

# **Disaster Prevention Measures for Condominiums**

## **Introduction**

Disasters can strike at any time, and for residents of condominiums, protecting your lives and property requires preparedness that takes into account the unique characteristics of condominium living, which differ from single-family homes. It is vital to make preparations in daily life and implement disaster measures as a community within your condominium.

In general, condominiums—often built with reinforced concrete and other sturdy materials—have superior fire resistance and earthquake resistance compared to wooden houses. Because of this strong construction, a condominium building is less likely to burn down or collapse in an earthquake, meaning residents do not necessarily have to evacuate to a shelter during a quake and, in many cases, can continue living in their familiar homes even after a disaster.

However, even in a sturdy building, high-rise floors will sway more intensely and for longer during earthquakes, and problems specific to condominiums—such as elevators stopping or lifeline (utilities) outages—are likely to occur. In recent years, flooding from typhoons and prolonged heavy rain has frequently caused inundation damage, highlighting the need for advance measures. Considering these issues unique to condominiums, it is important first to protect your own life and your family's lives, and to prepare so that you can continue to live in your accustomed home even after a disaster.

By leveraging the fact that many people live in the same building, it is desirable to establish mechanisms for residents to help each other and to create rules necessary for post-disaster life so that everyone can continue to live safely after a disaster. We encourage you to take this opportunity, using this pamphlet as a reference, to advance disaster preparedness measures in your condominium.

## **Chapter 1: Major Disasters That Could Happen at Any Time**

### **Capital Direct-Hit Earthquake: Predicted Damage**

In May 2022, the Tokyo Metropolitan Government published a damage prediction report for a potential capital direct-hit earthquake. According to this report, if a magnitude 7.3 earthquake were to strike directly beneath the southern central Tokyo area (with winter evening conditions), almost all of Ota Ward would be shaken at a violent intensity of upper 6 on the Japanese scale. The predicted damage in Ota Ward is enormous: on the order of tens of thousands of buildings completely collapsed, hundreds of deaths and thousands of injuries, around 208,000 people forced to live in evacuation shelters, and approximately 57,000 people unable to return home immediately. It is also estimated that about 1,500 elevators in the ward could stop with people trapped inside. Lifeline utilities are expected to suffer widespread outages – for example, power and communication outages might last around 4 days, water and sewer service disruptions around 3 weeks, and gas supply interruptions around 6 weeks.

Experts estimate there is a 70% probability of a major metropolitan earthquake like this occurring in the next 30 years, meaning it could strike at any time. To ensure you will not be caught unprepared, begin taking whatever precautions you can now so that you and your household can manage even if an earthquake occurs tomorrow.

## **Storm and Flood Disasters: Predicted Damage**

In recent years, extremely large typhoons and long-duration torrential rains (often caused by stationary linear rainbands) have been causing increasingly severe storm and flood damage. Due to its geographical features, Ota Ward faces various flooding risks. It is important to familiarize yourself with the flood risk in your area – such as predicted inundation depths and flood duration – by using the Ota City Disaster Hazard Map, so that you can take appropriate action when needed. (The hazard map is available from the ward's Disaster Crisis Management Division, local offices, or online.) For example, if the levee of the Tama River were to break, a massive amount of water could inundate surrounding areas, with the potential to destroy homes.

## **Characteristics of Damage in Condominiums**

Condominium buildings are generally very robust. A survey after the 1995 Great Hanshin-Awaji Earthquake found that nearly 90% of condominium units surveyed had only minor damage or none at all. Likewise, barring extremely unusual circumstances, a well-constructed condominium is unlikely to suffer structural collapse in a storm or flood disaster. However, even if the building remains intact, condominiums can experience certain **characteristic impacts** in a disaster:

- **Intense and prolonged shaking on upper floors:** The higher floors of a building sway more strongly and for a longer time than the ground level during large

earthquakes. Long-period seismic motion can cause the building to continue swaying even after the initial quake subsides. This can lead to furniture toppling or sliding and windows shattering, which in turn can cause injuries.

- **Elevator outages hindering mobility:** If elevators stop functioning, residents—especially those on higher floors—will have difficulty moving between floors or carrying supplies.
- **Lifeline interruptions disrupting daily life:** If electricity, water, or gas utilities are cut off, lights will go out and essential systems like water supply, toilets, baths, and security systems will become unusable for an extended period. This can significantly impact daily life.
- **Shortages of supplies and waste management issues:** As time passes after the disaster, shortages of food and other supplies may become acute. At the same time, disposing of garbage and managing sanitation (including odors and hygiene) will become serious problems if normal services are not available.
- **Residents requiring rescue or special assistance:** In any large residential building, there may be people such as the elderly, persons with disabilities, or injured residents who cannot easily evacuate or call for help on their own. There might be individuals trapped and in need of assistance somewhere in the building.
- **Risk of plumbing damage and sewage leaks:** Earthquake tremors can damage pipes. If a toilet is flushed without knowing the drain pipes are broken, it can cause sewage to leak into lower-floor units. Such incidents have occurred in past earthquakes, creating additional health hazards and disputes between residents.

Considering these potential impacts and risks, it is crucial to implement countermeasures tailored to them. While the foundation of disaster preparedness is for each household to **prepare independently**, the **mutual assistance of neighbors within the condominium** is also vital to solving issues unique to condominium living. Instead of thinking “the building managers will handle it,” every resident should take responsibility as an involved party when it comes to disaster readiness.

**Point:** Even in a condominium that is structurally sound, higher floors will shake more violently and for a longer time during a major earthquake. This can cause furniture to topple or slide and glass to shatter, leading to injuries. Also, if an earthquake damages your building’s plumbing, avoid using the toilets until the system is confirmed safe – otherwise, flushing could cause dirty water to leak into someone else’s unit downstairs.

**Point:** During the 2019 East Japan Typhoon (Typhoon 19/Hagibis), rising water levels in the Tama River caused inland flooding. The grounds and even interior of some nearby condominiums were inundated. In condominiums, units on lower floors or basement levels, as well as entrances that are below street level, are at risk of flooding. Furthermore, if vital electrical equipment (like switchboards or generators) in the basement gets flooded, it can result in a prolonged power outage in the building.

## Chapter 2: Staying in Your Home After a Disaster

In the event of a disaster, some people may assume they should evacuate to a public shelter. However, as shown below, evacuation centers (shelters) are intended for people who can no longer live in their homes because their house has burned down or collapsed.

Condominiums, especially those built after the updated 1981 seismic standards (or with seismic isolation/quake-resistant designs), have a low likelihood of collapse in an earthquake. Condominiums also generally offer excellent fire resistance and structural strength. For these reasons, the need for residents to evacuate to a shelter is relatively low. It is often possible to continue living in your own home, which you are used to, after the disaster – in other words, to **shelter in place** in your condominium.

Moreover, as mentioned earlier, a major disaster in Ota Ward could affect hundreds of thousands of people – for example, up to around 200,000 people in a large earthquake, or over 500,000 in a widespread flood. If everyone flocked to evacuation centers, those centers (usually ward elementary or junior high schools) would be overwhelmed with people and likely fall into chaos, as shown in past disaster cases. In overcrowded shelters, it is very difficult to maintain privacy, and many people have become ill due to stress and fatigue in such conditions. Considering this, being able to continue living in your own home is by far the better option whenever possible (this is referred to below as “residence continuation”).

