Installing the Avaya WLAN Indoor Access Points WAP9170 Series

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Installing the WLAN 9170 Series

This Guide covers the steps required to install the Avaya 9170 Series Wireless Access Point (WAP) on a T-bar ceiling grid and execute the initial power up of the WAP. For additional information, see *Using the Avaya OS for Avaya WLAN AP 9100 Series* (NN47252-102).

1

You Need the Following Items

- Accessory Kit (included in each Wireless WAP carton) containing one T-Bar Bracket for mounting to 15/16" standard ceiling grid.
- Access to a Web browser to manage the Wireless WAP.
- Knife for cutting an access hole in the ceiling tile. Flat screwdriver and 7/16" nut driver for attaching the WAP mounting plate to the T-bar bracket.
- Cat 5e or Cat 6 Ethernet connection(s) to your wired network.
- Power—WAPs are powered via Power over Ethernet (PoE) using Ethernet Cat 5e or Cat 6 cable(s) that also carry data traffic.
  - Apply power to the GIGABIT POE(+) port only—the other WAP Gigabit port will not draw power if connected to a powered switch port, and WAP LEDs will not light.
  - If you are using an 802.3at PoE+ enabled switch, it is imperative that you know that the switch has sufficient power budget to power all connected devices and that the switch port is properly enabled to support the WAP.

    The WAP9172 requires 30W.

    The WAP9173 requires additional power— 38W.

    All 9170 WAPs are Type 2, Class 4 PoE-802.3at devices. If your switch provides a setting for the type of powered-device detection with options such as Legacy, 4-Point, or BOTH, set the port to BOTH or 4-Point. Do not use settings intended for legacy devices.

The total Cat 5e or Cat 6 cable length from the switch to the WAP must be no more than 100 m, including all cable segments. The WAP must be connected to PoE networks without routing cables to the outside plant—ensuring that cables aren't exposed to lightning strikes or crossover from high voltage lines.

2

Choose a Suitable Location

- The best location is ceiling-mounted within an open plan environment. Choose a location that is central to your users. Refer to the *Wireless* WAP *User's Guide*. For optimal placement, we recommend that a predictive survey be performed by Avaya or a qualified partner.
- Keep the unit away from electrical devices or appliances that generate RF noise—at least 3 to 6 feet (1 to 2 meters).
- Maintain a distance of at least 50 feet between additional Wireless WAPs.

3

Prepare for Ceiling Grid Mount

- **Drawings** for the mounting plate with dimensions are on page 5.
- On the ceiling tile, mark where to cut an opening for the cable feed.
- If you will be securing the WAP to the mounting plate with a zip tie, slide the attachment open as needed for the size of the WAP. Make sure that a hole in the attachment lines up with the mounting hole so that the mounting hole is not blocked. (Figure 1)

Figure 1. Mounting Plate (showing zip-tie attachment extended)

4

Secure the T-Bar Bracket to the Ceiling Support Grid

- If you have ceiling tiles with tegular edges (i.e., tiles whose surface protrudes down below the level of the ceiling grid), place one of the supplied black rubber standoffs on each of the bracket's bolts.
- To use the T-Bar bracket, simply twist it onto the ceiling grid with the bolts facing down.
- Cut an access hole for the cables in the ceiling tile.

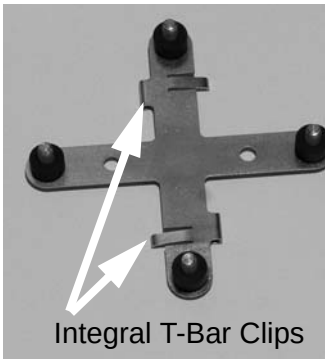

Figure 2. T-Bar Bracket with standoffs installed

5

Install the Mounting Plate.

- Align the WAP's mounting plate and secure it to the T-Bar bracket's four bolts using the nuts provided. Tighten the nuts to 10-12 lbf.ft (1.38-1.66 kgf.m), but *do not over-tighten*
- If you wish to secure the WAP to the mounting plate, feed a zip tie through the attachment. You will secure it to the WAP later.

Figure 3. Installing the Mounting Plate

6

Connect the Cables

- **Power**: These WAPs are powered through the **Gigabit POE(+)** port. All WAPs have integrated splitters.
- **Data**: We recommend that you supply data to multiple Gigabit ports to support bandwidth and redundancy requirements. Data may be provided via a combination of PoE and Ethernet connections.
- Feed the Ethernet cable(s) through the access hole in the ceiling tile.
- Connect Cat 5e or Cat 6 cable(s) carrying **data and power** to the WAP's **Gigabit POE(+)** port(s) as indicated in Figure 4.
- (Optional) Connect a Cat 5e or Cat 6 cable carrying **data only** to the WAP's **Gigabit** port as indicated in Figure 4.

