



BUILDINGS BULLETIN 2019-002

OTCR

Supersedes: 2018-012

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Purpose: This document establishes filing and submittal requirements, and outlines the approval process for lithium-ion, flow batteries, lead acid, and valve regulated lead-acid battery energy storage systems listed to UL 9540.

Related Code/Zoning Section(s):	MC 502	NYC EC Article 408
	BC 509	NYC EC Article 685
	FC 608	NYC EC Article 705

Subject(s): Battery energy storage systems (BESS); Stationary storage battery system; Facility standby power; Emergency power; Uninterrupted power supplies

Background: The NYC Construction Codes, NYC Electrical Code, and NYC Fire Code prescribe installation requirements for stationary storage battery systems used for facility standby power, emergency power or uninterrupted power supplies. Batteries used for facility standby power, emergency power or uninterrupted power supplies may be used as prescribed and do not need to comply with this bulletin. Battery energy storage systems (BESS), as described below, are not addressed in the aforementioned codes. This bulletin establishes filing and submittal requirements, and outlines the approval process for battery energy storage systems. Other bulletins will be published to establish criteria for specific battery chemistries and applications.

Description: Battery energy storage systems (BESS) store energy through electrochemical means and provide electrical energy for other uses. The systems' component may include equipment for charging, discharging, storage, communication, control and protection of the equipment, fuel, containment and other equipment used to properly operate the system.

Uses: The battery energy storage systems addressed in this bulletin are specifically used to store energy. BESS may be connected with renewable energy systems and energy management (e.g. peak shaving) applications.

Restriction: Lithium-ion and flow BESS shall not be installed indoors without the approval of the Commissioner.

Filing, Submittal and Approval: Installation of BESS requires several permits. Additionally, pursuant to AC 28-113, the Office of Technical Certification and Research (OTCR) will evaluate battery energy storage systems on a site-specific basis. Permit requirements, required submittal information, and OTCR equipment evaluation and acceptance of the BESS shall be in accordance with the following:

Department Filing and Sign-off Requirements (see Figure 1 below)

File application for construction document approval

- PW1 for the battery energy storage system and ancillary work associated with the battery installation (e.g. dunnage, fire-resistant penetrations, etc.). Use 'OT' work type, and enter **Battery Energy Storage System**.
 - This PW1 may only be submitted under full plan examination. Filing under professional certification privileges is not permitted.
 - Plan examination must include a zoning analysis for outdoor installations, including rooftops. The DOB approved Zoning Analysis shall also be submitted to OTCR as part of the BESS Required Submittal Information (see [OTCR Battery Application Checklist](https://www1.nyc.gov/assets/buildings/pdf/OTCR_battery_app_checklist)) (https://www1.nyc.gov/assets/buildings/pdf/OTCR_battery_app_checklist).
 - The plan examiner shall establish a discretionary required item for final OTCR material acceptance. The discretionary required item must be established in accordance with the following:
 - The required item shall be named 'OTCR Final Acceptance Letter for BESS'
 - The required item shall be submitted and satisfied prior to signoff
 - DOB administrative staff may receive the OTCR Final Acceptance Letter to satisfy the discretionary required item.

File Permit Applications

- The installer must obtain all required permits after the receipt of the OTCR Conditional Acceptance Letter.
 - PW2 for the battery energy storage system and work associated with the battery installation.
 - ED16A for the electrical work permit.
- Obtain Letter of Completion

Submittal requirements for OTCR evaluation and acceptance of the BESS (see Figure 1 below)

Submit the following for site-specific evaluation of the proposed BESS:

- OTCR2 site-specific application. This application will initiate the material acceptance evaluation for the proposed BESS. Include a \$600 check, made payable to **NYC Department of Buildings**.
- Submit the BESS Required Submittal Information (see [OTCR Battery Application Checklist](https://www1.nyc.gov/assets/buildings/pdf/OTCR_battery_app_checklist)) (https://www1.nyc.gov/assets/buildings/pdf/OTCR_battery_app_checklist). Prior to preparing and compiling this information, contact OTCR at (212) 393-2626. The items under Section 4 (Plans and Statements), must be submitted prior to the site visit. All other information may be submitted after the site visit.
- Site visit. A site visit will be required for ALT applications. Please note, NB applications do not require a site visit. The site visit will be coordinated by DOB and requires the attendance of the applicant, and representatives of FDNY and DOB.
- Obtain OTCR Conditional Acceptance Letter.
 - OTCR must complete the evaluation of the site-specific application prior to issuing the OTCR Conditional Acceptance Letter.
 - The FDNY Letter of No Objection must be received by OTCR prior to the issuance of the Conditional Acceptance Letter.
- Install the BESS.
 - Installation of the battery energy storage system shall comply with the OTCR Conditional Acceptance letter and the FDNY Letter of No Objection.
- Inspect the BESS and associated work.
 - The BESS and all associated work will be inspected in accordance with DOB approved

construction documents, the OTCR Conditional Acceptance Letter, FDNY Letter of No Objection, NYC Construction Codes, NYC Electrical Codes, and rules and regulations of the Department.

- For electrical and applicable construction inspections, the applicant must schedule and pass Department inspections.
- Certify the BESS.
 - A NYS registered design professional will certify, in a letter submitted to OTCR, that the installation complies with all conditions of the OTCR Conditional Acceptance Letter. The certification letter must be signed and sealed by the registered design professional.
- Obtain OTCR Final Acceptance Letter.
 - The OTCR Final Acceptance Letter will be issued after receipt of the BESS certification letter. OTCR will upload the Final Acceptance Letter to BIS.

Figure 1. Department Filing, Submittal and Approval Process for BESS

