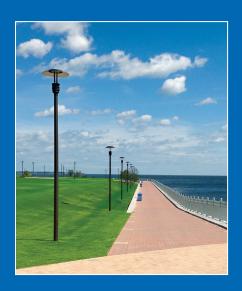


### Hapco Aluminum Poles... Better than Concrete.



## Advantages of Aluminum

The superior properties of aluminum make it both the perfect choice and best value for lighting poles.

- ✓ Superior Aesthetics
- ✓ Lower Overall Cost of Ownership
- ✓ Lightweight
- ✓ Corrosion Resistant
- √ Near-Zero Maintenance
- ✓ High Recycle Value 100% Recyclable Material
- ✓ Proven Performance
- ✓ Lifetime Warranty

### **HAPCO ALUMINUM**



# **Top 10 Reasons Concrete Poles are NOT Your Best Direct Buried Alternative.**

#### **Concrete Poles**

- Concrete is much heavier than Aluminum, resulting in significantly higher shipping and labor costs.
  - 25' Mounting Height Comparison Aluminum pole = 140 lbs. Concrete Pole = 1100 lbs.
- Concrete's slower, less efficient installations translate into extended job completion times. Concrete is difficult to install, requiring expensive installation equipment and larger installation crews.
- Concrete requires costly tenon adapters, which often loosen over time, causing vibration damage to the pole and/or fixture. Aluminum can be side drilled.
- Concrete is bulky, creating awkward transitions to today's sleek LED fixtures.
- Concrete poles use less aesthetic band mounting for accessory connections which leave stain rings when removed.
- Concrete will develop stains. Rebar used inside the pole will rust. The porous nature of the concrete allows this rust to bleed through to the surface of the pole, resulting in visible rust stains.
   Reclaimed waste water used by sprinkler systems many times contain iron, which permeates the porous concrete, also creating rust stains. Ground surface staining, especially in red clay environments, will also occur.
- Concrete has no recycle value.

- Concrete is conducive to spalling.
  Corrosion of reinforcing steel embedded in concrete lighting poles is a leading cause of deterioration. When steel corrodes, the resulting rust occupies a greater volume than the steel. This expansion creates tensile stresses which eventually causes cracking, delamination, and spalling (or crumbling) of the concrete.
- Concrete has poor aesthetics due to a lack of uniformity of color between the pole, fixture, and pole accessories such as banner arms and flag holders.
- Concrete handholes are trapezoidal, resulting in smaller handhole access. Junction boxes and submersible connections often must be used, resulting in poor aesthetics and increased costs up to \$200 per pole. Aluminum flexibility in handhole size allows connections to be made inside the pole, requiring no special connectors or unsightly pull boxes.

