Avaya WLAN 8100 Regulatory Information - WLAN AP 8120 with External Antenna

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Chapter 1: Regulatory Compliance Statements

The Avaya WLAN 8100 product line consists of the following models:

- WLAN AP 8120
- WLAN AP 8120 with External Antenna

This section contains regulatory compliance statements for the WLAN AP 8120 with External Antenna model.

Federal Communications Commission (FCC) Compliance Notices

This section includes the following FCC statements for the WLAN AP 8120 with External Antenna access point:

- FCC ID:
- Class B Interference Statement
- RF Radiation Exposure and Hazard Warning
- Non-Modification Statement
- Deployment Statement

Class B Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning

the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Class B Equipment (Residential Use) (Korean)

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며,
모든 지역에서 사용할 수 있습니다.

FCC Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure and Hazard Statement

To ensure compliance with FCC RF exposure requirements, this device must be installed in a location such that the antenna of the device will be greater than 24.9 cm (9.8 in.) away from all persons. Using higher gain antennas and types of antennas not covered under the FCC certification of this product is not allowed. Installers of the radio and end users of the product must adhere to the installation instructions provided in this manual.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Non-Modification Statement

Use only the supplied internal antenna. Unauthorized antennas, modifications, or attachments could damage the WLAN AP 8120 with External Antenna and violate FCC regulations. Any

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Deployment Statement

This product is certified for indoor deployment only. Do not install or use this product outdoors.

Dynamic Frequency Selection (DFS) in the 5.0 GHz UNII bands

The WLAN AP 8120 with External Antenna access point has been prohibited, via software, from operating in the 5250 to 5350 MHz and 5470 to 5725 MHz frequency bands for the US and Canada because it cannot meet the DFS requirements as outlined in the rules of the FCC for Part 15, Subpart E that came into force on July 20, 2007.

Canadian IC Statements

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l’intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

European Union and European Free Trade Association (EFTA) Regulatory Compliance

This equipment may be operated in the countries that comprise the member countries of the European Union and the European Free Trade Association. These countries, listed in the following paragraph, are referred to as The European Community throughout this document:

AUSTRIA, BELGIUM, BULGARIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, UNITED KINGDOM, ICELAND, LICHTENSTEIN, NORWAY, SWITZERLAND.

The WLAN AP 8120-E access point communicates with an Avaya WLAN 8100 Wireless Controller using a standard CAT-5 (Category 5) or higher 1000 Mbps twisted pair Ethernet cable to provide wireless local area networking (WLAN) capabilities. The WLAN AP 8120 with External Antenna access point includes two 802.11a+n, b/g+n radios.

Declaration of Conformity

Marking by this symbol

indicates compliance with the Essential Requirements of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards:

Safety: EN 60950-1:2001 + A11:2004

EMC: EN 55022:2006, EN 55024:1998 + A1:2001 + A2:2003, EN 301-489-1 v1.6.1, EN 301-489-17 v1.2.1, CISPR22:2005, CISPR24

Including: EN 61000-3-2, -3-3, -4-2, -4-3, -4-4, -4-5, -4-6 and -4-11. The product is also licensed as required for additional country specific standards as required for the International Marketplace.

Radio: EN 300-328 v.1.7.1 (2006-10) & EN 301-893 v.1.5.1 (2008-12)

DEVIATION: The WLAN AP 8120 with External Antenna access point was tested to and are compliant with all of the technical specifications of EN 301-893 v1.5.1 for operation in the 5.0 GHz bands, except the DFS requirements in the 5600 – 5650 MHz band.

IEEE 802.11a operation in the 5250 to 5350 MHz and 5470 to 5725 MHz frequency bands is governed by ETSI EN 301-893 v1.5.1 and the R&TTE Directive 1999/5/EC. Effective July 1, 2008, EN 301-893 v1.5.1 was updated to require compliance with 0.8 µsecond pulse widths and staggered PRF's in the 5470 – 5725 MHz band. The WLAN AP 8120 with External Antenna access point meets compliance with these new mandates by disabling operation, via software, on channels 120, 124, 128 and 132 in the 5600 to 5650 MHz frequency band because it cannot meet the 0.8 µsecond pulse width and staggered PRF DFS requirements as outlined in the updated EN 301-893 v1.5.1 standard.

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques and Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN. Certifications are harmonized to the EN standards covering essential requirements under article 3.2 of the R&TTE Directive.

SAR: EN 50385:2002

European Community Declaration of Conformity

WLAN Radio Model, WLAN AP 8120 with External Antenna, as stated in the following Declarations of Conformity, represents all models in the WLAN AP 8120 with External Antenna as listed above.

Bulgaria	български С това, avayal обявява, че този модел на радио на WLAN Радио Модел AP 8120-E, е със съгласие с съществените изисквания и други важни условия на директива 1999/5 на европейски съюз
Czech Republic	Èesky Avaya tímto prohlašuje, že tento WLAN Rádio Model, WLAN AP 8120-E, je ve shodì se základními požadavky a dalšími pøíslušnými ustanoveními smìrnice 1999/5/ES.
Denmark	Dansk Undertegnede Avayaerklærer herved, at følgende udstyr WLAN Radio Model, WLAN AP 8120-E, overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
English	English Hereby, Avaya declares that this WLAN Radio Model, WLAN AP 8120 with External Antenna, is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Estonia	Eesti Käesolevaga kinnitab Avayaseadme WLAN Radio Model, WLAN AP 8120-E, vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Finland	Suomi

	Avayavakuuttaa täten että WLAN Radio Esikuvallinen, WLAN AP 8120-E, tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
France	Français Par la présente Avaya déclare que l'appareil Model Par radio, WLAN AP 8120-E de WLAN, est conforme aux exigencies essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Germany	Deutsch Hiermit erklärt Avaya., dass sich das Gerät WLAN Radiomodell, WLAN AP 8120-E, in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Greece	ΕΛΛΗΝΙΚΗ ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Nortel ΔΗΛΩΝΕΙ ΟΤΙ WLAN Radio Model 8120 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
Hungary	Magyar Alulírott, Avayanyilatkozom, hogy a WLAN Rádió Minta, WLAN AP 8120-E, megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Italy	Italiano Con la presente Avayadichiara che questo Modello Radiofonico WLAN, AP 8120-E di WLAN, è conforme ai requisiti essenziali ed alle alter disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latvia	Latviski Ar šo Avayadeklarç, ka WLAN Radio Model, WLAN AP 8120-E, atbilst Direktîvas 1999/5/EK bûtiskajâm prasîbâm un citiem ar to saistîtajiem noteikumiem.
Lithuania	Lietuviø Šiuo Avayadeklaruoja, kad šis WLAN Radio Model, WLAN AP 8120-E, atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Malta	Malti Hawnhekk, Avaya., jiddikjara li dan WLAN Radio, Model WLAN AP 8120-E, jikkonforma mal-tiijiet essenzjali u ma provvedimenti orajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Netherlands	Netherlands Hierbij verklaart Avayadat het toestel WLAN Radiomodel, WLAN AP 8120-E, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Poland	Polski Niniejszym Avayaooewiadcza, ¿e WLAN Radio Model, WLAN AP 8120-E, jest zgodny z zasadniczymi wymogami oraz pozosta³ymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Portugal	Português

	Avaya declara que este Modelo De rádio WLAN, AP 8120-E de WLAN, está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Romania	Român Astfel, Avaya declarã acel acest WLAN Radio Model, WLAN AP 8120-E, este în conformitate cu cerinþele necesare ºi proviziile alte semnificative de Directive 1999 5 EC.
Slovakia	Slovensky Avaya týmto vyhlasuje, že WLAN Radio Model, WLAN AP 8120-E spåòa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Slovenia	Slovensko Avaya izjavlja, da je ta WLAN Radio Model, WLAN AP 8120-E, v skladu z bistvenimi zahtevami in ostalimi relevantnimi doloèili directive 1999/5/ES.
Spain	Español Por medio de la presente Avaya declara que el Modelo De radio, WLAN AP 8120-E de WLAN, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Sweden	Svenska Härmed intygar Avaya elatt denna WLAN Radiotelegrafera till Modell, WLAN AP 8120-E, står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Countries of Operation and Restrictions of Use in the European Community

Operation Using the 2.400 to 2.4835 GHz Channels in the European Community

The professional installer should use the configuration utility provided with this product to verify the current channel of operation, the expected transmit power level, and to confirm that the device is operating in conformance with the spectrum usage rules for the selected European Community country. If operation is occurring outside of the allowable channels as indicated in this guide, then operation of the product must cease immediately and the installer must consult with the local technical support staff responsible for the wireless network.

This device is intended to be operated in all countries of the European Community. Additional restrictions of use for the WLAN AP 8120 with External Antenna access point within the European Community countries in the 2.400 to 2.4835 GHz band are listed below.

- The frequencies associated with channels 1 to 13 in the 2.400 to 2.4835 GHz band are allowed to be used either indoors or outdoors in all countries of the European Community, except where noted below.
- In France, the following operation is permitted:

  Indoor operation is permitted in the 2.400 to 2.4835 GHz band on channels 1 to 13 at a maximum EIRP of 100 mW (20 dBm).

The WLAN AP 8120 with External Antenna access point is guaranteed to meet this limit by automatically adjusting the transmit power level through the operating software.

Operation Using the 5.15 to 5.25 GHz, 5.25 to 5.35 GHz, and 5.470 to 5.725 GHz Channels in the European Community

To remain in conformance with European National spectrum usage laws, follow the channel limitations associated with the 5 GHz bands as specified in this document. The professional installer should verify the current channel of operation and the expected transmit power level of the WLAN AP 8120 with External Antenna access point to confirm that the device is operating in conformance with the spectrum usage rules for the European Community country where the unit is being installed. If operation is occurring outside of the allowable frequencies or above the power levels, as indicated in this guide, then operation of the product must cease immediately and the installer must consult with the local technical support staff responsible for the wireless network.

This device is intended to be operated in all countries of the European Community. Additional restrictions of use for the WLAN AP 8120 with External Antenna access points within the European Community countries in the 5.15 to 5.25 GHz, 5.25 to 5.35 GHz, and 5.470 to 5.725 GHz bands are listed below.

This device is restricted to indoor use only when operated in the European Community using the 5.15-5.25 GHz and 5.25-5.35 GHz bands, which includes channels 36, 40, 44, 48, 52, 56, 60 & 64. • The 5 GHz Turbo Mode feature is not allowed for operation in any European Community country.

Dynamic Frequency Selection (DFS)

The WLAN AP 8120 with External Antenna access point implements a DFS feature in accordance with the limits in EN 301-893 v1.5.1, Section 4.7 and Annex D, Tables D.1, D.2 & D.4 for a device operating in the mode defined as “Master”. Section 4.7 and Tables 5 of this document define the requirements prior to using a channel and during normal operation for a Master device (i.e., Interference Detection Threshold, Channel Availability Check Time, Uniform Spreading, Channel Closing Transmission Time and Channel Move Time). This

product qualifies for this category since the maximum achievable transmit power is greater than 23 dBm per the requirements of Table D.2 in Annex D of the standard.

IEEE 802.11a operation in the 5250 to 5350 MHz and 5470 to 5725 MHz frequency bands is governed by ETSI EN 301-893 v1.5.1 and the R&TTE Directive 1999/5/EC. Effective July 1, 2008, EN 301-893 v1.5.1 was updated to require compliance with 0.8 µsecond pulse widths and staggered PRF's in the 5470 – 5725 MHz band. The WLAN AP 8120 with External Antenna access point meets compliance with these new mandates by disabling operation, via software, on channels 120, 124, 128 and 132 in the 5600 to 5650 MHz frequency band because it cannot meet the 0.8 µsecond pulse width and staggered PRF DFS requirements as outlined in the updated EN 301-893 v1.5.1 standard.

Transmit Power Control

European Regulatory requirements specify that wireless devices must employ Transmit Power Control (TPC) to reduce the potential for interference to other communication systems operating in the 5 GHz frequency bands. This device includes a provision for adjustment of Transmit Power in accordance with the limits in EN 301-893 v1.5.1, Sections 4.4.2.1 and 4.4.2.2.

Antenna Statement

Intentional radiators, such as the WLAN AP 8120 with External Antenna access point, are not intended to be operated with any antenna(s) other than those furnished by Avaya. An intentional radiator may only be operated with the antenna(s) with which it is authorized.

Use of an antenna not specifically authorized by Avaya may not comply with local regulatory requirements with respect to radiated emission limits and may result in illegal operation of the product. The installer of the wireless system and associated antenna is required to ensure that only those antennas specifically approved by Avaya are deployed with the intentional radiator.

Be sure to associate the appropriate antenna model number and localized regulatory region when selecting the Avaya authorized antenna(s).

Chapter 2: Devices with detachable antennas

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter WLAN AP 8120 with External Antenna has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio WLAN AP 8120-E a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna types approved for use with the transmitter:

1. Laird Technologies S24517PT36RSM:

   Maximum permissible antenna gain <11 dBi

   Impedance 50 ohms

2. TYCO Electronics 2118235-1:

   Maximum permissible antenna gain <6 dBi

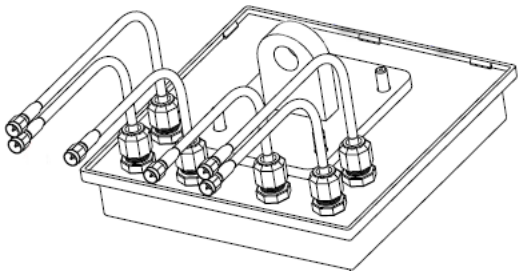
   Impedance 50 ohms

The following figure shows the Laird Technologies antenna supported by the WLAN AP 8120 with External Antenna.

Laird antenna

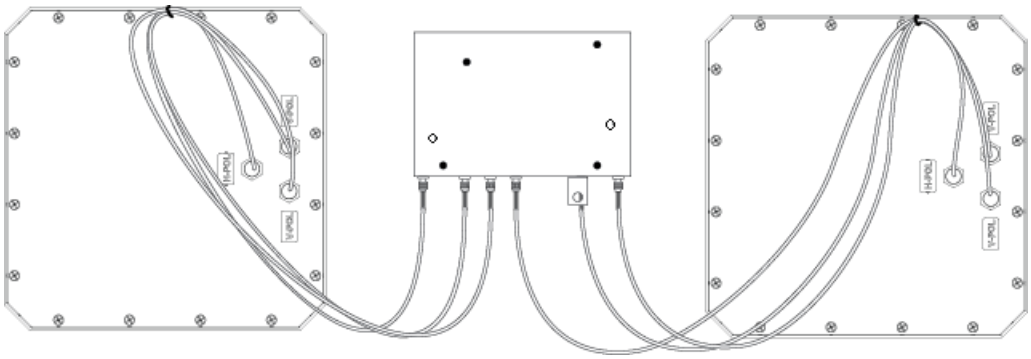
The following figure shows the TYCO Electronics antenna supported by the WLAN AP 8120 with External Antenna.

TYCO antenna with bracket mount and antenna cables



The following figure shows the WLAN AP 8120 with External Antenna with attached antennas.

WLAN AP 8120 with External Antenna attached to Laird antennas



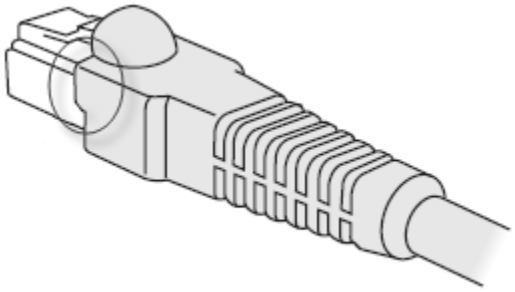
Chapter 3: English

About this task

Using the following procedures and information when installing the Avaya WLAN AP 8120 with External Antenna access points.

Cable requirements

The Ethernet ports on the access point cannot accept a CAT-5 cable that has an uneven sheath as shown below. The RJ-45 connector on the cable will not seat properly in the receptacle on the access point. Use a CAT-5 cable with an even sheath instead.



Mounting the WLAN AP 8120 with External Antenna on a wall

About this task

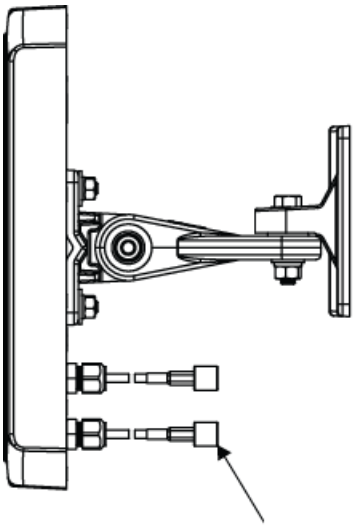
The WLAN AP 8120 with External Antenna installs similarly to the WLAN AP 8120. In addition to installing the access point itself, with the WLAN AP 8120 with External Antenna you must also mount the adjoining antennas. You can mount the WLAN AP 8120 with External Antenna on the wall using wall anchors.

Plan your installation to allow for the installation of both the access point and the antennas. Ensure you have the correct length of cable to connect the access point to the antennas. Each antenna comes with three 3–ft pre-installed permanent cables. If your installation distance is greater than the length of the original cables, you can attach additional 10–ft extension cables.

Note:

Assembling the external antenna to the WLAN AP 8120 with External Antenna is completed through Reverse Polarity SMA (RP-SMA) connectors. The installer should properly torque the connector using a 5/16 inch torque wrench that is set to 3-5 in·lbf (0.3 to 0.6 N·m) for brass, and 7-10 in·lbf (0.8–1.1 N·m) for stainless steel connectors. Flats are also provided on the cable side of the connector assembly so that you use a second wrench to prevent it rotating and damaging the joint to the cable. Avaya also recommends that you clean out loose debris from the internal surfaces before connecting.

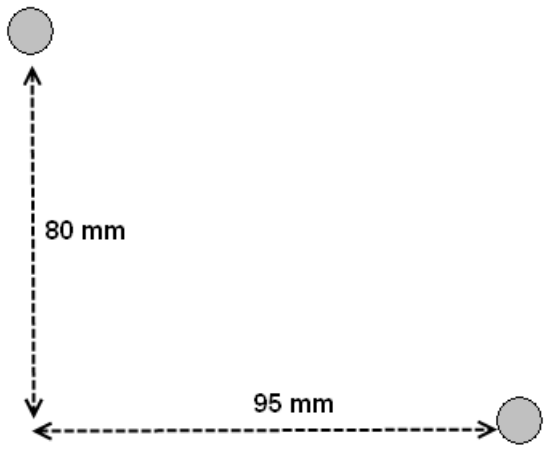
Laird antenna with arrow showing reverse polarity connector



The mounting bracket is designed to use wall anchors with threaded section diameters ranging between 3.5mm and 4.5mm. If wall anchors have threaded diameters greater than 3.5mm, only the two mounting holes marked ‘A’ may be used. If wall anchors have threaded diameters of less than 3.5mm, the holes marked ‘A’ and the holes marked ‘B’ may be used. All wall anchors must have a head diameter of less than 10mm or the wall mounting bracket cannot be installed over them.

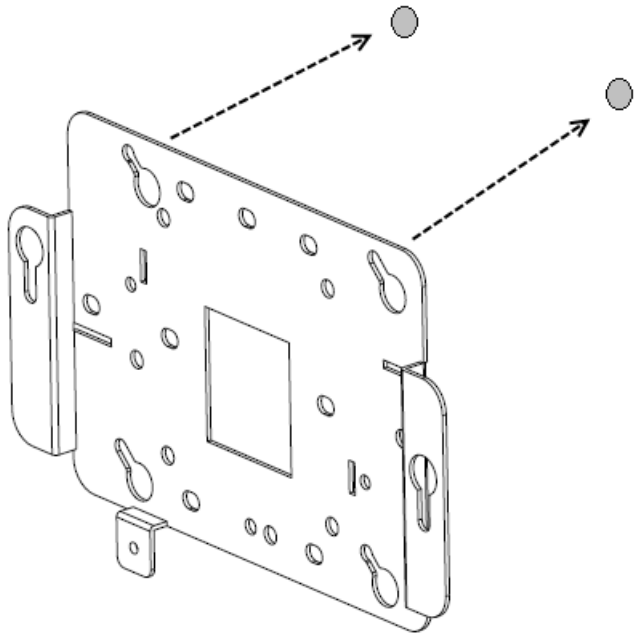
Perform the following procedure to mount a wireless LAN access point on a wall:

1. Locate the appropriate position of the wall anchors. The wall anchors should be 95mm apart horizontally and 80mm apart vertically.

