



Wi-Fi 6 (802.11ax) Access Points

Accessories Guide

9036825-00 Rev AA
October 2020



Copyright © 2020 Extreme Networks, Inc. All rights reserved.

Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, see: www.extremenetworks.com/company/legal/trademarks

Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at: <https://www.extremenetworks.com/support/policies/open-source-declaration/>

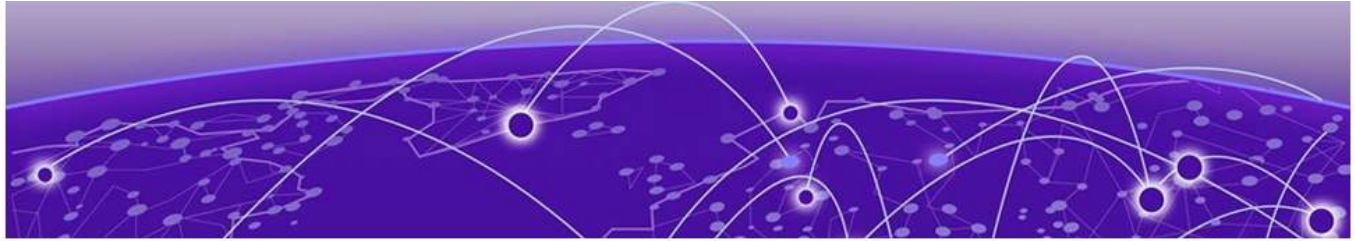
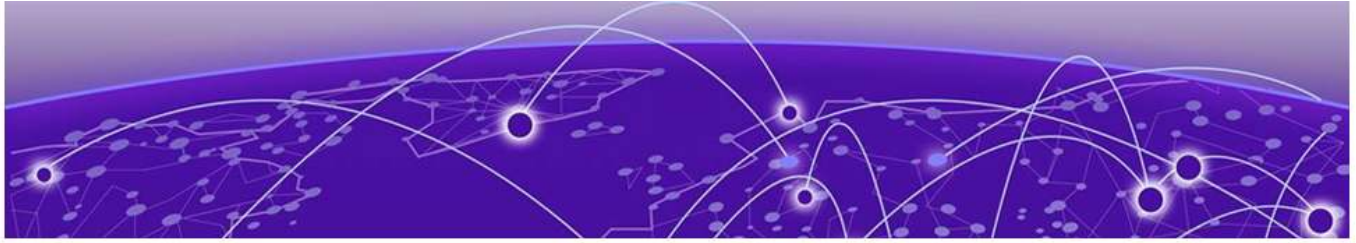


Table of Contents

Preface.....	4
Text Conventions.....	4
Documentation and Training.....	6
Getting Help.....	6
Subscribe to Service Notifications.....	6
Providing Feedback.....	7
11.ax Access Points and Mounting Accessory Usage.....	8
Mounting Accessory Compatibility Matrix.....	9
Power Accessories Matrix.....	11
Ethernet Cap Accessory Information.....	13
Indoor Mounting Accessory Installation.....	14
Position the Access Point before Installation.....	14
Install the Access Point on a 9/16 in. Wide Ceiling Using AH-ACC-BKT-AX-IL Accessory.....	15
Install the Access Point on a Silhouette Ceiling Rail Using AH-ACC-BKT-AX-SL Accessory.....	17
Install the Access Point on a 15/16 in. Wide Ceiling Rail Using AH-ACC-BKT-AX-TB Accessory.....	19
Install the Access Point on a Wall or a Solid Ceiling Using AH-ACC-BKT-AX-TB Accessory.....	21
Install the Access Point on a Junction Box Using ACC-BKT-AX-JB Accessory.....	22
Install the Access Point on a Beam Using ACC-BKT-AX-BEAM Accessory.....	25
Lock the Access Point after Installation.....	27
Outdoor Mounting Accessory Installation.....	28
Install the Access Point on a Pole Using AH-ACC-STRP-MRN Accessory.....	28
Install the Access Point on a Flat Surface Using AH-ACC-BKT-ASM Accessory.....	30
Ground Connection.....	32
Index.....	34



Preface

This section describes the text conventions used in this document, where you can find additional information, and how you can provide feedback to us.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as ExtremeSwitching switches or SLX routers, the product is referred to as *the switch* or *the router*.

Table 1: Notes and warnings

Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product.
	Note	Useful information or instructions.
	Important	Important features or instructions.

Table 1: Notes and warnings (continued)

Icon	Notice type	Alerts you to...
	Caution	Risk of personal injury, system damage, or loss of data.
	Warning	Risk of severe personal injury.

Table 2: Text

Convention	Description
screen displays	This typeface indicates command syntax, or represents information as it appears on the screen.
The words <i>enter</i> and <i>type</i>	When you see the word <i>enter</i> in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says <i>type</i> .
Key names	Key names are written in boldface, for example Ctrl or Esc . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press Ctrl+Alt+Del .
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
<i>italic</i> text	Italic text indicates variable content.
[]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ x y z }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member</i> [<i>member</i> . . .].
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

Documentation and Training

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and software compatibility](#) for Extreme Networks products

[Extreme Optics Compatibility](#)

[Other resources](#) such as white papers, data sheets, and case studies

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit www.extremenetworks.com/education/.

Getting Help

If you require assistance, contact Extreme Networks using one of the following methods:

[Extreme Portal](#)

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

[The Hub](#)

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

[Call GTAC](#)

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2826. For the support phone number in your country, visit: www.extremenetworks.com/support/contact

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

Subscribe to Service Notifications

You can subscribe to email notifications for product and software release announcements, Vulnerability Notices, and Service Notifications.

1. Go to www.extremenetworks.com/support/service-notification-form.
2. Complete the form (all fields are required).

3. Select the products for which you would like to receive notifications.

**Note**

You can modify your product selections or unsubscribe at any time.

4. Select **Submit**.

Providing Feedback

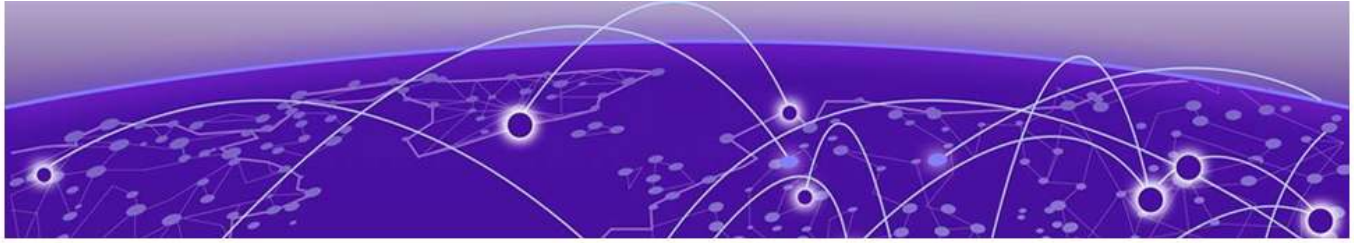
The Information Development team at Extreme Networks has made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information in the document.
- Broken links or usability issues.

If you would like to provide feedback, you can do so in three ways:

- In a web browser, select the feedback icon and complete the online feedback form.
- Access the feedback form at <https://www.extremenetworks.com/documentation-feedback/>.
- Email us at documentation@extremenetworks.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.



11.ax Access Points and Mounting Accessory Usage

Learn about the indoor and outdoor mounting accessory compatibility and usage with various Wi-Fi 6, 802.11.ax access points.

