

Installation Instructions

Models CAB2-BB/-RB and CAB3-BB/-RB

Medium and Large Enclosure Backboxes

INTRODUCTION

The Models CAB2-BB/-RB and CAB3-BB/-RB Enclosure Backboxes from Siemens Industry, Inc., are used to house system modules. Each backbox is shipped empty and without the inner and outer doors as shown in Figure 1.



CAB2-BB/-RB and CAB3-BB/-RB enclosures are for indoor use only in dry environments.

The difference between the CAB2-BB/-RB and CAB3-BB/-RB Enclosure Backboxes is the number of rows for mounting modules. The CAB2-BB/-RB has two mounting rows and CAB3-BB/-RB has three rows. Mounting plates for the backboxes can be purchased separately as an option (P/N 500-633012).

CAB2-BB and CAB3-BB Enclosure Backboxes are black; CAB2-RB and CAB3-RB Enclosure Backboxes are red. In all other respects they are identical. For the remainder of this document, the CAB2-RB and CAB3-RB will be referred to as the CAB2-BB and CAB3-BB.

The outer door hinges are factory-mounted on the left side of the backbox. These hinges may be moved to the right side of the backbox to allow the outer door to open to the right. The inner door hinges are permanently mounted on the left side of the backbox.

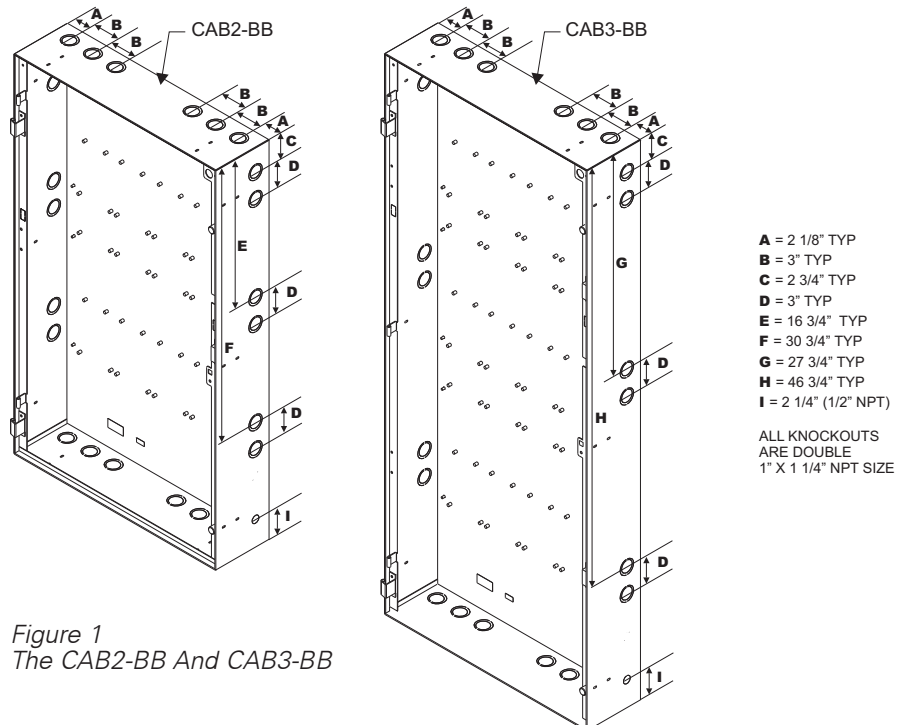


Figure 1
The CAB2-BB And CAB3-BB

The backboxes are mounted on a flat surface with four user-supplied bolts that are a minimum of $\frac{3}{8}$ inch in diameter. The backboxes contain enough space in the bottom to mount a set of BTX-1 (31 AH) batteries.

