

Overview

This standard is concerned with installing radio antennae. This includes radio antennae installation and testing on a range of fixed or mobile structures, including vehicles.

Install and configure radio antennae

Performance criteria

You must be able to:

1. Plan installation requirements by reviewing relevant antenna specifications and radio communication site details
2. Plan for the assembly of the antenna system to meet installation requirements
3. Assess the risks posed by any site-specific hazards and take preventative action following organisational standards and complying with relevant legislation and regulations
4. Check that equipment to be used for installation is in proper working condition and accurately calibrated
5. Assemble, mount and align antenna and prepare feed line to meet installation requirements
6. Carry out tests to check connectivity and signal strength
7. Analyse test results to identify, and where possible rectify, any failures in connectivity
8. Follow organisational procedures to report any unrectified failure in connectivity
9. Record all work undertaken and test results to organisational standards

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Knowledge and understanding

You need to know and understand:

1. The different types of radio antennas that can be used for different applications and environments
2. The current industry practice for antenna installation including earth and lightning protection
3. Industry standard procedures and equipment required for radio antenna testing
4. The features of instrument and equipment test methods and performance requirements
5. The legislation, codes of practice and other formal agreements that directly impact on operation and testing of Radio Communication antennas and equipment
6. The general components and installation of radio antennas and feed lines
7. The application of radio frequency (RF) and electromagnetic radiation (EMR) standards and specific health and safety requirements
8. The impact on the use and testing of Radio Communication equipment
9. The typical issues and challenges that occur in radio telecommunications antenna installations

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