This guide is a reference for users who install and manage the ExtremeWireless 802.11ax Wi-Fi 6 access points. The following access point accessories are covered in this guide:

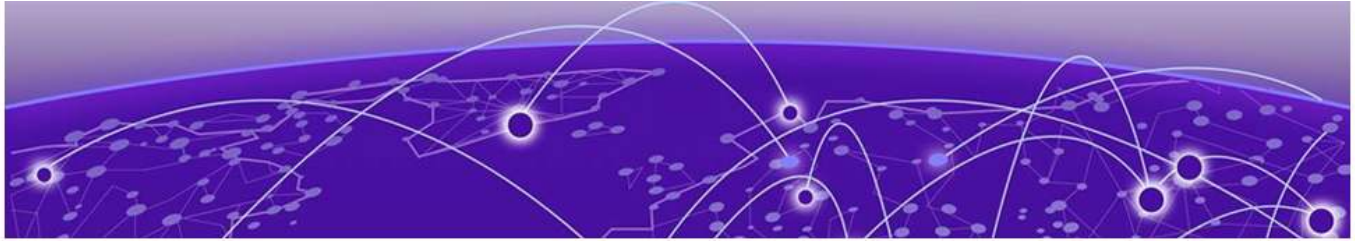
- AP305C/CX
- AP410C
- AP510C/CX or AP650/X
- AP460C, AP460S6C, and AP460S12C

The following mounting accessories are used with the indoor and outdoor access points listed in this guide:

- AH-ACC-BKT-AX-IL
- AH-ACC-BKT-AX-SL
- AH-ACC-BKT-AX-TB
- ACC-BKT-AX-JB
- ACC-BKT-AX-BEAM
- AH-ACC-STRP-MRN
- AH-ACC-BKT-ASM

Refer to the following table to locate various information in this guide:

For	Refer to
Information on mounting accessory compatibility	Mounting Accessory Compatibility Matrix on page 9
Information on power accessories usage	Power Accessories Matrix on page 11
Information on Ethernet cap accessory	Ethernet Cap Accessory Information on page 13
Information on positioning the access point for installation, how to install an access point using indoor mounting accessory	Indoor Mounting Accessory Installation on page 14
Information on how to install an access point using outdoor mounting accessory	Outdoor Mounting Accessory Installation on page 28
Information on ground connection	Ground Connection on page 32



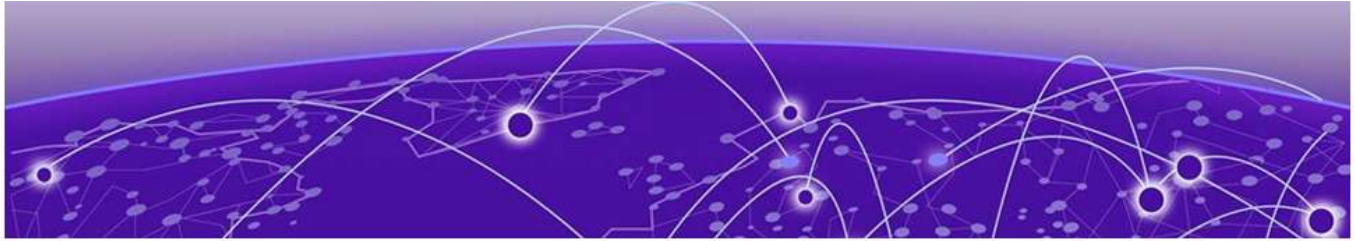
Mounting Accessory Compatibility Matrix

Details about mounting accessory part number and compatibility information with 802.11ax access points.

Part number		Description	Access point compatibility			
			Indoor access points			Outdoor access points
			AP305C /CX	AP410C	AP510C/ CX and AP650/ X	AP460C, AP460S6C, and AP460S12C
Indoor mounting accessory	AH-ACC-BKT-AX-IL	Mounting bracket for interlude ceilings	✓	✓	✓	—
	AH-ACC-BKT-AX-SL	Mounting bracket for silhouette 1/8 in. and silhouette 1/4 in. ceiling grids	✓	✓	✓	—
	AH-ACC-BKT-AX-TB	Mounting bracket for prelude 15/16 in. and suprafine 9/16 in. ceilings and walls	✓	✓	✓	—
	ACC-BKT-AX-JB	Junction box or wall mounting for indoor access points	✓	✓	✓	—
	ACC-BKT-AX-BEAM	Beam mounting for indoor access points	✓	✓	✓	—

Part number		Description	Access point compatibility			
			Indoor access points			Outdoor access points
			AP305C/CX	AP410C	AP510C/CX and AP650/X	AP460C, AP460S6C, and AP460S12C
Outdoor mounting accessory	AH-ACC-STRP-MRN	Outdoor access point stainless steel hose strap for 3 in. – 7 in. diameter pole	—	—	—	✓
	AH-ACC-BKT-ASM	Outdoor access point stainless steel wall bracket assembly	—	—	—	✓

Key	Description
✓	Compatible
—	Not compatible



Power Accessories Matrix

This section lists the power accessories that are compatible with the 802.11ax access points.



Note

All power cables and accessories must be purchased separately. Use the power accessory part number provided in the following table to purchase the correct power accessory for your access point.

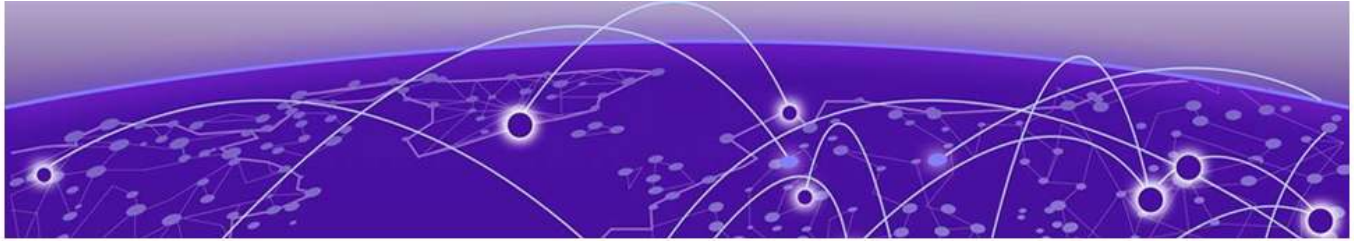
Power accessory part number	Description	Access point compatibility			
		Indoor access points			Outdoor access points
		AP305C/CX	AP410C	AP510C/CX	AP460C, AP460S6C, and AP460S12C
PD-3501G-ENT	Indoor single port 802.3af compliant mid span	✓	✓	✓	—
AH-ACC-PW-30W	30W power adapter (12VDC, 2.5A)	—	—	✓	—
AH-ACC-PW-CBL-US	6 ft. 18 AWG universal power cord with United States plug	✓	✓	✓	—
AH-ACC-PW-CBL-UK	6 ft. universal power cord with United Kingdom plug	✓	✓	✓	—
AH-ACC-PW-CBL-EU	6 ft. universal power cord with European Union plug	✓	✓	✓	—
AH-ACC-PW-CBL-AU	6 ft. universal power cord with Australia plug	✓	✓	✓	—

Power accessory part number	Description	Access point compatibility			
		Indoor access points			Outdoor access points
		AP305C/CX	AP410C	AP510C/CX	AP460C, AP460S6C, and AP460S12C
AH-ACC-PW-CBL-JP	6 ft. universal power cord with Japan plug	✓	✓	✓	—
AH-ACC-PW-CBL-KR	6 ft. universal power cord with Korea plug	✓	✓	✓	—
PD-9001GO-ENT	Outdoor 802.3at compliant PoE single port mid span	✓	✓	✓	✓
PD-9001GR-ENT	Indoor 802.3at compliant single port mid span	✓	✓	✓	✓

**Note**

The mid spans do not ship with a power cord. For the mid span power cords, the installer must supply appropriate AC plug for power connection.

Key	Description
✓	Compatible
—	Not compatible



Ethernet Cap Accessory Information

Details about the Ethernet cap used with AP305C/CX and AP410C indoor access points.

The Ethernet cap accessory is used to stop damage from dirt and debris on open ports and to cover any unused ports on an access point.

Before installing the accessory bracket onto the AP305C/CX access point or the AP410C access point, install the Ethernet cap on the access point.

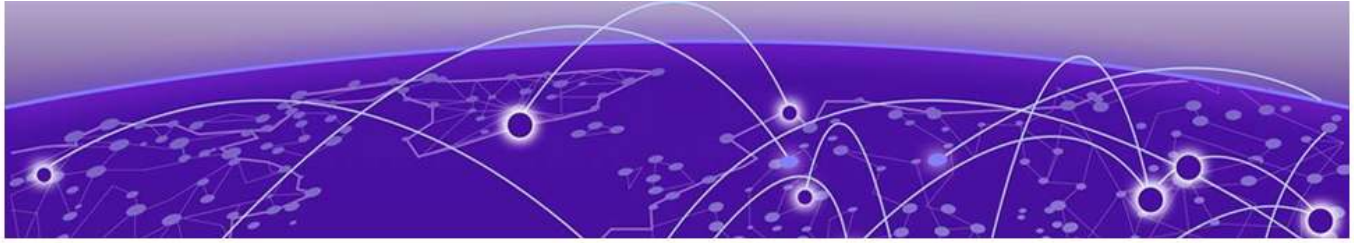


Note

You must purchase the Ethernet cap kit separately.