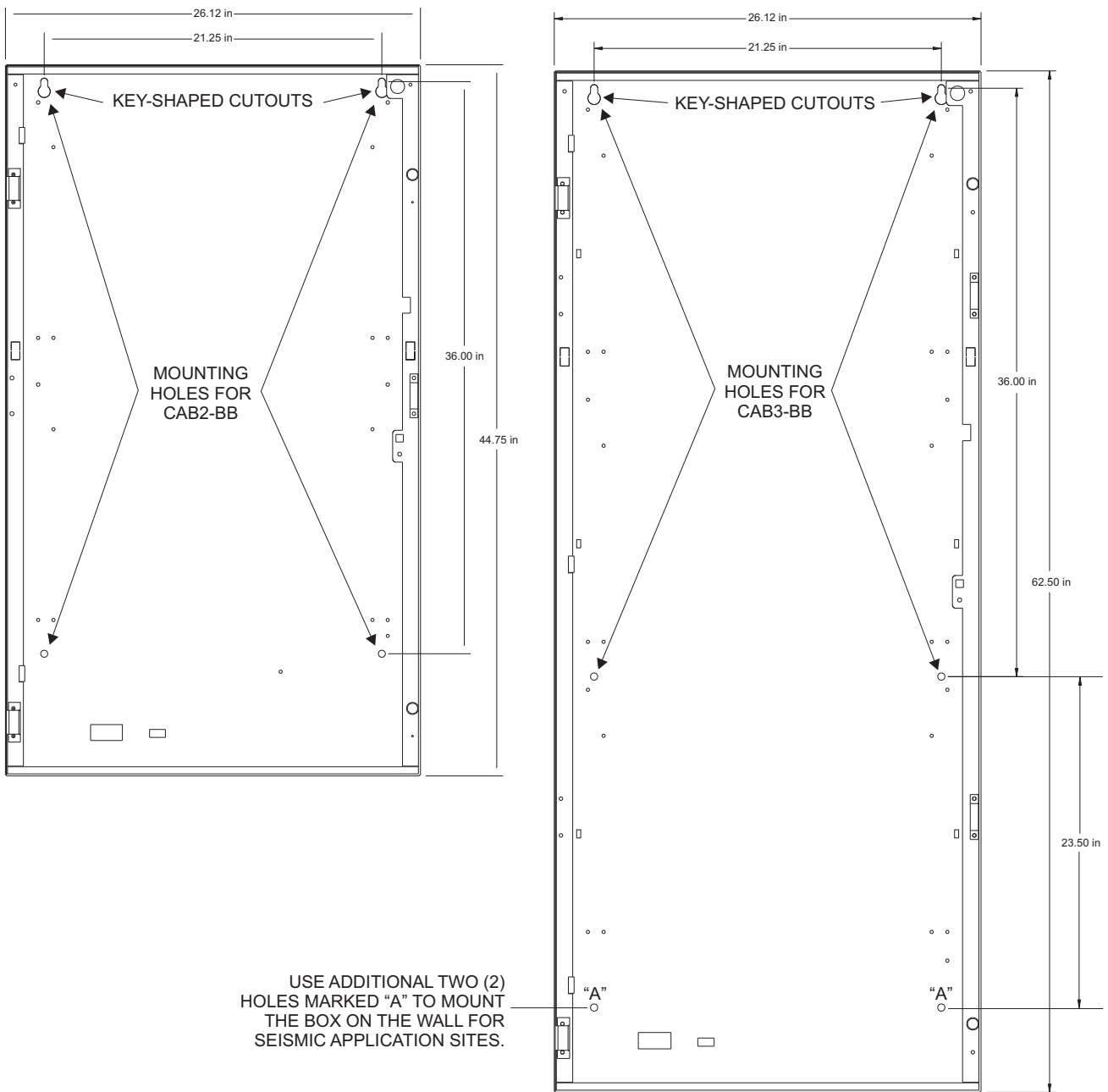


Figure 2
Mounting Holes For The CAB2-BB And CAB3-BB

PRE-INSTALLATION

Determine the direction that the outer door is to open. If the door is to open to the left, no further action is required. If the door is to open to the right, the hinges must be moved to the right side of the backbox.

INSTALLATION

Prior to installation consider the following:

- Mounting height for visual and manual access to the Person Machine Interface (PMI/PMI-2/PMI-3) displayed in an opening of the outer door.
- Weight and size of the enclosure.
- Local codes.
- Direction of the outer door opening (all doors are initially hinged left).

