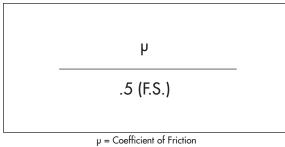6. The tabulated wind speeds resulting in sliding are based on a factor of safety (F.S.) equal to 1.0 and a coefficient of friction (μ) equal to .50. Wind speeds are given for 0, 20, and 40 degree antenna elevation angles. The .50 coeffficient of friction value was determined from full-scale load tests using wet UNR-ROHN roof pads on wet troweled finished concrete. The appropriate coefficient of friction to determine wind speeds resulting in sliding must be determined on an individual site basis.

   Wind speeds resulting in sliding for other factors of safety or for other coefficients of friction may be found by multiplying the tabulated wind speeds resulting in sliding by the following factor:

$$\frac{\mu}{.5 \, (F.S.)}$$

μ = Coefficient of Friction
F.S. = Factor of Safety

7. UNR-ROHN recommends that ballast material always be placed prior to mounting the antenna and that roof pads and gravity mount be secured to prevent hazards from occurring under extreme wind loading conditions.

8. Roof pads are recommended to prevent damage to roof membranes. Pads should be placed under all ballast rails and under the mast pipe. When roof pads are utilized, the minimum coefficient of friction between ballast rails and roof pad or between the roof pads and supporting surface must be used to calculate the wind speeds resulting in sliding.

9. When adhesives, sealants, or pads are utilized, they must be compatible with the supporting surface. They must also be durable and have adequate strength. Precautions should also be taken to ensure that damage to the supporting surface will not occur upon wind loading.

10. Adhesives and sealants must be capable of resisting shear, otherwise they may act as a lubricant and decrease the effective coefficient of friction between the ballast rails and the supporting surface. Windward ballast rails may partially lift off at wind speeds well below the maximum wind speeds indicated. Adhesives or sealants may be disturbed under such circumstances and may require repairing after major wind loading events.