Table 4: Ethernet cap accessory order details

Part number	Description
ACC-305C-ETH-CAP	Cable cover for AP305C/CX to cover the Ethernet port and Ethernet cable. The package includes a 5 in. flat Cat5e RJ45 cable and inline coupler (five pack kit)
ACC-410C-ETH-CAP	Cable cover for AP410C to cover the Ethernet port and Ethernet cable. The package includes a 7 in. flat Cat6 RJ45 cable and inline coupler (five pack kit)



Indoor Mounting Accessory Installation

[Position the Access Point before Installation](#) on page 14

[Install the Access Point on a 9/16 in. Wide Ceiling Using AH-ACC-BKT-AX-IL Accessory](#) on page 15

[Install the Access Point on a Silhouette Ceiling Rail Using AH-ACC-BKT-AX-SL Accessory](#) on page 17

[Install the Access Point on a 15/16 in. Wide Ceiling Rail Using AH-ACC-BKT-AX-TB Accessory](#) on page 19

[Install the Access Point on a Junction Box Using ACC-BKT-AX-JB Accessory](#) on page 22

[Install the Access Point on a Beam Using ACC-BKT-AX-BEAM Accessory](#) on page 25

[Lock the Access Point after Installation](#) on page 27

Learn about various indoor mounting accessories that can be used to install the access point.

The indoor mounting accessories can only be used with indoor access points. The AH-ACC-BKT-AX-TB accessory is shipped with indoor access points. All other indoor accessories must be purchased separately.

Related Topics

[Mounting Accessory Compatibility Matrix](#) on page 9

Position the Access Point before Installation

Details about access point pre-installation position.

There is a red dot on the back of the access point and the bracket that will work as a guide to position the access point for installation. Line up the red dot on the access point and the bracket for ease of installation.

Install the Access Point on a 9/16 in. Wide Ceiling Using AH-ACC-BKT-AX-IL Accessory

Learn how to install any indoor access point on a 9/16 in. wide interlude ceiling tile using the AH-ACC-BKT-AX-IL accessory.

Before You Begin

The following hardware is required to install the access point on a 9/16 in. wide interlude ceiling:

- An indoor access point
- One AH-ACC-BKT-AX-IL accessory

About This Task

The AH-ACC-BKT-AX-IL accessory is used on 9/16 in. wide Armstrong interlude ceiling rails. The interlude ceiling grid artwork is printed on the back of the accessory for your reference.

Procedure

1. Remove the ceiling tiles.
2. Place the accessory on the ceiling rail in such a way that the accessory metal hinges are about 1/8th of a turn from the sides of the ceiling rail.
3. Push up gently and rotate the accessory clockwise until the hinges hook over the edge of the rail and the white tabs click in place.



Note

There are two white tabs in the back of the accessory that holds on to the ceiling rail in place. Use your finger to push and unhook one side of the white tab if you want to remove the accessory from the ceiling rail.

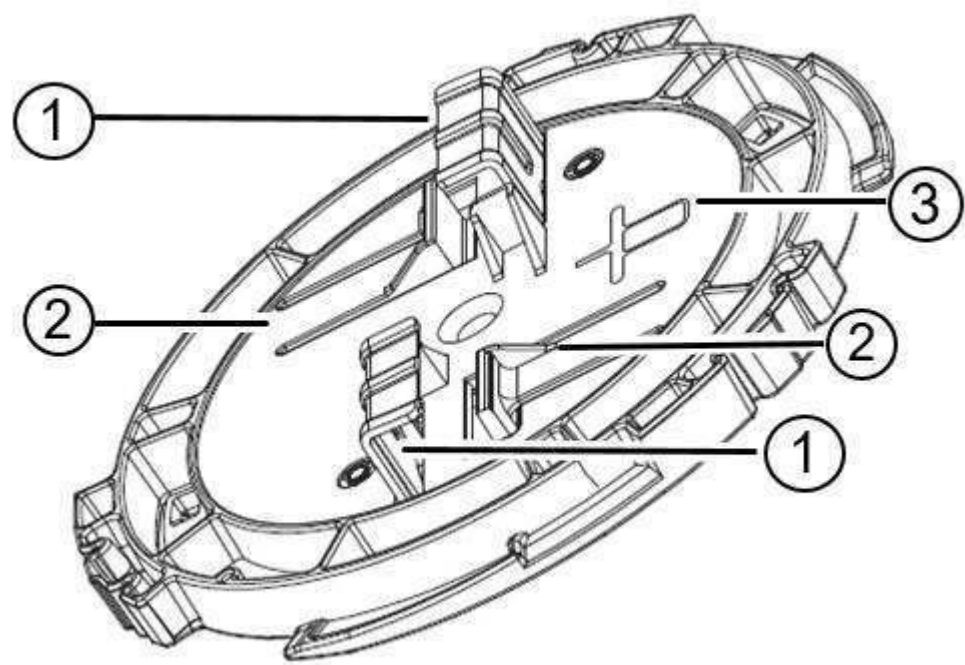


Figure 1: AH-ACC-BKT-AX-IL accessory

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-IL accessory
2	White tabs on the AH-ACC-BKT-AX-IL accessory
3	Artwork of the 9/16 interlude ceiling grid for reference

4. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.
- For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.
5. Align the red dot on the back of the access point against the accessory red dot.



Note
The accessory has a circular tip that fits into the circular depression on the back of the access point.

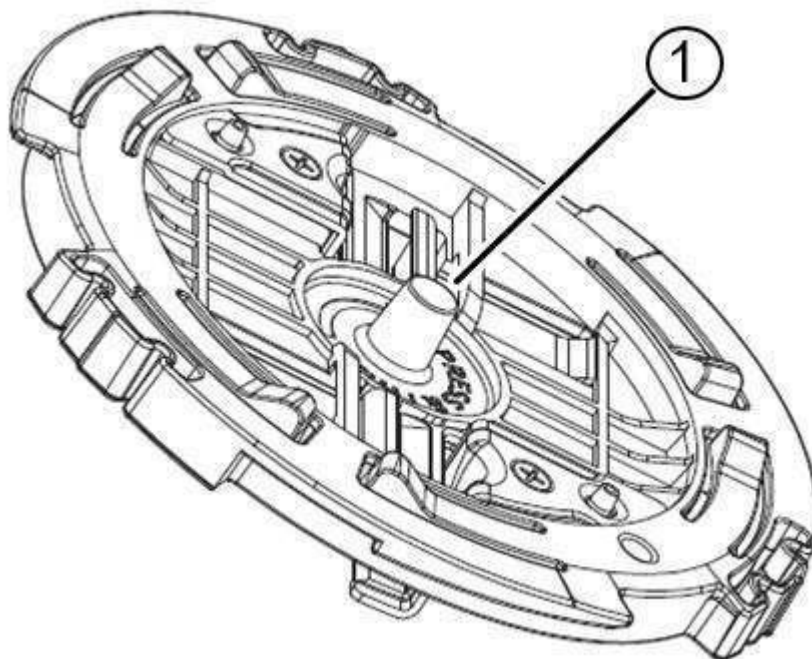


Figure 2: AH-ACC-BKT-AX-IL accessory circular tip

Callout	Description
1	AH-ACC-BKT-AX-IL accessory circular tip

6. Press and rotate the access point clockwise about $\frac{1}{4}$ th turn until it locks into place on the accessory.
7. Attach the Cat5e RJ45 cable to the ETH0 port on AP305C/CX or the Cat6 RJ45 cable to the ETH0 or ETH1 port on AP410C.
8. Place the cable cover over the Ethernet cable.
9. Replace the ceiling tiles.

Install the Access Point on a Silhouette Ceiling Rail Using AH-ACC-BKT-AX-SL Accessory

Learn how to install an indoor access point on a 1/8 in. or 1/4 in. silhouette ceiling rail using the AH-ACC-BKT-AX-SL accessory.

Before You Begin

The following hardware is required to install the access point on a 1/8 in. or 1/4 in. silhouette ceiling:

- An indoor access point
- One AH-ACC-BKT-AX-SL accessory

About This Task

The AH-ACC-BKT-AX-SL accessory is used for 1/8 in. or 1/4 in. silhouette ceiling installation. The silhouette ceiling drawing is printed in the back of the accessory for your reference.

