# LITHIUM ION BATTERY STORAGE, USE AND DISPOSAL RECOMMENDATIONS



Lithium-ion batteries power everyday tools, devices, and equipment, but they can present fire and safety risks if mishandled. This checklist is intended for occupancies that use or sell products with lithium-ion batteries such as handheld tools, laptops, phones, or mobile equipment, and for locations with only a limited number of batteries in storage or on display. The guidance is designed to help support safe handling and reduce potential hazards.

### **STORAGE**

- ☐ Maintain batteries at below 50% charge during storage.
- ☐ If storing at floor level, use designated areas with strict limits on stack height, footprint, and spacing.
- ☐ Maintain at least 10 ft (3 m) of separation from combustibles when batteries are stored in pallets or piles.
- ☐ Store combustible waste separately from lithium-ion batteries.
- ☐ Keep batteries away from exits to allow for safe and unobstructed egress.
- ☐ Ensure product is not shielded from automatic sprinkler protection.

### **CHARGING**

- ☐ Keep at least 1 m of separation between charging stations and combustibles.
- ☐ Charge batteries only on non-combustible, sturdy surfaces.
- ☐ Ensure charging is done in a well-ventilated area.
- ☐ Install smoke or heat detection in charging locations.
- ☐ Use only OEM-approved, compatible chargers.
- ☐ Never leave batteries charging in unoccupied areas or premises.





A single pallet of lithium-Ion batteries can fuel a major fire. Reduce risk by storing them outside or in a secure, controlled facility.

### INSPECTION

Conduct daily inspections of storage
charging, and disposal areas.

### Report and address any physical damage to storage areas, racking, packaging, pallets, batteries, or enclosures.

- ☐ Use thermal cameras to inspect bulk packages upon receipt or before shipping.
- Apply extra vigilance with product returns, as items may arrive damaged, unpackaged, or stressed from transport.

## SAFETY TIP:

Even a small rise in battery temperature (3°C or more) can signal a serious hazard. Report immediately so emergency action can be taken.

### **FIRE DETECTION**

Only charge batteries in areas equipped with smoke or heat detention, preferably monitored through a fire alarm.

### **MATERIAL HANDLING**

### **Disposal of Used Batteries (Not Damaged)**

- Place damaged or end-of-life batteries in metal containers with tight-fitting lids, stored at least 10 ft from combustibles.
- ☐ Cover battery terminals with insulating material to prevent accidental contact and unintended energy discharge.
- Stage disposal containers at least 5 ft from exits.
- ☐ Arrange for batteries to be taken offsite by approved third-party waste disposal providers as soon as possible.

### **Disposal of Damaged Batteries**

- Separate lithium-ion batteries showing physical damage from all other waste batteries.
- Quarantine damaged batteries in an appropriately sized metal container with a tight-fitting lid.
- Place containers outside the building, at least 10 ft from combustibles and exits.
- ☐ As a precaution, fill bins partially with water, sand, or vermiculite and store them at least 3 m from the building.





Avoid moving batteries with forklifts whenever possible to reduce the risk of crushing, dropping, or piercing. If forklift use is unavoidable, secure the load and use a spotter to guide the driver.