

3.0 INSTALLATION

NOTICE: The erection and use of this antenna and its systems requires experienced personnel. ANDREW installation instructions have been written for such personnel. Please read this manual and accompanying installation drawings thoroughly prior to any attempt at installation. ANDREW disclaims any liability as a result of improper or unsafe installation practices.

3.1 SITE PREPARATION

A flat area approx. 46m x 21m (150ft. x 70ft.) is required. This area must be away from any large conducting surfaces which may cause radiation blockage and/or re-radiation.

3.2 TOWER (MAST) REQUIREMENTS

Two masts are required to support each end of the array 15 metres (49.2 feet) above the ground. The masts should be designed, installed and tensioned so as to withstand the loading shown in FIGURE 1. This figure graphs tension versus span for three load conditions: no-load, 160 kph wind with no ice, and 110 kph wind with 6.4mm radial ice. The support masts should therefore be designed to adequately support the loads as shown with a sufficient safety factor.

At the 15m level on each mast there should be a pulley installed used to raise the array into position. Another eyebolt (or other anchoring device) should be installed at the base of each tower which will be used to anchor the hauling rope (halyard) and the lower triangle poly-rope attachment (see FIGURE 2).

Installation materials required:

1. Galvanized steel cable, 6.35mm (1/4") dia. or equivalent. Length dependent on site layout.
2. Polyfibre-rope, 7mm dia, with a UV stabilized jacket (or equivalent non-conducting rope). Length dependent on site layout.
3. Shackles (for 1/4" steel rope).
4. Thimbles (for 1/4" steel rope).
5. Bulldog and/or Fistgrips (for 1/4" steel rope).