Procedure

1. Remove the ceiling tiles.
2. Place the accessory on the ceiling rail in such a way that the accessory metal hinges are almost parallel to the sides of the ceiling rail with the ceiling rail over the center hole.
3. Rotate the accessory clockwise until the hinges hook over the edge of the rail and the white tabs click in place.



Note
There are two white tabs in the back of the accessory that holds on to the ceiling rail in place. Use your finger to push and unhook one side of the white tab if you want to remove the accessory from the ceiling rail.

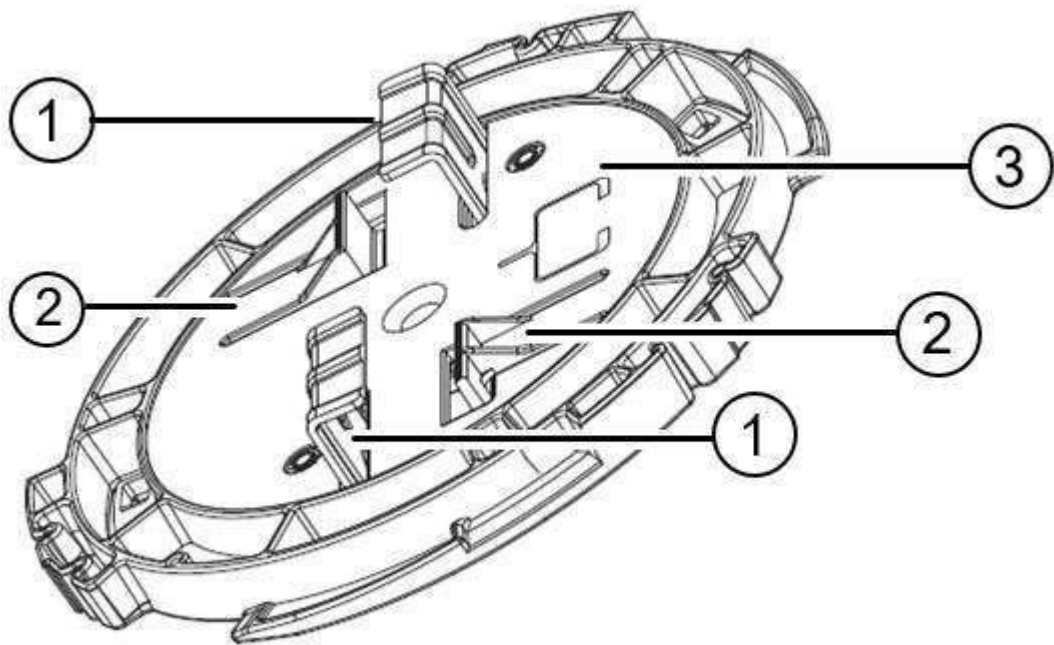


Figure 3: AH-ACC-BKT-AX-SL accessory

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-SL accessory
2	White tabs on the AH-ACC-BKT-AX-SL accessory
3	Artwork of the 1/8 in. or 1/4 in. ceiling grid for reference

4. Align the red dot on the back of the access point against the accessory red dot.



Note
The accessory has a circular tip that fits into the circular depression on the back of the access point.

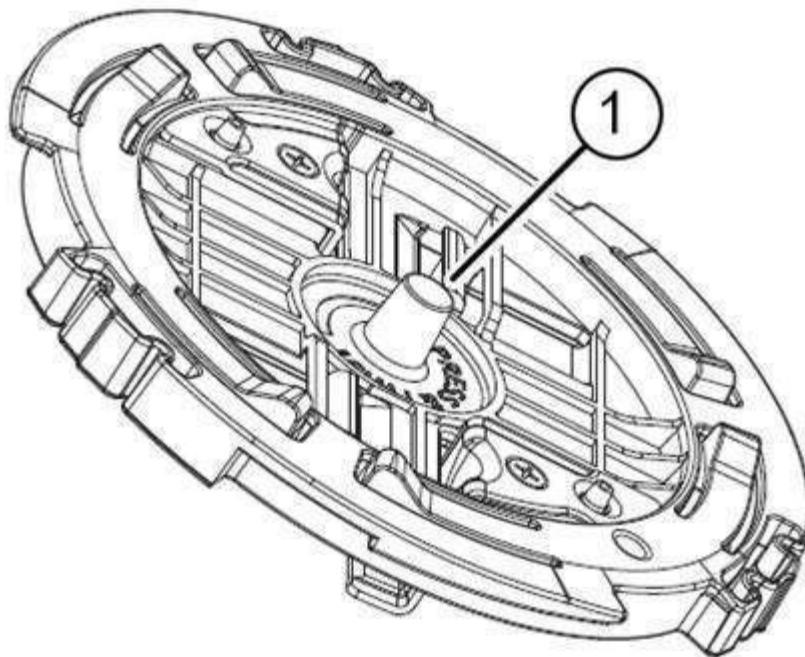


Figure 4: AH-ACC-BKT-AX-SL accessory circular tip

Callout	Description
1	AH-ACC-BKT-AX-SL accessory circular tip

5. Press and rotate the access point clockwise until it locks into place on the accessory.
6. Plug the RJ45 connector plug into ETH or ETH0, RJ45 connector receptacle on the access point.
7. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.
For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.
8. Place the cable cover over the Ethernet cable.
9. Replace the ceiling tiles.

Install the Access Point on a 15/16 in. Wide Ceiling Rail Using AH-ACC-BKT-AX-TB Accessory

Before You Begin

The following hardware is required for installing the AH-ACC-BKT-AX-TB accessory on a 15/16 in. wide ceiling rail:

- An indoor access point
- One AH-ACC-BKT-AX-TB accessory

About This Task

The AH-ACC-BKT-AX-TB accessory is shipped with most indoor model access points, and is used for standard drop ceiling rail installation.

Procedure

1. Remove the ceiling tiles.
2. Align the accessory on the ceiling rail in such a way that the accessory metal hinges are almost parallel to the sides of the ceiling rail.
3. Rotate the accessory clockwise until the metal hinges hook over the edge of the rail and the white tabs click in place.



Note
There are two white tabs in the back of the accessory that holds on to the ceiling rail in place. Use your finger to push and unhook one side of the white tab if you want to remove the accessory from the ceiling rail.

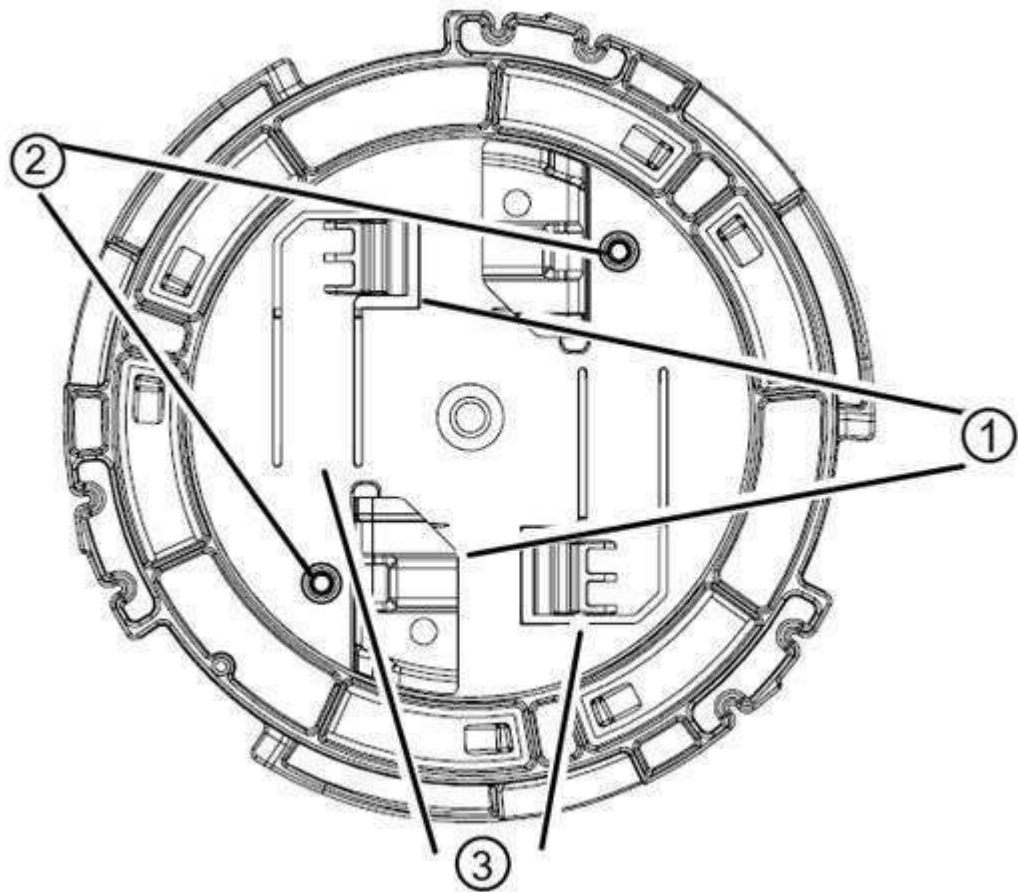


Figure 5: AH-ACC-BKT-AX-TB accessory

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-TB accessory
2	Mounting holes for wall mounting
3	White tab on the AH-ACC-BKT-AX-TB accessory

4. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.

