



Safety Guidelines and Warnings

Translated versions of all safety warnings are available on Cisco.com. Additional safety information, along with regulatory information, is provided in [Appendix B, “Declarations of Conformity and Regulatory Information”](#).



Note

- This equipment is not suitable for use in locations where children are likely to be present.
- The marking information is located at the bottom of the apparatus.



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030



Warning

Read the installation instructions before connecting the system to the power source. Statement 1004



Warning

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. Statement 1017



Warning

Do not operate the unit near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use. Statement 364



Caution

The cables specified in this installation guide that are used with the specified cable glands provide protection against ingress of moisture for a Type 4/IP67 classified enclosure. If substitute cable are used, the installer must ensure that the size (OD) of the cable meets the acceptable range allowed by the cable gland.



Warning

This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. Statement 1024

**Warning**

Ultimate disposal of this product should be handled according to all national laws and regulations.

Statement 1040

**Warning**

Do not work on the system or connect or disconnect cables during periods of lightning activity.

Statement 1001

**Warning**

When installing or replacing the unit, the ground connection must always be made first and disconnected last. Statement 1046.

**Warning**

Installation of the equipment must comply with local and national electrical codes. Statement 1074

**Caution**

All installation methods for mounting an access point on any wall surface is subject to the acceptance of local jurisdiction.

FCC Safety Compliance Statement

The FCC, with its action in ET Docket 96-8, has adopted a safety standard for human exposure to RF electromagnetic energy emitted by FCC-certified equipment. When used with approved Cisco Aironet antennas, Cisco Aironet products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper operation of this radio device according to the instructions in this publication results in user exposure substantially below the FCC recommended limits.

Safety Precautions

For safety and to achieve a good installation, please read and follow these safety precautions:

- Select your installation site with safety, as well as performance in mind. Remember: electric power lines and phone lines look alike. For safety, assume that any overhead line can kill.
- Call your electric power company. Tell them your plans, and ask them to come look at your proposed installation.
- Plan your installation carefully and completely before you begin. Successful raising of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task and should know what to do and when to do it. One person should be in charge of the operation to issue instructions and watch for signs of trouble.
- When installing the access points, remember:
 - Do not use a metal ladder.
 - Do not work on a wet or windy day.
 - Do dress properly—shoes with rubber soles and heels, rubber gloves, long sleeved shirt or jacket.

- Use a rope to lift the access point. If the assembly starts to drop, get away from it and let it fall. If an accident should occur, call for qualified emergency help immediately.

Performing Site Surveys

Every network application is a unique installation. Before installing multiple access points, you should perform a site survey to determine the optimum use of networking components and to maximize range, coverage, and network performance.

Site surveys reveals problems that can be resolved before the network is operational. Because 802.11a/b/g/n operates in an unlicensed spectrum, there may be sources of interference from other 802.11a wireless devices (especially in multi-tenant buildings) that could degrade your 802.11 signals. A site survey can determine if such interference exists at the time of deployment.

A proper site survey involves temporarily setting up mesh links and taking measurements to determine whether your antenna calculations are accurate. Determine the correct locations and antenna types before you drill holes and route cables and mounting equipment.

Consider the following operating and environmental conditions when performing a site survey:

- Data rates—Sensitivity and range are inversely proportional to data bit rates. The maximum radio range is achieved at the lowest workable data rate. A decrease in receiver sensitivity occurs as the radio data increases.
- Physical environment—Clear or open areas provide better radio range than closed or filled areas.
- Obstructions—Physical obstructions such as buildings, trees, or hills can hinder performance of wireless devices.
- How far is your wireless link?
- Has a previous site survey been conducted?
- Do you have a clear Fresnel zone between the access points or radio line of sight?
- What is the minimum acceptable data rate within the link?
- Do you have access to both of the mesh site locations?
- Do you have the proper permits, if required?
- Are you following the proper safety procedures and practices?
- Have you configured the access points before you go onsite? It is always easier to resolve configurations or device problems first.
- Do you have the proper tools and equipment to complete your survey.

Translated Safety Warnings

The *Translated Safety Warnings for Cisco Aironet Outdoor Access Points* document is available at the following URL:

http://www.cisco.com/c/en/us/td/docs/wireless/access_point/warnings/reference/guide/1520_30_50_trans_warn78_18259_03.html

