

# SEISKIT-BB100/BB200 Product Installation Document

PN 53869:D 1/17/2023 ECN: 00029084

## 1 Overview

The instructions that follow describe requirements for seismic installations using a SEISKIT-BB100 with a BB-100 or BB-200 backbox and Power Sonic batteries.

The SEISKIT-BB100 that accompanies this document must be used to secure the batteries to the backbox. The kit consists of a battery bracket, two support tabs, and six nuts to secure the support tabs and the bracket. Two SEISKIT-BB100 kits are required for BB-200 installations, to install the second set of batteries. When used in combination with the instructions in this document, the installation will meet the requirements of the following standards.

- ASCE 7 - American Society of Civil Engineers document
- IBC (International Building Code) - Referencing ASCE 7 and ICC AC-156
- CBC (California Building Code) - Referencing ASCE 7

## 2 Cabinet Mounting

Specific hardware and installation procedures must be used when mounting the cabinet to conform with seismic rating requirements. Wood, concrete, and steel mounting requirements differ.

### 2.1 Mounting to Wood



**NOTE:** Wood lag screws must be embedded 2" (5 cm) minimum into wood. Sheetrock does not count as part of the 2" (5 cm) embedment. Install per the requirements of ICC ESR-2236.

1. If necessary, frame to match the backbox mounting holes.
2. Mark and pre-drill holes for mounting bolts.
3. Place cabinet over the holes.
4. Install 3/8" (0.95 cm) wood lag screws - four for the BB-100, six for the BB-200. Use 3/8" (0.95 cm) regular flat washers with each lag screw.

### 2.2 Mounting to Concrete



**NOTE:** Hilti Kwik Hus-EZ (KH-EZ) 3/8" (0.95 cm) anchors must be embedded 2" (5 cm) into a concrete masonry wall (CMU), per the requirements of ICC ESR-1385.

1. Mark and pre-drill holes for the mounting bolts - four for the BB-100, six for the BB-200.
2. Place cabinet over the holes. Install 3/8" (0.95 cm) Hilti Kwik Hus-EZ (KH-EZ) anchors - four for the BB-100, six for the BB-200 - using 3/8" (0.95 cm) regular flat washers with each anchor.

### 2.3 Mounting to Steel Studs

It is not recommended to mount the BB-100 or BB-200 backbox on metal studs.

### 2.4 U-Struts

- Use A1000 Series Unistrut with A1008 (Channel Nut with Spring, 3/8" nut size thread), which will accommodate the 3/8" (.95 cm) hardware.
- Span shall not be greater than width of unit + 12" (30.5 cm).
- Anchor into substrate per sections 1.1, 1.2, and 1.3.
- Install per manufacturer's instructions.