In an earthquake, **you should evacuate to a temporary assembly point or designated evacuation area only if there is an immediate danger** (for example, a large spreading fire). Once major dangers like fire have subsided, those who have lost their homes (due to fire or collapse) need to move into an evacuation shelter. People whose homes remain livable are better off staying at home and not occupying space in the shelter, which should be reserved for those who truly have nowhere else to go.

*(Note: In Ota Ward, specific local parks or open spaces are designated as temporary assembly points and evacuation areas for each neighborhood, and ward schools serve as evacuation shelters. Consult the Ota City hazard map or website for the locations of your nearest assembly point, evacuation area, and shelter.)*

Of course, there are scenarios where **evacuation becomes unavoidable** – for instance, if your building is severely damaged, at risk of collapse, has burned, or is officially judged unsafe to live in after the disaster. Even though such cases are unlikely for many

condominiums, you should still **make an evacuation plan in advance**: know the location of your local temporary assembly point, the official evacuation area, and the designated shelter for your area (including any special emergency refuge site for flood scenarios). Also decide on your family's communication method and an evacuation route. Planning these details ahead of time will ensure that if you ever must evacuate, you can do so quickly and safely.

## Key Points for Being Able to Stay at Home

In order to make it feasible to continue living in your home after a disaster, the following points are fundamental:

- **Maintain emergency supplies in your household:** As a baseline, prepare enough drinking water, food, and other essentials for at least 3 days (and preferably 1 week) for everyone in your household.
- **Prevent injuries inside your home:** Ensure your living space is safe so that no one is injured during the disaster. This means implementing indoor safety measures like securing furniture and eliminating items that could fall or shatter. If you can get through the disaster uninjured, it will be much easier to continue your daily life at home.
- **Plan for elevator outages (especially for the elderly or those with mobility issues):** If the elevators stop, residents on higher floors may need assistance in carrying supplies or getting up and down the stairs. Households comprised only of older adults, or anyone who would have difficulty in this situation, should arrange with neighbors for help in advance, as needed.
- **Tackle longer-term issues cooperatively:** As days go by after the event, problems such as food and water shortages and the accumulation of garbage and human waste will become more serious. These issues require cooperation among residents – for example, sharing resources or establishing common waste collection points – and an organized effort by the condominium community to manage sanitation and supplies.
- **Organize your community before a disaster strikes:** Do not wait until problems have grown severe to start figuring out solutions. It is highly recommended to form an autonomous condominium disaster response organization *beforehand*. Having a structure in place (with agreed roles and plans) will enable a faster and more coordinated response when a disaster occurs.

## Chapter 3: Self-Help Measures for Your Household

### Stockpiling Emergency Food and Water

Every household should maintain an emergency stockpile of drinking water and non-perishable food. As noted, aim for at least 3 days' worth of supplies (and ideally 1 week's worth). Guidelines suggest storing about **1 liter of drinking water per person per day** (and roughly 3 liters per person per day if you include water for cooking and basic hygiene). Consider variety and nutrition in your food supplies so that your family can continue to eat a balanced diet and not get too fatigued or demoralized by a monotonous menu during an emergency.

Some tips for food stockpiling:

- A **2 kg bag of rice** provides roughly 27 servings (assuming ~75 g uncooked rice per meal). Stocking up on rice is an efficient way to have a staple carbohydrate on hand.
- Keep a supply of easy-to-eat, high-energy foods. Good options include **instant rice** ("alpha rice"), **dried noodles**, **cup ramen**, and **calorie-dense snacks** like chocolate or energy bars. Also store some **pickled or canned foods** (such as umeboshi plums or tsukemono pickles) to add variety and salt, and basic **seasonings** (miso, soy sauce, etc.) to improve the taste of simple meals.
- Choose foods that your family actually enjoys and eats regularly. In a disaster, comfort and familiarity are important, and you will be more willing to consume and rotate items that are part of your normal diet (this also makes stockpiling more economical than buying only special "emergency rations").

## Stockpiling Daily Necessities and Supplies

In addition to food and water, make sure to stock other essential daily necessities to last at least several days without services. Think in terms of categories: **lighting**, **cooking**, **sanitation**, **warmth**, **information/communication**, and any **special needs** specific to your household members.

- **Lighting:** Prepare flashlights or lanterns (with plenty of spare batteries) and/or hand-crank rechargeable lights so you can see if the power is out.
- **Cooking:** Keep a portable stove (butane "cassette" stove or a small camping stove) with extra fuel canisters, and a lighter or matches. This allows you to boil water or heat food even if electricity and gas are unavailable.
- **Sanitation:** Stock up on items like emergency **portable toilet kits**, toilet paper, garbage bags, plastic bags, wet wipes, tissues, and paper towels. Plastic cling **wrap** is useful for many purposes (for example, you can line plates or cover surfaces with it to avoid dirty dishes when water is scarce). Don't forget soap, hand sanitizer, and basic cleaning supplies to maintain hygiene.
- **Warmth:** Have ready some blankets or sleeping bags, warm clothing (including socks and gloves), and even a sturdy vinyl or plastic sheet (tarpaulin) which can serve as an extra layer of insulation or protection. Disasters can disrupt heating, so be prepared for cold conditions.

- **Information & Communication:** Keep a battery-powered or hand-crank **radio** to receive news and emergency information. Also prepare portable chargers or spare batteries for your mobile phones and other critical devices. A whistle or other noisemaker is also useful to signal for help if needed.
- **First Aid and Medication:** Assemble a first aid kit with bandages, disinfectant, any regular medications your family needs, and basic over-the-counter medicine (for pain, fever, stomach upset, etc.). Injuries or illnesses may need to be handled by yourselves for some time after a disaster.
- **Important documents and valuables:** Keep copies of important documents (IDs, insurance policies, etc.) in a waterproof pouch, and have some cash on hand (as ATMs and card systems may not work during outages).

**Special considerations:** Tailor your preparations to your family members' specific needs. In a disaster, you may not be able to obtain specialized items, so plan to have them accessible. For example:

- For family members with poor eyesight, prepare an extra pair of eyeglasses or spare contact lenses (with solution).
- For women, store an adequate supply of feminine hygiene products.
- For infants or toddlers, have extra diapers, baby wipes, infant formula, baby food, and bottles.
- If you are caring for someone elderly, ill, or with a disability, ensure you have any special care items they might need (e.g. adult diapers, hearing aid batteries, mobility aids, necessary prescription medicines). Keep a list of their medical needs and contacts for caregivers.
- For pets, prepare a pet emergency kit: pet food, water, a leash, a carrier or cage, and any pet medications. Remember that pets are usually not allowed in public shelters, so you may need to make special arrangements for them.
- For anyone with dietary restrictions or severe allergies, stock an extra supply of safe foods and any required medicines (such as antihistamines or epinephrine). You cannot count on special products being available in emergency shelters or aid supplies, so having your own is crucial.