For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.

5. Align the red dot on the back of the access point against the accessory red dot.

**Note**

The accessory has a circular tip that fits into the circular depression on the back of the access point.

6. Press and rotate the access point 1/8th turn clockwise until it clicks into place on the accessory.
7. Attach the Cat5e RJ45 cable to the ETH0 port on AP305C/CX or the Cat6 RJ45 cable to the ETH0 or ETH1 port on AP410C.
8. Place the cable cover over the Ethernet cable.
9. Replace the ceiling tiles.

Install the Access Point on a Wall or a Solid Ceiling Using AH-ACC-BKT-AX-TB Accessory

Before You Begin

The following hardware is required for installing the AH-ACC-BKT-AX-TB accessory on a wall or a solid ceiling:

- An indoor access point
- One AH-ACC-BKT-AX-TB Accessory
- Two M3.5 pan head wood screws
- Two screw-in anchors

**Note**

The wood screws and screw-in anchors come in a separate plastic bag.

About This Task

You can use the AH-ACC-BKT-AX-TB accessory for flat surface wall installation.

Procedure

1. Using the AH-ACC-BKT-AX-TB accessory as a template, mark and drill two mounting holes.
2. Attach the accessory to the wall using the M3.5 pan head wood screws.

Use push-in anchors or screw-in anchors for drywall or plastic board installations.

**Note**

Screw-in anchors must be used for solid ceiling installations.

3. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.

For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.

4. Attach the access point to the accessory by aligning the red dot on the accessory and the access point.
5. Press and rotate the access point 1/8th turn clockwise until it clicks into place on the accessory.

6. Attach the Cat5e RJ45 cable to the ETH0 port on AP305C/CX or the Cat6 RJ45 cable to the ETH0 or ETH1 port on AP410C.
7. Place the cable cover over the Ethernet cable.

Install the Access Point on a Junction Box Using ACC-BKT-AX-JB Accessory

Install the access point on a junction box using the ACC-BKT-AX-JB accessory.

Before You Begin

The following hardware is required to install an indoor access point on a junction box (box):

- An indoor access point
- ACC-BKT-AX-JB accessory

About This Task

The ACC-BKT-AX-JB accessory is used when you need to install the access point on an indoor junction box. The ACC-BKT-AX-JB access has two parts:

- A metal part that attaches to the junction box (also called the sheet-metal junction box hole plate)

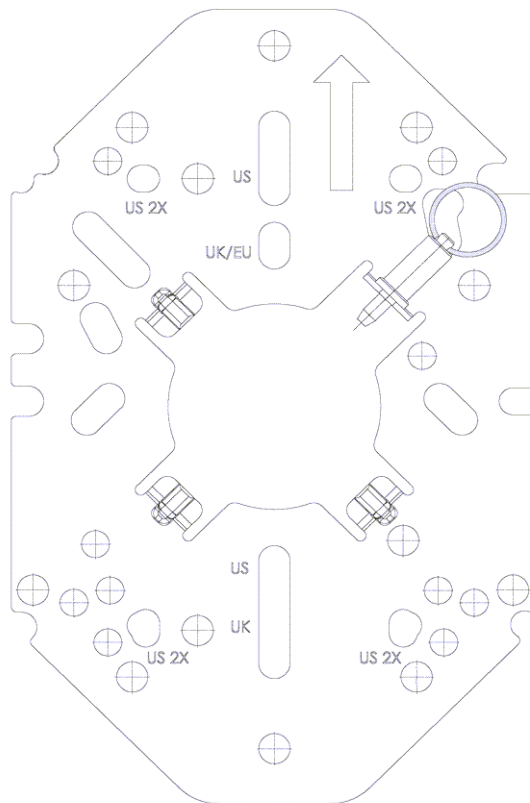


Figure 6: ACC-BKT-AX-JB accessory metal part

- A plastic part that attaches to the metal part and the access point (also called the plastic twist plate)

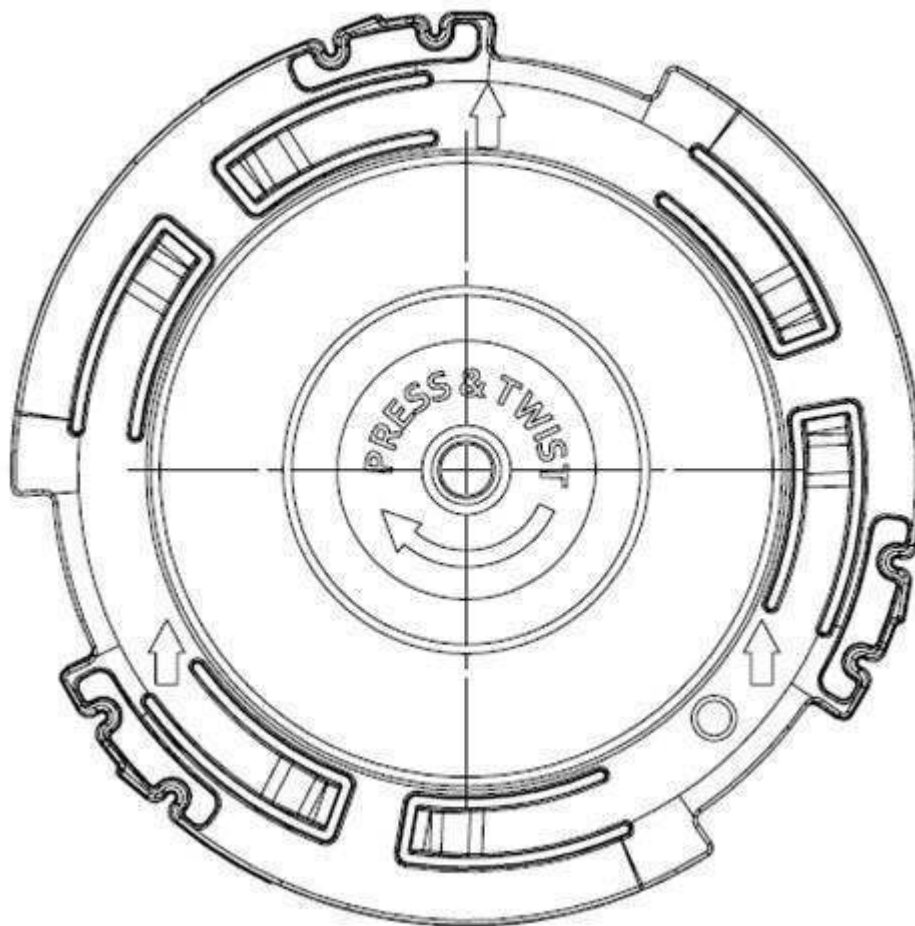


Figure 7: ACC-BKT-AX-JB accessory plastic part

Procedure

1. Remove the screws holding the box cover plate.
2. Remove the LAN cable from the cover plate.
3. Bring the LAN cable through the center hole of the metal part.
The LAN wire must be in-between the metal part and the plastic part during installation.
4. Place the ACC-BKT-AX-JB accessory metal part, with the bracket holes against the cover plate of the box.
5. Using the screws removed from the cover plate, attach the metal part to the box.



Important

The text for the holes must be normally readable.

6. Place the plastic part on the metal part, rotate it 1/3rd turn clockwise and twist it until you hear it click in place.



Important

When installed correctly on a wall, the side arrows on the plastic part must be pointing up.



Note

There is a metal pull ring in the metal part that is used to unlock and remove the plastic part.

