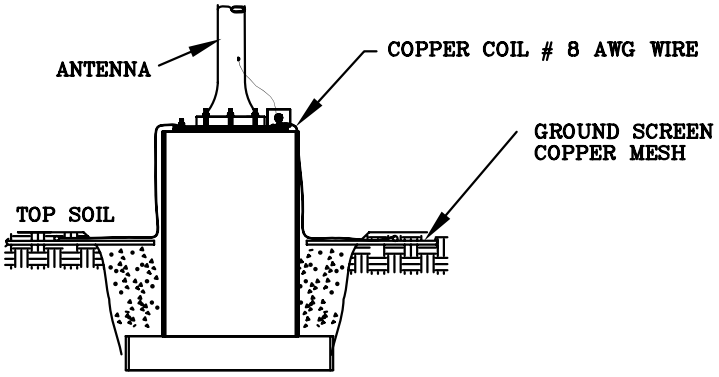
World's Leading Manufacturer Of Fibreglass AM Broadcasting Antennas

VGS-120120AM Broadcast Antenna Ground Screen

VALCOM'S VGS–120120AM GROUND SCREEN CONSISTS OF 120 RADIALS EACH 114 FEET LONG JOINED TO A CENTER RING AT THE BASE OF THE ANTENNA. THE RING IS PLACED ON A 12 X 12 FOOT COPPER MESH GRID. THE RADIAL ENDS ARE TERMINATED BY 10 FOOT LONG GROUND RODS POSITIONED 6.25 FEET APART AROUND THE CIRCUMFERENCE. THE GROUND SCREEN FEATURES ALL COPPER CONSTRUCTION. THE MOUNTING PAD, ANTENNA AND ANTENNA COUPLER ARE FOR REFERENCE ONLY.



THIS PARTICULAR SETUP IS USED IN AREAS OF GOOD TO AVERAGE GROUND CONDUCTIVITY AND MEETS THE MINIMUM REQUIREMENTS OF 120 RADIALS WITH LENGTHS EQUAL TO, OR GREATER THAN, THE PHYSICAL HEIGHT OF THE ANTENNA. IN AREAS WHERE SOIL CONDUCTIVITY IS POOR, THE GROUND RADIALS SHOULD BE EXTENDED TO THE DISTANCE EQUIVALENT TO A QUARTER WAVELENGTH OF THE OPERATING FREQUENCY, IF ENOUGH SPACE IS AVAILABLE. THIS DISTANCE CAN BE FOUND USING THE CALCULATIONS LISTED BELOW:

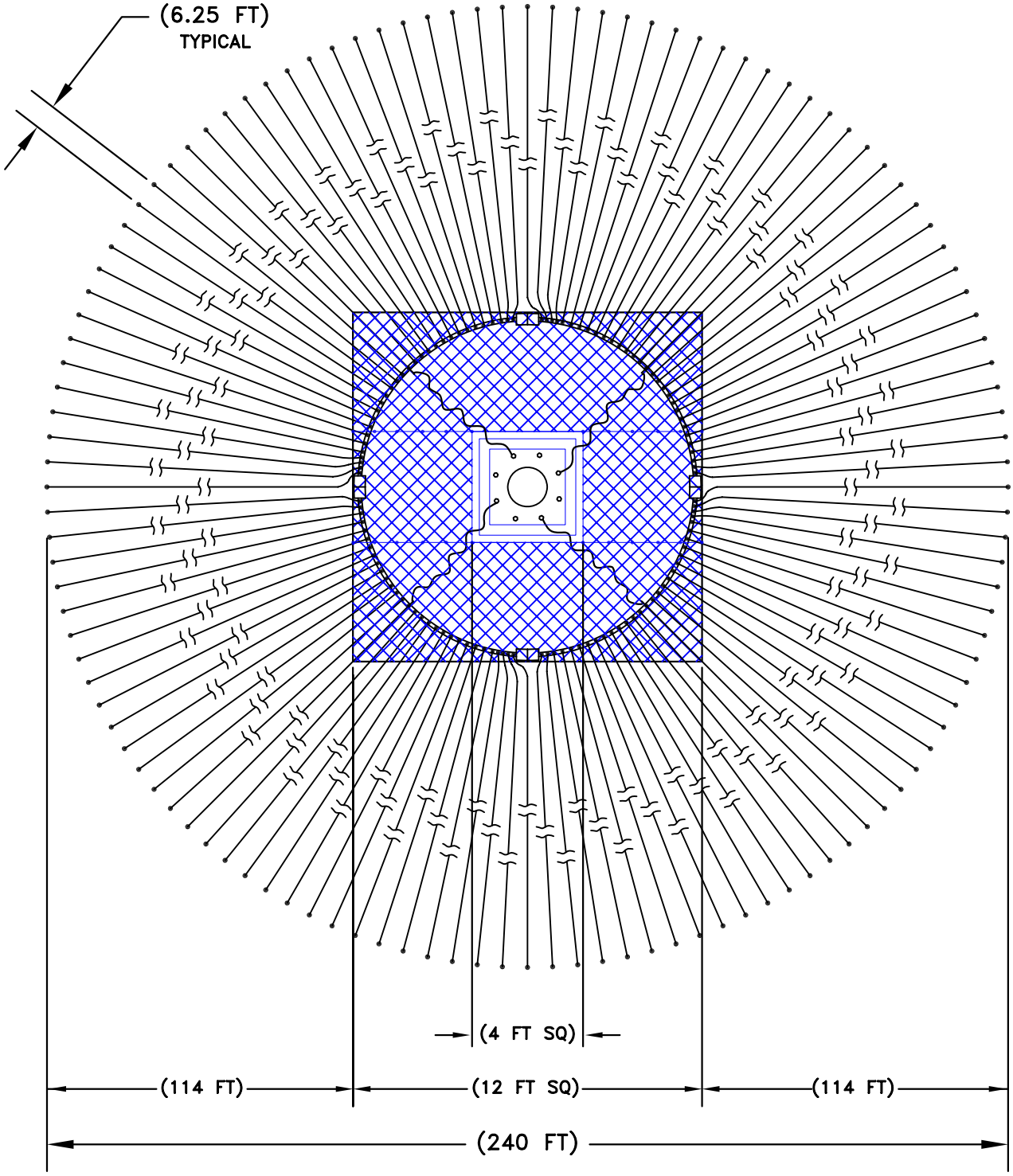
QUARTER WAVELENGTH IN FEET:

$$1/4\,\lambda = \frac{245.89}{\text{operating frequency (in MHz)}}$$

QUARTER WAVELENGTH IN METERS:

$$1/4\,\lambda = \frac{73.48}{\text{operating frequency (in MHz)}}$$

VGS-120120AM GROUND SCREEN
QUICK REFERENCE DATA



P.O. BOX 603 GUELPH, ONTARIO, CANADA, N1H 6L3
TEL 519-824-3220 FAX 519-824-3411
INTERNET: www.valcom-guelph.com EMAIL: enquiries@valcom-guelph.com