*(Note: During a disaster, it is likely that you will not be able to easily obtain items that are specifically suited to your needs or preferences. Prepare those in advance to avoid hardship.)*

### **Tip: Using the “Rolling Stock” Method**

Maintaining a stockpile can be done gradually and efficiently using the **“rolling stock” method** (rotation of stored goods). Instead of purchasing a large emergency supply all at once, incorporate your emergency stock into your regular shopping and consumption cycle:

1. **Buy a little extra** of the non-perishable foods and other supplies you routinely use, until you have built up the necessary quantity for your emergency reserve.
2. As time passes, **consume items from your stockpile** on a regular basis (always checking expiration dates) – for example, use the older canned or packaged foods in everyday meals.
3. **Replenish** what you consume by buying new stock, so that your emergency supplies are always being refreshed. In this way, you maintain a constant level of preparedness without items expiring.

This rotation method ensures that your stored food remains fresh and that the money you spend on supplies is not wasted. It is also generally more budget-friendly, since you can stock up on normal foods that go on sale, rather than having to buy expensive long-shelf-life emergency rations. By regularly using and replacing your emergency stock, you also become familiar with preparing those foods.

*Tip:* Your refrigerator and freezer probably contain at least a few days' worth of food as well. However, remember that **during a power outage, perishable foods will spoil**. Plan to **eat the contents of your refrigerator first** in an emergency (while they are still good), then consume pantry items that can be kept at room temperature, and save your longest-lasting emergency foods for last. If you have advance warning of a disaster (such as a coming typhoon), you might freeze some of your refrigerated food to keep it usable longer. Just be mindful to prioritize using up foods that will spoil once the power is out.

*Tip:* An often overlooked aspect of preparedness is having the means to **cook food without utilities**. Ensure you have cooking equipment like a camp stove with fuel (as mentioned above). If the electricity and gas are down, you won't be able to use your electric rice cooker or kitchen stove. Practice using your portable stove safely, and remember to only use such devices in a well-ventilated area to avoid carbon monoxide buildup.

## **Preparing for Elevator Outages and Lifeline Disruptions**

Major earthquakes can cause building utilities to shut down automatically. Elevators, in particular, will usually stop for safety. To prepare for these situations:

- **If you are in an elevator when an earthquake strikes:** Do not panic. Press the buttons for all floors and get off as soon as it stops at the nearest floor. Many elevators in modern buildings are equipped with seismic safety features that will automatically halt the car at the nearest floor and open the doors when a significant quake is detected. Check whether your condominium's elevators have this feature, and ensure all residents are aware of it.



- **Expect prolonged elevator outages:** Once an elevator has stopped due to a quake, it will not resume service until a qualified technician can inspect and reset it. After a major disaster, it could take a long time for elevator service to be restored (hundreds of elevators citywide may need inspection). High-rise residents should therefore plan for the possibility of having no elevator for days or weeks. If you live on an upper floor, store essential supplies in your unit in greater quantities to minimize trips up and down the stairs. Neighbors should be ready to assist the elderly or anyone with mobility difficulties in moving between floors or transporting supplies if elevators are down.
- **If someone becomes trapped in an elevator:** They should use the emergency call button or intercom to contact help. Those outside should inform the building management or emergency services of the situation. Rescue of trapped passengers might take time, so it is important to keep calm and wait for professional assistance.
- **Electrical power precautions:** In the aftermath of a quake, it's wise to **unplug electrical appliances and turn off your main breaker** (circuit breaker) if you can safely do so. When the power comes back on, damaged appliances or circuits could short-circuit and start a fire if left energized – a phenomenon known as a “return-of-power fire.” By cutting the power until you know it's safe, you can prevent this risk. Better yet, consider installing a **seismic sensor breaker** (an automatic shutoff device that cuts electricity when it detects strong shaking). This device can prevent post-quake electrical fires by keeping the power off until the system is checked. *(Note: If anyone in your home depends on electrically powered medical equipment, consult an expert before installing an automatic shutoff, as it will cut power during an earthquake.)*
- **Gas and water:** If you smell gas or suspect a gas leak, turn off the gas valve and open windows. Know how to turn off the gas supply in your unit. In many cases of strong earthquakes, the city gas network will automatically shut down to prevent fires, and professional inspection will be required to restore service. Likewise, water service may be interrupted or deliberately cut to prevent contamination. Stay tuned to official information about utility restoration and use stored water as needed until water service resumes.

## Preparing for Toilet Use When Water is Out

One often underestimated challenge during a disaster is the loss of indoor plumbing. If the water supply is cut off, **toilets will not function** normally (the toilet tank won't refill and you cannot flush waste). More critically, if an earthquake has damaged the sewer pipes, attempting to use or flush the toilet can lead to sewage leakage or backflow into your home or your neighbors' units. For these reasons, every household should **be ready to use emergency toilets** if needed, and **avoid using the regular toilet until the system is confirmed safe**.

Here's how to prepare and cope:

- **Keep emergency toilet kits on hand:** These are portable plastic liners and absorbent agents that can be placed into your toilet bowl (or a sturdy bucket) to collect waste when flushing is not possible. The most convenient type fits right over your existing toilet. Stock enough for your family for at least several days.
- **Do not flush until pipes are checked:** After a major earthquake, do not flush any toilets until the building's drainage system has been inspected for damage. During the 2011 Great East Japan Earthquake, for example, some lower-floor apartments were ruined because sewage from upper floors leaked through broken pipes when residents unknowingly kept flushing. It's best to assume the sewer lines are broken until proven otherwise.
- **Improvise if necessary:** If you run out of commercial toilet kits, you can improvise a "toilet" by **lining your toilet bowl with 2–3 heavy-duty plastic bags** (one inside the other for safety). Place some absorbent material in the bottom (such as newspapers, old rags, pet litter, or even a disposable diaper) to soak up liquids. After use, add a bit of disinfectant or deodorizing agent (if available), then tie up the bags securely to contain the waste and odor.
- **Control odors and hygiene:** Keep a supply of deodorizer or bleach to sprinkle in used waste bags, and have a large garbage bin with a tight lid or other container to store these bags if they must be kept on your property for a time. Flies and pests are attracted to human waste, so sealing and treating the bags is important.
- **Prepare a portable toilet for evacuation as well:** If you might need to evacuate or if you are stuck away from home, carry a few foldable "pocket" toilet bags in your emergency go-bag. Public facilities could be unusable or overwhelmed, so having a personal option is invaluable.

Also, take advantage of any existing building features. Many condominium buildings have **water storage tanks (cisterns)** for emergency use. Find out if your building's system allows you to access water from the cistern or pump room during an outage. Some condominiums have upgraded their cisterns with valves that automatically stop the outflow to preserve water for emergencies. Even without a cistern, you can **store water in your bathtub** – for example, after each use, consider leaving the bathwater in the tub instead of immediately draining it, so you have a supply of water for manual flushing or cleaning if the water supply fails. *(Be aware, however, that if the sewer pipes are damaged, even pouring water to flush a toilet can cause leakage. Only attempt to flush manually if you are sure the drainage system is intact.)*

Because waste will accumulate if toilets can't be flushed, **plan how to handle the disposal** of used emergency toilet bags in your condo community. It's wise to discuss and establish some rules with your building management or residents' association ahead of time. For example, one possible plan is:

*"Each household will keep their sealed waste bags on their balcony or other designated spot. When the ward office notifies that it will collect disaster waste, the condo management or disaster response team will announce a time and location (such as the building's trash collection area) for everyone to bring out their stored waste bags for pickup."*

Whatever method you choose, **coordination is key** – you don't want used toilet bags piling up indefinitely or being disposed of improperly.

