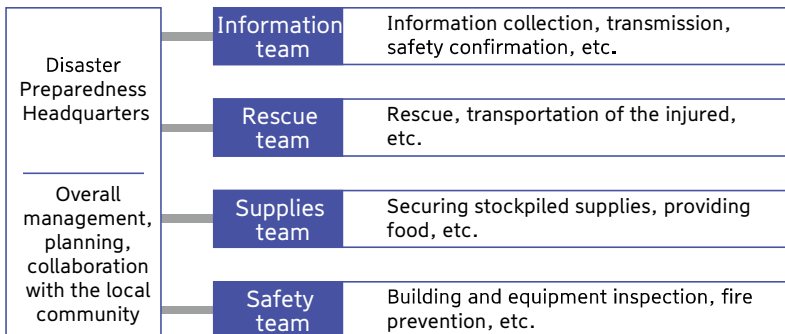
Building face-to-face relationships by exchanging greetings regularly and participating in events and joint activities will provide strength in an emergency. Knowing in advance whether there are elderly people, people with physical disabilities, infants, etc. will make it easier to confirm their safety and provide support for them to live in the event of a disaster.



Form a disaster preparedness organization

A variety of responses are required after a disaster, including information gathering, relief, procurement of supplies, and ensuring safety. Creating an organization by dividing up the roles among everyone will be of assistance.

Organization chart (example)



Disaster preparedness manual

It is important to decide in advance what actions each person should take when a disaster occurs. Compile the details into a manual and share it with all residents. Consider the details based on the circumstances of your condominium, such as its size, structure and location.

Large condominiums:

Equipped with a disaster preparedness office and equipment, and often have a manager permanently on site. Activities should be conducted at the block level.

Small, medium condominiums:

Often not equipped with a disaster preparedness office or equipment, and the manager is not on site on weekends or at night. The role of each resident should be identified.

Rental condominiums:

Consider establishing a communication system centered around the management company.

Stockpiling by the condominium as a whole

For condominiums, the management association should create a disaster preparedness manual and make sure there is a stockpile of portable toilets, etc. (at least one week's supply). An emergency supplies storeroom should also be set up on each floor or every few floors.



Make sure these goods and equipment are prepared!

- | | |
|--------------------|--|
| ▫ Rescue set | Fire extinguishers, generators, carts, jacks, saws, axes, pickaxes, rescue ropes, etc. |
| ▫ First aid set | Bandages, slings, disinfectant, gauze, etc. |
| ▫ Flashlights | Prepare spare batteries too |
| ▫ Elevator cabinet | Water, food, portable toilets, flashlights, radios, cold weather clothing, etc. |

Disaster preparedness drills in condominiums

In addition to initial firefighting drills, first aid drills, rescue drills from upper floors, and evacuation drills, which raise disaster preparedness awareness throughout the condominium, it is also effective to conduct tours of the equipment that residents don't usually get to see, such as water tanks and power generators, and explain how to use them in the event of an earthquake.



Residents' list

Ascertain who may especially need help in the event of a major earthquake. If a list of residents cannot be prepared, cooperate with the manager to identify those who require special consideration.



If it is difficult to form a disaster preparedness organization, such as in rental housing

Even in cases where there is no management association or disaster preparedness organization, such as in rental housing, residents must carry out the emergency disaster response themselves. Although it may not be possible to organize immediately, it is important from the perspective of disaster response that, in addition to building a communication system centered on the management company, residents get to know each other, such as through greeting each other.

Tokyo Todomaru Condominiums

The Tokyo Metropolitan Government registers and publishes information on privately-owned and rental condominiums in which disaster preparedness measures having been taken that make it easy to continue living in after a disaster, such as securing an emergency power source so that elevators and water pumps can operate in the event of a power outage, the creation of a disaster preparedness manual, and stockpiling of goods.



Todomarukun

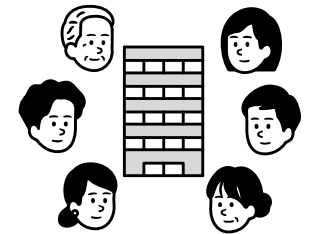


Collaboration with the local community is essential

Cooperation with the local community is essential to further enhance disaster preparedness capabilities. Deepen your interaction by regularly participating in local events such as disaster preparedness drills.



One way to promote cooperation with the local community is to join the neighborhood association, or form a neighborhood association to connect with the community. Participating in neighborhood association activities is not only about interaction, but also leads to being able to help each other in a disaster and crime prevention.



For large condominiums, considering the creation of a neighborhood association and promoting community formation is an effective way to prepare for disasters. If you live in a small or medium-sized condominium or rental housing where it is difficult to form a standalone neighborhood association, consider joining a nearby neighborhood association.

Utilization of common areas

Common areas can be used for various purposes, including as the location of the disaster preparedness headquarters, a place for residents to stay when elevators are stopped, a place to temporarily store disaster supplies, and a place to collect disaster garbage outdoors. Also consider establishing rules for opening common areas up to the community if nearby evacuation centers are full.