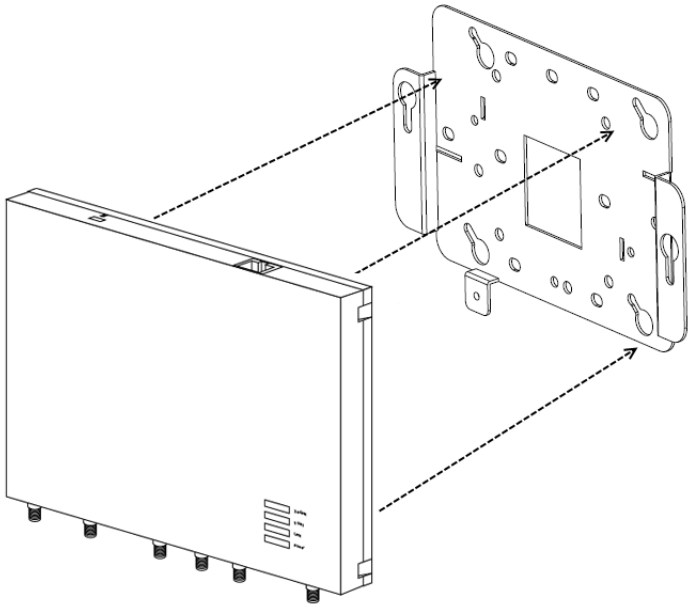


The wall bracket is designed to use a minimum of 2 anchors and a maximum of 4.

2. Install the screws into the wall anchors but do not seat them fully, leave at least a 2mm gap between the screw head and the wall.
3. Slip the wall bracket over the heads of the screws and slide the bracket to the right as viewed facing the wall.

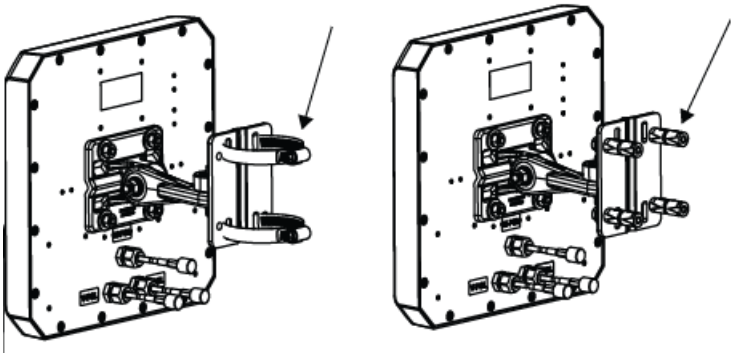


4. Tighten the screws to secure the wall mounting bracket tightly against the wall.
5. Align the mounting tabs on the bottom of the access point sheet metal enclosure with the vertically oriented keyhole slots in the mounting bracket.

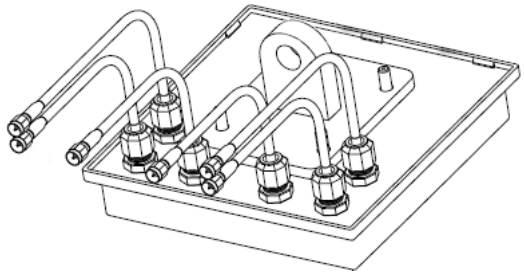


6. Allow the access point to slide down the keyhole slots, making sure the access point mounting tabs are seated at the bottom of the slot.
7. Secure the access point to the wall mounting bracket and tighten the thumbscrews.
8. Verify that the access point is secured to both the bracket and to the wall.
9. Mount the external antennas to the wall within the specified distance from the access point.

   If you are installing Laird antennas, you can mount the antennas on a mast or vertical surface (wall) using the articulated mount and mounting bolts.
   Laird antennas with arrows showing mast (left) and wall mount (right) options



   If you are installing TYCO antennas, attach mounting brackets to the wall and attach the antennas to the mounting brackets.
   TYCO antenna showing attached cables



10. Verify that the antennas are securely mounted to the wall (or mast, in the case of a Laird antenna installation).
11. Attach the antenna cables to the access point.
12. Make electrical connections.

Installing the WLAN AP 8120 with External Antenna to the ceiling

About this task

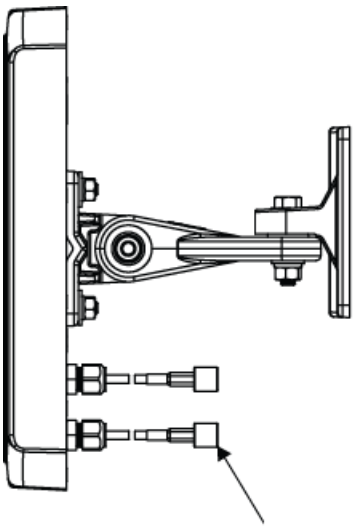
The WLAN AP 8120 with External Antenna installs similarly to the WLAN AP 8120. In addition to installing the access point itself, with the WLAN AP 8120 with External Antenna you must also mount the adjoining antennas. You can mount the WLAN AP 8120 with External Antenna on the ceiling using a ceiling grid adaptor.

Plan your installation to allow for the installation of both the access point and the antennas. Ensure you have the correct length of cable to connect the access point to the antennas. Each antenna comes with three 3–ft pre-installed permanent cables. If your installation distance is greater than the length of the original cables, you can attach additional 10–ft extension cables.

Note:

Assembling the external antenna to the WLAN AP 8120 with External Antenna is completed through Reverse Polarity SMA (RP-SMA) connectors. The installer should properly torque the connector using a 5/16 inch torque wrench that is set to 3-5 in·lbf (0.3 to 0.6 N·m) for brass, and 7-10 in·lbf (0.8–1.1 N·m) for stainless steel connectors. Flats are also provided on the cable side of the connector assembly so that you use a second wrench to prevent it rotating and damaging the joint to the cable. Avaya also recommends that you clean out loose debris from the internal surfaces before connecting.

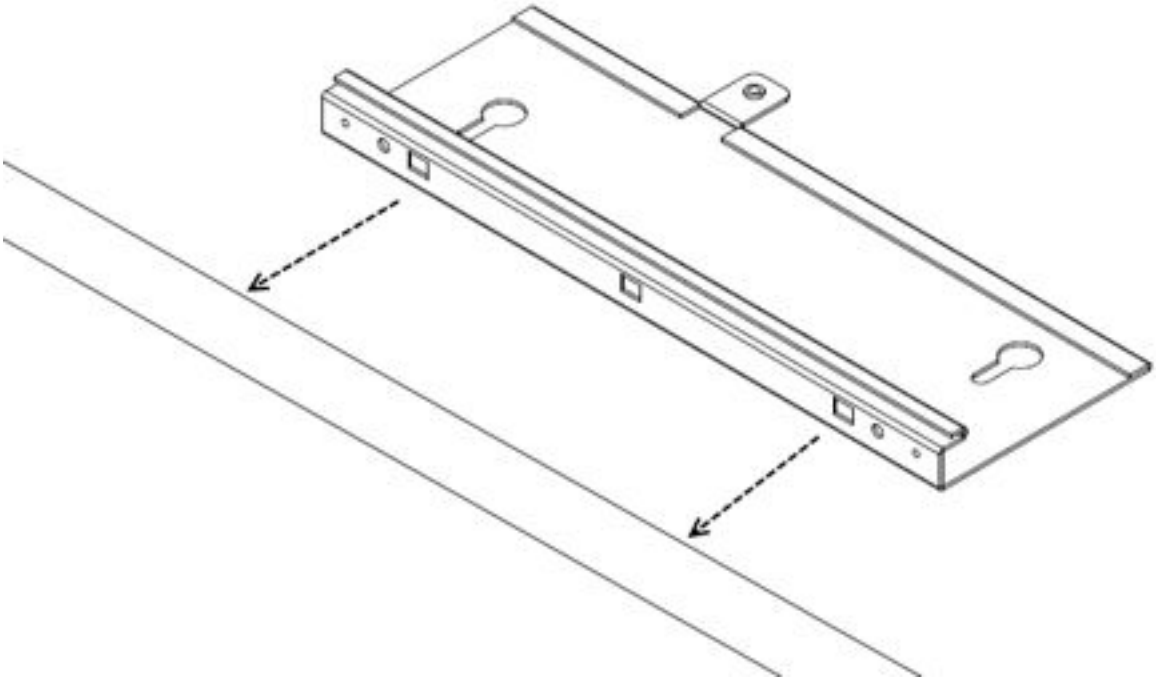
Laird antenna with arrow showing reverse polarity connector



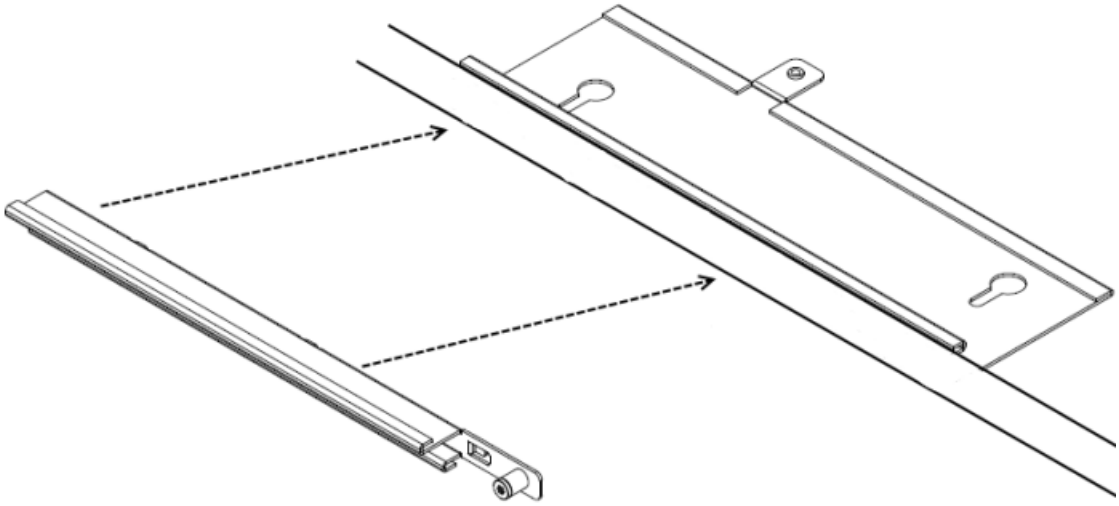
The ceiling grid adaptor comes with two interlocking bracket parts. The larger bracket includes keyhole shaped slots which mate with tabs on the under surface of the AP and a threaded hole that mates with the captive thumbscrew on the AP. The smaller bracket also includes a captive fastener and it can be oriented with respect to the larger bracket in two different ways corresponding to narrow or wide ceiling grids.

Perform the following procedure to install the access point with a ceiling grid adaptor:

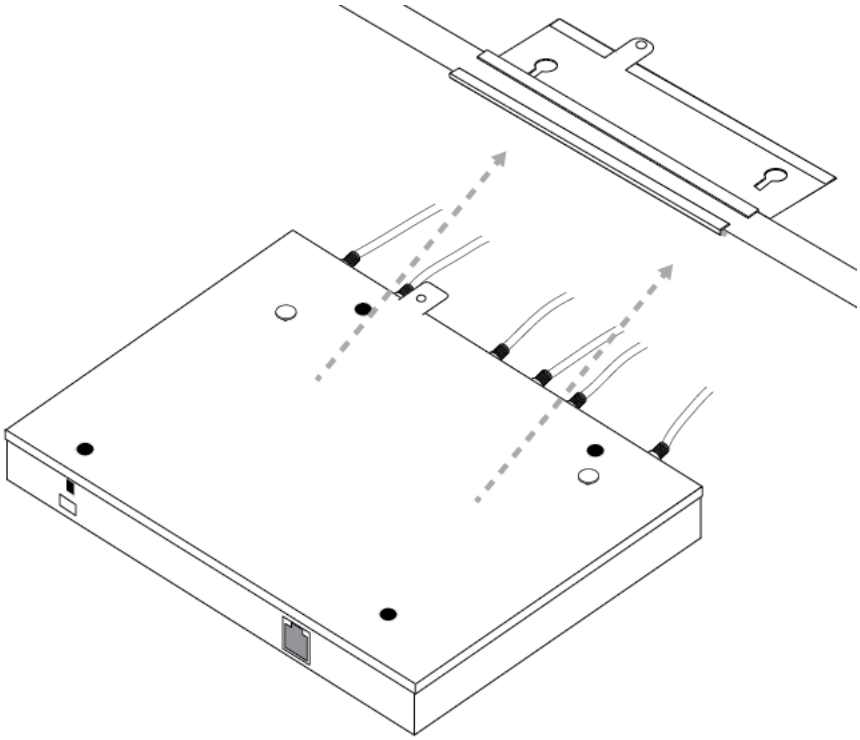
1. Secure a safe work environment. Obtain a ladder that allows easy access to the ceiling grid system.
2. Identify an appropriate location on the ceiling grid where the ceiling T-bars are safely accessible and where the ceiling tiles can be temporarily elevated and cleared away from the work area. The adaptor bracket assembly is intended for use with the thin section grid runners, not the thicker section runners used to cross large spans. To provide access for hands and tools, use a pair of pencils or sticks to hold up the ceiling tiles out of the grid. Doing this provides easy access for securing the bracket to the grid.
3. Mount the larger bracket to the grid. While installing, pay attention to the width of the grid strip in order to ascertain the appropriate orientation for the smaller bracket which is installed next.



4. Mount the interlocking small bracket to the large bracket and clamp the two pieces together on the grid. The smaller bracket has tabs formed into it which engage slots in the larger tab. This allows the two parts to slide together and lock to one another. When this is done, the two brackets effectively clamp themselves around the ceiling grid. When the two halves of the bracket are correctly slid together, the captive fastener in the small bracket should engage threads provided in the larger bracket. Use a screwdriver to screw down the captive fastener. Securing the two brackets in this manner is essential to prevent them from disengaging from one another. Tighten the captive fastener screw securely.



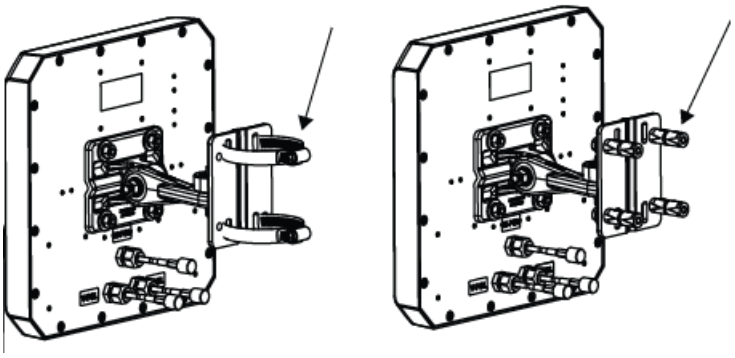
5. Attach the access point to the bracket. Align the access point securing tabs with the keyhole slots in the ceiling grid bracket and carefully slide the access point onto the ceiling grid bracket assembly. If the access point and the bracket assembly are correctly engaged, it should be possible to engage the access points captive thumbscrew into the threaded tab provided on the ceiling grid bracket.



6. Mount the external antennas to the wall within the specified distance from the access point.

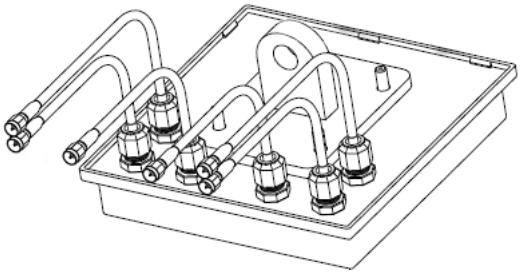
   If you are installing Laird antennas with articulated mount, you must attach the antennas to a mast or a vertical surface using the articulated mount and mounting bolts.

   Laird antennas with arrows showing mast (left) and wall mount (right) options



   If you are installing TYCO antennas, attach mounting brackets to the wall and attach the antennas to the mounting brackets.

TYCO antenna showing attached cables



7. Verify that the antennas are securely mounted to the ceiling (or mast or vertical surface, in the case of a Laird antenna installation).
8. Attach the antenna cables to the access point.
9. Make electrical connections and return ceiling tiles.

Safety Messages

Caution:

The Avaya WLAN AP 8120 with External Antenna radios are disabled by default and can be enabled only by a system administrator.

Warning:

This situation or condition can cause injury.

Warning:

High voltage. This situation or condition can cause injury due to electric shock.

Warning:

Only qualified service personnel must perform installation. Read and follow all warning notices and instructions marked on the product or included in the documentation.

Warning:

Install this device in such a manner as to maintain a minimum of 24.9 cm (9.8 inches) separation distance between the radiating element(s) and all persons. This safety warning conforms with FCC radio frequency exposure limits.

Warning:

Do not operate access point near unshielded blasting caps or in an otherwise explosive environment unless the device has been modified for such use by qualified personnel.

Warning:

Do not touch or move the access point when the antennas are transmitting or receiving.

Warning:

Before using a wireless device in a hazardous location, consult the local codes, national codes, and safety directors of the location for usage constraints.

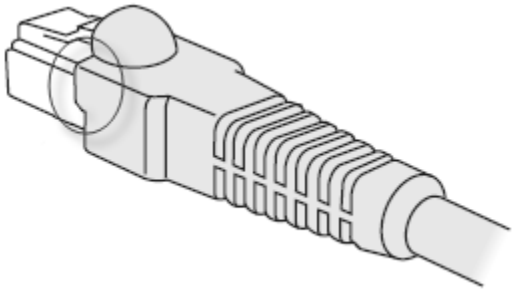
Chapter 4: Deutsch

About this task

Verwenden Sie die folgenden Verfahren und Informationen zur Installation der Access Points Avaya WLAN AP 8120 mit externer Antenne.

Kabelanschlüsse

An die Ethernet-Ports an den Access Points können nicht CAT 5-Kabel mit abgesetzter Kabelhülse angeschlossen werden (siehe unten). Der RJ-45-Anschluss des Kabels sitzt in diesem Fall nicht richtig auf dem Port des Access Points auf. Verwenden Sie stattdessen ein CAT 5-Kabel mit einer geraden Kabelhülse.



Wandmontage des WLAN AP 8120 mit externer Antenne

About this task

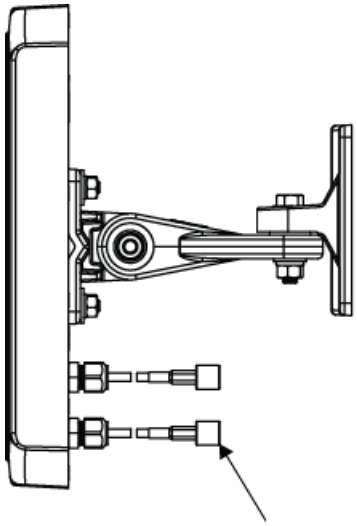
Bei der Montage des WLAN AP 8120 mit externer Antenne ist ähnlich vorzugehen wie bei der Montage des WLAN AP 8120. Zusätzlich zur Installation des Access Point müssen beim Modell „WLAN AP 8120 mit externer Antenne“ außerdem die zugehörigen Antennen angebracht werden. Sie können bei der Deckenmontage des WLAN AP 8120 mit externer Antenne Wanddübel verwenden.

Berücksichtigen Sie bei der Planung der Montage den Platzbedarf des Access Point und der Antennen. Sie benötigen ausreichend Kabellänge, um den Access Point mit den Antennen verbinden zu können. An jeder Antenne ist ein 90 cm langes Kabel untrennbar angebracht. Wenn das Kabel zu kurz ist für den Abstand zwischen Access Point und Antenne, können Sie ein 3 Meter langes Zwischenkabel einsetzen.