Remember: in a disaster, **you may not be able to use your toilet as usual**. Preparing for this unpleasant reality in advance will protect your health and dignity when the time comes.

## Earthquake Safety Measures Inside Your Condo

One of the most important aspects of preparedness is making sure your **living space will not injure you** during a sudden disaster. In past earthquakes, most people who died or were seriously injured at home were not hurt by fire, but by **collapsing structures or falling furniture**. In a high-rise condominium, even if the building structure remains sound, the violent shaking can easily topple furniture or send objects flying, endangering you. Take the following measures in your home to make it safer:

- Arrange large furniture so that it **will not fall onto beds or places people sleep**. For example, do not place a tall dresser right next to your bed where it could topple onto you while you sleep.
- **Do not put heavy furniture where it could topple and block an exit**. A cabinet that falls and jams a doorway could trap you inside. Keep exit paths clear.
- **Keep the balcony and hallways clear**. Your balcony may serve as an emergency escape route or a place for rescuers to enter, so it should be free of clutter. Likewise, do not leave items in common corridors or stairwells that could obstruct evacuation or rescue efforts.

A wide variety of **furniture anchoring and anti-tip devices** are sold in stores. These include L-shaped metal brackets, telescoping tension rods (“pole” jacks that press between the top of furniture and the ceiling), nylon straps, buckles and belts for appliances, non-slip pads, and more. There are also **latches** to keep cabinet doors from flying open and **shatter-resistant film** that can be applied to glass to prevent it from spraying shards if it cracks. It's a good idea to use a combination of these, tailored to your furniture and layout. Even inexpensive hardware from a home center can be very effective if installed properly.

Here are some key tips for securing your home interior:

- **Store heavy items on lower shelves, and lighter items up high**. This lowers the center of gravity of cabinets and makes them less prone to tip over. It also reduces the danger if something does fall from a shelf.
- **Don't put objects on very high places**. The tops of cabinets or refrigerators are not good places to store items, because they will tumble off in a quake.

- **Use latches on cabinets and drawers.** Install simple hook or buckle latches to keep doors and drawers from flying open and spilling out contents.
- **Apply safety film to glass.** Cover large glass panels (windows, glass cabinet doors, mirrors) with transparent shatter-resistant film. This film will hold the fragments together if the glass breaks. Also, keep curtains closed at night—curtains can catch some glass shards and prevent them from scattering over your bed.
- **Keep a flashlight and slippers within reach of your bed.** If a quake strikes in darkness, you'll need light immediately. Slippers or shoes by your bed will protect your feet from broken glass or debris on the floor.
- **Secure tall furniture to the wall or ceiling.** Use L-brackets (L-shaped metal braces) to bolt bookcases, wardrobes, and similar heavy furniture to the wall studs. If drilling into the wall is not possible (for instance, if the wall is concrete or if you do not have permission to modify it), use tension pole braces that extend between the top of the furniture and the ceiling. Even adjustable anti-tip jacks can significantly improve stability.
- **Restrain appliances and electronics:** For example, use **belt straps** designed for refrigerators to strap your fridge to a wall or pillar so it won't slide or tip. Place your **television on a low, stable stand**, and secure it with anti-slip mats or small straps or brackets so it can't topple. Use velcro, adhesive gel pads, or small screws to secure microwave ovens, computers, and other devices in place.
- **Link furniture pieces together:** If you have modular shelving units or multiple bookcases side by side, connect them to each other with brackets so they move as one unit rather than independently falling.
- **Use non-slip pads under furniture legs:** Put rubber anti-skid pads or safety chocks under the corners of tables, sofas, and cabinets. This helps prevent them from "walking" during sustained shaking.
- **Install guard rails on open shelves:** For shelves holding books or objects, attach a simple railing or bar across the front of each shelf (or use bungee cords) to stop items from flying off.

When installing hardware to secure furniture, always consider the strength of the mounting surface. For example, condominium walls can be made of concrete, wood, or drywall (plasterboard). Use appropriate **anchor bolts or plugs** for the wall material so that screws will hold under stress. If you're anchoring to a wooden stud behind a drywall, make sure the screw bites firmly into the stud. If you attach an L-bracket only into thin drywall or into a weak door frame (kamoi), it may rip out and not hold. Many condo interior trim pieces like door frames are just glued in place and are not load-bearing; do not rely on them. Instead, secure into solid structure (wall studs or masonry) whenever possible. If you need to drill into a structural wall that is part of the building's common area, consult your building management or condo board first for approval. If drilling into concrete is too difficult, the **tension pole** style anti-tip devices are a good alternative.

Regularly **check and maintain** your safety measures. Over time, adhesive pads can degrade and screws can loosen. After any significant event (or annually at minimum), inspect your brackets, straps, and other devices to ensure they remain secure.

## Flood Countermeasures for Your Condominium

Flooding can occur during typhoons, heavy downpours, or if nearby rivers overflow. Condominium residents should take **preventive measures in advance** and know how to respond if flooding threatens:

- **Use sandbags and flood boards:** If your building is in an area that might flood, keep materials on hand to block water at entrances. For example, placing sandbags at doorways, garage entrances, and other openings can help keep water from flowing in. Ota Ward maintains sandbag stockpiles at certain parks and public facilities and distributes them for free when flooding is anticipated – take advantage of this if needed. If you do not have ready-made sandbags, you can improvise by filling heavy-duty plastic bags with water to serve as weights (these are called “*water bags*”). Placing a wooden board or metal flood barrier across a doorway and weighing it down with sandbags or water bags is an effective temporary dam to prevent water ingress.
- **Protect against sewer backflow:** In intense rains, storm drains and sewers can back up, causing water (or even sewage) to gush out of low-lying fixtures like floor drains, sinks, bathtubs, or toilets. To prevent this, you can use the water-filled bags mentioned above as plugs. For instance, if a typhoon is approaching, consider sealing your shower/tub drain and floor drains with a plastic bag full of water or a specialized drain plug. This can help block sewage from backing up into your unit.
- **Elevate and secure valuables:** If you live on a lower floor or have storage in a basement, move important items to higher places when a flood warning is in effect. Park your car on higher ground if your parking garage is underground and flooding is likely. Lift appliances or furniture off floors by a few centimeters (using blocks or pallets) if minor flooding is expected – this can make a difference.
- **Know your building’s flood defenses:** Some condominiums have built-in flood panels or gates that can be installed at garage entrances or building doors when a flood is coming. Ensure that residents or staff know how to install and use these. Also, locate your building’s drainage pumps if any (and know if they have backup power) as well as any valves that can be closed to prevent water ingress.

A handy DIY tip: **Making an emergency water bag:** Take two large garbage bags and place one inside the other for strength. Fill them about halfway with water and tie them off. Put these water bags inside a cardboard box or pillowcase. They will flatten out and form a heavy, sandbag-like block. Lined up tightly at a doorway, a row of these can act as a barrier against shallow flooding if you have no sandbags. They can also be used to cover basement floor drains or toilets to suppress backflow.

