



## Stationary Storage Battery Systems Policy

[revised 09/19/2016]

**This policy is subject to revision – download the latest version from: [www.cor.net/fire](http://www.cor.net/fire).  
 SUBMITTALS THAT DO NOT COMPLY WITH THIS POLICY WILL NOT BE APPROVED.**

**Submittals must demonstrate compliance with each applicable section of *Section 608 Stationary Storage Battery Systems*, of the 2015 International Fire Code as amended and adopted by the City of Richardson. 2015 International Fire Code is available for review at the Richardson Library and at Fire Administration.**

This list may not include all requirements. If you have questions, please contact the Fire Marshal's Office at (972) 744-5750.

- 1) **Stationary Storage Battery Systems:** *Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion, used for facility standby power, emergency power or uninterrupted power supplies, shall comply with [2015 IFC Section 608] and Table 608.1.*

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-resealing 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)

- 2) **Permit is Required:** Unless exempt or otherwise approved, a permit shall be obtained before commencing construction or installation. For work commencing prior to permit issuance, the permit fee is doubled:
- a) Use only the currently published *Stationary Storage Battery System Permit Application*, available at [www.cor.net/fire](http://www.cor.net/fire);
  - b) A separate permit is required:
    - i) For each system, e.g. A design including two stationary storage battery systems requires two permits;
    - ii) For each section to be accepted separately – e.g. if “phase 1” and “phase 2” are to be accepted at different times;
    - iii) For each suite; and,
    - iv) Where otherwise determined necessary for proper tracking and recording of inspections.
  - c) Permits shall be kept on the job site at all times and shall be readily available for inspection by the fire code official;
  - d) Permits and submittals not retrieved within 30-days of notification will be disposed of and resubmittal will be required;
  - e) Permits expire 1-year from issue. Work must begin within 180-days of issue. Unexpired permits may be extended.
- 3) **Inspections:**
- a) Work that is exempt from permitting does not require an inspection or submittals;
  - b) Applicant shall not request inspection prior to permit issuance, or before all work to be approved is completed and pre-tested;
  - c) Applicant is responsible for requesting all inspections, by calling (972) 744-5750, at least one full business day in advance. Fire Marshal's Office will try to accommodate, but cannot guarantee availability for the requested time.
- 4) **Required Submittals** (Typically fewer than 10 pages):  
 Cut-sheets, calculations, and documents describing the batteries, cabinets, safety caps, thermal runaway management, spill control, neutralization, ventilation, signage, seismic protection, smoke detection, etc... show how the system complies with each specific requirement indicated in *Table 608.1*. **Do not submit documentation that does not specifically address the requirements.**
- 5) **Plans:**
- a) Plans shall show locations and details of: batteries/racks, neutralization, signs, extinguishers, exits, room construction, etc...
  - b) A summary description of the work to be permitted shall be included on the first page of the plans, or in a cover letter;
  - c) Indicate that the system is to comply with the, *2015 International Fire Code, as amended and adopted by the City of Richardson*;
  - d) Exceptions used in the design must be specifically identified by code or standard, and section number;
  - e) Plans shall be drawn in a clearly legible and professional manner.