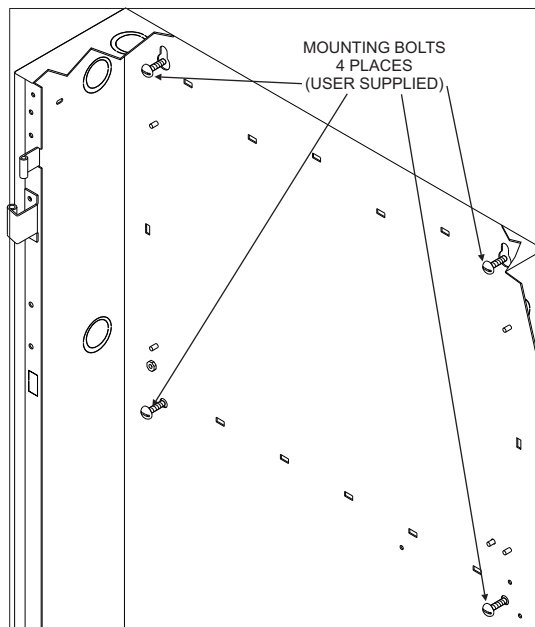
Install the backbox:

1. Select a clean, dry, shock and vibration free surface.
2. Position the backbox clear of obstructions so that the front door opens freely and the controls and indicators are easily accessible.
3. Mark the locations of the two upper mounting bolts of the backbox on the wall. (Refer to Figure 2.)



There are two key-shaped cutouts on the top of the backbox. Make sure the end with the two key-shaped cutouts is on top when installing the backbox. (Refer to Figure 2.)

4. Drill the two holes located in the previous step and screw in the top bolts, leaving a small gap between the wall and each top bolt. (Refer to Figure 3.)
5. Place the backbox over the two top bolts and allow it to slide down over the bolts.
6. Mark, drill, and install the two bottom bolts in the backbox.
7. Tighten all four bolts securely against the back wall of the backbox.



*Figure 3
Mounting The Backbox*

Outer door hinge
reversal (if required):

1. Remove the upper door hinge, turn the hinge upside down, and install on the right side of the backbox. (Refer to Figure 4.)
2. Repeat the above procedure for the lower door hinge.
3. On the right side of the backbox, remove the rubber bumpers and lock bracket(s). Reinstall the rubber bumpers and lock bracket(s) on the left side of the backbox. (Refer to Figure 5.)

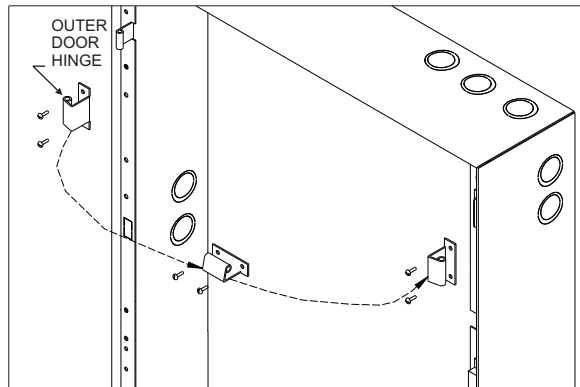


Figure 4
Outer Door Hinge Reversal

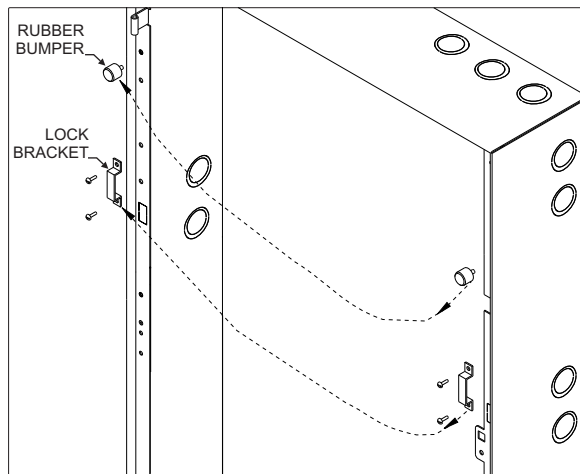


Figure 5
Lock Bracket And Rubber Bumper Reversal

WIRING


In compliance with NEC Article 760, all power limited fire protective signaling conductors must be separated a minimum of $\frac{1}{4}$ inch from all of the following wiring located within a control panel:

- electric light
- power
- Class 1 or non-power limited fire protective signaling conductors

To meet these requirements, the following guidelines **must be observed** when installing modules and wiring to this control panel.

When installing power limited field wiring, the installer must comply with NEC article 760, which states:

The fire alarm power-limited circuits are installed using Types FPL, FPLR, FPLP or permitted substitute cable, provided these power-limited cable conductors extending beyond the jacket are separated by a minimum of 0.25 in. (6.35 mm) or by a nonconductive sleeve or nonconductive barrier from all other conductors.