## Important Tips for Evacuation During Storms or Floods

Unlike earthquakes, we usually have some warning before a typhoon or heavy rain disaster strikes. Use that time to prepare and, if necessary, evacuate early. Here are some key steps and considerations for evacuating in a storm or flood scenario:

1. **Stay informed:** Monitor weather forecasts and disaster information closely. Track the typhoon's path or rainfall intensity and watch for any evacuation advisories or orders. Make use of reliable sources such as the Japan Meteorological Agency's website (which provides real-time radar, rainfall and flood risk maps like "*Kikikuru*" for inundation, flood, and landslide risks) and Ota City's disaster information updates. Ota Ward offers a smartphone app for disaster prevention, as well as a web-based disaster prevention portal, where you can quickly get information on evacuation sites and shelter openings. Local TV channels also broadcast emergency information (for example, by pressing the data "d-button" on digital TV, you can see any warnings or evacuation instructions as text). Stay alert to any signs that rivers are rising or that your area might be told to evacuate.
2. **Prepare your emergency kit and essentials:** Well before the storm hits, ensure you have your **emergency supplies** ready (see the sections above on stockpiling). Also assemble a grab-and-go emergency bag (evacuation bag) with the bare necessities you would need if you have to leave home. This typically includes water, some food, a flashlight, a portable phone charger, important documents, a first aid kit, a radio, spare clothes, and any critical personal items (like medicines). Keep this bag by the front door or another easy-to-grab location. The general guideline is to be ready with enough supplies to sustain yourself for at least 3 days if you evacuate, or up to a week if you stay in your home.
3. **Decide on your evacuation destination and route:** In principle, it is best to arrange your own evacuation plan rather than relying solely on public shelters. If possible, **decide in advance where you would go** if you needed to evacuate. For instance, you might plan to stay with a relative or friend who lives in a safer, elevated area that won't flood. Also plan out the safest route to your chosen refuge – avoid low-lying areas, riversides, or roads that are known to flood. If you have a car, be aware that driving may become impossible due to waterlogged roads or traffic jams, so have a plan to evacuate on foot if necessary.
4. **Do a final check of your belongings before leaving:** If an evacuation becomes imminent, go through your emergency bag and **make sure you have everything essential**. Check items like your wallet (ID, cash, bank cards), cell phone, medicines, and any specialty items (glasses, infant needs, etc.). If there is something critical you forgot and it's still safe to retrieve it, grab it now. Conversely, if there are non-essential valuables that you don't want to carry but want to protect (like family photos or electronics), you might quickly move them to a higher place in your home to keep them above any floodwater level.
5. **Dress for safety and mobility:** Change into sturdy, comfortable clothing and shoes before you evacuate. Ideally, wear clothes that cover and protect your skin (long sleeves and pants) and that you don't mind getting wet or dirty. **Wear sneakers or other secure footwear** – avoid slippers or high heels, and interestingly, avoid long rubber boots if possible, because they can fill with water and become heavy; athletic shoes are often better for walking in difficult conditions. Use a **backpack (rucksack)** for your emergency kit so that your hands are free. If it's raining heavily, put on rain gear (jacket, pants, hat) rather than using an umbrella, which can be hard to manage in wind. And don't forget a helmet or hardhat if you have one – during storms and floods, there can be flying debris.

One helpful strategy is to create a personal **“My Timeline”** for storm/flood evacuation. A *My Timeline* is basically an individual evacuation action plan that lays out **who will do what and when** as the disaster approaches. For example, it might specify: *“When a heavy rain emergency warning is issued, I will leave work and pick up the children from school; if the river level reaches a certain height, our family will evacuate to our cousin’s house by 6 PM,”* and so on. By planning these steps in advance in chronological order, you can avoid confusion and delay when an actual emergency happens. Creating a My Timeline helps you commit to **evacuating early**, rather than taking a wait-and-see approach. Ota Ward encourages each household to make such a plan so that when extreme weather threatens, you can act decisively and calmly according to a pre-set script.

Finally, remember that even after evacuating, **staying informed** is crucial. Keep listening to the radio or checking updates on your phone (if networks are working) to know when it is safe to return home or if further precautions are needed. And always heed official instructions – if authorities issue an evacuation order for your area, follow it promptly for your safety.

## Chapter 4: Helping One Another – Neighbors and Community

In a disaster, everyone in the community becomes an important part of the local emergency response. In Ota Ward, **neighborhood associations** (自治会 or 町会) in almost every area have organized **volunteer disaster response teams** (防災市民組織) and **civilian fire brigades** (市民消火隊). These groups prepare in peacetime to minimize damage and save lives, and they carry out activities like initial firefighting, search and rescue, and assisting people who require special care during disasters. Local public elementary and junior high schools, designated as evacuation shelters, are positioned as bases for community disaster response, and are operated mainly by community members and the evacuees themselves.

In a disaster, a neighborhood shelter site serves as a hub for distributing food and supplies, gathering and sharing information from authorities, and keeping watch over the vulnerable. These activities benefit not just those living in the shelter but everyone in the community. However, one concern is that **the burden of community disaster response often falls on a small number of association members**, many of whom are aging. Younger generations’ participation in traditional community groups has been declining, which means fewer hands to help and a risk that vital knowledge won’t be passed on. **Broad, multi-generational participation** is needed to sustain these local disaster-response efforts.

This is where condominium residents can play a big role. Even if you live in a large condo complex somewhat apart from the old neighborhood, you are still members of the local community. It is highly encouraged that condo residents **actively join local disaster preparedness activities** as equal partners. By participating in your area's neighborhood association events and disaster drills, you not only gain useful knowledge but also build relationships with long-time residents. Your skills and energy can contribute greatly, and in turn, when your condominium is in need, the community is more likely to extend help.

Condominiums themselves can also **cooperate with the surrounding community** in unique ways. For example, because condo buildings are usually robust, you might offer certain common spaces as a temporary refuge: after a big earthquake, neighbors in less secure structures could take shelter in your building's lobby or meeting room to get through the aftershocks; or during a typhoon, stranded commuters could be allowed to rest in a sheltered area of the condo. Such gestures of support can be coordinated through prior discussion with the neighborhood association.

The bottom line: to be able to work smoothly with the community when a crisis happens, **start cooperating during normal times**. Join in the local safety drills, attend disaster workshops, participate in community festivals or clean-up activities – any engagement helps build trust. This way, if “the time” comes, everyone will already be familiar and can help each other more easily.

## **Supporting Residents Who Need Extra Assistance**

Disasters hit especially hard for the **elderly, people with disabilities, small children**, and others who may need extra help. These individuals (referred to as “persons requiring special care in a disaster”) face challenges such as:

- Difficulty quickly protecting themselves or evacuating without assistance.
- Difficulty calling for help or obtaining critical information in a timely way (for example, not hearing an alert or not understanding it).
- Furniture's being unsecured or other home safety measures they cannot perform by themselves.
- Inability to carry heavy supplies like food and water over long distances or up stairs if elevators are out.