To unlock the plastic part, pull out the pin's ring and turn the plastic part 1/3rd turn counter-clockwise and lift it apart.

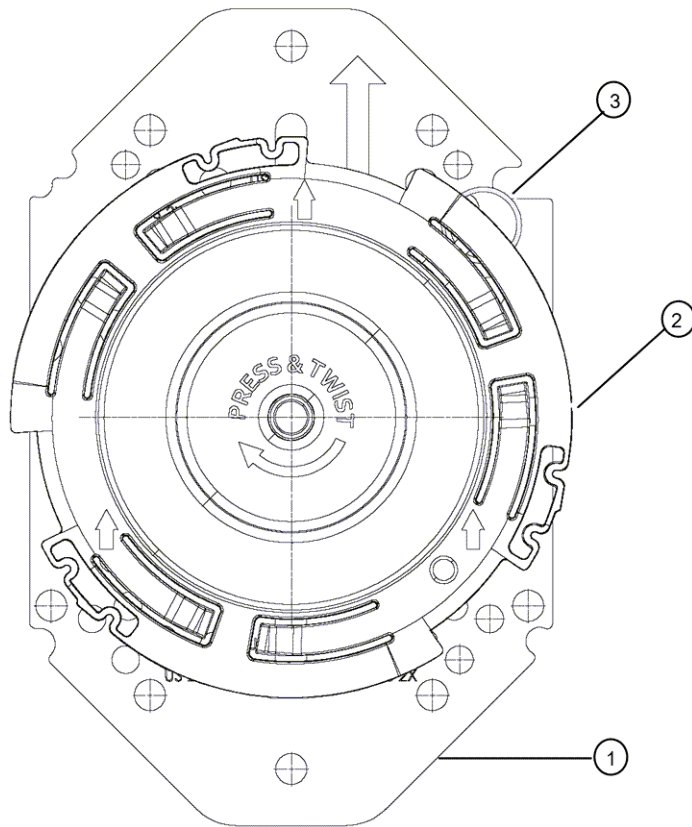


Figure 8: Junction box accessory assembly

Callout	Description
1	Sheet-metal junction box hole metal part
2	Plastic twist plate part
3	Pull ring with 10 mm diameter ring for unlocking the plastic part

7. Align the red dot on the back of the access point against the red dot on the plastic part.
8. Push the access point onto the plastic part and turn it clockwise until you hear it lock in place.
9. Insert the RJ45 cable connector to the Ethernet connector on the access point.
10. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.

For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.

11. Place the cable cover over the Ethernet cable.

Install the Access Point on a Beam Using ACC-BKT-AX-BEAM Accessory

Install the access point on a indoor beam using the ACC-BKT-AX-BEAM accessory parts.

Before You Begin

The following hardware is required to install the access point on a beam:

- An indoor model access point
- ACC-BKT-AX-BEAM accessory

Beam properties checklist:

- The beam must be able to support the access point in all environmental conditions.
- The beam must be flat.

About This Task

The ACC-BKT-AX-BEAM accessory is used for beam installation. The beam clip comes attached to the plastic accessory part. Before attaching the access point onto a beam, verify that:

- Beam attachment area is at least 0.5 in. (12.7mm) wide and as long as the access point's largest dimension.
- Beam mounting surface is less than 0.650 in. (16.5mm) thick.

Procedure

1. Align the red dot on the access point with the red dot on the accessory.
2. Insert the plastic part posts into the access point back recess.
3. Push the access point onto the plastic part, and rotate the access point about 1/8th turn clockwise to make it lock in place.



Note

If you can turn or twist the access point, it was not locked in place properly. Remove the access point and attach it again until it locks in place.

4. Plug the RJ45 connector plug into ETH or ETH0, RJ45 connector receptacle on the access point.
5. When using a AP305C/CX or AP410C access point, attach the Ethernet port cap to the access point Ethernet port.

For more information about Ethernet cap, refer to [Ethernet Cap Accessory Information](#) on page 13.

6. Place the cable cover over the Ethernet cable.

7. Place the beam clip onto a beam.



Note

You must hold the access point when attaching the beam clip.

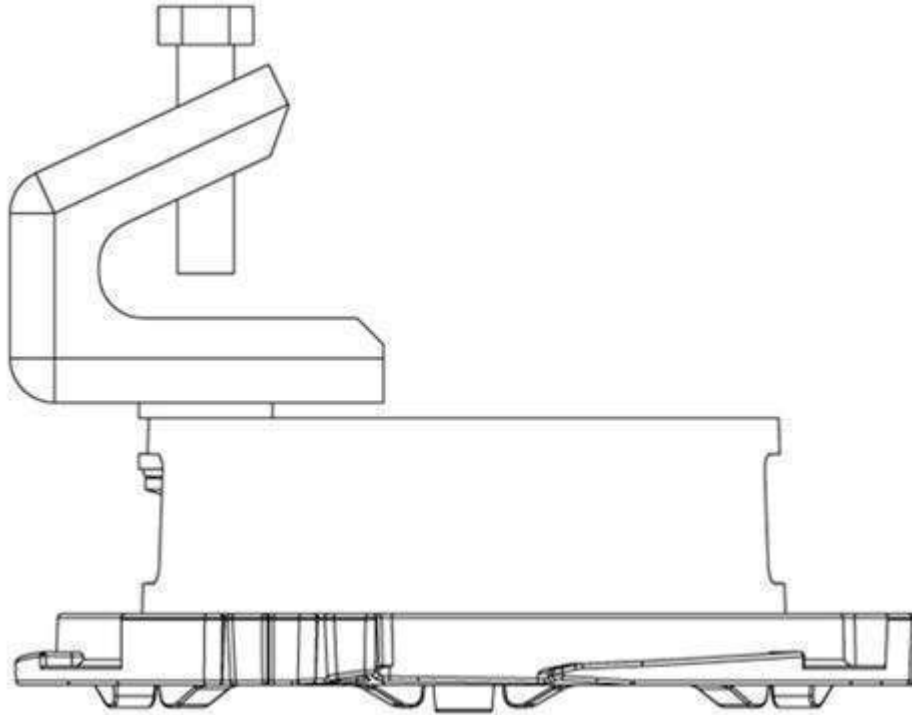


Figure 9: ACC-BKT-AX-BEAM accessory

- 8. Tighten the beam clip top screw to a torque of 50 in-lbs.

