



RESILIENT SOLAR (SOLAR + BATTERY STORAGE)

FDNY Filing Procedures

March 20th, 2024

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LIST OF APPROVED BESS FOR NYC

Manufacturer	Product Name	Model Number	Certificate of Approval Number	Expiration Date
Tesla	Tesla Megapack	1462965-XX-Y	8000	March 2, 2027
ELM	FieldSight	MG500 MG500-13	8001	March 28, 2025
SimpliPhi	AccESS Sol-Ark 12k	A-XPHI-SA	8002	May 5, 2025
SimpliPhi	AccESS Sol-Ark 12k	A-XPHI-SA; A-XPHI-2SA-SP; A-XPHI-3SA-SP; A-XPHI-3SA-3P	8003	May 30, 2025
Tesla	Tesla Mega Pack 2	1748844-XX-Y	8004	November 8, 2025
Sungrow	PowerTitan	STXSUX-X6UD-MV-US	8005	April 17, 2026
Tesla	Tesla Megapack 2 XL	1848844-XX-Y	8006	May 2, 2026
Fluence Energy	Gen 6 Cube	06-01-0031-08, 06-01-0031-16, 06-01-0036-08, 06-01-0036-16, 06-01-0061-08, 06-01-0061-16	8007	September 5, 2026
LS Energy Solutions	Schneider Electric	BESS 250Q-QMMA9944	8008	November 19, 2026



FIRE CODE 2022



New York Fire Department Fire Code 2022

- Allows BESS installation for indoor commercial use and R-3 occupancies
 - The allowed installations and conditions will be noted on the certificate of approval (CoA) for the BESS
- Requires the BESS to be listed to UL 9540 2nd edition (2020)
 - Can be listed to UL 9540 1st edition (2016), if BESS got listed prior to FC 2022 and is tested to 9540A 4th edition (2019)



FILING AN APPLICATION CERTIFICATE OF APPROVAL – NEW EQUIPMENT



TM-2 Application

- \$625 examination fee
- Narrative that describes the BESS, modes of operation, any incorporated safety system and activation sequence
- Data sheet + cut-sheets of system components or documentation showing how system components work
- MSDS (Material Safety Data Sheet) for the chemical components within the BESS
- Installation and operational manuals
- UL listings and certifications (Listing to UL 9540, UL 1973, UL 1741 and other pertinent UL certifications)
- UL 9540A testing results and hazard mitigation analysis (HMA) or a failure modes and effects analysis done by a New York State licensed design professional (PE/RA), preferably a fire protection engineer.
- BESS manufacturers emergency response plan



INFORMATION AND SUPPORTING DOCUMENTATION



BESS Description

- System size (kWh and kW)
- Applicable product standards met (ex UL, Intertek, NFPA)
- Battery specific:
 - Number of battery cells
 - Battery chemistry
 - Voltage
 - Cascading protection (ex fuses/circuit breakers)



INFORMATION AND SUPPORTING DOCUMENTATION



- Battery Encasement:
 - Cabinet information
 - Ventilation for off gassing (if required)
 - Deflagration venting (if required)
- Inverter:
 - Size
 - Type
 - UL Listing
 - Monitors for: over current, over temperature, etc.



INFORMATION AND SUPPORTING DOCUMENTATION



- Battery Management System (BMS):
 - Description of system
 - Monitors for: battery voltages, temperatures, current, etc.
 - Explain how software detects malfunctions and the thresholds
- Safety measures:
 - Additional safety monitors not captured in the system description
 - Ex. Hydrogen sensors, ground fault protection, etc.
 - Sequence of events if malfunction happens at battery or system level
 - Arc Fault Protection as per NEC (NFPA 70)



ONLINE FILING PROCEDURE



TM-2 Filing Procedure

For the equipment approval (Certificate of Approval)

Go to FDNY Business:

1. Select **Design and Installation Application**;
2. Select **Technology Management Application**;
3. Select **Certificates of Approval Application New/Renewal/Amendment**
4. Pay fee and upload all necessary documents

* If there is any questions or concerns, please direct them to FDNY.businesssupport@FDNY.nyc.gov

* Link to FDNY business portal provided on reference slide



FILING AN APPLICATION FOR INSTALLATION (CAN BE SUBMITTED IN PARALLEL WITH DOB)



TM-1 Application

- \$420 + \$525 (\$945 total) examination fee
- Plans signed and sealed by a NYS licensed design professional (PE/RA) showing proposed location of BESS installation
- Narrative or scope of work
- Installation manuals and technical documentations
- Commissioning and decommissioning plans
- UL Listings
- Other pertinent information (CoA approval, signage, flood plan map, certificate of occupancy, etc.)
- Certificate of Fitness (CoF) holder information



INFORMATION AND SUPPORTING DOCUMENTATION



- Signed and Sealed Drawings by NYS licensed design professional (PE/RA)
 - Shows location of BESS and auxiliary equipment, Hydrant, FDC (if required), and smoke purge activation switch(if required)
- Process to shut down system
 - Rapid Shutdown for solar array as per NEC (NFPA 70)
 - E-Stop as per NFPA 79 and 3RCNY 608-01 (g)(3)(C)
 - Location of Rapid Shutdown Switch + E-Stop
 - Use of software to shut down system
 - List who has access to these systems (remote or physically)
- Specify any existing dangers
 - Ex. Isolation of the system does not remove any charge present in the batteries.
- Commissioning and decommissioning plans
 - NFPA 855 for guidance
- Emergency Management Plan
 - Detailed plan of action in the event of failure as per FC 608.8