To protect and assist these neighbors during a disaster, **compassionate cooperation** is needed among those living nearby and the condominium community as a whole. Here are some perspectives on how to achieve that:



**If you yourself might need assistance:** Don't hesitate to **reach out and make arrangements in advance**. Let a trusted neighbor or the building manager know about your situation – for example, if you are elderly and live alone, or if you have a medical condition, or a family member is bedridden. Discuss what kind of help you might need in a disaster (evacuation, getting essentials, etc.) and ask if they would check on you. Likewise, if there are preparedness tasks you cannot do (such as moving heavy furniture to secure it, or gathering emergency supplies), ask for help with those ahead of time. Most people will be glad to help if they understand the need.

It's also easier to ask for help from neighbors if you **know them well**, so invest in building friendly relationships day-to-day. Greet your neighbors regularly, attend condo or community events and drills so you become familiar faces. The more connected you are, the more comfortable you'll feel requesting and receiving aid when it's needed.

**If you have a neighbor who might need help:** Be understanding and proactive. Many people with disabilities or special needs strive to live independently and may be reluctant to seek help, even if they worry about disasters. Try to **put yourself in their shoes** and be considerate. If you know, for instance, that an elderly person or someone with a mobility issue lives down the hall, check in with them once in a while. You can gently ask if they have a plan for emergencies, or offer to include them when you hear useful information (like "If there's an earthquake, I'll knock on your door to see if you're okay, shall I?"). Showing that willingness can ease their anxiety.

During an actual event, if you suspect someone hasn't evacuated or might be in trouble, reach out to them (while keeping yourself safe). Sometimes just knocking on a door or calling out to a neighbor during an emergency can save a life.

**What the condominium community can do organizationally:** It is very helpful to **identify in advance** who in your building would likely need assistance and what kind of help, as well as **who is available to help**. For example, perhaps there are residents with medical training or people who own wheelchairs or speak multiple languages – all those details can be invaluable. Some condos conduct surveys or circulate questionnaires to gather this information. If your management or residents' association does this, please cooperate. (Typically, they will ask something like: "Would you require special help in an emergency?" "Do you have any skills or equipment that could be useful in a disaster?")

Compiling a simple **disaster support registry or list** of residents can make organizing aid much more efficient when the time comes. Of course, personal information must be handled

sensitively. Not everyone may be comfortable sharing health details or living situations. Condo leaders should reassure residents that any such information will be kept confidential, used only for emergency purposes, and is aimed at protecting lives. Emphasize that participation is voluntary but highly beneficial for everyone's safety. Usually, when people understand that the intention is to save lives (perhaps even their own), they are willing to cooperate.

In summary, knowing **who might need a check-up or rescue** and **who might be available with a helping hand** in your building is a big part of “preparedness” at the community level. Fostering a culture of looking out for one another – where asking for or offering help is normal – will make your condominium much more resilient against any disaster.

## Chapter 5: Organizing Condo-Wide Disaster Measures

Up to now, we have discussed individual and small-group preparedness. The final piece of the puzzle is **organizing your entire condominium community** for disaster response. No matter how prepared individual residents are, a disaster demands a coordinated effort. There are limits to what one person or a handful of volunteers can do on their own, especially in a large building. However, a condominium has the advantage that **many people live together** in one place – if you can harness that by working as an organized team, you can greatly increase effectiveness. An organized, building-wide approach to disaster readiness and mutual aid is known as establishing a “**自主防災組織**” (**autonomous disaster preparedness organization**) for your condo.

A condominium's 自主防災組織 is essentially a group and framework that allows residents to **work together systematically on disaster preparedness and response**. It ensures that when a disaster strikes or in its aftermath, all the necessary mutual aid activities (the “共助” we've referred to) can be carried out efficiently by the residents. If your building does not have such an organization yet, it's strongly recommended to consider forming one.

You don't have to start from scratch: often the condominium's existing governance bodies can serve as a foundation. For instance, you can establish the disaster organization as a committee under the condo's management association or residents' association. If your building already has an emergency fire response team (a **self-defense fire brigade** mandated in some large buildings), you might expand its role to cover broader disaster tasks. The key is to get the conversation started among your neighbors and building managers.

Here's a general process that has worked for other condominiums:

- 1) Bring up the topic at a meeting of the management association or residents' association: propose the formation of a condo disaster response organization (自主防災組織).
- 2) If the idea is approved in principle, create a **small planning team** to work out the details (you might call it a preparatory committee for launching the organization). This team might consist of volunteer residents, board members, the building manager, etc., who are interested in disaster preparedness.
- 3) The planning team's job is to assess the building's needs and draft a proposal. They should refer to guidelines (such as this document and local government advice) to figure out what roles and teams are needed in your condo, and what activities should be planned. (In the next sections below, we outline key points to consider for this.) They will decide on a proposed team structure (what “班” or squads to have, how many people in each, etc.) and outline an activity plan/manual.
- 4) Share the draft plan with all residents to gather feedback. Distribute a summary to every household (via notice boards, newsletters, or mailboxes) and invite comments. This step not only improves the plan with more ideas, but also serves to **recruit helpers** – when people see the plan, some will step forward to get involved.
- 5) Revise the plan as needed based on residents' input, then submit it to the condominium's management body for formal approval (often at a general meeting of all owners). Once approved, the organization becomes official.
- 6) Implement the organization: appoint or elect the **leaders for each group** (e.g., a chief for the whole condo's disaster team, plus leaders for each squad or block). Also assign general members (班員) to each team, aiming to involve as many residents as possible. Then start carrying out activities – meetings, drills, stockpiling of supplies, etc. – according to the plan.

By following steps like these, even a large condominium can gradually develop a robust disaster preparedness framework. Remember, **mutual aid activities are most effective when everyone participates**, not just a few. The goal is to avoid a situation where only the building managers or a handful of volunteers try to do everything – that wouldn't scale.

Instead, by spreading roles across many residents, you reduce individual burden and increase overall capability.

What should your condo's disaster plan include? Below are major areas to think about when creating your **organization structure and activity manual**. Use these as a checklist during your planning discussions:

### **(1) Know Your Building and Its Emergency Facilities**

It's important that the disaster team members (and really all residents) are familiar with the **layout and equipment of the building**. Take stock of all the disaster-relevant features in your condominium:

- **Where are the fire alarms, extinguishers, and hoses?** (And do people know how to use them?)
- **Where are the main utility shut-offs** for electricity, gas, and water? (Who has access to them?)
- **If your building has emergency power generators, water tanks, pumps, sumps, etc., where are they and how do they operate?** Know the locations of the electrical room, pump room, generator fuel storage, elevator machine room, and so on.
- **What emergency supplies or equipment are already stored in the building?** Some condos might have a disaster cabinet with tools for those trapped in an elevator, or stockpiles of drinking water or blankets provided by the management or ward. Make an inventory of these.

Understanding your condo's infrastructure is necessary to plan how to utilize it or fix it in a disaster. For instance, if the emergency generator comes on, which parts of the building will it power and for how long? If water stops, can the cistern pump water to some floors? If not, who will manually fetch it? If something fails, do we have instructions or service contracts to get it repaired quickly? These are the kinds of details to clarify in advance.