Figure 4. Network Interface Ports

7

Attach the Wireless WAP to the Mounting Plate

- Align the keyed slot in the center of the WAP with the key post on the mounting plate.

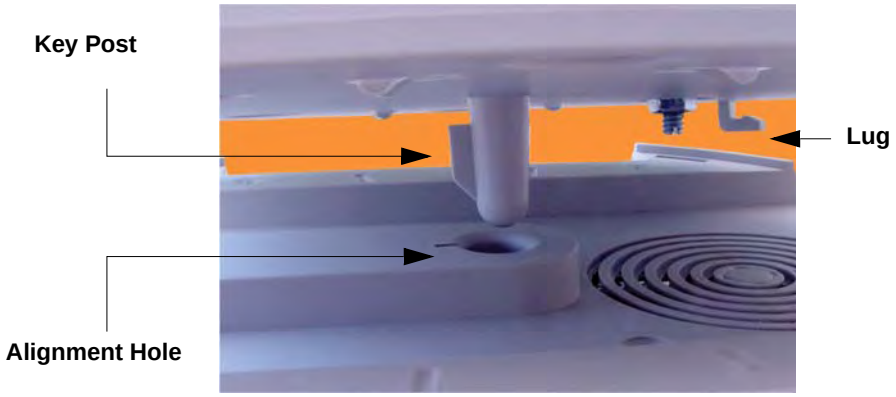

Figure 5. Attaching the WAP to the Mounting Plate

- Turn the Wireless WAP to the right to lock the unit into place—similar to the assembly of a smoke detector.
- If you are using a zip tie, feed it through the loop on the WAP and secure it.
- If you wish to dismount the WAP, push it up against the mounting plate and turn it to the left to release it.

8

Zero-Touch Provisioning and Ongoing Management

Most customers employ the Wireless LAN Orchestration System (WOS) for the initial setup and continuing management of Avaya devices. WOS users can readily set up new devices for zero-touch provisioning and perform ongoing maintenance.

If you are not using WOS, please see *Using the Avaya OS for Avaya WLAN AP 9100 Series* to configure your AP manually via the Express Setup menu option.

9

Small Mounting Plate Drawing

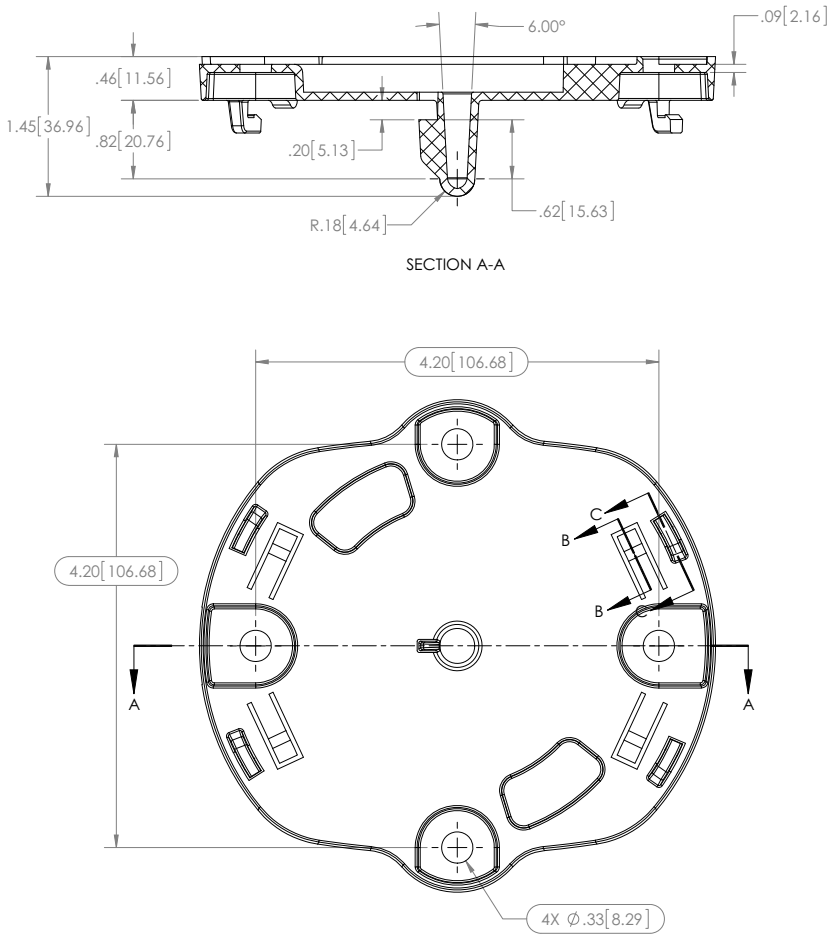

Figure 6. Drawing of Small Mounting Plate