

Date 8/15/01

Log #: AN-0148

Base Station Mounting to I-Beams (Horizontal or Vertical)

Overview

Direct mounting of the DCT1900 Base Station to an I-Beam is not allowed because of the distortion caused to the radiated field pattern of the Base Station. Included in the following discussion is a recommended method of securing the Base Station to the I-Beams while not affecting the Base Stations' radiation pattern.

Technical Discussion

For optimum performance, the Base Station must be mounted at least 3' from the I-Beam, the Base Stations should not be mounted any higher than 20' from the ground and the antennas must be perpendicular to the floor.

Solution

Use Fiberglass, Plexiglas, or Plywood to construct an extension arm to mount to the I-Beam. The extension arm should be long enough to keep the base station at least 3' from the I-Beam. The extension width should match that of the Base Station. Mount the extension to the I-Beam using I-Beam clamps. The Base Station is then mounted to the extension arm. See Figure 1 for examples.

Parts Needed

Fiberglass, Plexiglas, or Plywood cut to size.
I-Beam Clamps.
Nuts, Bolts and Washers.

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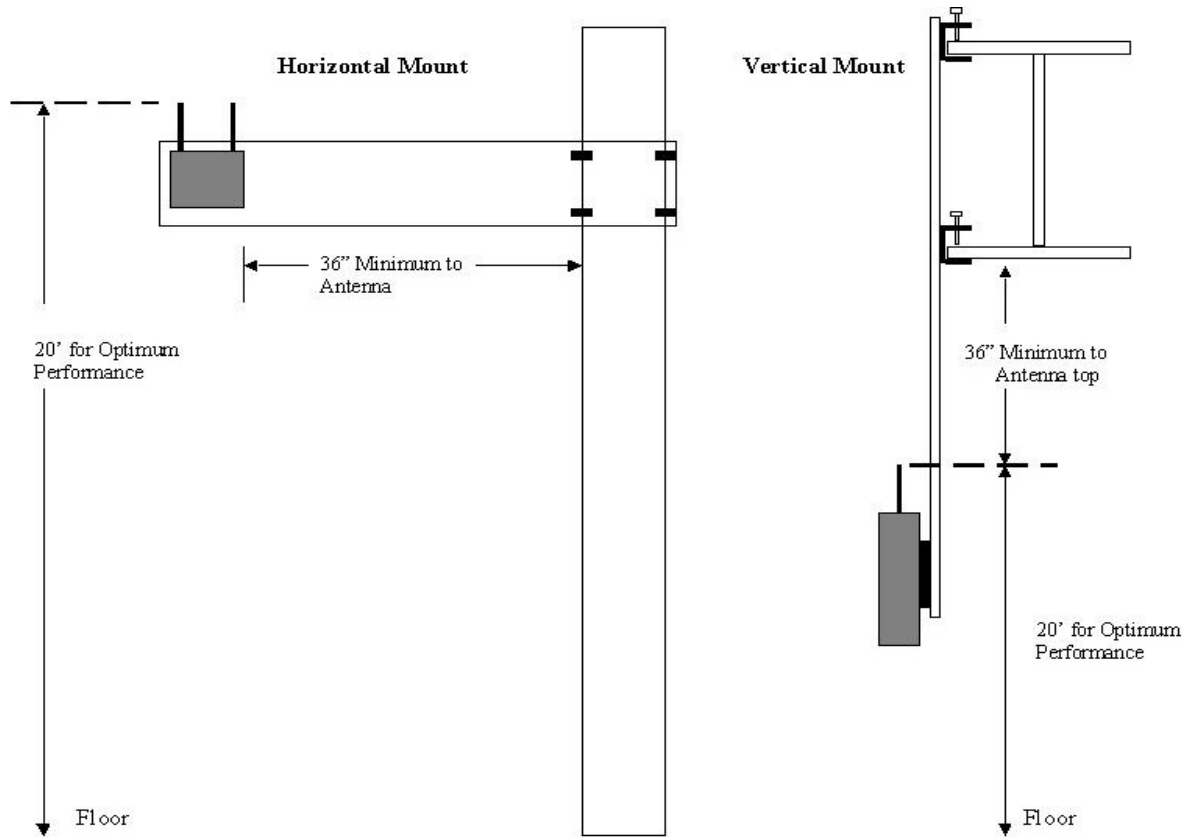


Figure 1

Additional Information

For further details and other ideas, please refer to the Freeset Technical Product Manual (Section 5, Chapter 15) of Ascom or contact the Technical Department at 1-877-712-7266.