

ETX Battery Box Installation Guide

Overview

This document provides recommended guidelines for the installation of EarthX battery boxes.

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 the ETX900 (4.9lb).

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	4
10-32 screw	4
1/4-20 screw	4

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. Additionally, the fastener hole should be located at least 1-hole-diameter from the edge of the support tab.