Note:

Der Anschluss der externen Antenne an den WLAN AP 8120 mit externer Antenne erfolgt mit SMA-Steckverbindern mit umgekehrter Polarität (RP-SMA). Der Monteur muss den Steckverbinder mit einem Drehmomentschlüssel (5/16", 8 mm) festziehen. Für Messingstecker muss ein Drehmoment zwischen 0,3 und 0,6 Nm (3-5 in lbf) eingestellt werden, für Edelstahlstecker ein Drehmoment zwischen 0,8 und 1,1 Nm (7-10 in lbf). Am Stecker ist kabelseitig eine Abflachung vorhanden. An diese kann ein zweiter Schraubenschlüssel zum Dagegenhalten angesetzt werden. Das Kabel kann sich dann nicht mitdrehen, und die Kabelverbindung wird nicht beschädigt. Avaya empfiehlt außerdem, vor dem Anschließen losen Schmutz aus dem Innenbereich des Steckers zu entfernen.

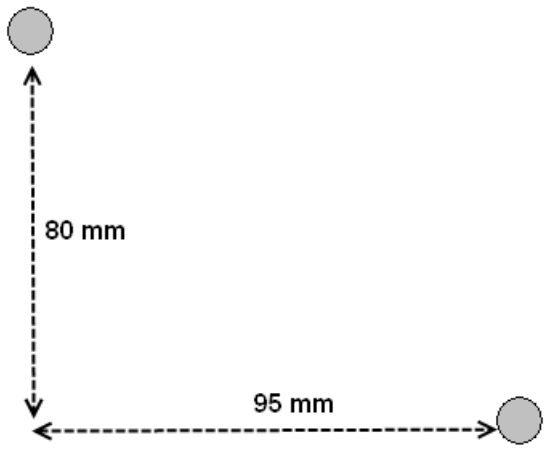
Laird-Antennen. Die Pfeile zeigen auf die Steckverbinder mit umgekehrter Polarität.



Die Wandhalterung wird mit Wanddübeln mit einem Gewindedurchmesser von 3,5-4,5 mm befestigt. Bei Gewindedurchmessern über 3,5 mm dürfen nur die mit „A“ markierten Montagelöcher der Wandhalterung verwendet werden. Bei Gewindedurchmessern unter 3,5 mm können Sie die mit „A“ und die mit „B“ markierten Montagelöcher verwenden. Der Kopfdurchmesser des Wanddübels muss kleiner als 10 mm sein, damit die Wandhalterung richtig montiert werden kann.

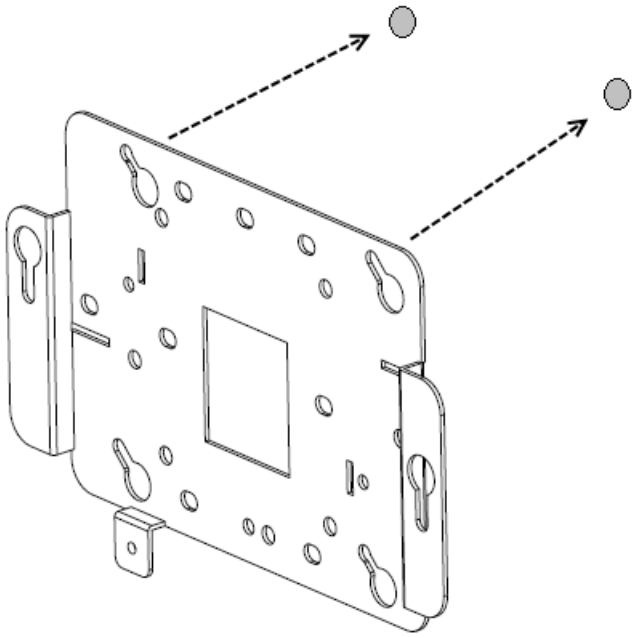
So bringen Sie einen Wireless LAN Access Point an der Wand an:

1. Bestimmen Sie die richtige Position der Wanddübel. Die Wanddübel müssen waagerecht in einem Abstand von 95 mm und senkrecht in einem Abstand von 80 mm eingebracht werden.

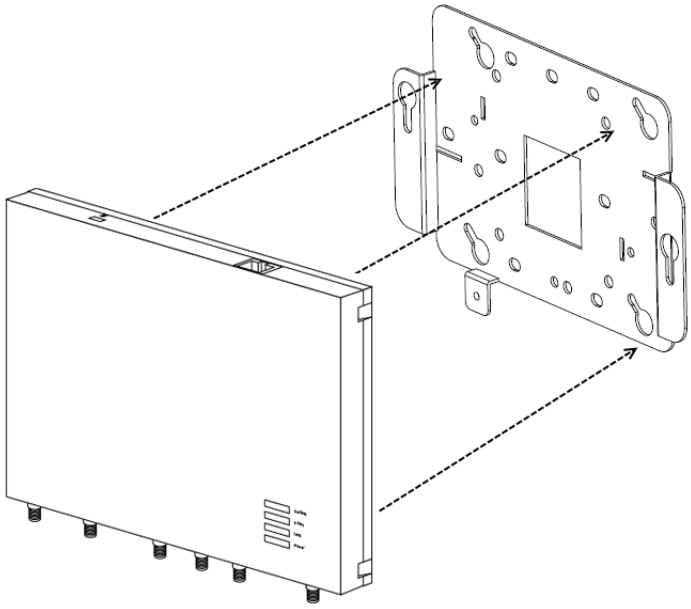


Die Wandhalterung wird mit mindestens 2 und höchstens 4 Schrauben befestigt.

2. Drehen Sie die Schrauben in die Wand, aber ziehen Sie sie nicht ganz fest. Lassen Sie einen Abstand von mindestens 2 mm zwischen dem Schraubenkopf und der Wand.
3. Setzen Sie die Wandhalterung auf die Schraubenköpfe auf. Schieben Sie die Halterung nach rechts (von Ihnen aus gesehen).



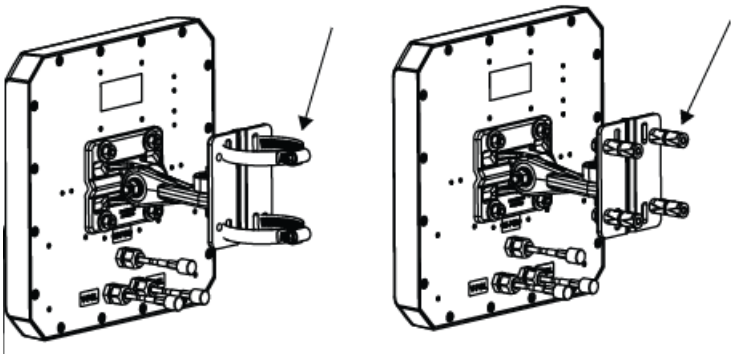
4. Befestigen Sie die Wandhalterung durch Festziehen der Schrauben sicher an der Wand.
5. Richten Sie die Montagelaschen unten am Metallgehäuse des Access Point auf die senkrechten Längsschlitze an der Wandhalterung aus.



6. Schieben Sie den Access Point vorsichtig in den Längsschlitzen nach unten, sodass die Montagelaschen des Access Point am unteren Rand der Längsschlitze aufsitzen.
7. Befestigen Sie den Access Point an der Wandhalterung, und ziehen Sie die Daumenschrauben an.
8. Prüfen Sie, ob der Access Point sicher an der Wandhalterung und an der Wand angebracht ist.
9. Bringen Sie die externen Antennen an der Wand an. Halten Sie dabei den vorgeschriebenen Abstand zum Access Point ein.

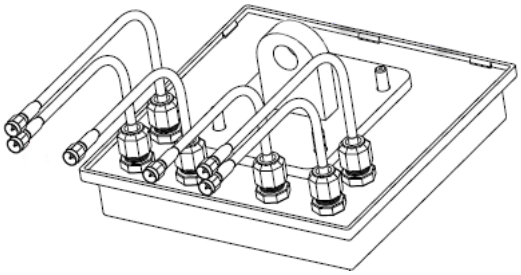
   Laird-Antennen können an einem Mast oder einer senkrechten Fläche (Wand) angebracht werden. Verwenden Sie dazu die Gelenkhalterung und die Montageschrauben.

   Laird-Antennen. Die Pfeile zeigen auf die Halterungsoptionen „Mast“ (links) und „Wand“ (rechts).



Werden TYCO-Antennen verwendet, müssen die Montagehalterungen an die Wand montiert werden. Die Antennen werden auf die Montagehalterungen aufgesetzt.

TYCO-Antenne mit aufgeschraubten Kabeln



10. Prüfen Sie, ob die Antennen sicher an der Wand (bzw. am Mast, falls Laird-Antennen verwendet werden) montiert sind.
11. Schließen Sie die Antennenkabel an den Access Point an.
12. Stellen Sie die elektrischen Verbindungen her.

Deckenmontage des WLAN AP 8120 mit externer Antenne

About this task

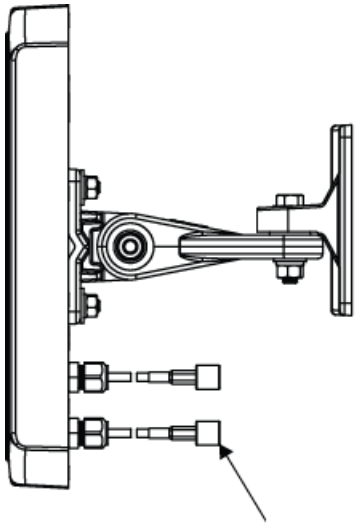
Bei der Montage des WLAN AP 8120 mit externer Antenne ist ähnlich vorzugehen wie bei der Montage des WLAN AP 8120. Zusätzlich zur Installation des Access Point müssen beim Modell „WLAN AP 8120 mit externer Antenne“ außerdem die zugehörigen Antennen angebracht werden. Sie können bei der Deckenmontage des WLAN AP 8120 mit externer Antenne einen Adapter für die Deckenmontage verwenden.

Berücksichtigen Sie bei der Planung der Montage den Platzbedarf des Access Point und der Antennen. Sie benötigen ausreichend Kabellänge, um den Access Point mit den Antennen verbinden zu können. An jeder Antenne ist ein 90 cm langes Kabel untrennbar angebracht. Wenn das Kabel zu kurz ist für den Abstand zwischen Access Point und Antenne, können Sie ein 3 Meter langes Zwischenkabel einsetzen.

Note:

Der Anschluss der externen Antenne an den WLAN AP 8120 mit externer Antenne erfolgt mit SMA-Steckverbindern mit umgekehrter Polarität (RP-SMA). Der Monteur muss den Steckverbinder mit einem Drehmomentschlüssel (5/16", 8 mm) festziehen. Für Messingstecker muss ein Drehmoment zwischen 0,3 und 0,6 Nm (3-5 in lbf) eingestellt werden, für Edelstahlstecker ein Drehmoment zwischen 0,8 und 1,1 Nm (7-10 in lbf). Am Stecker ist kabelseitig eine Abflachung vorhanden. An diese kann ein zweiter Schraubenschlüssel zum Dagegenhalten angesetzt werden. Das Kabel kann sich dann nicht mitdrehen, und die Kabelverbindung wird nicht beschädigt. Avaya empfiehlt außerdem, vor dem Anschließen losen Schmutz aus dem Innenbereich des Steckers zu entfernen.

Laird-Antennen. Die Pfeile zeigen auf die Steckverbinder mit umgekehrter Polarität.



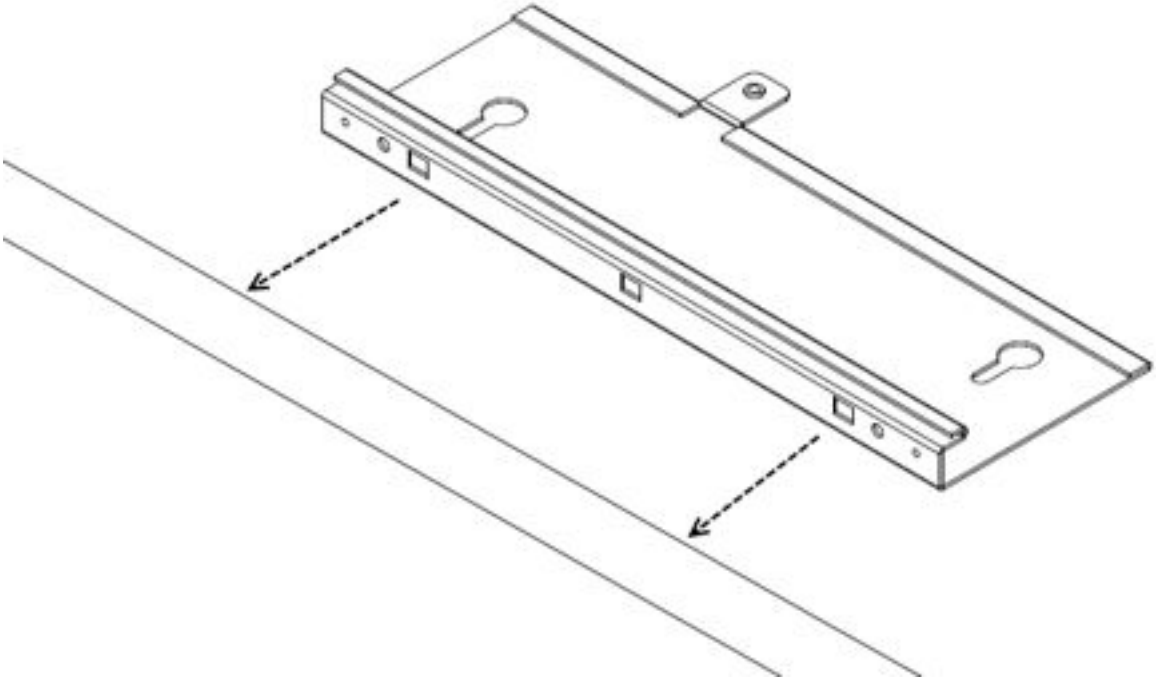
Der Adapter für die Deckenmontage verfügt über zwei ineinander greifende Halterungen. Die Montagelaschen unten am Access Point passen in die Längsschlitze an der größeren Halterung. Die unverlierbare Schraube am Access Point wird in das Gewindeloch an der größeren Haltung geschraubt. Die unverlierbare Schraube an der kleineren Halterung kann je nach Rastergröße auf zweierlei Weise an der größeren Halterung ausgerichtet werden.

So montieren Sie einen Access Point an einer Rasterdecke:

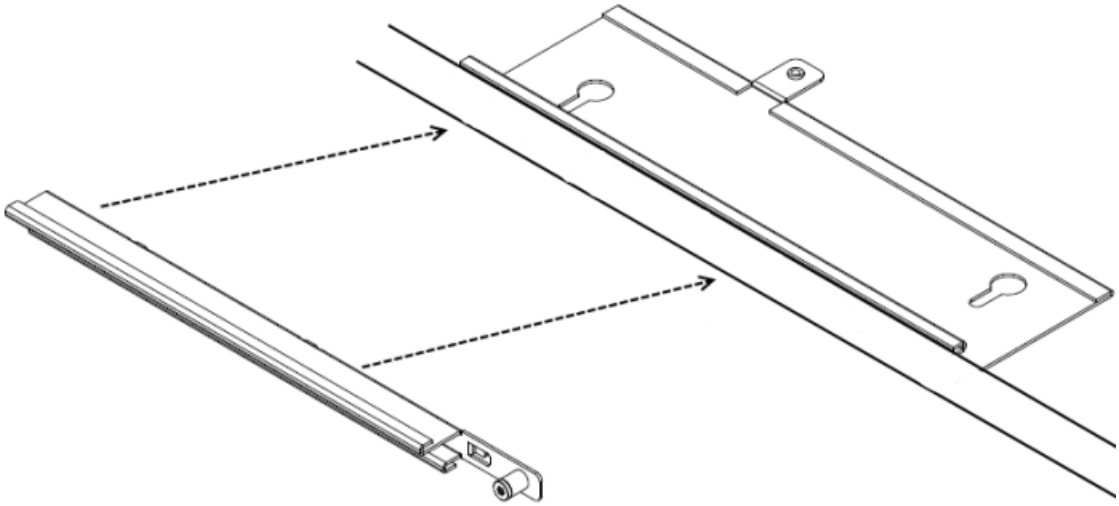
1. Sorgen Sie für eine sichere Arbeitsumgebung. Sie benötigen eine Leiter, auf der Sie zur Rasterdecke hochsteigen können.
2. Bestimmen Sie eine geeignete Montageposition an der Rasterdecke. Die T-Profile müssen sicher zugänglich sein und die Deckenplatten müssen vorübergehend abgehängt werden können. Der Adapter für die Deckenmontage wird an den dünneren Querschienen befestigt, nicht an den dickeren und längeren Haupttrageschienen. Um ungehindert arbeiten zu können, heben Sie die

Deckenplatten mit zwei Stiften oder Stäben nach oben aus dem Deckenraster. So erhalten Sie einfachen Zugang zum Befestigen der Halterung.

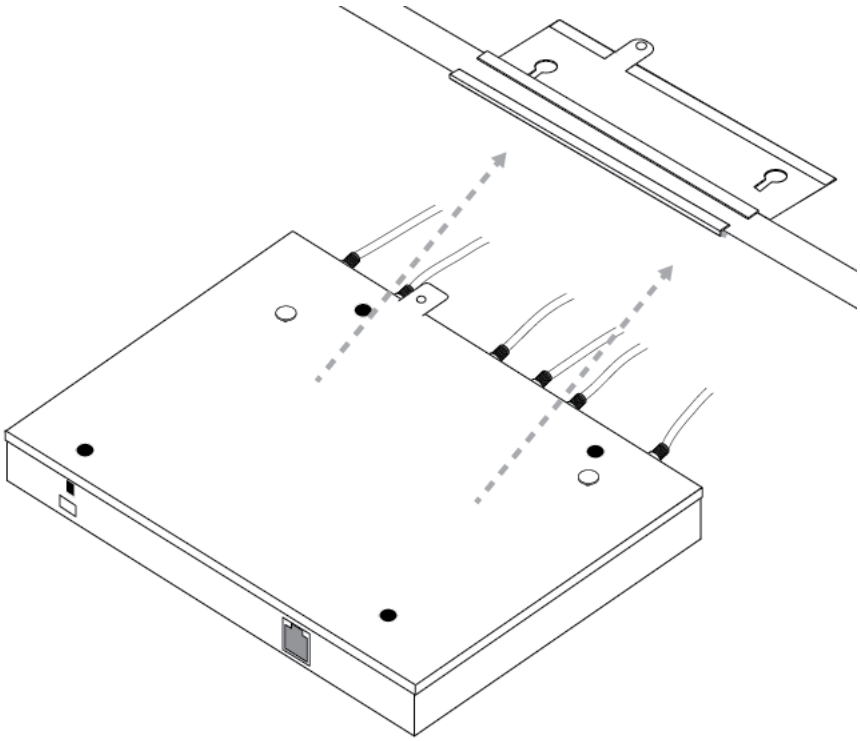
3. Befestigen Sie die größere Halterung am Deckenraster. Achten Sie dabei auf die Breite der Schiene, um die richtige Positionierung für die kleinere Halterung zu bestimmen, die anschließend montiert wird.



4. Montieren Sie die kleinere Halterung so an der größeren, dass sie ineinander greifen, und klemmen Sie die beiden Halterungen zusammen. Die Montagelaschen der kleineren Halterung passen in die Schlitze der größeren Halterung. So können die beiden Halterungen sicher arretiert und um die Deckenschiene herum montiert werden. Wenn Sie die beiden Halterungen richtig miteinander verbunden haben, passt die unverlierbare Schraube an der kleineren Halterung in das Gewinde in der größeren Halterung. Sichern Sie die unverlierbare Schraube mit einem Schraubendreher. Es ist sehr wichtig, die beiden Halterungen auf diese Weise zu sichern, damit sie sich nicht voneinander lösen. Ziehen Sie die unverlierbare Schraube fest an.



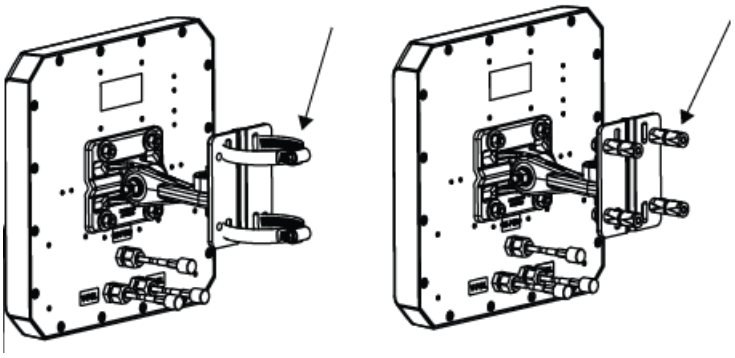
5. Befestigen Sie den Access Point an der Halterung. Richten Sie die Sicherungslaschen am Access Point an den Längsschlitzen an der Deckenhalterung aus, und schieben Sie den Access Point vorsichtig auf die montierte Deckenhalterung. Wenn der Access Point richtig auf die Deckenhalterung aufgesetzt ist, kann die unverlierbare Daumenschraube auf dem Access Point in das Gewinde an der Deckenhalterung geschraubt werden.