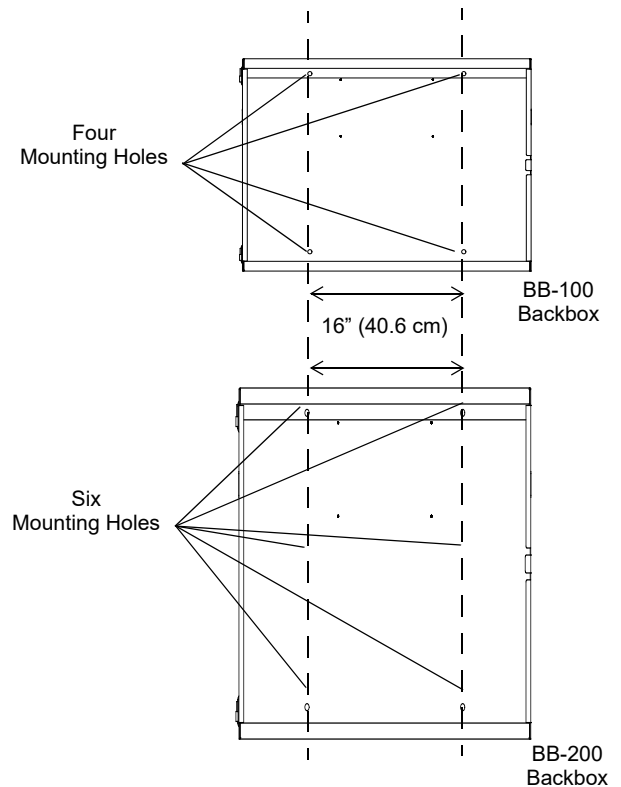
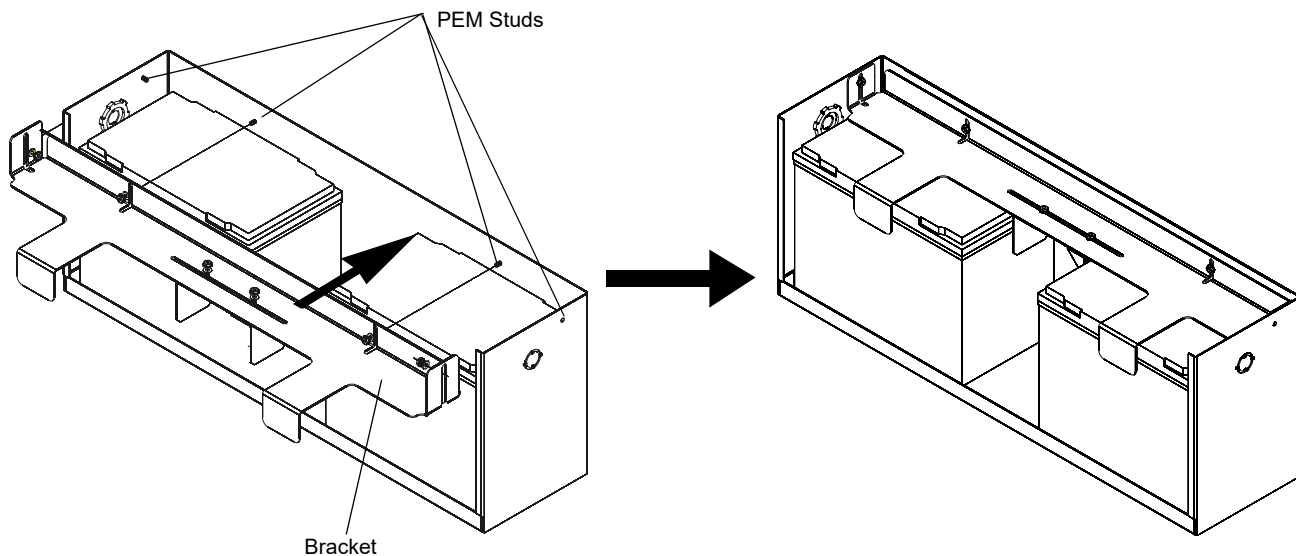
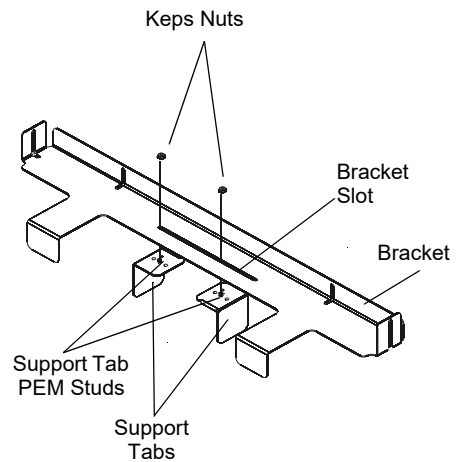


Figure 1 Mounting a BB-100 or BB-200 Backbox

## 3 Battery Bracket Installation

### 3.1 In a BB-100 Cabinet

1. Place batteries in the bottom of the BB-100 cabinet.
2. Slide support tab PEM studs into bracket slot. Loosely attach to bracket with Keps #10-32 nuts (p/n 36048). Support tabs should face inward, with the support walls on the outside.
3. Place bracket assembly over batteries, aligning over cabinet PEM studs (shown below). If necessary, slide support tabs in towards the center so they clear the batteries.
4. Attach bracket to cabinet PEM studs with four Keps #10-32 nuts (p/n 36048).
5. Slide support tabs back out until they touch the battery walls. Tighten the Keps nuts securely.



**NOTE:** Power Sonic batteries, p/n PS-121000, must be used in this installation. Substitutions are not acceptable.

**Figure 2 Mounting the Battery Strap**

### 3.2 In a BB-200 Cabinet, Bottom of Cabinet Only

Installing the batteries and bracket in the bottom of a BB-200 cabinet requires a slightly different procedure than that described in Section 3.1, as the battery shelf is fixed and limits the amount of space available for the installation process.

1. Slide the bracket (with no support tabs installed) into the space under the battery shelf. Rest it on top of the PEM studs on the back cabinet wall.
2. Install batteries.
3. Drop the bracket onto the batteries, align over the cabinet PEM studs, and fasten as show in Figure 2 above, using four Keps #10-32 nuts (p/n 36048).
4. Install the support tabs into the battery slot, with support walls facing outward as shown in Figure 2. Slide the tabs up against the battery walls and fasten securely with the Keps #10-32 nuts (p/n 36048).

## 4 Ceiling-mounted Devices

Ceiling-mounted devices, such as smoke detectors and notification appliances, should be mounted to the structure in accordance with any applicable codes or standards.