One practical step is to schedule a walk-through with the building's maintenance staff or any contractors who do regular inspections (e.g., elevator maintenance company, fire safety inspector). Have members of your disaster committee accompany them during a routine check. Let that serve as a mini training to point out where things are and how to operate them. You might be surprised by what you learn (for example, the location of a pump switch or a hidden shutoff valve).

Another aspect is knowing the **household demographics** of your building, as we discussed in Chapter 4. How many units are occupied by just seniors? Where are families with small kids? Does anyone have mobility challenges? Also, who might have useful skills (like doctors, nurses, ham radio operators, language abilities, carpentry skills, etc.)? Having a sense of your community's composition will help tailor your disaster response plans. For example, if you have many elderly residents, you might prioritize setting up a check-in system for them, or if you have medical professionals in the building, assign them a role in first aid.

## (2) Decide in Advance: Rules, Procedures, and Priority Actions

A good disaster manual will list the decisions and rules you've made *beforehand* so that everyone knows what to do when an event occurs. Think about likely scenarios (earthquake, fire, flooding) and **what actions will be most important immediately and in the hours/days afterward**. Here are some key items your community may want to decide in advance:

- **Evacuation and assembly:** Decide where the condo's disaster response **headquarters** (main command post) will be established after an event. For example, will it be in the management office, the lobby, or another safe spot? Also, identify a safe outdoor **temporary assembly area** for residents in case the building must be fully evacuated (this might be a nearby park or open space). Make sure everyone knows these locations.
- **Emergency communication:** Establish how you will **gather and share information** during the crisis. For instance, who will collect updates from the ward or government (via radio or the internet) and how will they relay those to residents? Consider making an information bulletin board in the lobby or using a loudspeaker if available to give updates. Also figure out a way to rumor-control: commit to sharing only verified information to prevent the spread of false rumors (which often happens in disasters).
- **Safety checks:** Outline a procedure for conducting **safety checks of the building** and of residents. This could include assigning teams to inspect the building for damage (and mark dangerous spots), and a system for conducting welfare checks on each unit (perhaps using a door-to-door sweep or a reporting system like placing tags on doors). Determine how you will keep track of who is safe, who might be injured, and who might need assistance (like those stuck upstairs without elevators). Have a plan for checking on any residents who are known to need special care.
- **Resource and supply management:** Plan how you will utilize and distribute **emergency supplies**. For example, if the condo has stockpiled water and food, decide how and where they will be handed out to residents (e.g., set up a distribution point in the lobby at certain times). If you run low on supplies, have a strategy for requesting aid from outside (such as via the ward office) and for fairly rationing what you have. Also decide where an emergency cooking station (for communal meals or “炊き出し” soup kitchen) could be set up, if you plan to organize one when needed.
- **Basic services and sanitation:** Work out how to handle **toilets and garbage** if utilities are down. (Refer to the emergency toilet section in Chapter 3.) For instance, decide on a location for a temporary garbage collection point and how often waste

will be gathered, and establish rules for storing and eventually disposing of the used emergency toilet bags. Planning this now will avoid confusion and unsanitary conditions later.

- **Security and fire watch:** If the building's security systems (locks, intercom, CCTV) fail due to power loss, decide how you will maintain building security. This might involve organizing patrols of the premises, especially at night. Also plan for **fire safety patrols** – after earthquakes, the risk of fires is significant, so consider having volunteers with fire extinguishers do rounds, and ensure an initial firefighting capability is in place.
- **Cooperation with outside organizations:** Discuss how your condo's disaster team will coordinate with the **local community** and with **public authorities**. For example, you might assign someone to liaise with the neighborhood association's disaster group or the nearest public shelter to exchange information or ask for help if needed. Have contact numbers ready for the ward office's disaster management department, local fire department, etc. Pre-establishing this "link" can speed up assistance.
- **Supporting the vulnerable:** As elaborated in Chapter 4, decide how you will ensure help for residents who need extra assistance. Will there be a buddy system or assigned "support person" for each individual who needs one? How will you organize getting medication or other special supplies to them? Document these arrangements in your plan.
- **Prioritize life-saving actions:** Agree that in the immediate aftermath of a disaster, everyone will focus on **actions that protect lives first**. For example, primary tasks include extinguishing small fires, rescuing anyone who is trapped or injured, and checking on at-risk neighbors. Less urgent tasks (like cleaning common areas or worrying about minor building damage) can wait. Emphasize this in your manual so all members understand the priorities.

By sorting out these decisions and procedures during peacetime, your community won't have to debate or improvise under duress – you can simply follow the agreed manual, which will save valuable time and prevent misunderstandings.

### (3) Establish Your Teams and Assign Roles

Using the points above, you can determine what **teams (班)** your condo's disaster organization will need. A typical structure in a large condominium might include, for example:

- An **Information Team (情報班)** to handle communication and information gathering/sharing
- A **Rescue/First Aid Team (救護班)** to assist injured people and possibly perform light search-and-rescue inside the building
- A **Safety/Security Team (安全班)** to inspect building damage, manage fire prevention, and keep the premises secure

- A **Supplies/Logistics Team** (物資班) to manage stockpiles, distribution of food/water, setup of cooking or toilet facilities, etc.

*(Depending on size, you might have other teams or merge some roles. For instance, some condos also have an **Evacuation Guidance Team** or assign people specifically to check on vulnerable residents.)*

Each team should have a leader (班長) and several members (班員). Overseeing all teams would be a main **Condo Disaster Response Headquarters** (本部) typically led by a chief (本部長) and deputy, who coordinate the overall response and communicate with outside authorities. In a very large condominium, it can be effective to divide the building into **blocks** (groups of floors or units) with a Block Leader (ブロック長) for each, to make coordination easier. Those Block Leaders can act as intermediaries between the main headquarters and the individual residents/floors.

When deciding who does what, consider people's normal roles but also their personal strengths. The condo manager or security guards, for example, might naturally be part of the Safety/Security Team. A resident who is a nurse or doctor might volunteer to lead the First Aid Team. Younger, physically strong residents could be great for a Rescue Team or for carrying supplies up stairs. Someone who is tech-savvy could help with the Information Team's communications. Try to **involve as many residents as possible** across these roles – not only does this lighten the load on each person, it also means more people are engaged and aware of the disaster plan.

There are a couple of approaches to staffing: you can keep the same people in certain roles long-term to build expertise, or you can periodically rotate roles among different residents to prevent burnout and to widen the pool of trained participants. Some condominiums elect team leaders annually so that new people get a chance to serve and learn, ensuring knowledge is spread out. Choose the method that works best for your community's size and dynamics. What's crucial is that every key role is filled by someone who understands their responsibilities.

Also, consider how to physically **divide the building for response duties**. Many condos choose to organize by floors – e.g., one team covers 1st–3rd floors, another covers 4th–6th floors, etc. But another method is to organize vertically by **stairwell or tower section**. For example, if your building has multiple stairwells or wings, assign teams to each stairwell so they handle all floors along that stairway. This can be practical because in an evacuation or in delivering supplies, people will use the stairs – so having a team responsible for everything along one stairway makes sense. Discuss these options and decide a scheme that would allow teams to work **efficiently and safely** in your building's layout.