6. Bringen Sie die externen Antennen an der Wand an. Halten Sie dabei den vorgeschriebenen Abstand zum Access Point ein.

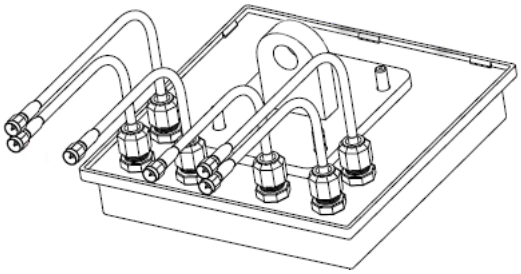
Laird-Antennen mit Gelenkmechanismus müssen an einem Mast oder einer senkrechten Fläche angebracht werden. Verwenden Sie dazu die Gelenkhalterung und die Montageschrauben.

Laird-Antennen. Die Pfeile zeigen auf die Halterungsoptionen „Mast“ (links) und „Wand“ (rechts).



Werden TYCO-Antennen verwendet, müssen die Montagehalterungen an die Wand montiert werden. Die Antennen werden auf die Montagehalterungen aufgesetzt.

TYCO-Antenne mit aufgeschraubten Kabeln



7. Prüfen Sie, ob die Antennen sicher auf der Decke (bzw. am Mast oder auf senkrechter Fläche, falls Laird-Antennen verwendet werden) montiert sind.
8. Schließen Sie die Antennenkabel an den Access Point an.
9. Stellen Sie die elektrischen Verbindungen her, und setzen Sie die Deckenplatten wieder ein.

Sicherheitshinweise

Caution:

Die Frequenzempfänger des Avaya WLAN AP 8120 mit externer Antenne sind standardmäßig deaktiviert und können nur von einem Systemadministrator aktiviert werden.

Warning:

Dieser Zustand bzw. diese Bedingung kann zu Verletzungen führen.

Warning:

Hochspannung. Dieser Zustand bzw. diese Bedingung kann aufgrund von Stromschlag zu Verletzungen führen.

Warning:

Die Installation darf nur von qualifiziertem Wartungspersonal durchgeführt werden. Lesen und befolgen Sie alle Warnhinweise und Anweisungen, die am Produkt angebracht oder in der Dokumentation zu finden sind.

Warning:

Installieren Sie das Gerät so, dass zwischen den Strahlungselementen und allen Personen ein Abstand von mindestens 24,9 cm gewährleistet ist. Diese Sicherheitswarnung entspricht den FCC-Grenzwerten für Hochfrequenzstrahlung.

Warning:

Setzen Sie den Access Point nicht in der Nähe von ungeschützten Zündkapseln oder in anderen Umgebungen mit Explosionsgefahr ein, es sei denn, das Gerät wurde von qualifiziertem Personal für einen solchen Einsatz modifiziert.

Warning:

Berühren oder bewegen Sie den Access Point nicht, wenn die Antennen gerade Funksignale senden oder übertragen.

Warning:

Informieren Sie sich vor der Verwendung eines Wireless-Geräts in einer Gefahrenumgebung über regionale und überregionale Vorschriften zu Nutzungsbeschränkungen sowie die Sicherheitsrichtlinien für den jeweiligen Standort.

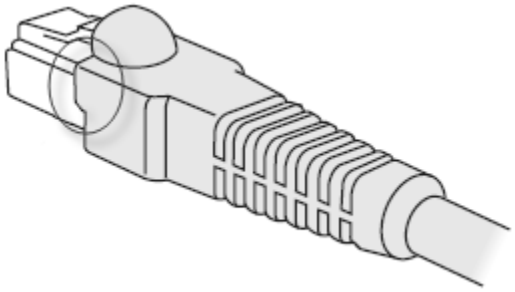
Chapter 5: Español

About this task

Al momento de instalar los puntos de acceso WLAN AP 8120 con antena externa de Avaya, tenga en cuenta el procedimiento y la información que se presentan a continuación.

Requisitos de cableado

Los puertos de Ethernet en el punto de acceso no pueden aceptar un cable CAT-5 que tenga una cubierta despareja, como se muestra a continuación. El conector RJ-45 del cable no se fijará correctamente en el receptáculo en el punto de acceso. Use un cable CAT-5 con una cubierta pareja.



Cómo montar la WLAN AP 8120 con antena externa en una pared

About this task

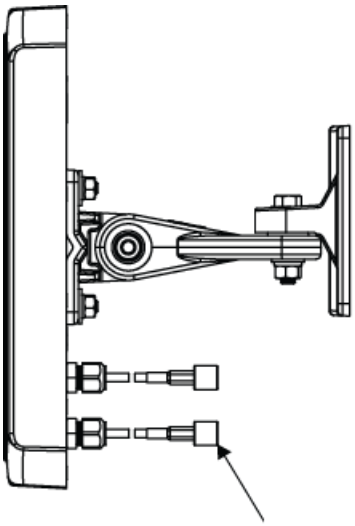
La WLAN AP 8120 con la antena externa se instala en forma similar a la WLAN AP 8120. Además de instalar el punto de acceso en sí mismo, con la WLAN AP 8120 con antena externa, también debe montar las antenas unidas. Puede montar la WLAN AP 8120 con antena externa en la pared utilizando anclajes para pared.

Planifique la instalación para tener en cuenta tanto la instalación del punto de acceso como de las antenas. Asegúrese de tener la longitud de cable correcta para conectar el punto de acceso a las antenas. Cada antena incluye tres cables permanentes preinstalados de 3 pies. Si la distancia de instalación es mayor que la longitud de los cables originales, puede adjuntar cables de extensión adicionales de 10 pies.

Note:

La instalación de la antena externa con la WLAN AP 8120 con antena externa se completa a través de conectores de polaridad invertida SMA (RP-SMA). El instalador debe ajustar correctamente el conector usando una llave dinamométrica de 5/16 pulgadas ajustada a 3-5 libras pulgadas (in-lbf) (0,3 a 0,6 N·m) para conectores de bronce y 7-10 in-lbf (0,8–1,1 N·m) para conectores de acero inoxidable. También se proveen caras planas del lado del cable de la unidad del conector para utilizar una segunda llave para impedir que gire y dañe el ensamble al cable. Avaya también recomienda limpiar los desechos sueltos de las superficies internas antes de conectar.

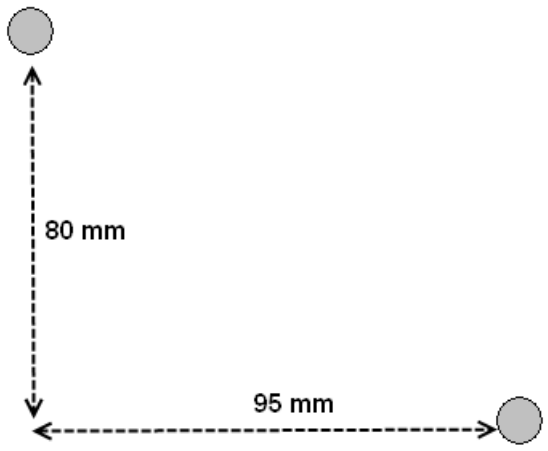
Antena Laird con flecha que muestra el conector con polaridad invertida.



El soporte de montaje está diseñado para usar anclajes de pared con diámetros de sección roscada de entre 3,5 mm y 4,5 mm. Si los anclajes de pared tienen diámetros roscados de más de 3,5 mm, solo pueden usarse los orificios de montaje marcados "A". Si los anclajes de pared tienen diámetros roscados de menos de 3,5 mm, pueden usarse los orificios marcados "A" y los marcados "B". Todos los anclajes de pared deben tener un diámetro de cabezal de menos de 10 mm, de lo contrario, el soporte de montaje de pared no podrán instalarse sobre ellos.

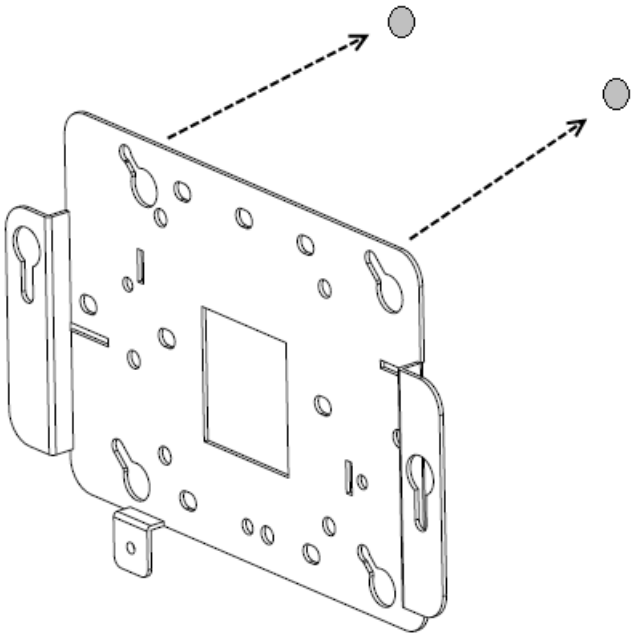
Realice el siguiente procedimiento para montar un punto de acceso LAN inalámbrico en una pared:

1. Ubique la posición correcta de los anclajes de pared. Los anclajes de pared deben estar separados con una distancia de 95 mm en forma horizontal y una distancia de 80 mm en forma vertical.



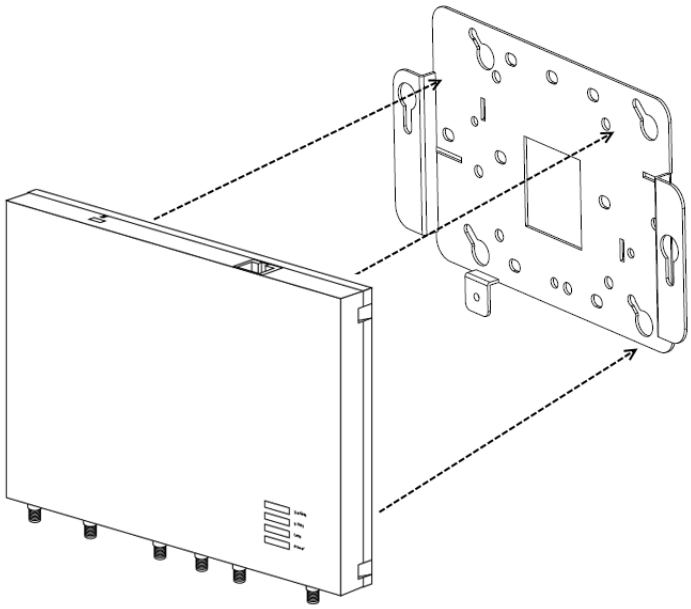
El soporte de pared está diseñado para usar un mínimo de 2 anclajes y un máximo de 4.

2. Instale los tornillos en los anclajes de la pared pero no los inserte por completo, deje un espacio mínimo de 2 mm entre el cabezal del tornillo y la pared.
3. Deslice el soporte de la pared por los cabezales de los tornillos y deslice el soporte hacia la derecha visto como de frente a la pared.



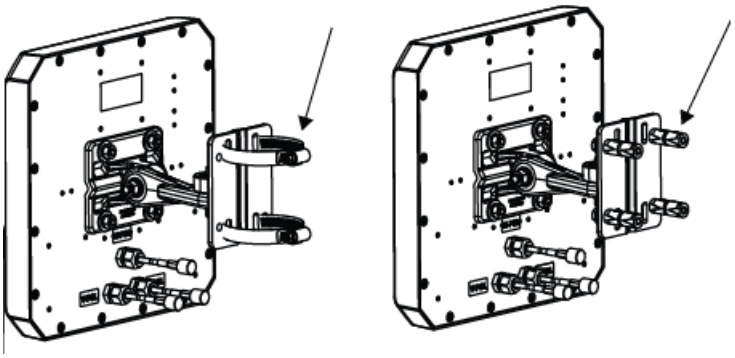
4. Ajuste los tornillos para fijar el soporte de montaje de pared con firmeza contra la pared.

5. Alinee las lengüetas de montaje en la parte inferior de la caja metálica del punto de acceso con las ranuras verticales con forma de cerradura del soporte de montaje.

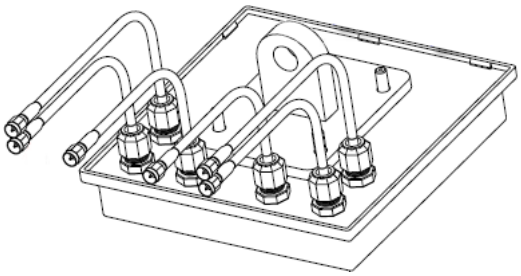


6. Permita que el punto de acceso se deslice por las ranuras con forma de cerradura, asegurándose de que las lengüetas de montaje del punto de acceso estén asentadas en la parte de abajo de la ranura.
7. Asegure el punto de acceso en el soporte de montaje de pared y apriete los tornillos de ajuste.
8. Verifique que el punto de acceso quede bien sujeto tanto al soporte como a la pared.
9. Monte las antenas externas a la pared dentro de la distancia especificada del punto de acceso.

   Si instala antenas Laird, puede montarlas en un mástil o en una superficie vertical (pared) utilizando el montaje articulado y los pernos de montaje.
   Antenas Laird con las flechas que muestran las opciones de mástil (izquierda) y montaje de pared (derecha).



Si instala antenas TYCO, fije los soportes de montaje a la pared y fije las antenas a los soportes de montaje.
La Antena TYCO muestra los cables conectados.



10. Verifique que las antenas estén montadas de manera segura a la pared (o mástil, en caso de instalar una antena Laird).
11. Conecte los cables de la antena al punto de acceso.
12. Realice las conexiones eléctricas.

Instalación de la WLAN AP 8120 con la antena externa en el techo

About this task

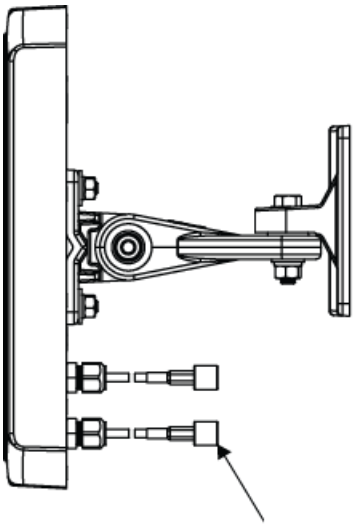
La WLAN AP 8120 con la antena externa se instala en forma similar a la WLAN AP 8120. Además de instalar el punto de acceso en sí mismo, con la WLAN AP 8120 con la antena externa, también debe montar las antenas unidas. Puede montar la WLAN AP 8120 con antena externa en el techo utilizando un adaptador para las estructuras de los techos.

Planifique la instalación para permitir la instalación tanto del punto de acceso como de las antenas. Asegúrese de tener la longitud de cable correcta para conectar el punto de acceso a las antenas. Cada antena incluye tres cables permanentes preinstalados de 3 pies. Si la distancia de instalación es mayor que la longitud de los cables originales, puede adjuntar cables de extensión adicionales de 10 pies.

Note:

La instalación de la antena externa con la WLAN AP 8120 con antena externa se completa a través de conectores de polaridad invertida SMA (RP-SMA). El instalador se debe ajustar correctamente al conector usando una llave dinamométrica de 5/16 pulgadas ajustada a 3-5 libras pulgadas (in-lbf) (0,3 a 0,6 N·m) para conectores de bronce y 7-10 in-lbf (0,8–1,1 N·m) para conectores de acero inoxidable. También se proveen caras planas del lado del cable de la unidad del conector para usar una segunda llave para impedir que gire y dañe el ensamble al cable. Avaya también recomienda limpiar los desechos sueltos de las superficies internas antes de conectar.

Antena Laird con flecha que muestra el conector con polaridad invertida.



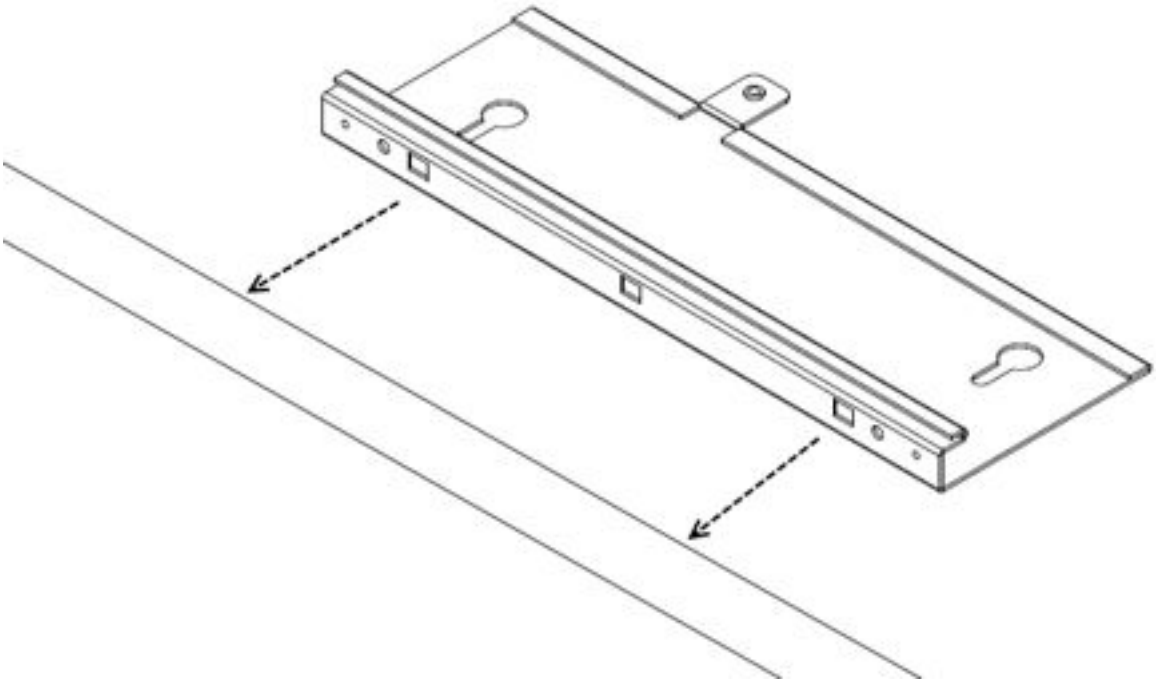
El adaptador para estructuras de techos incluye un soporte de dos piezas que van conectadas entre sí. El soporte más grande tiene ranuras con forma de cerradura que coinciden con lengüetas ubicadas en la superficie inferior del punto de acceso, además de contar con un orificio roscado para el tornillo imperdible de ajuste manual del punto de acceso. El más pequeño también incluye un tornillo imperdible y puede orientarse de dos maneras distintas con respecto al soporte de mayor tamaño a fin de adaptarse a estructuras de techos desmontables angostas y anchas.

