

CITY OF MERCER ISLAND

Fire Marshal's Office

3030 78th Ave SE | MERCER ISLAND, WA 98040

PHONE: 206.275.7966 | www.mercergov.org



2018 STATIONARY STORAGE BATTERY SYSTEMS

| | |
|-------------------------|------------------|
| Project Type: | |
| Project Address: | |
| Contact Name: | Phone No. |
| Owner Name: | |

1. Battery System

If either of these are checked then permits in #3 are required

- The battery system has an electrolyte capacity of more than 50 gallons (189 L) for flooded lead-acid, nickel cadmium (Ni-Cd) and value-regulated lead-acid (VRLA)

Specify # of Gallons _____

- The battery system has more than 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer.

Specify # of Pounds _____

- The battery system has less than the above quantities. *No Fire Permits are Required.*

2. Battery Classification

- Nonrecombinant Vented Lead Acid
- Nonrecombinant Vented Nickel-Cadmium
- Recombinant Value Regulated Lead Acid Cells
- Recombinant Valve Regulated Lithium-Ion Cells
- Lithium Metal Cells

3. Permits Required (fire code requirements are referenced in the table on the following page)

- Battery System Permit
- Fire Alarm Permit

**TABLE 608.1
BATTERY REQUIREMENTS**

| REQUIREMENT | NONRECOMBINANT BATTERIES | | RECOMBINANT BATTERIES | | OTHER BATTERIES |
|----------------------------|--------------------------------------|---|---|-------------------|---------------------|
| | Vented (Flooded) Lead Acid Batteries | Vented (Flooded) Nickel-Cadmium (Ni-Cd) Batteries | Valve Regulated Lead-Acid (VRLA) Cells | Lithium-Ion Cells | Lithium Metal Cells |
| Safety caps | Venting caps (608.2.1) | Venting caps (608.2.1) | Self-sealing flame-arresting caps (608.2.2) | No caps | No caps |
| Thermal runaway management | Not required | Not required | Required (608.3) | Not required | Required (608.3) |
| Spill control | Required (608.5) | Required (608.5) | Not required | Not required | Not required |
| Neutralization | Required (608.5.1) | Required (608.5.1) | Required (608.5.2) | Not required | Not required |
| Ventilation | Required (608.6.1; 608.6.2) | Required (608.6.1; 608.6.2) | Required (608.6.1; 608.6.2) | Not required | Not required |
| Signage | Required (608.7) | Required (608.7) | Required (608.7) | Required (608.7) | Required (608.7) |
| Seismic protection | Required (608.8) | Required (608.8) | Required (608.8) | Required (608.8) | Required (608.8) |
| Smoke detection | Required (608.9) | Required (608.9) | Required (608.9) | Required (608.9) | Required (608.9) |