Once you've decided on the structure, document it clearly: e.g., create a chart that shows 'Headquarters -> Information Team -> Rescue Team -> Safety Team -> Supplies Team' etc., and list the members in each, along with their contact info or unit numbers. Post this on the bulletin board or distribute it so everyone knows who is in charge of what. Emphasize that while leaders coordinate, **every resident is expected to cooperate** in some way – disaster response is not something to leave only to a few officials. The goal is a structure where all able-bodied residents are team members or block assistants, creating a true community effort.

#### (4) Create an Annual Activity Plan

Don't let your disaster organization exist only on paper. It needs to stay active and improve through regular activities. It's very helpful to **plan out a year's worth of preparedness events** for your condominium. This spreads out the work and keeps residents engaged and aware. Here is an example of what an annual schedule could look like:

- **Spring (April–June):** Hold a general meeting of residents to formally launch or reaffirm the disaster organization and present the activity plan for the year. During this period, you might also conduct a survey or circulate a sign-up via the resident bulletin (or an online form) to **update the list of residents who may need assistance** in a disaster. Spring is a good time to remind everyone to secure furniture and replenish household stockpiles; you could distribute a newsletter with tips or even host a lecture/workshop on home disaster safety. This is also an ideal time to budget for and **purchase any emergency equipment or supplies** the condo needs (using either building funds or collective purchase at discount).
- **Summer (July–September):** Organize a **building-wide disaster drill**. For instance, you can practice earthquake evacuation, have residents try using fire extinguishers, simulate a scenario of carrying supplies upstairs, etc. Collaborating with the local fire department or ward office for a drill can add realism (sometimes they can lend training materials or send an instructor). Additionally, consider **participating in community disaster drills or festivals**. Many neighborhoods have summer festivals or public disaster drills – joining these as a group will strengthen ties with the community and raise the condo's profile as an active participant in safety initiatives.
- **Fall (October–December):** Use this period to **review and update your plans**. The disaster committee can convene to evaluate the year's activities and draft the **activity plan and budget for the next year**. This includes planning any equipment upgrades or new supply purchases needed. Also, around this time, start discussing who will take on leadership roles for the next year (if your structure rotates positions annually). By late fall or early winter, you should **nominate or elect the next set of team leaders and officers** for the disaster organization so they have time to prepare.
- **Winter (January–March):** In many cases, the leadership changes (decided in fall) might officially take effect around the new fiscal year (April). During January–March, the outgoing leaders can **train or brief the incoming leaders** on their duties. You might not schedule heavy activities in winter aside from perhaps a small indoor drill or inventory check of supplies, but this is a good time for administrative tasks and



ensuring a smooth hand-off. It's also worth sending out a year-end/new-year reminder to residents about disaster preparedness (since earthquakes often strike without warning – having a reminder can prompt people to check their emergency kits during the New Year cleaning, for example).

This calendar is just an example – adjust it to what suits your condo. The principle is to **spread activities throughout the year** so that preparedness is an ongoing effort, and to make those activities practical and not overly burdensome so people will participate reliably. Also, try to make drills and training engaging – for instance, combine a disaster drill with a community BBQ or a kiddie festival to attract families and younger residents. Encouraging social interaction as part of these events can increase turnout and build community spirit, which in itself strengthens disaster resilience.

Once your annual plan is drafted and approved, communicate it clearly to all residents (post it on the notice board, include it in newsletters, etc.). Encourage everyone to mark their calendars for the key events like drills or meetings. Over time, as residents see these activities happening regularly, disaster preparedness becomes ingrained in your building's culture.

Finally, always be ready to adapt. After any real incident or even after drills, hold a quick review: what worked, what didn't? Update your plan and manual accordingly. Preparedness is a continuous improvement process. With each cycle of planning, training, and review, your condominium's resilience will grow stronger.

## **Ota City Support Programs for Disaster Preparedness**

Ota City (Ota Ward) offers several programs and services to assist residents – including condominium communities – in improving their disaster readiness. Here are some of the key programs available (as of this writing):

### **1. Free provision and installation of furniture anti-tip devices and seismic breakers:**

Certain households in Ota Ward are eligible to receive free **furniture securing brackets** and **auto seismic circuit breakers** (which cut off electricity during earthquakes to prevent fires), including free installation of these devices. This program is targeted at households with vulnerable residents (for example, seniors over 65 living alone or families with certified disabilities and lower income, etc.). If you qualify, the ward will arrange for professionals to install these safety devices in your home at no cost.

**2. Bulk purchase of disaster supplies (at discounted rates):** The ward facilitates year-round bulk purchasing of recommended **disaster preparedness goods** for home use. Residents can order items through the ward to get them at subsidized or lower prices. Available items include long-life **emergency food**, various **disaster supply kits**, **portable toilets**, **furniture anchoring devices**, **glass shatterproof film**, an emergency “lifeline cabinet” for elevator entrapment (a kit of supplies to keep in elevators), and a simple seismic breaker device, among others. Check with the ward for a catalog of items and how to place orders.

**3. Bulk purchase (and periodic refill) of fire extinguishers and home fire alarms:** Ota Ward also helps residents obtain **household fire extinguishers** and **residential smoke detectors** at reasonable cost throughout the year. In addition, at certain times the ward organizes fire extinguisher **refilling campaigns** – if you used your extinguisher to fight a fire (for example, helping put out a neighbor’s fire), you can have it refilled free of charge. (Note: free refills are offered when the extinguisher was used to assist with a nearby fire, but not for replacing the one from the actual source of the fire.) Keep an eye on ward announcements for the schedule of these services.

**4. Free on-site condominium seismic diagnosis and retrofit advice:** The ward provides a service where they dispatch a **professional seismic retrofit advisor** to condominium complexes (free of charge) upon request. This expert will assess the building’s earthquake resistance (through document review and a site visit) and advise on possible reinforcement or retrofitting measures. This is especially useful for older condos that may need structural upgrades. It’s a chance to get a professional opinion and guidance at no cost.

**5. Financial subsidies for seismic retrofitting of buildings:** Ota City offers **subsidies (grants)** to help cover part of the cost of earthquake retrofitting work for eligible buildings. If your condominium decides to carry out structural reinforcement to improve quake resistance, you can apply for ward assistance to alleviate the financial burden. The subsidy amount and conditions vary (they will consider factors like the building size, age, and the extent of work). Inquire with the ward’s Disaster Management or Urban Planning department for details on application requirements and subsidy limits.

**6. Subsidies for step-by-step (phased) retrofit construction:** In cases where a full seismic retrofit cannot be done all at once, the ward also has subsidy programs for **phased retrofitting projects**. This allows a condominium to plan upgrades in stages (perhaps strengthening one part of the structure at a time) and receive financial support for each phase. This can make large improvement projects more manageable over a few years. Again, you would need to consult with the ward’s offices to design an approved plan and apply for the subsidies.

*For the latest information, eligibility criteria, and application procedures for these programs, contact Ota Ward's Disaster Prevention or Urban Planning departments.* The ward office can provide pamphlets or consultation on how your condominium can utilize these services. Taking advantage of such programs can significantly boost your disaster preparedness at less cost to individual residents.