Para instalar el punto de acceso con un adaptador para estructuras de techos desmontables, siga los pasos que se presentan a continuación:

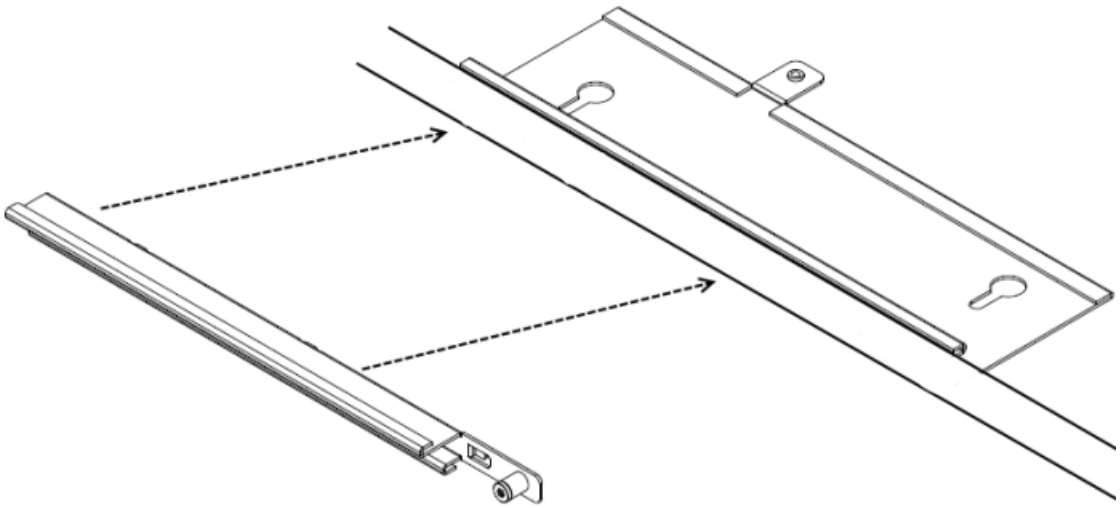
1. Tome las medidas necesarias para garantizar la seguridad del lugar de trabajo. Consiga una escalera que le permita llegar fácilmente a la estructura del techo desmontable.
2. Identifique un lugar apropiado en la ubicación del techo desmontable donde pueda accederse sin correr riesgos a los perfiles en T y donde las placas del cielorraso puedan levantarse y quitarse momentáneamente del sector de trabajo. El adaptador sirve para perfiles delgados de techos desmontables, no para los perfiles más gruesos que se utilizan para cubrir distancias mayores. A fin de poder acceder

al punto de instalación, utilice un par de lápices o palitos para mantener levantadas las placas del cielorraso de la estructura. De esta manera, resulta fácil llegar con las manos y las herramientas para sujetar bien el soporte a la estructura.

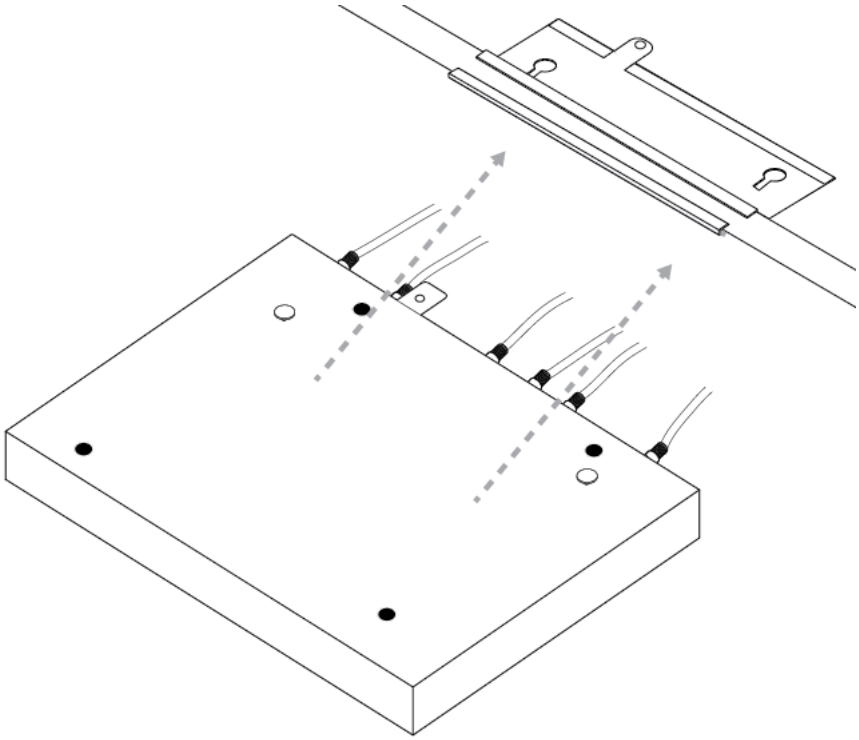
3. Coloque el soporte más grande en la estructura. Mientras lo hace, fíjese cuál es el ancho del perfil con objeto de determinar la orientación adecuada del soporte pequeño que debe instalarse a continuación.



4. Monte el soporte pequeño en el grande y ajuste ambos soportes a la estructura. El soporte más pequeño tiene lengüetas que encajan en ranuras ubicadas en el soporte más grande. Esto permite que las dos piezas queden conectadas y se sujeten entre sí. Cuando esto se realice, los dos soportes efectivamente se sujetarán con firmeza a la estructura del techo desmontable. Si ambas piezas del soporte quedar bien conectadas, el tornillo imperdible del soporte pequeño tiene que quedar alineado con el orificio roscado del soporte grande. Utilice un destornillador para ajustar el tornillo imperdible. Es muy importante sujetar los dos soportes soporte de esta manera para impedir que se suelten. Ajuste bien el tornillo imperdible.



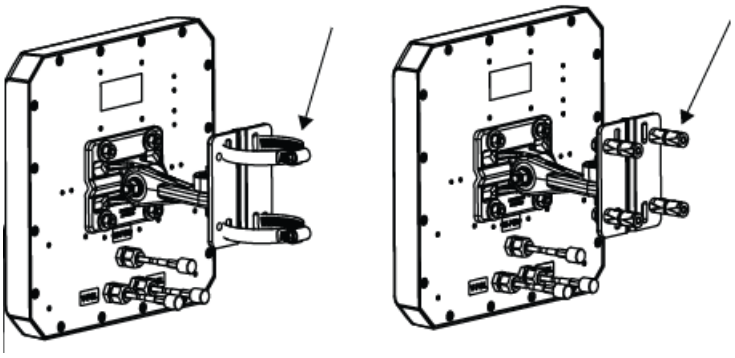
5. Monte el punto de acceso en el soporte. Alinee las lengüetas del punto de acceso con las ranuras con forma de cerradura del adaptador para estructuras de techos desmontables e inserte con cuidado el punto de acceso en el adaptador. Si tanto el punto de acceso como el adaptador están bien colocados, el tornillo imperdible de ajuste manual del punto de acceso tiene que coincidir con la lengüeta roscada del adaptador para estructuras de techos desmontables.



6. Monte las antenas externas a la pared dentro de la distancia especificada del punto de acceso.

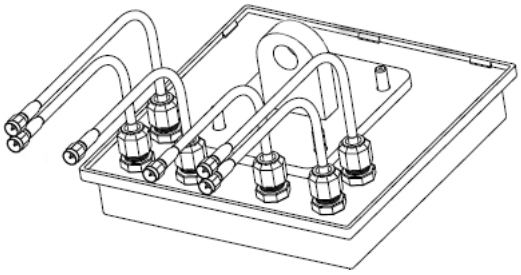
Si instala antenas Laird con montaje articulado, debe conectar las antenas a un mástil o una superficie vertical utilizando el montaje articulado y los pernos de montaje.

Las antenas Laird con las flechas que muestran las opciones de mástil (izquierda) y montaje de pared (derecha).



Si instala antenas TYCO, fije los soportes de montaje a la pared y fije las antenas a los soportes de montaje.

La antena TYCO muestra los cables conectados.



7. Verifique que las antenas estén montadas de manera segura al techo (o mástil o superficie vertical, en caso de instalar una antena Laird).
8. Conecte los cables de la antena al punto de acceso.
9. Realice las conexiones eléctricas y vuelva a colocar las placas del cielorraso.

Advertencias de seguridad

Caution:

Las radios WLAN AP 8120 con antena externa de Avaya se encuentran desactivadas de manera predeterminada, y sólo puede activarlas un administrador de sistemas.

Warning:

Esta situación o estado puede provocar lesiones.

Warning:

Alta tensión. Esta situación o estado puede provocar lesiones por descarga eléctrica.

Warning:

La instalación debe dejarse en manos de personal de servicio técnico especializado. Lea y respete todas las advertencias de seguridad e instrucciones que figuren en el producto o en la documentación pertinente.

Warning:

Instale este dispositivo de modo que quede una separación de como mínimo 24,9 cm (9,8 pulgadas) entre las personas y todo lo que emita señales de radiofrecuencia. Esta advertencia de seguridad se ajusta a los límites de exposición a señales de radiofrecuencia que dicta la FCC.

Warning:

No utilice el punto de acceso cerca de detonadores sin blindaje ni en ningún tipo de lugar en que exista riesgo de explosión a menos que personal especializado haya adaptado el dispositivo para dicho fin.

Warning:

No toque ni mueva el punto de acceso cuando las antenas estén transmitiendo o recibiendo información.

Warning:

Antes de utilizar un dispositivo inalámbrico en un entorno peligroso, familiarícese con las normativas locales y nacionales, y consulte al encargado de seguridad del lugar para estar al tanto de los usos permitidos.

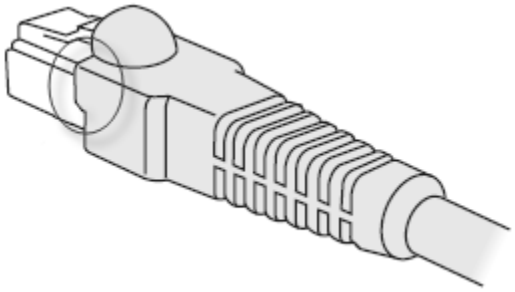
Chapter 6: Français

About this task

Utilisez les procédures et informations suivantes lors de l'installation des points d'accès WLAN AP 8120 avec antenne externe d'Avaya.

Configuration requise pour les câbles

Les câbles CAT-5 dotés d'une gaine irrégulière, comme illustré ci-dessous, ne sont pas adaptés aux ports Ethernet du point d'accès. Sur ce type de câble, le connecteur RJ-45 ne s'insère pas correctement dans le logement du point d'accès. Utilisez plutôt un câble CAT-5 doté d'une gaine régulière.



Installation murale du point d'accès 8120 WLAN avec antenne externe

About this task

La procédure d'installation du point d'accès 8120 WLAN avec antenne externe est identique à celle du point d'accès 8120 WLAN. En plus de l'installation du point d'accès proprement dite, le point d'accès 8120 WLAN avec antenne externe nécessite également le montage des antennes adjacentes. Vous pouvez utiliser des dispositifs d'ancrage au mur pour fixer le point d'accès 8120 WLAN avec antenne externe.

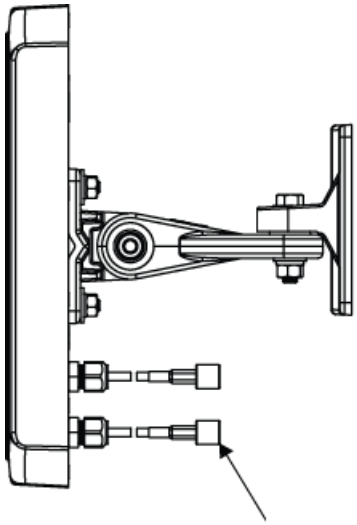
Lors de l'installation, pensez à laisser un espace suffisant pour installer à la fois le point d'accès et les antennes. Vérifiez que la longueur de câble est suffisante pour relier le point d'accès aux antennes. Chaque antenne est livrée avec des câbles permanents pré-installés d'une longueur de 0,91 m (3 pieds). Si la distance de votre installation est supérieure à la longueur

des câbles d'origine, vous pouvez utiliser des rallonges supplémentaires d'une longueur de 3,04 m (10 pieds).

Note:

Des connecteurs SMA à polarité inversée (RP-SMA) permettent de fixer l'antenne externe au point d'accès 8120 WLAN avec antenne externe. Le connecteur doit être correctement fixé à l'aide d'une clé dynamométrique de 5/16 pouces réglée sur 0,3 à 0,6 Nm pour les connecteurs en cuivre et sur 0,8 à 1,1 Nm pour les connecteurs en acier inoxydable. Des embouts sont également placés au niveau des câbles de l'assemblage de connecteurs afin qu'une autre clé puisse être utilisée pour éviter toute rotation et endommagement du raccordement aux câbles. Il est recommandé de nettoyer les dépôts présents sur les surfaces internes avant de procéder au raccordement.

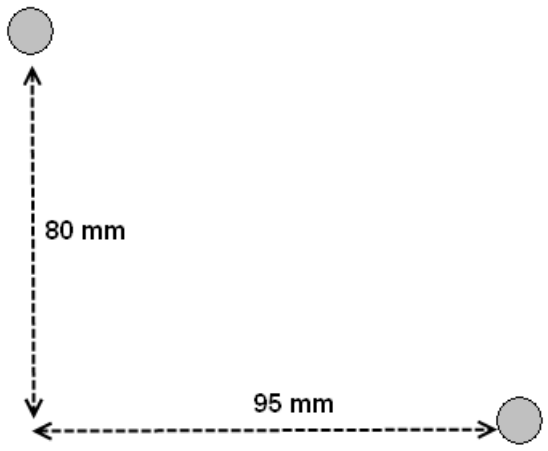
Antenne Laird avec flèches indiquant un connecteur à polarité inversée



Le support de montage est conçu pour utiliser des dispositifs d'ancrage au mur équipés de diamètres de filetage de sections allant de 3,5 à 4,5 mm. Si le diamètre de filetage des dispositifs d'ancrage au mur est supérieur à 3,5 mm, seuls les deux trous de montage marqués par la lettre A peuvent être utilisés. Si le diamètre de filetage des dispositifs d'ancrage au mur est inférieur à 3,5 mm, les trous marqués par les lettres A et B peuvent être utilisés. Tous les dispositifs d'ancrage au mur doivent posséder un diamètre de tête inférieur à 10 mm, sinon ils ne peuvent pas prendre en charge l'installation du support de montage mural.

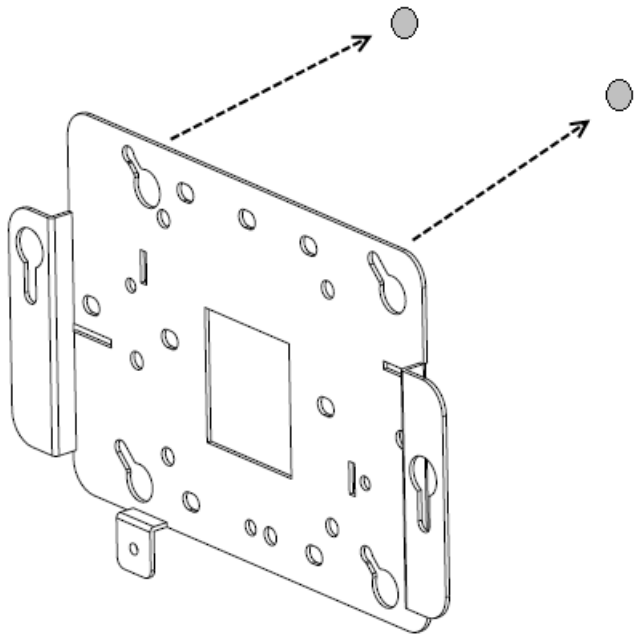
Pour monter un point d'accès WLAN sur un mur, procédez comme suit :

1. Localisez l'emplacement adéquat pour les dispositifs d'ancrage au mur. Les dispositifs d'ancrage au mur doivent être écartés de 95 mm horizontalement et 80 mm verticalement.

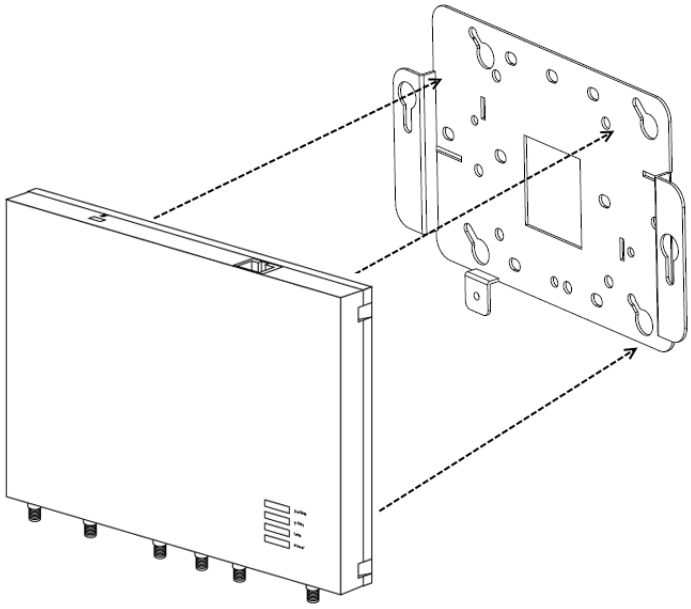


Le support mural est conçu pour utiliser entre 2 et 4 dispositifs d'ancrage.

2. Insérez les vis dans les dispositifs d'ancrage au mur sans les serrer complètement : laissez un espace de 2 mm au moins entre la tête de la vis et le mur.
3. Glissez le support mural sur les têtes des vis, puis faites-le glisser vers la droite (en regardant le mur).

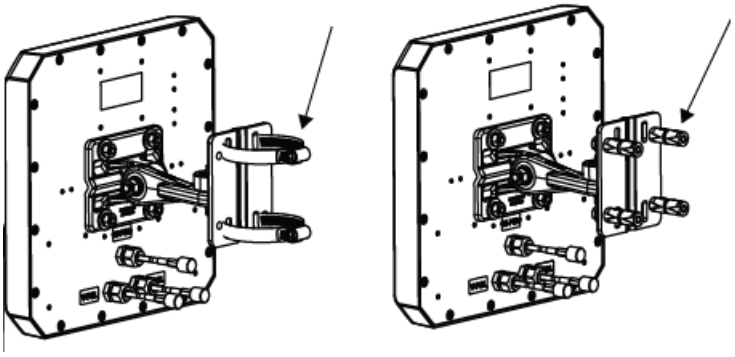


4. Serrez les vis afin de fixer solidement le support de montage mural au mur.
5. Alignez les languettes de montage de la partie inférieure du boîtier en tôle du point d'accès avec les encoches en trous de serrure du support de montage, orientées à la verticale.



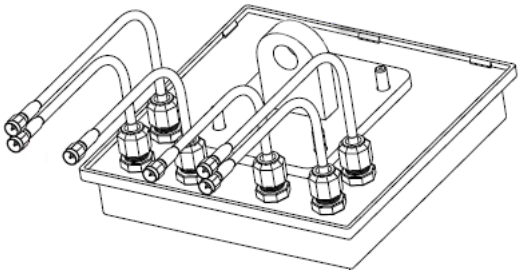
6. Faites glisser le point d'accès dans les encoches en trous de serrure en veillant à ce que ses languettes de montage soient correctement installées dans la partie inférieure des encoches.
7. Fixez solidement le point d'accès au support de montage mural et serrez les vis.
8. Vérifiez que le point d'accès est solidement fixé au support et au mur.
9. Fixez les antennes externes au mur en respectant la distance spécifiée par rapport au point d'accès.

   Si vous installez des antennes Laird, vous pouvez les fixer à un support ou à une surface verticale (mur) à l'aide d'une fixation articulée et de boulons de montage.
   Antennes Laird avec flèches indiquant les 2 possibilités d'installation : support (gauche) et fixation murale (droite)



   Pour installer des antennes Tyco, fixez les supports de montage au mur. Installez ensuite les antennes sur ces supports de montage.

Antenne Tyco avec câbles raccordés



10. Assurez-vous que les antennes sont correctement fixées au mur (ou au support, en cas d'installation d'une antenne Laird).
11. Raccordez les câbles d'antenne au point d'accès.
12. Effectuez les raccordements électriques.

Installation du point d'accès 8120 WLAN avec antenne externe au plafond

About this task

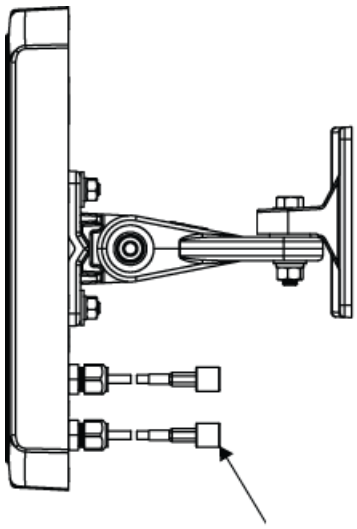
La procédure d'installation du point d'accès 8120 WLAN avec antenne externe est identique à celle du point d'accès 8120 WLAN. En plus de l'installation du point d'accès proprement dite, le point d'accès 8120 WLAN avec antenne externe nécessite également le montage des antennes adjacentes. Vous pouvez fixer le point d'accès 8120 WLAN avec antenne externe au plafond à l'aide d'un adaptateur pour grille de plafond.

