

CHARGE SAFE, STORE SAFE:

Electric Micromobility Safety
Guidance for Residential Building
Owners and Managers

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Electric Micromobility Safety Guidance for Residential Building Owners and Managers

Electric bikes and scooters (“e-micromobility”) are an increasingly common way for New Yorkers to get around. These [devices](#) are an affordable and convenient alternative to car ownership, reduce pollution and congestion, and provide an option for those who do not live close to transit. They are essential for those who are employed as delivery workers, and many commuters and families rely on them for daily trips. Unfortunately, lithium-ion batteries that typically power these devices have caused devastating fires and fatalities in New York City. Batteries can ignite even when they are not charging. Many residents rely on these devices and need to store them at home, so many buildings are seeking ways to increase safety and reduce risk.

NYC residents and building owners can take action to protect lives and property by complying with fire safety laws and adopting some or all of these best practices. Here are some ways to increase safety in your building:

1. PROVIDE RESIDENTS WITH SAFER CHARGING AND STORAGE OPTIONS

Option A: Outdoor Battery Storage and Charging

Storing and charging batteries outdoors is the safest approach. If you have a courtyard or other outdoor space, create a dedicated location for residents to store and charge their batteries.

Specific Considerations for Outdoor Storage and Charging

- Residents are most likely to use the storage location if they believe it will keep their battery in good repair and keep their property secure. The ideal charging location would be secure and minimize exposure to rain, humidity, sun, and extreme hot or cold temperatures.
- There are battery storage and charging cabinets designed for e-micromobility batteries. Explore whether one of these options works for your building.

Option B: Dedicated Indoor Battery Storage and Charging

If you do not have an appropriate outdoor location, you can still reduce risk by providing an option for storage and charging other than residents’ apartments. Options might include your building’s garage, a ground floor storage room, an amenity area, or another shared indoor space.

Specific Considerations for Indoor Storage

- If six or more devices are being charged in a single area, the area must not be used for any other purpose. The room must be protected by a fire sprinkler system and one or more smoke detectors or smoke alarms. The room must be secured from unauthorized entry and a fire barrier with a one-hour fire-resistance rating must be provided. Additional requirements are set forth in Fire Code Section 309.3.3.

- There are battery storage and charging cabinets designed for e-micromobility batteries approved for indoor use by the Fire Department. These cabinets contain technology designed to contain fires. Explore whether one of these options works for your building.
- The location should have a portable fire extinguisher with a minimum 4-A:20-B:C rating.
- For dedicated charging areas, building owners should consult with an electrician for support identifying an adequate electrical supply and ensuring compliance with the Fire Code.

Visit fdnysmart.org to learn about options for charging cabinets and how they can be installed.

Option C: Battery Charging and Storage in Residents' Own Units

If your building is unable to create a dedicated indoor or outdoor charging location, there are still steps you can take to improve the safety of storing and charging in a resident's unit.

- Make sure residents know batteries should never be charged unattended or left charging overnight. An adult should always be present when the battery is charging and the battery should be unplugged once charging is complete.
- Advise your residents of the below best practices for storing and charging batteries.

Regardless of where these devices are stored:

- You should never store or charge a battery in a location that interferes with anyone's ability to exit their unit or the building.
- Extension cords are not permitted. Any charging location must enable chargers to plug directly into outlets.
- You should not charge or store batteries near radiators or direct heat sources because these can damage batteries and increase the risk of fire.
- You should not store batteries near combustible materials, combustible waste, or hazardous materials.

2. ENCOURAGE RESIDENTS TO PURCHASE CERTIFIED DEVICES

- Battery quality and safety vary widely. High-quality batteries that meet UL standards are safer than uncertified batteries. See materials at nyc.dot/ebikes to learn how to identify a battery that meets UL standards.
- A building should establish rules for device standards, such as:
 - Option 1 - Immediate safety standard: Require all batteries stored or charged in the building to be certified to UL standards.
 - Option 2 – Phased safety standard:
 - Require that all new batteries to be UL certified.

- Starting at a future date, require all batteries in the building to be UL certified. E-micromobility batteries are expensive, so this policy would put your building on a path to reduced risk while accommodating residents who recently invested in a battery and need time to save money to replace existing batteries.
- You may establish rules that residents report their device ownership to building management, which can support compliance and emergency response. Placing a sticker on batteries that comply with your building’s policy could simplify compliance verification.

3. PROHIBIT UNSAFE DEVICES AND ACTIVITIES

Building owners and managers can increase safety by establishing policies that re-enforce existing laws.

- It is illegal to store or charge damaged batteries, including refurbished batteries.
- It is illegal to repair or refurbish batteries.
- It is illegal to store gas mopeds, electric mopeds and motorcycles in apartments. They must be in areas designated for motor vehicle storage, like garages or parking lots.
- No storage or charging of devices that cannot be operated legally on NYC streets. This includes unregistered electric mopeds, electric mopeds without vehicle identification numbers (VINs), electric skateboards, Segways, electric hoverboards, electric unicycles, and electric all-terrain vehicles.
- No charging-related businesses should be operating out of apartments. You should expect no more than one device per resident.

In most e-micromobility devices, batteries can be detached from their device for storage and charging. E-micromobility devices without their batteries do not pose a safety risk. Safety measures should focus on batteries.

If you suspect a charging or battery-related business is operating from an apartment or other illegal or unsafe activity, alert FDNY by calling 311 or emailing FDNY.BusinessSupport@fdny.nyc.gov.

4. PROVIDE FIRE SAFETY EDUCATION FOR YOUR RESIDENTS

- Provide your occupants with educational materials on responsible e-bike and e-scooter ownership. These materials are at the end of this guide and available at the [NYC DOT website](https://www.nyc.gov/dot) and fdnysmart.org
- Encourage your occupants to call 311 if they see unsafe conditions.

Additional Educational Resources

[Dangers of Lithium-ion Batteries](#) (English)

[El Peligro de las baterías de iones de litio](#) (Spanish)

[锂离子电池的危险](#) (Simplified Chinese)

[লিথিয়াম-আয়ন ব্যাটারির বিপদ](#) (Bengali)

[Les Dangers des Batteries Lithium-ion](#) (French)