INFORMATION AND SUPPORTING DOCUMENTATION



Building Information

- Building construction type (Non-Combustible)
- Building use and occupancy
- Description of where BESS will be located (indoor, outdoor etc.)
- Available FDNY access to BESS
- Description of ventilation system for entire building and HVAC intakes in the vicinity of proposed BESS location
- Standpipe hose outlet locations near installation
- Emergency exit locations



ONLINE FILING PROCEDURE



TM-1 Filing Procedure

For the site-specific approval

Go to FDNY Business:

1. Select **Design and Installation Application**;
2. Select **Technology Management Application**;
3. Select **Engineering Application/Amendment, Category Stationary (Battery) Energy Storage System**
4. Pay fee and upload all necessary documents

For the Fire Alarm portion

FDNY Business:

1. Select **Design and Installation Application**;
2. Select **Technology Management Application**;
3. Select **Fire Alarm Application New/Amendment**
4. Pay fee and upload all necessary documents

If system is provided with Internal Clean Agent System:

Go to FDNY Business:

1. Select **Design and Installation Application**;
2. Select **Technology Management Application**;
3. Select **Engineering Application/Amendment, Category Non-water fire extinguishing systems (FC904), Sub-category Clean agent systems (FC904)**
4. Pay fee and upload all necessary documents

For the Water-Based Fire Extinguishing System (NFPA 15)** FYI the design density of the water-based system (NFPA 15) shall be 0.5 gpm/ft² **

Go to FDNY Business:

1. Select **Design and Installation Application**;
2. Select **Technology Management Application**;
3. Select **Engineering Application/Amendment Category Other**
4. Pay fee and upload all necessary documents

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TYPES OF INSTALLATIONS

- Outdoors
 - Roof top is considered outdoor
- Indoor commercial use
- R-3 Occupancies
 - Attached garage
 - Detached garage
 - Mount on exterior wall



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* All installations require BESS to have a valid CoA and follow conditions stipulated in the CoA

*Notice to the Department shall be made in accordance with FC 608.10.3 and 3 RCNY 608-01 (f)(3) for all installations.



R-3 OCCUPANCY INSTALLATION



BESS Size Limit

- Attached garage (20 kWh per dwelling unit)
- Detached garage / Exterior wall (40 kWh per dwelling unit)

Installation Requirements

If BESS has CoA

- Follow FC 608.13 and conditions in CoA. If compliance to FC and CoA cannot be met, file TM-1 for installation approval.

If BESS doesn't have CoA, file a TM-2, Installation not allowed without CoA



OUTDOOR INSTALLATION



BESS

- Characterized as Small, Medium, Large as per 3 RCNY 608-01 Table 1

Installation Requirements

If BESS has CoA

- Based on BESS size follow requirements in 3 RCNY 608-01 Table 2
- File TM-1 for site specific installation approval
- File TM-1 based on 3 RCNY 608-01 for:
 - Fire Alarm system
 - Non-water based fire suppression (if included in BESS)
 - NFPA 15 designed water spray system

If BESS doesn't have CoA, file a TM-2, Installation not allowed without CoA



INDOOR INSTALLATION



BESS Size Limit

- Follows FC Table 608.9.1.1
 - Control areas limitations set forth in FC 5003.8.3.3

Installation Requirements

If BESS has CoA

- Installation parameters within CoA, requirements of FC 608.9.1, and manufacturer requirements
 - No need to file TM-1 with FDNY and only needs DOB approval
- Installation parameters not within CoA, requirements of FC 608.9.1, and manufacturer requirements
 - File TM-1 for site specific installation approval

If BESS doesn't have CoA, file a TM-2, Installation not allowed without CoA



THINGS TO CONSIDER

Things that need to be considered:

- Size (what's needed and what hazards that would pose)
- All nearby exposures as defined by 3RCNY 608-01 (g)(1)(C)
- Gas Hazards (Toxicity and Deflagration)
- Fire Protection Systems
- FDNY connections?
- FDNY response? (clean agent and water)
- Certificate of Fitness holder and subject matter expert (SME)
- Emergency Response
 - Shutdown
 - Emergency signals
 - Actual emergencies
- Vehicles
- Disposal of the BESS



REVIEW PROCESS

Applicant submits all required paperwork



Once submitted, the application will be reviewed by FDNY and if any information is required a letter of deficiency will be issued through the FDNY portal



If needed FDNY will contact the applicant to set up a joint site visit, conducted by Tech-Management and HazMat



FDNY will notify applicant of decision; if approved, a Letter of Acceptance (LOA) or Conditional Letter of Acceptance (CLOA) will be issued

*Approval shall be obtained from NYC Department of Buildings (DOB) and all other agencies having jurisdiction

*As of now please allow 12 weeks for plan review and response



UNIT CONTACT INFORMATION



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REFERENCES

FDNY Business Portal

(<https://www1.nyc.gov/site/fdny/business/support/fdny-business.page>)

FDNY Outdoor Stationary Storage Battery Systems Rule

(<https://www1.nyc.gov/assets/fdny/downloads/pdf/codes/3-rcny-608-01.pdf>)

FDNY Fire Code 2022

(<https://www1.nyc.gov/site/fdny/codes/fire-code/proposed-fire-code.page>)

Energy Storage System Permitting and Interconnection Process
Guide For New York City

(https://nysolarmap.com/media/2101/li-ion-permitting-guide-2020-updated_11320.pdf)

List of approved BESS for use in NYC

(<https://www.nyc.gov/assets/fdny/downloads/pdf/business/coa-energy-storage-systems.pdf>)

TM-2 Application

(https://www.nyc.gov/html/fdny/pdf/fire_prevention/tm_2.pdf)

TM-1 Application

(<https://www.nyc.gov/assets/fdny/downloads/pdf/business/tm-1-application-for-plan-examination-doc-review.pdf>)