FITTING BATTERIES GUIDE

INTRODUCTION

This guide is only for the installation of the Enerdrive | Dometic range of Lithium batteries including the ***B-TEC*** & ***eLITE*** Range of Batteries to meet the requirements of AS/NZS 3001.2:2022 and does not reflect any other brands of batteries in the market.
Note: We advise that you read the AS/NZS 3001.2:2022 in full to make your own interpretation and make sure the complete installation in you build complies.

The ***B-TEC*** & ***eLITE*** Battery Packs have an Integrated Battery Management Safety System that protects against the following as required by **Clause 5.4.12.3.3**

A. Over and Under Voltage (at Cell Level)
B. Over and under Temperature
C. Over Current

The Lithium Cells (Batteries) inside the ***B-TEC*** & ***eLITE*** Battery Packs comply with AS IEC 62619 as required by **Clause 5.4.12.3.1** of the Standard.

MONITORING DEVICE

- The ***B-TEC*** Battery Packs have Bluetooth connection and via the APP you can view the State of Charge (SOC) % as required by **Clause 5.4.12.3.4** along with Current, Temp and Voltage of the Cells. If connecting multiple battery packs in parallel to increase your battery bank capacity, we recommend the additional use of a Standalone Battery Monitor designed to work with lithium like, the ***ePRO Plus*** or Simarine battery monitor.

- The ***eLITE*** Battery Packs have an internal BMS that monitors and protects the Cells on Voltage, Temp and Current but does not monitor the State of Charge (SOC) %. To do this, you will require a Battery Monitor designed to work with lithium batteries like the ***ePRO PLUS*** or Simarine battery monitor to be compliant with **Clause 5.4.12.3.4**

INSTALLATION

To protect the Battery Packs from external influences like rocks & moisture, we require the Battery Pack to be installed in a designated dry battery compartment.

If the battery compartment is within the enclosed structure, it needs to be installed to share an outer Wall or Floor of the structure. The compartment needs to be sealed and made of materials that prevents any gases/vapours in said compartment from entering the Habitable/Liveable space of the structure directly or indirectly.

Access to install/removal or access to the Battery Packs for maintenance needs to be easy as per **Clause 5.4.11.3.2** and can be made via a door/hatch directly to the outside of the structure. As this cannot always be achieved, if installing with an internal access panel, the panel/hatch needs to be fastened and sealed to prevent gases/vapours entering the Habitable/Liveable space of the structure. If you are using this option, we strongly recommend attaching a label that warns of the dangers and legalities of leaving it open or unsecured.

Example:

This panel/hatch must be sealed and fastened into position to comply with AS/NZS 3001.2:2022 **Clause 5.4.12.2** Failure to do this may lead to injury or death.

VENTING

Venting of the Battery compartment needs to be done via a minimum 20mm hole to the exterior of the structure in a way that prevents water from entering the Battery Compartment. This Ventilation port is to allow the Battery Compartment to equalize the pressure of the battery compartment with outside environment and in the event that a Battery Cell/s vent, it does not pressurize/compromise the battery compartment and force gas/vapours into the Habitable/Liveable space of the structure.

MOUNTING

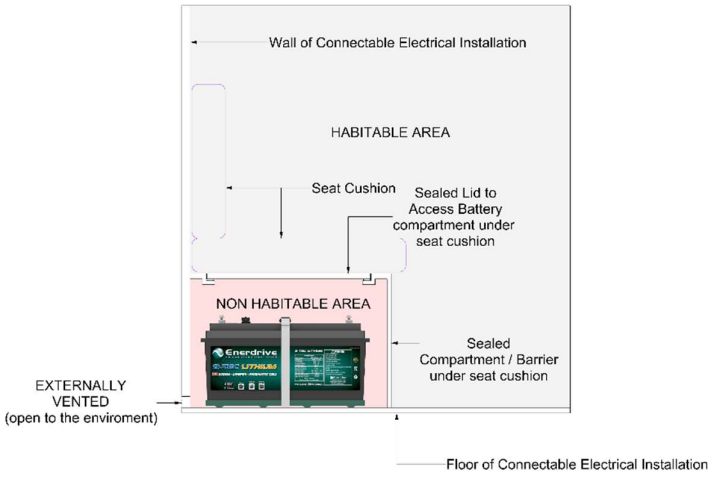
All ***eLITE*** and ***B-TEC*** batteries (except the EPL-100BT-12V-SLIM) come with either a Battery Tray and Straps or a Mounting Bracket kit to secure the Battery Pack into place in order to restrict its movement as per **Clause 5.4.5** The Trays or brackets will need to be secured adequately onto a suitable surface.

