

ETX Battery Box Installation Guide

Overview

This document provides recommended guidelines for the installation of EarthX battery boxes for ETX680C, ETX680, ETX900, ETX900-VNT, ETX900-TSO, ETX400-24-TSO, ETX680-24-VNT and ETX680-24-TSO.

Number of Required Fasteners

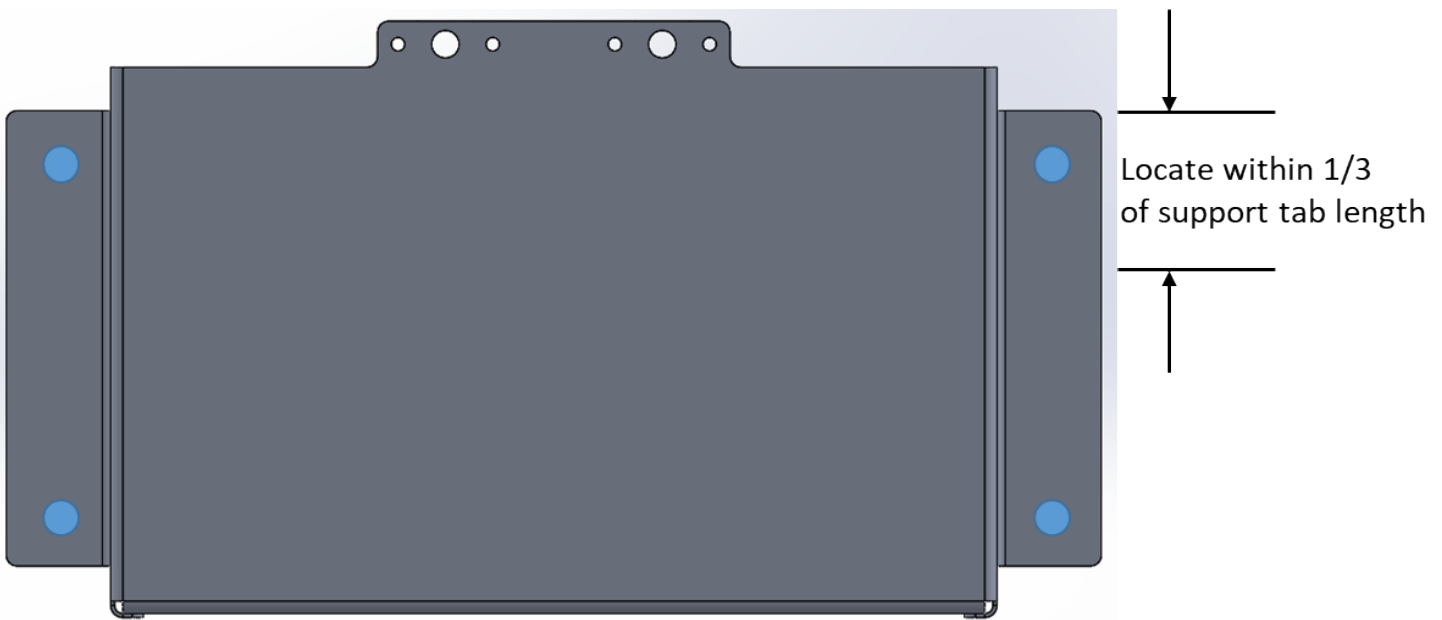
The table below shows the recommended number of fasteners to be used when securing the battery box to a vertical surface, like the engine firewall. The number of fasteners is based on ASTM 2245 6g upward force, plus a 1.5X safety factor (9g downward or upward). The battery weight used in the calculation was 7.2lb (worst case for ETX680-24-TSO).

The material the box is fastened to should be of equal or greater strength than that of the battery box (14ga aluminum or 22ga stainless steel).

Fastener type	Quantity (minimum, total)
1/8" rivet (stainless steel)	4
10-32 screw	3
1/4-20 screw	3

Fastener Location

Ideally, the fasteners should be located at the four corners (blue dots) as shown below. Based on the build of the aircraft or battery location it may not be possible to locate fasteners uniformly at the corners or in all the pre-drilled holes provided on the battery box. All that is required is to install a fastener on the top 1/3 length of the support tab and another on the lower 1/3 as shown below. If using 10-32 or 1/4-20 screws only 3 fasteners is required (2 fasteners on one edge and 1 centered on the other edge). Additionally, the fastener hole should be located at least 1-hole-diameter from the edge of the support tab.



Thermal Battery Box BB-TH Cooling Air Connection

The BB-TH battery box come with a 1" hole in the front surface so a 1" flange can be riveted (with two 1/8" rivets) to the front of the box. The 1" flange will accept a 1" "scat" tube. The flange can be purchased from Aircraft Spruce (part # 10350-4).

