

**Torsion** – Some helical piers are subject to Torsional moments. Moments are a little more difficult to explain than a simple force. Note the orange arrows in the drawing to the right. Torsional moments on helical piers tend to be the result of other forces acting on the pier. The torsional moment is the tendency of the helical pier to “twist” in the soil, usually as a result of a shear force acting simultaneously on the pier. To generate torsion or ”twist” on the pier there must load bearing area can’t be evenly distributed over the pier. A great example is a traffic light that overhangs an intersection.

**Helical Pier applications that include measurable Torsional moments.**

- Billboards
- Signage & Signals