SPILL TRAY

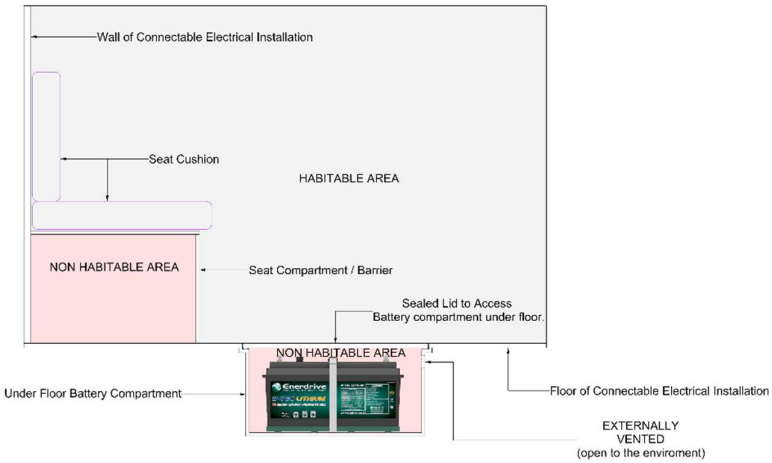
The ***eLITE*** and ***B-TEC*** Battery Packs have a Built in Spill tray as per the Requirements of **Clause 5.4.11.3.3**

EXAMPLES OF BATTERY COMPARTMENT LOCATIONS

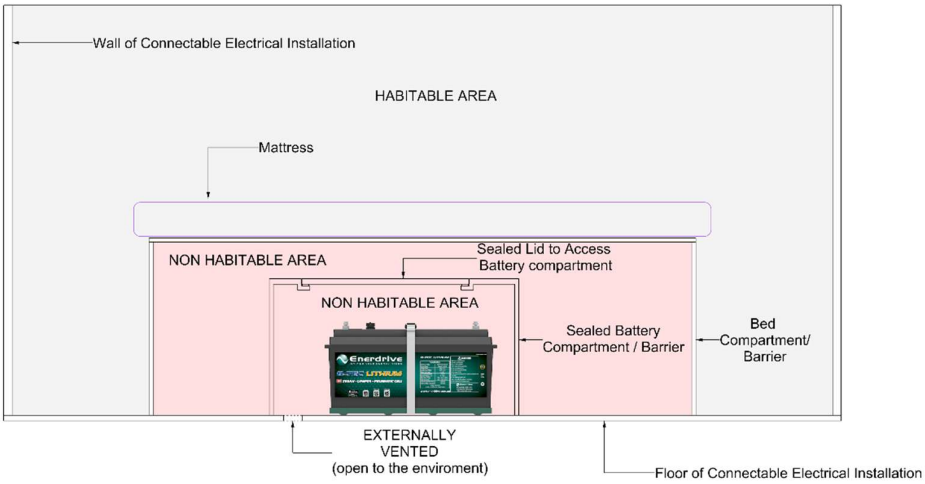
Example 1: Under Seat



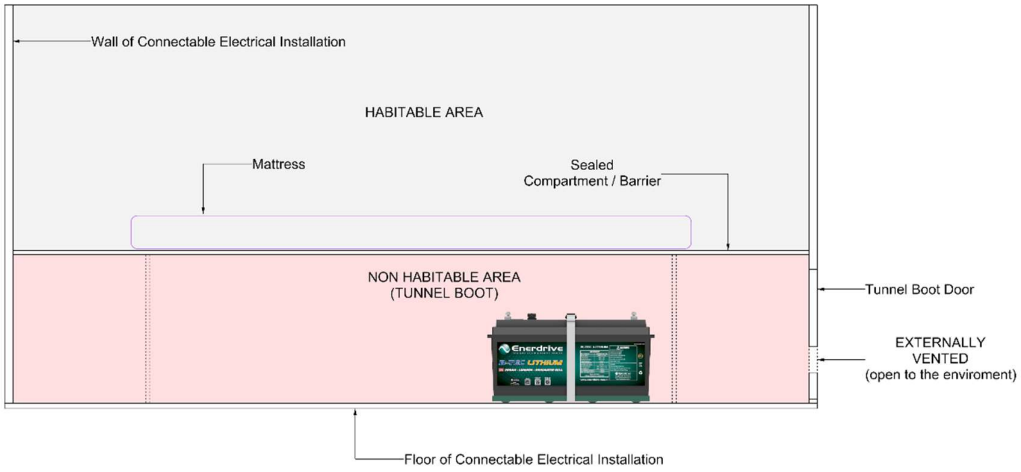
Example 2: Under Floor



Example 3: Under Bed



Example 4: Tunnel Boot



COMMISSIONING OF BATTERY BANK

We recommend before operating the system as intended;

1. All connections are checked to make sure that there are no washers or any other non-conductive materials under any lugs
2. All connections are done up tight
3. Check that the Battery Pack/Bank is securely in position as per **Clause 5.4.5**
4. Charge the system till it is completely full (100%) to allow all internal/external battery monitors to automatically sync to 100% SOC.
5. Perform a discharge test on the system with all desired/intended loads including Inverters at their intended output and check for any hot connections. This maybe an indication of a loose connection, bad connection, or undersized cable which will require further inspection.
6. Rectify any hot connections and test again.
7. Recharge system.