

Emergency Battery Backup Storage Guidelines

STORAGE GUIDANCE

1. All batteries require periodic charging and discharging cycles. In general, the following are the relevant battery chemistry industry standard guidelines to maintain optimal battery capacity for each battery type provided by Utopia Lighting:
 - a. Nickel-based battery chemistries (Ni-Cd/Ni-MH) should be fully recharged every 6 months.
 - b. Lead-Acid battery chemistries, such as the Sealed Lead-Acid (SLA) batteries used in some Emergency Battery Backup products, should be fully recharged every 8 months.
 - c. Lithium chemistries should be fully recharged every 6 months.
2. Any battery stored for the time period mentioned above requires a full charge, or for the product to be energized for its rated charge time, in order to meet the full rated emergency run-time.
3. Batteries must be stored at temperatures between 32°F(0°C) - 104°F (40°C). However, the optimal storage is 68°F (20°C) - 77°F (25°C). Storage at extreme temperatures will reduce the permissible storage time and may eventually permanently damage the battery.
4. Never store the product with the inverter connector (converter or unit enable connector) closed. This enables the output and the control circuitry and will drain the battery in storage at a faster rate. A special EM type such as Bodine's ABCConnect (Automatic Bodine Connect), if enabled, should be first disabled prior to storage.

PRACTICAL APPLICATION RECOMMENDATION

STORAGE TIME

Utopia Lighting recognizes that emergency lighting products may be subject to various storage conditions. These battery guidelines shall be followed whether the Utopia Lighting's emergency product is stored at the component-level or as an emergency unit (installed inside of a luminaire) that is placed into storage (or installed, but prior to the application of AC mains voltage).

Utopia Lighting recommends a storage time of no more than 6 months for any of our products with an emergency battery backup.

STORAGE ENVIRONMENT

The storage times given here are typical and are only applicable if the batteries are stored at "room temperature" (between 68°F (20°C) - 77°F (25°C)). Storing batteries in a warmer environment will reduce allowable storage time even further. Storage at 104°F (40°C) can reduce the recommended storage time to as little as one month.



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PRODUCT ACTIVATION AND STORAGE

While in any form of storage, product with wired enabled connectors (the connectors that enable the output) should always remain open. Closing these connectors will activate the control, monitor, and output circuitry and will drain the battery, potentially causing permanent damage to the battery if left in this condition for extended periods. Even a small current will eventually damage the battery, possible in as little as two weeks.

A special EM type such as the wire-free enable/disabled feature, including Bodine's ABConnect, will completely disconnect the battery if no AC power is applied to the product. Applying AC power will enable the unit, therefore it is important to disable the product after luminaire production testing is complete. If not manually deactivated, the battery will disconnect once the battery reaches a lower threshold of charge, reducing the likelihood of permanent damage in the short term, but storage life will be reduced as the battery is now drained.

RECHARGING

As with storage, batteries should be charged at room temperature to ensure optimal charge acceptance and efficiency.

Failure to comply with these battery storage guidelines, including prolonged storage with depleted batteries, may lead to permanent battery degradation. Utopia Lighting cannot warrant products that have been stored outside of these guidelines.