# NOTES FOR PRM6 BALLAST REQUIREMENTS TABLE

1. Ballast requirements are based on typical ANSI/EIA-222-D paraboloid antennas supported 12 inches horizontally from the vertex of the antenna at the top of the PRM6 mounting pipe on a flat supporting surface for 0, 20 and 40 degree antenna elevation angles. Specific antenna types and/or other mounting configurations may require more stringent strength and ballast requirements and must be investigated for each installation. The load carrying requirements of the support surface, the mast, the antenna and the antenna's connection to the mast must also be investigated for each installation.

2. The ballast weights indicated are total ballast weights, and must be uniformly distributed over all sides of the mount. The weight of the mount and antenna may be considered as ballast. The following table summarizes the weight of the PRM6 mount:

## PRM6 ANTENNA MOUNT WEIGHTS

| Mount No. | PRM635 | PRM640 | PRM645 | PRM655 |
|---|---|---|---|---|
| Mast Pipe Size | 3" Std. | 3 1/2" Std. | 4" Std. | 5" Std. |
| Weight (lbs) | 167 | 173 | 179 | 193 |

3. The zero velocity loads shown are equal to the ballast weights indicated divided by the total area enclosed by the perimeter of the mount (93 sq. ft.). This area is greater than the ballast contact area. Loads which must also be investigated include reactions caused by wind forces and moments; live loads; and dead loads of ballast, mount, antenna, miscellaneous equipment and roof pads.

4. The tabulated maximum wind velocities (Vmax) are based on a minimum 1.5 factor of safety against structural failure and overturning. The wind velocity and the appropriate factor of safety for an installation must be determined on an individual site basis. Potential increases in wind velocity due to channeling, roof projections, and other obstructions, must be considered when determining ballast requirements.

5. The tabulated wind velocities resulting in sliding (Vs) are based on a factor of safety equal to 1.0 and a coefficient of friction equal to .50. A 1.0 factor of safety was used assuming that at higher wind velocities, safety cables or other suitable attachments to the support structure would prevent sliding beyond a safe, designated area. The appropriate coefficient of friction and factor of safety to determine wind velocities resulting in sliding must be determined on an individual site basis. The coefficient of friction may vary under changing moisture and temperature conditions. The minimum coefficient of friction must be used to evaluate sliding resistance.

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