Lors de l'installation, pensez à laisser un espace suffisant pour installer à la fois le point d'accès et les antennes. Vérifiez que la longueur de câble est suffisante pour relier le point d'accès aux antennes. Chaque antenne est livrée avec des câbles permanents pré-installés d'une longueur de 0,91 m (3 pieds). Si la distance de votre installation est supérieure à la longueur des câbles d'origine, vous pouvez utiliser des rallonges supplémentaires d'une longueur de 3,04 m (10 pieds).

Note:

Des connecteurs SMA à polarité inversée (RP-SMA) permettent de fixer l'antenne externe au point d'accès 8120 WLAN avec antenne externe. Le connecteur doit être correctement fixé à l'aide d'une clé dynamométrique de 5/16 pouces réglée sur 0,3 à 0,6 Nm pour les connecteurs en cuivre et sur 0,8 à 1,1 Nm pour les connecteurs en acier inoxydable. Des embouts sont également placés au niveau des câbles de l'assemblage de connecteurs afin qu'une autre clé puisse être utilisée pour éviter toute rotation et endommagement du raccordement aux câbles. Il est recommandé de nettoyer les dépôts présents sur les surfaces internes avant de procéder au raccordement.

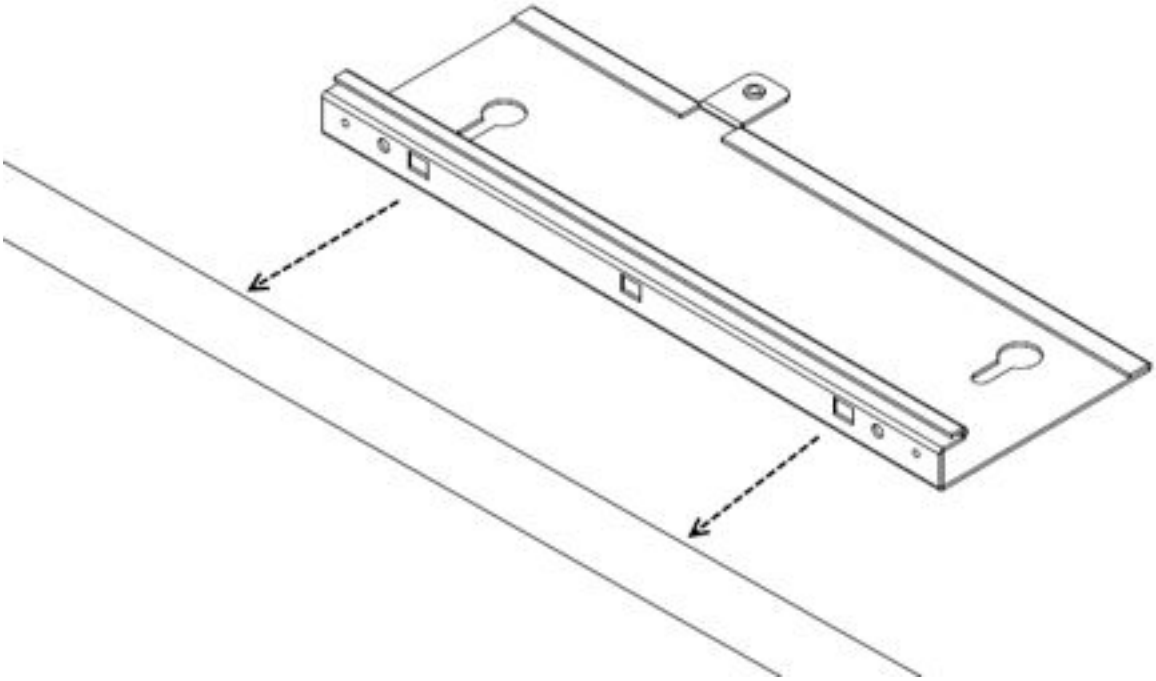
Antenne Laird avec flèches indiquant un connecteur à polarité inversée



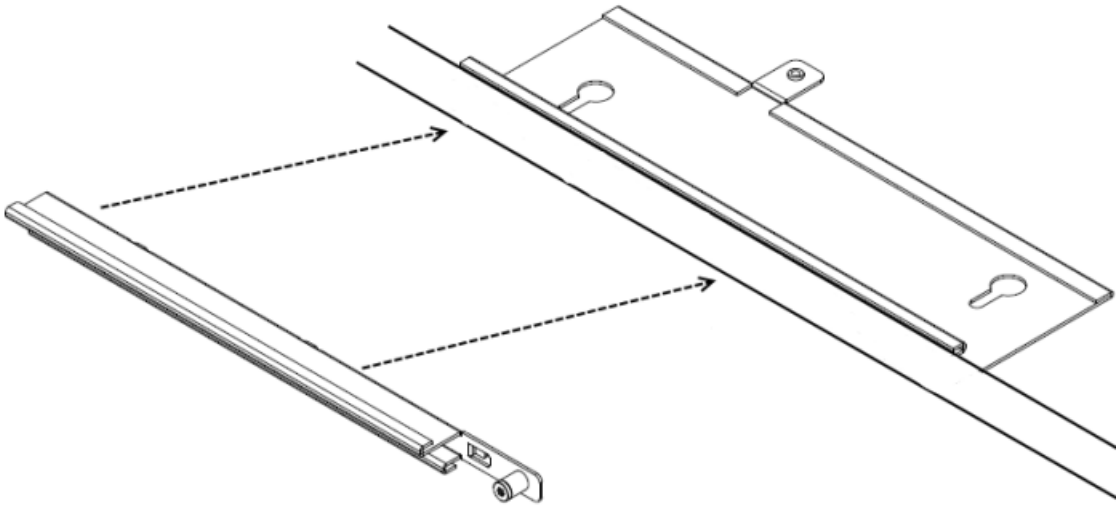
L'adaptateur pour grille de plafond est fourni avec deux pièces de support croisées. Le grand support est doté d'encoches en trous de serrure, adaptées aux languettes situées sur la face inférieure du point d'accès, et d'un trou taraudé adapté à la vis captive du point d'accès. Le petit support est également doté d'une fixation captive et peut être orienté dans deux directions différentes par rapport au grand support, s'adaptant ainsi aux grilles de plafond étroites ou larges.

Pour installer le point d'accès avec un adaptateur pour grille de plafond, procédez comme suit :

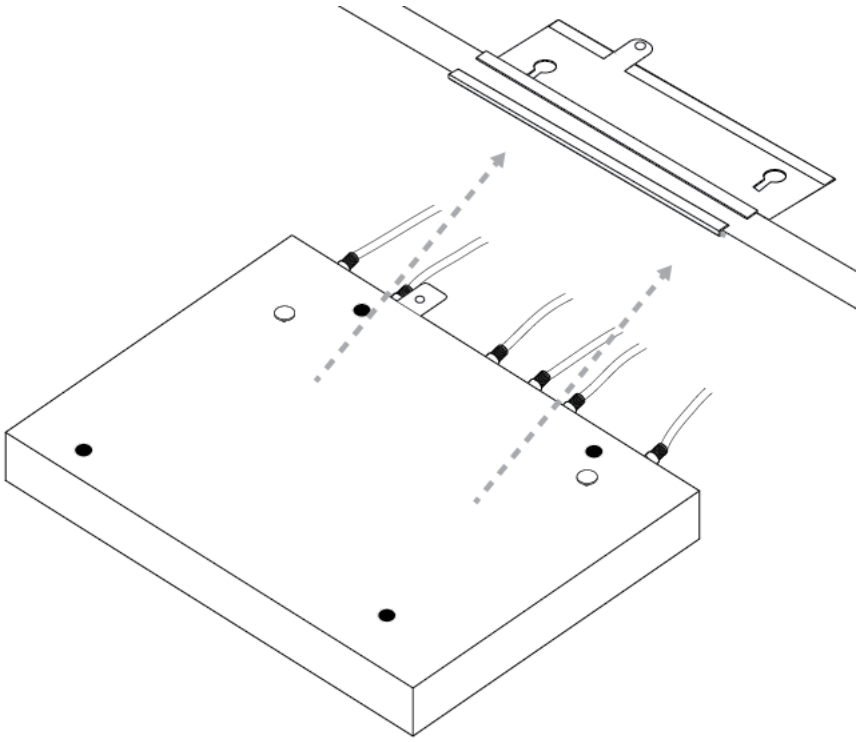
1. Sécurisez votre environnement de travail. Munissez-vous d'une échelle afin d'accéder facilement à la grille de plafond.
2. Déterminez un emplacement approprié sur la grille de plafond où les barres en T sont accessibles en toute sécurité et où les dalles de plafond peuvent être temporairement soulevées et retirées de l'espace de travail. Le dispositif d'adaptateur de support est conçu pour être utilisé avec les coulisseaux de la grille de la section fine et non avec ceux de la section plus épaisse, conçus pour le croisement des grandes travées. Afin de disposer d'espace pour vos mains et vos outils, utilisez des crayons ou des bâtonnets pour maintenir les dalles de plafond éloignées de la grille. Ainsi, vous bénéficiez d'une large ouverture pour fixer le support à la grille.
3. Montez le grand support sur la grille. Lors de l'installation, prêtez attention à la largeur du lattis afin de déterminer l'orientation appropriée pour l'installation du petit support à l'étape suivante.



4. Montez le petit support croisé sur le grand support et serrez les deux éléments ensemble sur la grille. Le petit support est doté de languettes dans lesquelles s'insèrent les encoches du grand support. Ainsi, les deux éléments glissent simultanément et sont maintenus l'un contre l'autre. Une fois cette action effectuée, les deux supports sont resserrés sur la grille de plafond. Lorsque les deux moitiés du support coulissent correctement l'une contre l'autre, les filets du grand support doivent s'insérer dans la fixation captive du petit support. Utilisez un tournevis pour serrer la fixation captive. Il est indispensable de fixer les deux supports de cette manière afin d'éviter qu'ils ne se détachent l'un de l'autre. Serrez solidement la vis de la fixation captive.



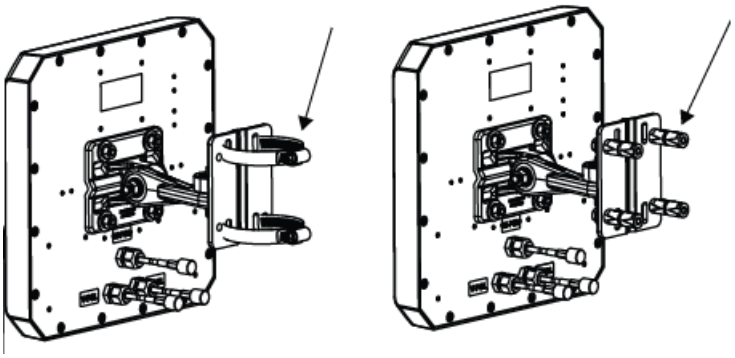
5. Fixez le point d'accès au support. Alignez les languettes de fixation du point d'accès avec les encoches en trous de serrure du support de la grille de plafond, puis faites glisser le point d'accès sur le dispositif de support de la grille de plafond avec soin. Si le point d'accès et le système de support sont correctement rattachés, il doit être possible d'insérer la vis captive du point d'accès dans la languette filetée du support de la grille de plafond.



6. Fixez les antennes externes au mur en respectant la distance spécifiée par rapport au point d'accès.

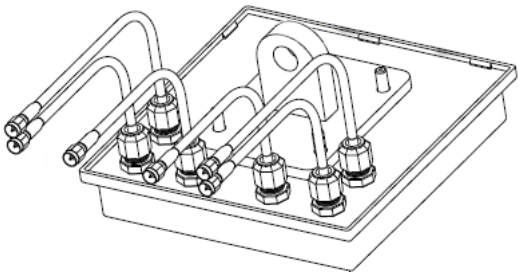
   Si vous installez des antennes Laird avec fixation articulée, fixez les antennes à un support ou à une surface verticale à l'aide du système de fixation articulé et des boulons de fixation.

   Antennes Laird avec flèches indiquant les 2 possibilités d'installation : support (gauche) et fixation murale (droite)



Pour installer des antennes Tyco, fixez les supports de montage au mur. Installez ensuite les antennes sur ces supports de montage.

Antenne Tyco avec câbles raccordés



7. Assurez-vous que les antennes sont correctement fixées au plafond (ou au support ou à la surface verticale, en cas d'installation d'antenne Laird).
8. Raccordez les câbles d'antenne au point d'accès.
9. Effectuez les raccordements électriques et remettez les dalles de plafond en place.

Messages de sécurité

Caution:

Les radios des points d'accès 8120 WLAN avec antenne externe d'Avaya sont désactivées par défaut et peuvent uniquement être activées par un administrateur système.

Warning:

Cette situation ou condition peut provoquer des blessures.

Warning:

Tension élevée. Cette situation ou condition peut provoquer des blessures dues à un choc électrique.

Warning:

Seul le personnel de service qualifié est autorisé à effectuer l'installation. Lisez et suivez l'ensemble des avertissements et instructions figurant sur le produit ou fournis dans la documentation.

Warning:

Installez l'appareil en veillant à conserver une distance d'au moins 24,9 cm entre les éléments rayonnants et les personnes. Cet avertissement de sécurité est conforme aux limites d'exposition définies par la norme FCC relative aux fréquences radio.

Warning:

N'utilisez pas ce point d'accès à proximité de détonateurs non blindés ou dans d'autres environnements où des risques d'explosion existent, sauf si l'appareil a été modifié pour une telle utilisation par une personne qualifiée.

Warning:

Ne touchez pas et ne déplacez pas le point d'accès lorsque les antennes sont en cours de transmission ou de réception.

Warning:

Avant d'utiliser un périphérique sans fil sur un site dangereux, consultez les réglementations locales et nationales et interrogez les responsables de la sécurité du site afin de connaître les contraintes d'utilisation.

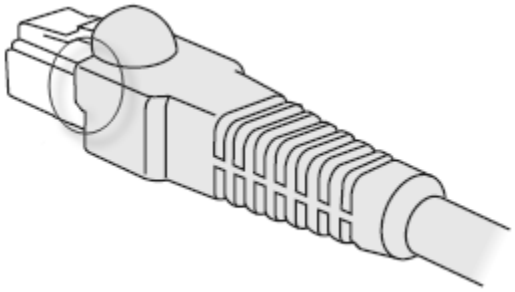
Chapter 7: Português do Brasil

About this task

Use os seguintes procedimentos e informações ao instalar os pontos de acesso do Avaya WLAN AP 8120 com antena externa.

Requisitos de cabo

As portas Ethernet no ponto de acesso não podem aceitar um cabo CAT-5 com um revestimento irregular como mostrado abaixo. O conector RJ-45 do cabo não se ajustará adequadamente ao receptáculo no ponto de acesso. Em vez disso, use um cabo CAT-5 com um revestimento uniforme.



Montando o WLAN AP 8120 com antena externa em uma parede

About this task

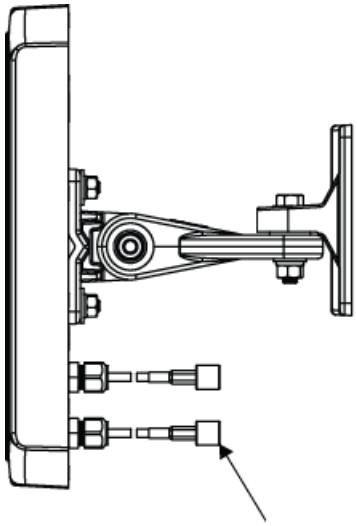
O WLAN AP 8120 com antena externa é instalado de forma similar ao WLAN AP 8120. Além da instalação do ponto de acesso em si, com o WLAN AP 8120 com antena externa, você também deve montar as antenas adjacentes. Você pode montar o WLAN AP 8120 com antena externa em uma parede usando fixadores.

Planeje sua instalação de modo a permitir que se instalem o ponto de acesso e as antenas. Verifique se o comprimento do cabo permite a conexão do ponto de acesso às antenas. Cada antena é fornecida com 3 cabos permanentes pré-instalados de 90 cm. Se a distância de instalação for maior que o comprimento dos cabos originais, você pode usar cabos de extensão adicionais de 3 m.

Note:

A montagem da antena externa no WLAN AP 8120 com antena externa é completada por meio dos conectores de polaridade reversa SMA (SMA (RP-SMA). O instalador deve aplicar a força de torção adequada ao conector usando uma chave de torque de 5/16 polegadas que seja ajustada em 3 a 5 in-lbf (0,3 a 0,6 Nm) para conectores de latão, e 7 a 10 in-lbf (0,8 a 1,1 Nm) para conectores de aço inoxidável. No lado do cabo do conjunto de conectores também há uma área plana para que você possa usar uma segunda chave que tem por função evitar que o cabo gire e danifique suas conexões. A Avaya também recomenda a remoção de fragmentos das superfícies internas antes de conectar os cabos.

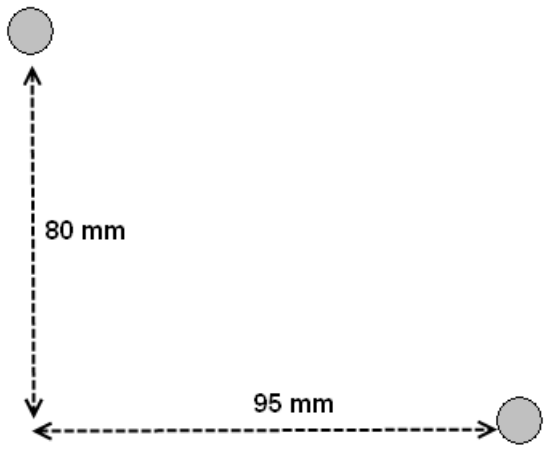
Antena Laird com seta mostrando conector de polaridade reversa



O suporte de montagem foi projetado para usar fixadores com diâmetros de seção aparafusados entre 3,5 mm e 4,5 mm. Se os fixadores tiverem diâmetros aparafusados maiores de 3,5 mm, somente os dois furos marcados "A" poderão ser usados. Se os fixadores tiverem diâmetros menores de 3,5 mm, os furos marcados "A" e "B" poderão ser usados. Todos os fixadores de parede devem ter um diâmetro de cabeça menor de 10 mm ou não será possível instalar o suporte de montagem sobre eles.

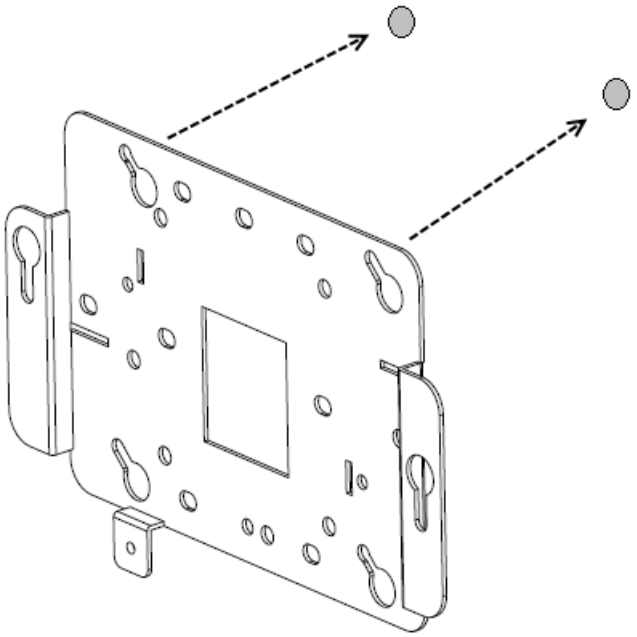
Execute o seguinte procedimento para instalar um ponto de acesso LAN sem fio em uma parede:

1. Localize a posição apropriada dos fixadores. Os fixadores devem ficar distantes aproximadamente 95 mm horizontalmente e 80 mm verticalmente.