NOTE  **If energy limited cable or equivalent is not used within the CAB2-BB or CAB3-BB enclosure, then the following guidelines do not apply. In that case, be sure to follow standard wiring**

practices.

Wiring Entering Enclosure	<i>Non-Power Limited Wiring</i>
	Wiring entering the enclosure from the bottom and right side of the backbox is considered non-power limited wiring. Wiring must be in the shortest route and must not overlap any other wiring.
	<i>Power Limited Wiring</i>
	Wiring entering the enclosure from the top and the left side of the backbox is considered power limited. Wiring must be in the shortest route and must not overlap any other wiring.
Use the existing lances in the backbox to dress the wires as needed to maintain separation of power limited and non-power limited wiring.	
Install Wiring	The primary mains input must have a separate or dedicated circuit breaker. Wire in accordance with local codes and NEC 760.
	<ol style="list-style-type: none"> 1. Remove the knockouts in the backbox for the entry of field wiring. (Refer to Figure 6, page 6 for the location of knockouts.) 2. Pull all field wiring into the backbox. Do not dress the wiring until the location of all the equipment is known. 3. Install the wiring from the external power source to the approximate location of the power supply.

COMPATIBILITY	The CAB2-BB backboxes can be used with CAB2-BD, CAB2-RD and CAB2-XBD, CAB2-XRD doors.
	The CAB3-BB backboxes can be used with CAB3-BD, CAB3-RD and CAB3-XBD, CAB3-XRD doors.
SPECIFICATIONS	CAB2-BB: 26-1/8"W x 6-7/8"D x 44-3/4"H
	CAB3-BB: 26-1/8"W x 6-7/8"D x 62-1/2"H

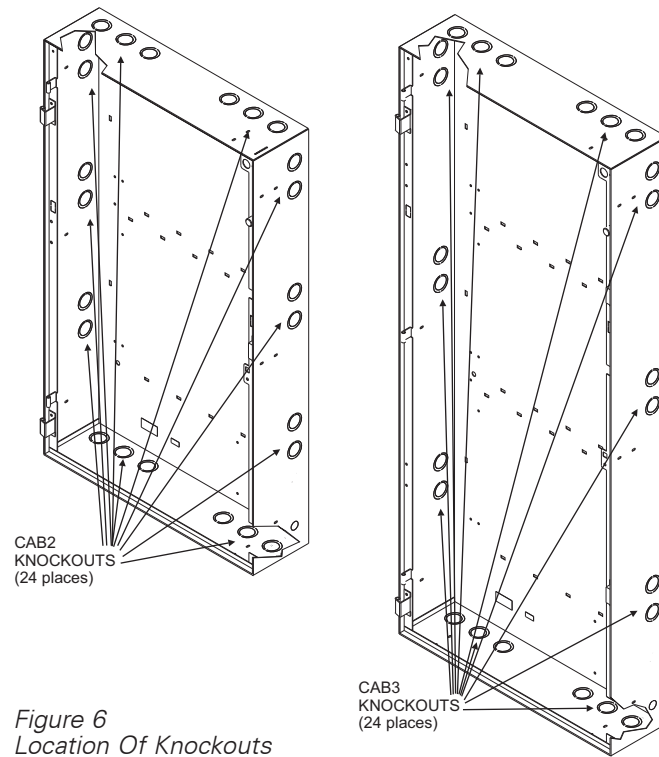


Figure 6
Location Of Knockouts

Cyber security disclaimer

Siemens products and solutions provide security functions to ensure the secure operation of building comfort, fire safety, security management and physical security systems. The security functions on these products and solutions are important components of a comprehensive security concept.

It is, however, necessary to implement and maintain a comprehensive, state-of-the-art security concept that is customized to individual security needs. Such a security concept may result in additional site-specific preventive action to ensure that the building comfort, fire safety, security management or physical security system for your site are operated in a secure manner. These measures may include, but are not limited to, separating networks, physically protecting system components, user awareness programs, defense in depth, etc.

For additional information on building technology security and our offerings, contact your Siemens sales or project department. We strongly recommend customers to follow our security advisories, which provide information on the latest security threats, patches and other mitigation measures.

<http://www.siemens.com/cert/en/cert-security-advisories.htm>

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