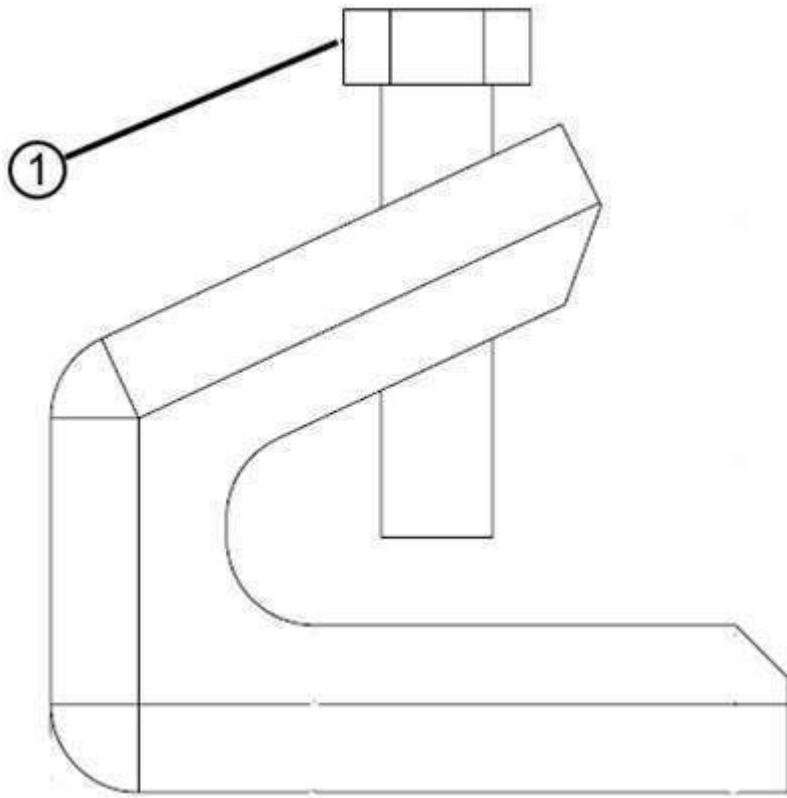


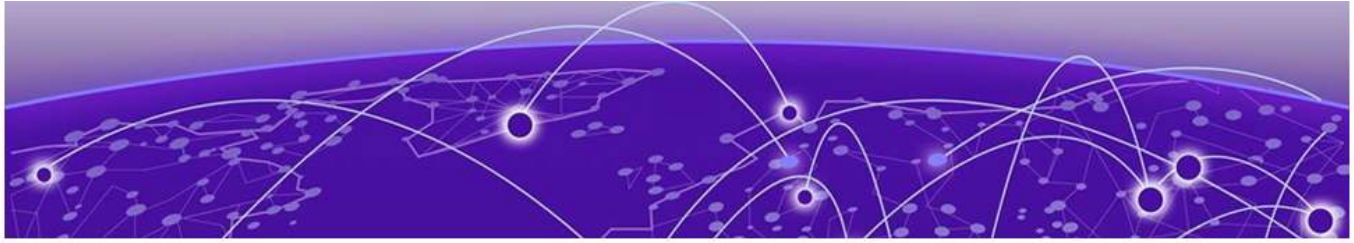
Figure 10: Beam clip top screw

Callout	Description
1	Beam clip top screw that is used to attach the beam accessory to a beam

Lock the Access Point after Installation

Learn how to lock the indoor access point using a Kensington® lock.

If you are using an indoor access point, you can secure it by using the Kensington® lock on the side of the access point. The security feature is used to prevent the access point from being removed from the mounting accessory.



Outdoor Mounting Accessory Installation

[Install the Access Point on a Pole Using AH-ACC-STRP-MRN Accessory](#)
on page 28

[Install the Access Point on a Flat Surface Using AH-ACC-BKT-ASM Accessory](#)
on page 30

[Ground Connection](#) on page 32

Learn about various outdoor mounting accessories that can be used to install the access point.

The outdoor mounting accessories can only be used with outdoor access points. The outdoor mounting accessories must be purchased separately.

Install the Access Point on a Pole Using AH-ACC-STRP-MRN Accessory

Install the access point on a vertical or horizontal 3 in. to 7 in. diameter pole using the AH-ACC-STRP-MRN accessory.

Before You Begin

The following hardware is required for installation the access point to a vertical pole or a horizontal pole:

- An access point (AP460C, or AP460S6C, or AP460S12C)
- Two AH-ACC-STRP-MRN accessory, which is an outdoor access point stainless steel hose strap for 3 in. to 7 in. diameter poles.



Tip

The best practice is to mount the access point to a pole with a minimum circumference of 3 in.



Important

You must provide your own cable clamps if you are mounting the access point to a pole that is less than 3 in. or more than 7 in. in diameter.



Tip

The best practice is to use a stainless-steel cable clamp that is 0.5 in. (12.7 mm) wide.

- A flat-head slotted screwdriver to tighten the clamp screws.

About This Task

Install the access point on a vertical pole or a horizontal pole at outdoor environments. If you are resting the access point under a horizontal pole, use the install method only during indoor warehouse or distribution center installations.



Caution

Do not install the access point in freezers.

Procedure

1. Thread the cable clamp straps through the access point rear slots.
2. Position and insert the cable clamp straps around the pole.



Note

Ensure that the access point top slots face the sky and the bottom slots face the ground.

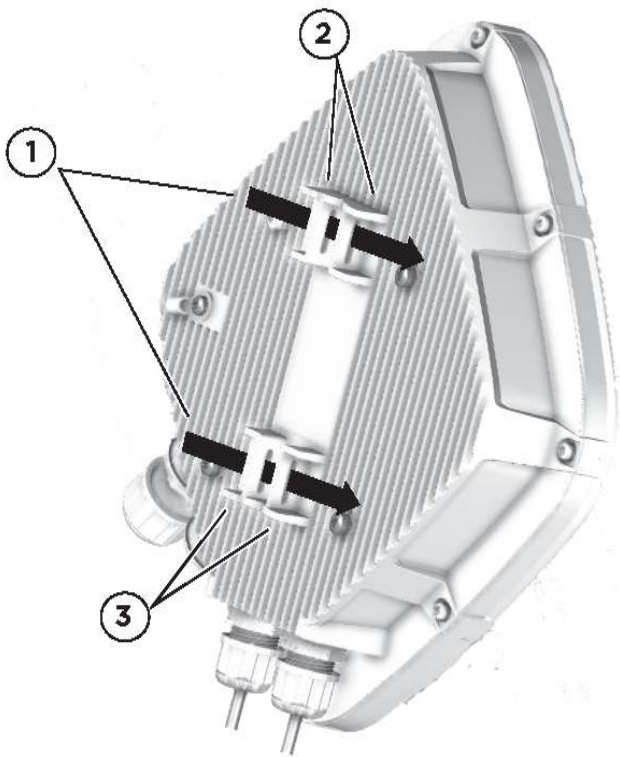


Figure 11: Pole mount strap slots on the back of the access point

Callout	Description
1	Pole mount cable clamp strap insert holes in the back of the access point
2	Top slots on the rear of the access point facing the sky
3	Bottom slots on the rear of the access point facing the ground

3. Using a slotted screwdriver, tighten the clamp screws to a minimum torque of 14 in-lbs. until the access point is securely mounted onto the pole.

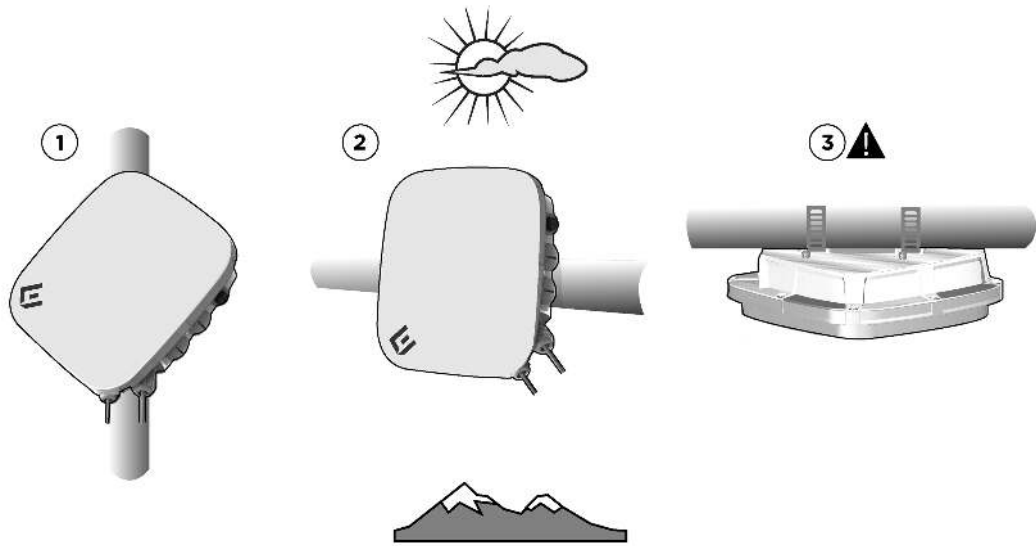


Figure 12: Access point pole mount positions

Callout	Description
1	Vertically oriented access point mounted onto a pole
2	Horizontally oriented access point mounted onto a pole
3	Access point mounted onto a horizontal pole (indoor warehouse installation)

As an added security measure, you can thread a safety strap through one of the cable clamp slots in addition to the cable clamps. Connect the other end of the strap to a secure object.

➡

Important

The access point LAN glands must face down to eliminate water from entering the chassis.

Install the Access Point on a Flat Surface Using AH-ACC-BKT-ASM Accessory

Install the access point on a vertical or horizontal outdoor flat surface using the AH-ACC-BKT-ASM accessory.

Before You Begin

The following hardware is required to install the access point to a flat surface:

- An access point (AP460C, or AP460S6C, or AP460S12C)
- AH-ACC-BKT-ASM wall accessory (must be purchased separately)
- Four M5 bolts
- Four wall mount screws and screw-in anchors (must be provided by the installer)

Before beginning the mounting procedure, insert the four M5 bolts into the holes on the rear of the access point and torque the bolts to 16 in-lbs.