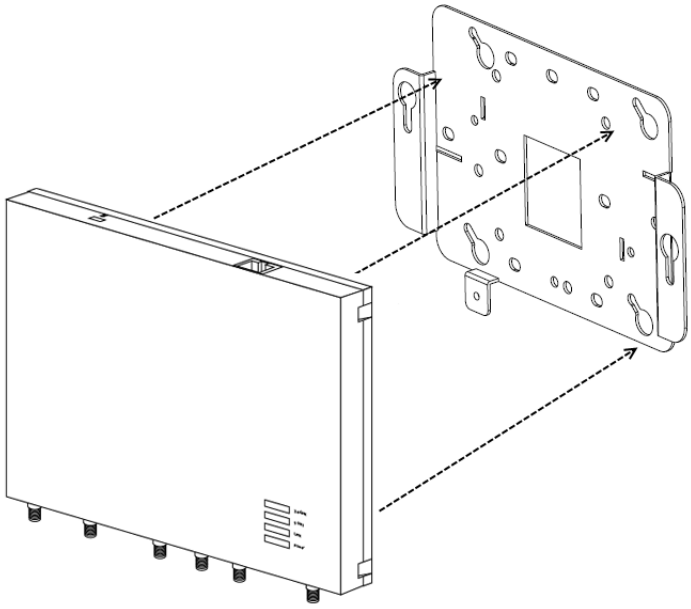


O suporte de parede foi projetado para usar um mínimo de 2 fixadores e um máximo de 4.

2. Instale os parafusos nos fixadores, mas não os ajuste completamente. Deixe uma folga de pelo menos 2 mm entre a cabeça do parafuso e a parede.
3. Deslize o suporte de parede sobre as cabeças dos parafusos e escorregue-o para a direita, voltado para a parede.



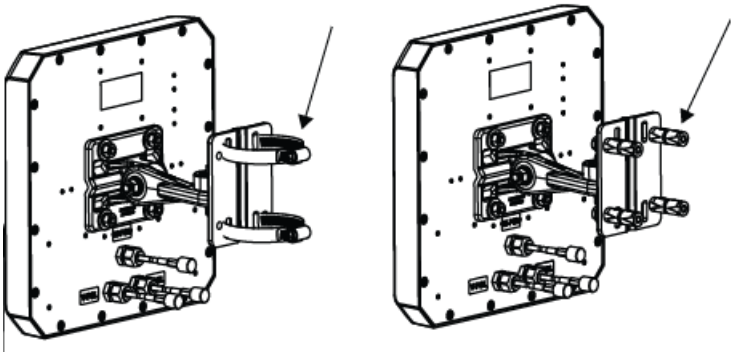
4. Aperte os parafusos para segurar com firmeza o suporte de montagem contra a parede.
5. Alinhe as presilhas de montagem na parte inferior do invólucro de metal do ponto de acesso com os slots do suporte de montagem orientados verticalmente.



6. Permita que os pontos de acesso passem pelos slots, assegurando que as presilhas estejam fixadas na parte inferior do slot.
7. Prenda o ponto de acesso ao suporte de montagem e ajuste os parafusos.
8. Verifique se os pontos de acesso estão fixos no suporte e na parede.
9. Monte as antenas externas na parede dentro da distância especificada do ponto de acesso.

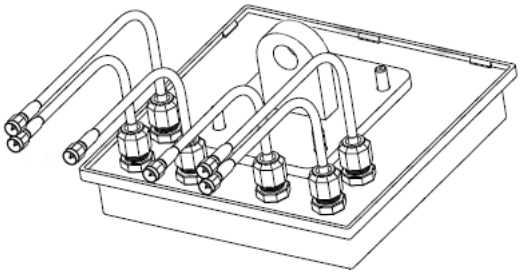
   Se estiver instalando antenas Laird, você poderá montá-las em um mastro ou em uma superfície vertical (parede) usando o suporte articulado e parafusos do suporte.

   Antenas Laird com setas mostrando as opções de mastro (esquerda) e suporte de parede (direita)



   Se você estiver instalando antenas TYCO, prenda os suportes de montagem à parede e as antenas aos suportes de montagem.

Antena TYCO mostrando cabos anexados



10. Verifique se as antenas estão firmemente montadas na parede (no mastro ou em uma superfície vertical no caso das antenas Laird).
11. Prenda os cabos da antena ao ponto de acesso.
12. Faça as conexões elétricas.

Instalando o WLAN AP 8120 com antena externa no teto

About this task

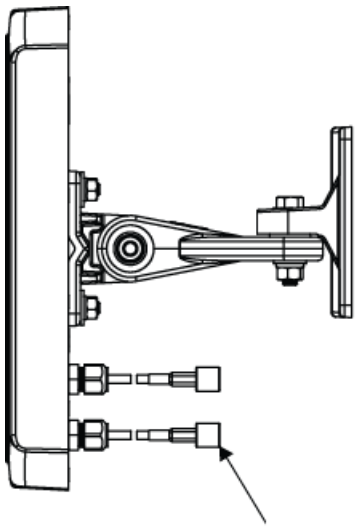
O WLAN AP 8120 com antena externa é instalado de forma similar ao WLAN AP 8120. Além da instalação do ponto de acesso em si, com o WLAN AP 8120 com antena externa, você também deve montar as antenas adjacentes. Você pode montar o WLAN AP 8120 com antena externa no teto usando um adaptador de grade de teto.

Planeje sua instalação de modo a permitir que se instalem o ponto de acesso e as antenas. Verifique se o comprimento do cabo permite a conexão do ponto de acesso às antenas. Cada antena é fornecida com 3 cabos permanentes pré-instalados de 90 cm. Se a distância de instalação for maior que o comprimento dos cabos originais, você pode usar cabos de extensão adicionais de 3 m.

Note:

A montagem da antena externa no WLAN AP 8120 com antena externa é completada por meio dos conectores de polaridade reversa SMA (SMA (RP-SMA). O instalador deve aplicar a força de torção adequada ao conector usando uma chave de torque de 5/16 polegadas que seja ajustada em 3 a 5 in-lbf (0,3 a 0,6 Nm) para conectores de latão, e 7 a 10 in-lbf (0,8 a 1,1 Nm) para conectores de aço inoxidável. No lado do cabo do conjunto de conectores também há uma área plana para que você possa usar uma segunda chave que tem por função evitar que o cabo gire e danifique suas conexões. A Avaya também recomenda a remoção de fragmentos das superfícies internas antes de conectar os cabos.

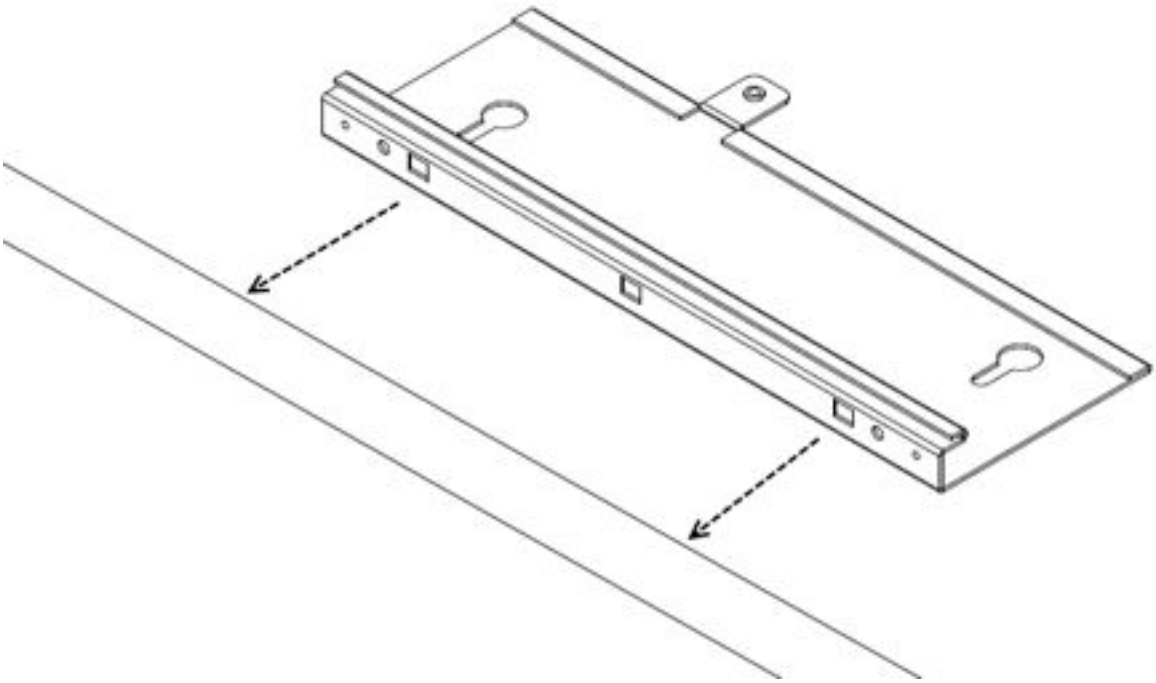
Antena Laird com seta mostrando conector de polaridade reversa



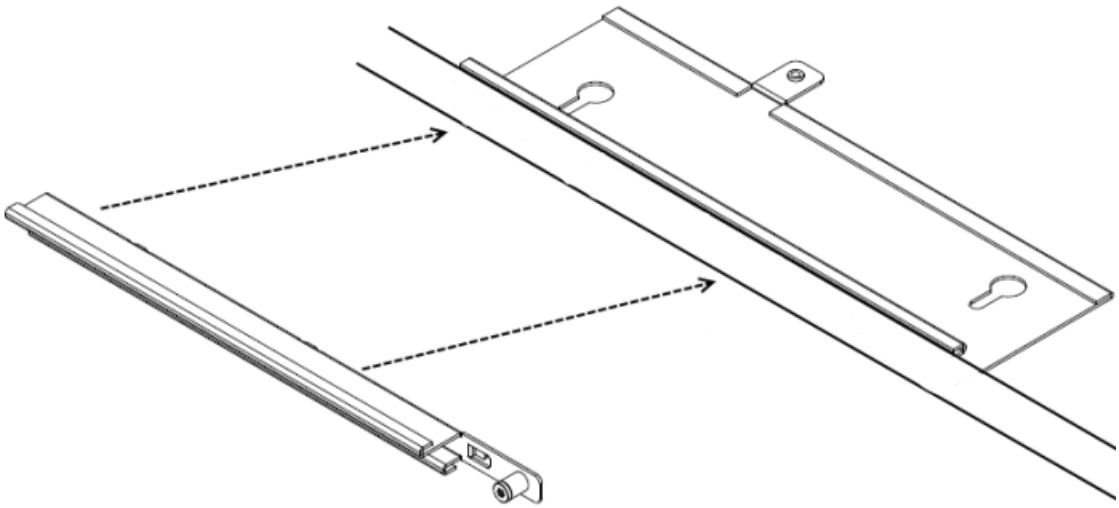
O adaptador de grade de teto vem com duas peças de travamento de suporte. A peça maior inclui slots moldados que se encaixam às presilhas na superfície inferior do AP (painel de acesso) e um orifício aparafusado que se encaixa a um parafuso cativo no AP. A peça menor inclui também um prendedor cativo e pode ser orientado com relação à peça maior de duas maneiras diferentes, de acordo com grades de teto mais amplas ou mais estreitas.

Execute o seguinte procedimento para instalar o ponto de acesso com um adaptador de grade de teto:

1. Garanta a segurança do ambiente de trabalho. Utilize uma escada que permita fácil acesso ao sistema de grade de teto.
2. Identifique um local apropriado na grade onde as barras T sejam acessíveis de forma segura e onde o revestimento do teto possa ser temporariamente suspenso e tirado da área de trabalho. O conjunto de adaptador é para ser usado com deslizadores de grade de seção finos, não os mais grossos, usados para atravessar grandes extensões. Para ter espaço para mãos e ferramentas, use dois lápis ou varetas para manter o revestimento do teto suspenso e longe da grade. Isso fará com que você tenha acesso para ajustar os suportes à grade.
3. Instale o suporte maior na grade. Durante a instalação, preste atenção à largura da tira da grade para determinar a orientação apropriada do suporte menor instalado na sequência.

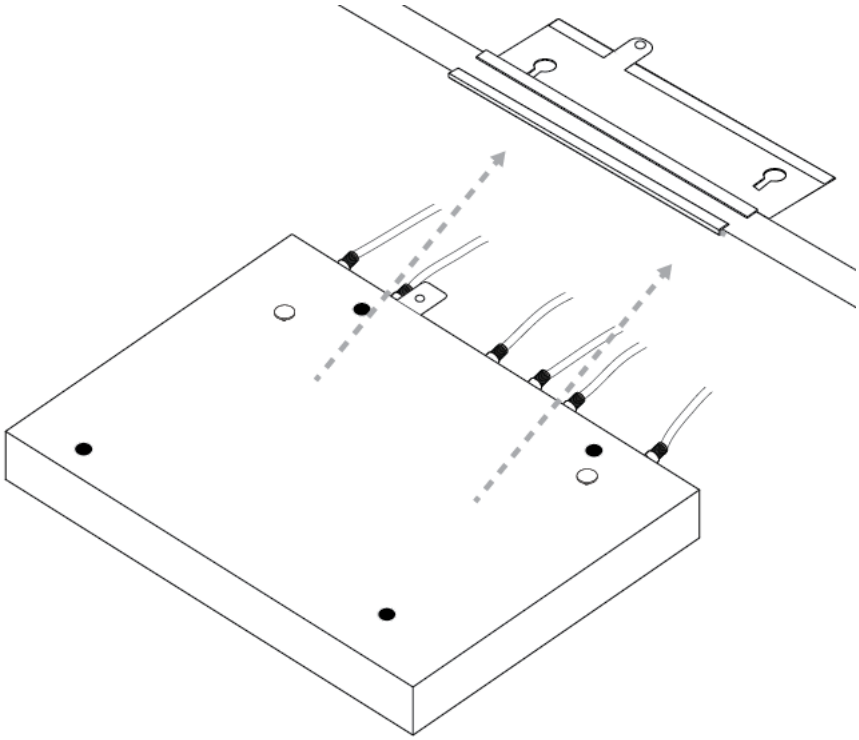


4. Instale o suporte de travamento menor sobre o suporte maior e acople as duas peças à grade. O suporte menor contém presilhas moldadas que prendem os slots à presilha maior. Isso permite que as duas partes deslizem juntas e se fixem uma à outra. Quando isso é feito, os dois suportes se juntam em volta da grade de teto. Quando as duas partes do suporte deslizam juntas corretamente, o prendedor cativo do suporte menor deve se ajustar aos fios do suporte maior. Use uma chave de fenda para ajustar o prendedor cativo. Prender os dois suportes dessa maneira é essencial para evitar que se soltem. Ajuste firmemente o prendedor cativo.



5. Prenda o ponto de acesso ao suporte. Alinhe as presilhas de segurança do ponto de acesso aos slots no suporte e deslize cuidadosamente o ponto de acesso no

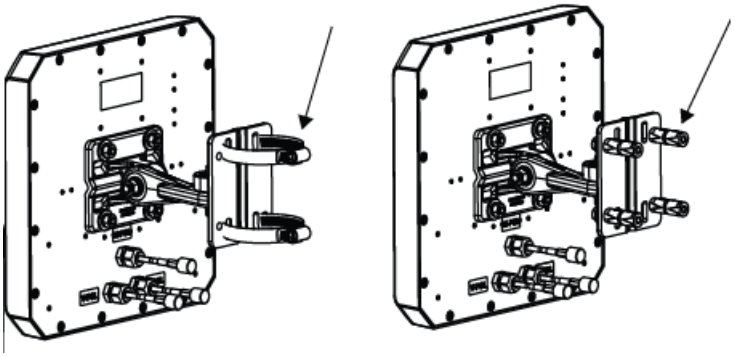
conjunto de suporte de grade de teto. Se o ponto de acesso e o conjunto de suporte forem acoplados corretamente, o parafuso cativo dos pontos de acesso deverá se ajustar à presilha fornecida no suporte da grade de teto.



6. Monte as antenas externas na parede dentro da distância especificada do ponto de acesso.

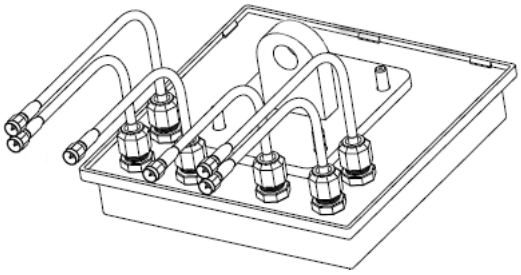
   Se você estiver instalando as antenas Laird com um suporte articulado, prenda as antenas a um mastro ou a uma superfície vertical usando o suporte articulado e parafusos do suporte.

   Antenas Laird com setas mostrando as opções de mastro (esquerda) e suporte de parede (direita)



   Se você estiver instalando antenas TYCO, prenda os suportes de montagem à parede e as antenas aos suportes de montagem.

Antena TYCO mostrando cabos anexados



7. Verifique se as antenas estão firmemente montadas no teto (no mastro ou em uma superfície vertical no caso das antenas Laird).
8. Prenda os cabos da antena ao ponto de acesso.
9. Faça as conexões elétricas e coloque o revestimento do teto no lugar.

Mensagens de segurança

Caution:

Os rádios do ponto de acesso do Avaya WLAN AP 8120 com antena externa são desativados por padrão e só podem ser ativados pelo administrador do sistema.

Warning:

Esta situação ou condição pode causar danos.

Warning:

Alta voltagem. Esta situação ou condição pode causar dano por choque elétrico.

Warning:

Somente pessoas qualificadas devem realizar a instalação. Leia e siga os avisos e as instruções de atenção indicados no produto ou incluídos na documentação.

Warning:

Instale este dispositivo de forma a manter um mínimo de 24,9 cm (9,8 polegadas) de distância entre os elementos de radiação e todas as pessoas. Este aviso de segurança está de acordo com os limites de exposição à frequência de rádio da FCC.

Warning:

Não opere o ponto de acesso próximo a pontos de sobrecarga desprotegidos nem em outro ambiente com risco de explosão a menos que o dispositivo tenha sido modificado para tal uso por pessoal qualificado.

Warning:

Não toque nem mova o ponto de acesso quando as antenas estiverem transmitindo ou recebendo.

Warning:

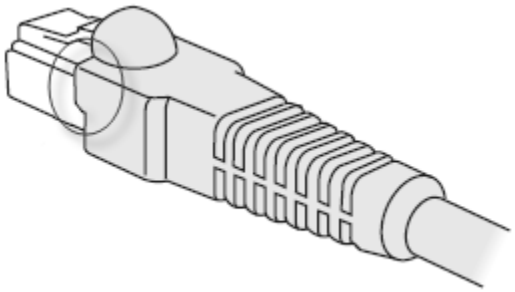
Antes de usar um dispositivo sem fio em um local perigoso, consulte os códigos locais, nacionais e os responsáveis pela segurança do local para obter informações sobre restrições de uso.