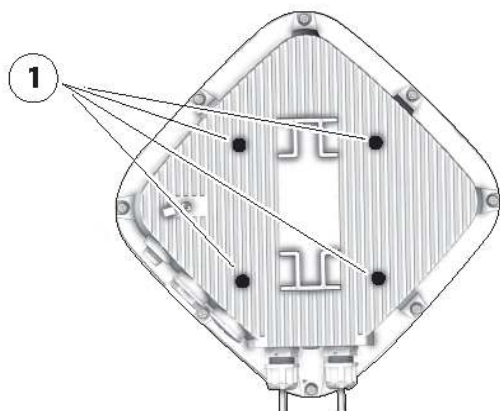


Figure 13: Wall mounting accessory M5 bolt holes

Callout	Description
1	M5 bolt attachment holes



Note

If you are mounting the access point horizontally, ensure that the ports are facing down to reduce the chance of water entering the chassis.

Procedure

1. Using the ASM wall accessory as a template, mark and drill four mounting holes on a flat surface.



Note

The printed arrows on the accessory must be pointing up.

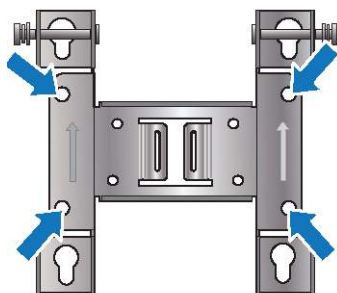


Figure 14: ASM accessory wall mounting hole markings

2. Attach the ASM accessory to the wall by using four M5 shoulder mounting screws.

**Tip**

The best practice is to use screw-in anchors with the mounting screws on a wood surface, and concrete anchors on a concrete surface.

3. Insert the M5 shoulder mounting screws into the mounting holes.
4. Torque the M5 shoulder mounting screws to 25 in-lbs.
5. Remove the two locking screws on the accessory.

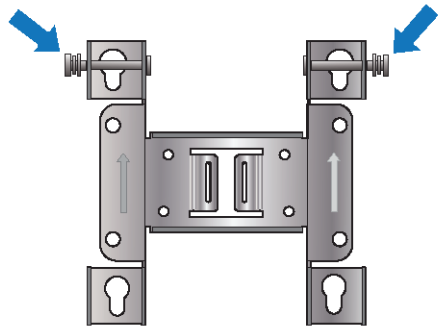


Figure 15: ASM accessory locking screws

**Note**

The access point will not go onto the accessory if the locking screws are not removed.

6. Insert the M5 bolt heads on the access point into the large end of the accessory keyholes and slide the access point down until the bolts rest in the narrow end of the keyholes.
7. Tighten the locking screws on the ASM accessory to secure the access point.
8. [Ground the access point.](#)

Ground Connection

Safely ground the access point using the grounding hardware.

Before You Begin

The following hardware is required for ground connection:

- An access point
- One M4 ground screw
- One star washer
- One ground terminal
- One ground wire

**Note**

The ground wire must be provided by the installer.

About This Task

When you install the access point on an outdoor environment, you must provide protective grounding to prevent the access point from damages and failures.

Procedure

- 1. Strip the insulation off of one end of the ground wire and attach the stripped wire to the ring terminal.



Note
The best practice is to use a 10 AWG electrical wire.

- 2. Attach the ground wire ring terminal to the access point using the M4 ground screw assembly with the star washer.



Note
The star washer must be in contact with both the ring terminal and the access point.

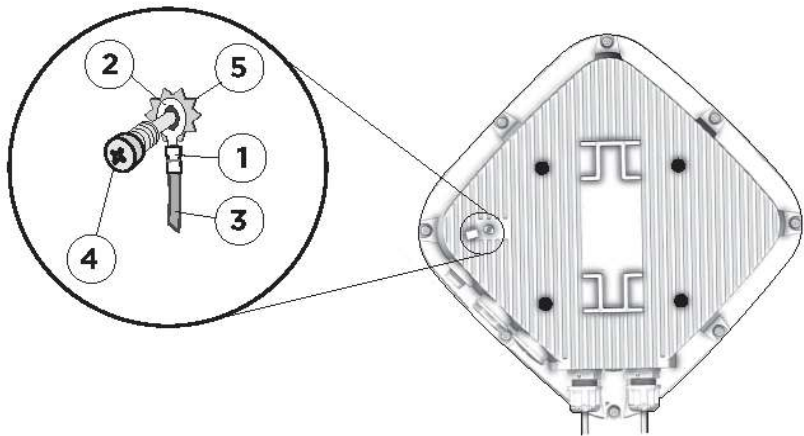
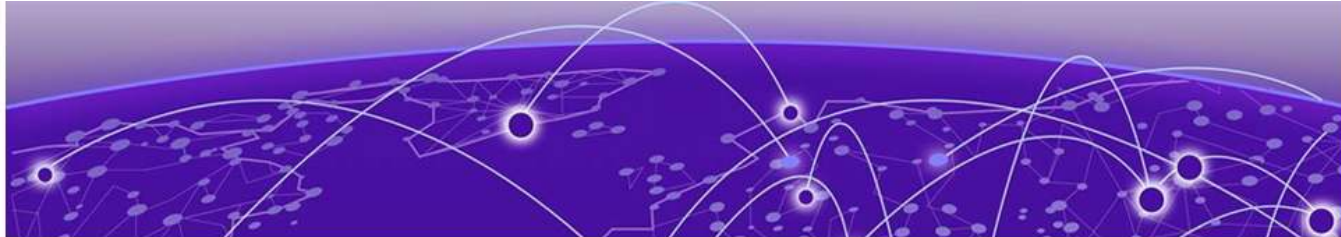


Figure 16: Ground connection on the access point

Callout	Description
1	Ground terminal edge area
2	Ground terminal
3	10 AWG ground wire
4	M4 screw
5	Star washer

- 3. Tighten the screw to a torque of 12 in-lbs.
- 4. Connect the other end of the ground wire to an appropriate earthing location.



Index

A

- ACC-BKT-AX-BEAM accessory
 - beam install
 - beam clip part 25
 - wall part 25
- ACC-BKT-AX-JB accessory
 - junction box install 22
- access point lock
 - kensington lock 27
 - security bracket 27
 - security torx 27
- AH-ACC-BKT-ASM accessory
 - flat surface install
 - horizontal surface 30
 - vertical surface 30
- AH-ACC-BKT-AX-SL accessory
 - 1/4 in. ceiling rail 17
 - 1/8 in. ceiling rail 17
 - silhouette ceiling install 17
- AH-ACC-BKT-AX-TB accessory
 - 15/16 ceiling install 19
 - wall install 19
- AH-ACC-STRP-MRN accessory
 - pole install
 - horizontal pole 28
 - vertical pole 28

C

- ceiling install
 - 9/16 ceiling 15
 - 9/16 interlude ceiling 15
 - AH-ACC-BKT-AX-IL accessory 15
- conventions
 - notice icons 4
 - text 4

D

- documentation
 - feedback 7
 - location 6

E

- Ethernet cap
 - cable cover 13
 - inline coupler 13

F

- feedback 7

G

- ground connection
 - ground terminal 32
 - ground wire 32

I

- indoor mounting 9
- indoor mounting accessory
 - ACC-BKT-AX-BEAM accessory 14
 - ACC-BKT-AX-JB accessory 14
 - AH-ACC-BKT-AX-IL accessory 14
 - AH-ACC-BKT-AX-SL accessory 14
 - AH-ACC-BKT-AX-TB accessory 14

M

- mounting accessories
 - AH-ACC-BKT-ASM 9
 - AH-ACC-BKT-AX-IL 9
 - AH-ACC-BKT-AX-SL 9
 - AH-ACC-BKT-AX-TB 9
 - AH-ACC-BKT-AX-WL 9
 - AH-ACC-STRP-MRN 9

N

- notices 4

O

- ordering part number 9
- outdoor mounting 9
- outdoor mounting accessory
 - AH-ACC-BKT-ASM accessory 28
 - AH-ACC-STRP-MRN accessory 28

P

- position your access point 14
- power accessories
 - AH-ACC-PW-30W 11
 - AH-ACC-PW-CBL-AU 11
 - AH-ACC-PW-CBL-EU 11
 - AH-ACC-PW-CBL-JP 11

power accessories (*continued*)

AH-ACC-PW-CBL-KR 11

AH-ACC-PW-CBL-UK 11

AH-ACC-PW-CBL-US 11

PD-3501G-ENT 11

pre-installation 14

S

support, see technical support

T

technical support

contacting 6

W

warnings 4