Chapter 8: Simplified Chinese

Chinese

电缆要求

接入点设备上的以太网端口不能接受具有不平整外壳（如下图所示）的 CAT-5 电缆。 电缆上的 RJ-45 连接器无法正确插入接入点设备上的插孔中。 使用具有平整外壳的 CAT-5 电缆。



在墙壁上安装带有外部天线的 WLAN AP 8120

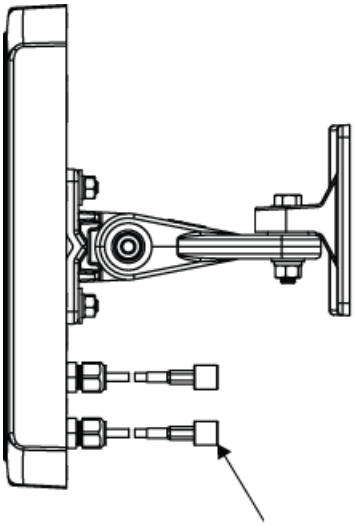
带有外部天线的 WLAN AP 8120 在安装时与 WLAN AP 8120 类似。 对于带有外部天线 WLAN AP 8120，除了安装接入点本身之外，您还必须安装邻接天线。 可使用墙壁预埋件在墙壁上安装带有外部天线的 WLAN AP 8120。

规划您的安装，以便能够同时安装接入点和天线。 确保您有长度适当的缆线将接入点连接到天线。 每个天线都附带了三根 3 英尺的预装永久线缆。 如果安装距离大于原装缆线的长度，您可以另外连接 10 英尺的延长缆线。

Note

通过反极性 SMA (RP-SMA) 接头将外部天线组装到带有外部天线的 WLAN AP 8120。 安装人员应使用 5/16 英寸转矩扳手将接头扭紧到适当的转矩，对于铜质接头设为 3-5 英寸磅（0.3 到 0.6 牛米），对于不锈钢接头，设为 7-10 英寸磅（0.8–1.1 牛米）。 连接器组件的缆线端还提供了平头，方便您使用另一个扳手防止它转动，以免损坏与缆线的接合点。 Avaya 还建议您在连接之前从内部表面清除散落的碎片。

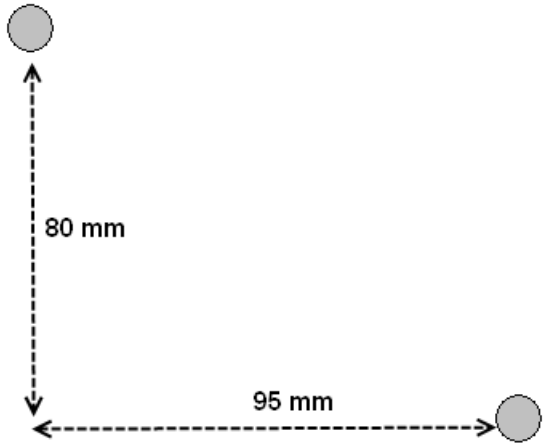
Laird 天线上有箭头显示了反极性接头



安装支架可使用螺纹直径范围在 3.5mm 至 4.5mm 之间的墙壁预埋件。 如果墙壁预埋件的螺纹直径大于 3.5mm，则只可使用两个标记了 'A' 的安装孔。 如果墙壁预埋件的螺纹直径小于 3.5mm， 则均可使用标记了 'A' 和 'B' 的安装孔。 所有墙壁预埋件的头部直径必须小于 10mm，否则无法在其上安装墙壁安装支架。

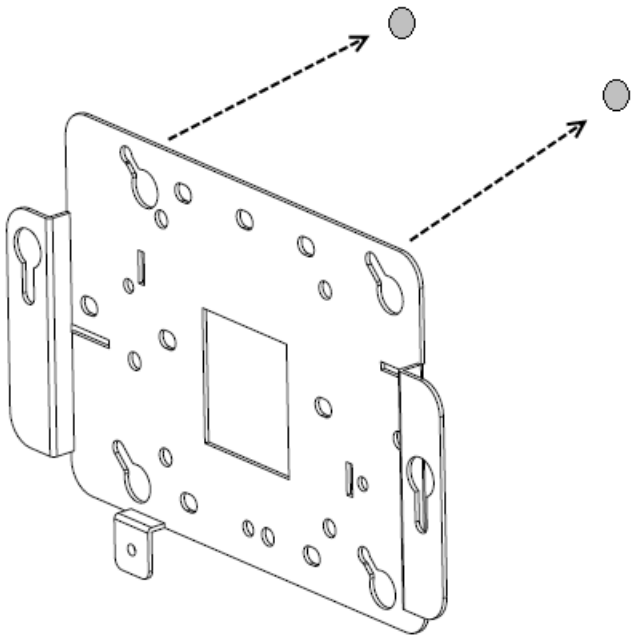
若要在墙壁上安装无线 LAN 接入点设备，请执行以下步骤：

1. 找到墙壁预埋件的相应位置。 墙壁预埋件之间的水平距离为 95mm，垂直距离为 80mm。

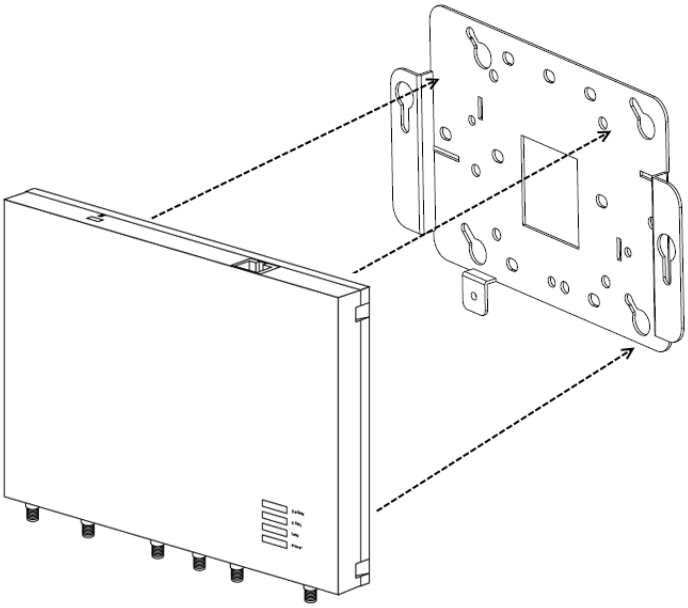


墙壁支架可使用至少 2 个预埋件，至多 4 个。

2. 将螺丝装入墙壁预埋件，但不要完全拧入，在螺丝头与墙面之间留 2mm 的间隙。
3. 将墙壁支架套到螺丝头上，以朝向墙壁的方向向右滑动支架。



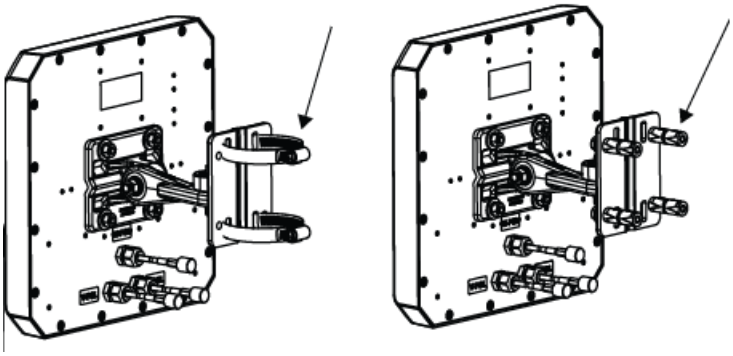
4. 拧紧螺丝，将墙壁安装支架紧紧地固定在墙壁上。
5. 将接入板金属外壳底部的安装接片与安装支架中垂直定向的钥匙孔插槽对齐。



6. 允许接入点设备向下滑动钥匙孔插槽，确保接入点安装接片位于插槽底部。
7. 将接入点设备固定在墙壁安装支架上，旋紧手旋螺丝。
8. 确认接入点设备已固定在支架和墙壁上。
9. 将外部天线安装到距离接入点指定距离内的墙壁上。

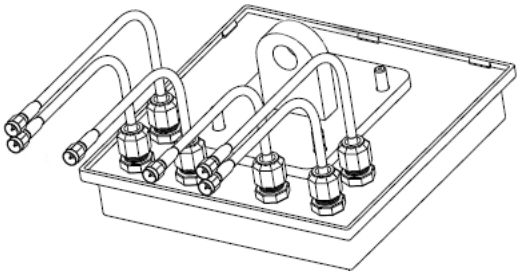
如果您要安装 Laird 天线，您可以使用铰接支架和装配螺栓，在立柱或垂直表面（墙壁）上安装天线。

Laird 天线上有箭头指明了立柱（左侧）和墙壁安装（右侧）选项。



如果是安装 TYCO 天线，请将安装支架固定到墙壁，然后将天线连接到安装支架。

显示了连接缆线的 TYCO 天线



10. 确认天线已牢固安装到墙壁（或立柱，在安装 Laird 天线时）。
11. 将天线缆线连接到接入点。
12. 进行电气连接。

将带有外部天线的 WLAN AP 8120 安装到天花板

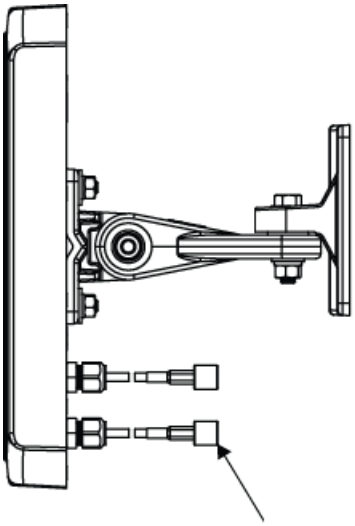
带有外部天线的 WLAN AP 8120 在安装时与 WLAN AP 8120 类似。 对于带有外部天线 WLAN AP 8120，除了安装接入点本身之外，您还必须安装邻接天线。 您可以利用吊顶龙骨适配器将带有外部天线的 WLAN AP 8120 安装到天花板。

规划您的安装，以便能够同时安装接入点和天线。 确保您有长度适当的缆线将接入点连接到天线。 每个天线都附带了三根 3 英尺的预装永久线缆。 如果安装距离大于原装缆线的长度，您可以另外连接 10 英尺的延长缆线。

Note

通过反极性 SMA (RP-SMA) 接头将外部天线组装到带有外部天线的 WLAN AP 8120。 安装人员应使用 5/16 英寸转矩扳手将接头扭紧到适当的转矩，对于铜质接头设为 3-5 英寸磅（0.3 到 0.6 牛米），对于不锈钢接头，设为 7-10 英寸磅（0.8–1.1 牛米）。 连接器组件的缆线端还提供了平头，方便您使用另一个扳手防止它转动，以免损坏与缆线的接合点。 Avaya 还建议您在连接之前从内部表面清除散落的碎片。

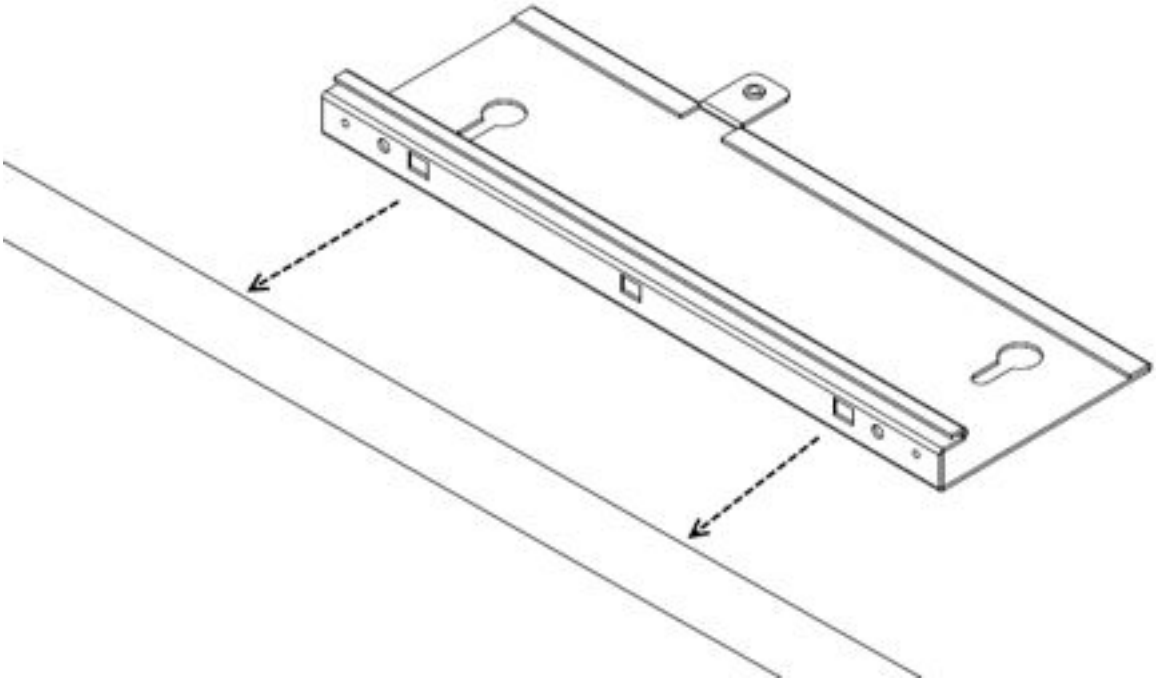
用箭头显示了反极性接头的 Laird 天线



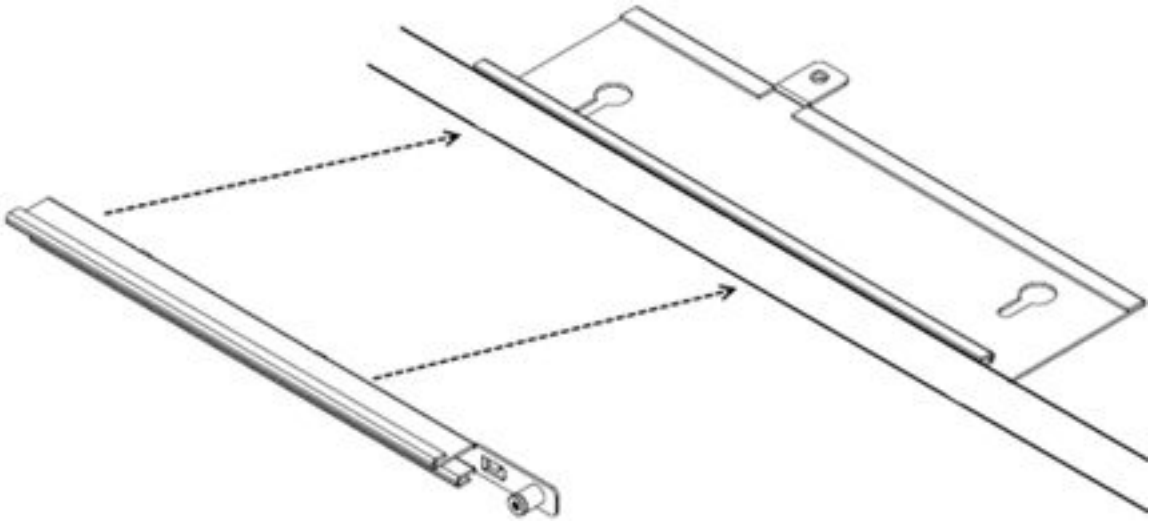
吊顶龙骨适配器随附两个联锁支架部件。 尺寸较大的支架具有钥匙孔形状的插槽（用于与 AP 表面下的接片配接）和一个螺纹孔（用于与 AP 上的外加手旋螺丝配接）。 尺寸较小的支架也具有一个系留紧固件，可根据大支架定位为两个不同的方向，分别对应于窄或宽吊顶龙骨。

若要使用吊顶龙骨适配器安装接入点设备，请执行以下步骤：

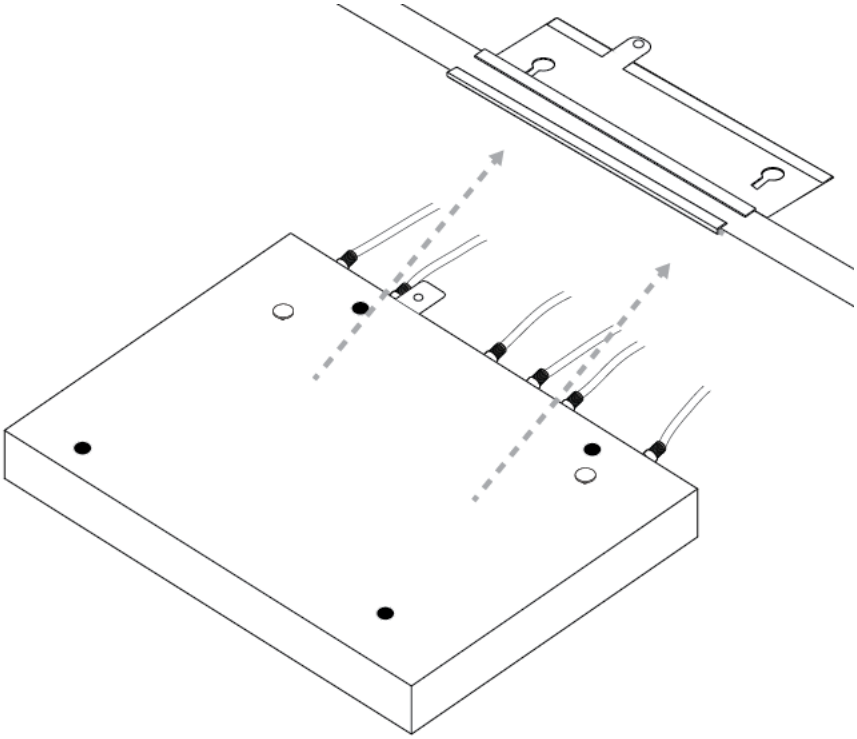
1. 固定一个安全的工作环境。 使用梯子，以便于接触到吊顶龙骨系统。
2. 在吊顶龙骨上找到便于取用 T 型龙骨并能暂时抬升天花板使其不接触到工作区的适当位置。 适配器支架组件用于薄层的龙骨流道，厚层流道并不用于跨接。 为便于手动和工具操作，可使用两只铅笔或木棍支撑住天花板，使其不接触龙骨。 这样，可方便将支架固定到龙骨。
3. 将大支架安装到龙骨上。 安装时，注意龙骨条的宽度，以便确定接下来要安装的小支架的相应方位。



4. 安装小支架与大支架之间的联锁装置，用夹具将这两个支架固定在龙骨上。 小支架上具有接片，大接片上有插槽。 这可使两个部件连接在一起，并相互锁定。 此步骤完成后，两个支架即可牢固地夹紧在吊顶龙骨周围。 支架的两半正确地连接在一起后，小支架上的系留紧固件应与大支架上的螺纹相啮合。 使用螺丝刀拧紧系留紧固件。 以此方式固定两个支架，以防止相互脱离。 牢固地拧紧系留紧固件的螺丝。



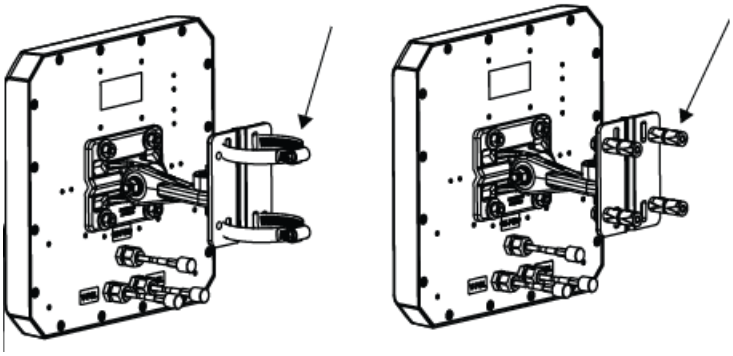
5. 将接入点设备安装到支架。 将接入点设备的固定接片与吊顶龙骨支架上的钥匙孔插槽对齐，小心将接入点设备滑到吊顶龙骨支架组件上。 如果接入点设备和支架组件正确啮合，应可将接入点设备的外加手旋螺丝放入吊顶龙骨支架上的螺纹接片。



6. 将外部天线安装到距离接入点指定距离内的墙壁上。

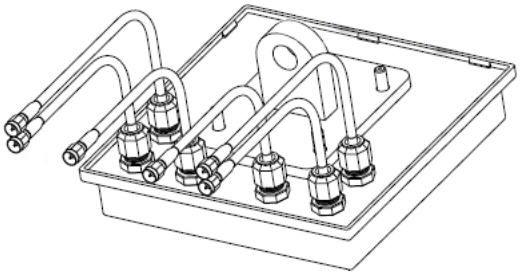
如果用铰接支架安装 Laird 天线，必须使用铰接支架和装配螺栓将天线连接到立柱或垂直表面。

用箭头指示了立柱（左侧）和墙壁安装（右侧）选项的 Laird 天线



如果是安装 TYCO 天线，请将安装支架固定到墙壁，然后将天线连接到安装支架。

显示了连接缆线的 TYCO 天线



7. 确认天线已牢固安装到天花板（或立柱或垂直表面，在安装 Laird 天线时）。
8. 将天线缆线连接到接入点。
9. 进行电气连接并装回天花板。

安全消息

Caution

默认情况下，带有外部天线的 Avaya WLAN 8120 无线电装置是处于禁用状态，只可由系统管理员启用。

Warning

此情形或情况可能导致伤害。

Warning

高电压。 此情形或情况可能导致电击，从而造成伤害。

Warning

必须由合格的服务人员进行安装。 阅读并遵循产品上标注或文档中的所有警告告示和说明。

Warning

安装本设备时，辐射元件与人群的距离至少 24.9（9.8 英寸）。 本安全警告符合 FCC 无线电频率暴露限制的规定。

Warning

不得在非屏蔽爆破雷管附近或在其他爆炸环境中使用接入点设备，除非设备已经合格人员改装用于此类用途。

Warning

天线正在进行发射或接收时，不得触摸或移动接入点设备。

Warning

在危害位置使用无线设备之前，请查询当地法规、国家法规，或咨询当地的安全员了解使用限制。

Simplified Chinese