

# The StressCrete Group

## Concrete Pole Facts



### Why concrete?

Low maintenance, competitive priced, and the aesthetic appearance of prestressed concrete poles make them superior to steel or wood for use in utility, sports lighting, communication and area lighting applications. The ease and speed of installation means faster project completion and lower installed costs. Also the use of concrete poles preserves our forests, requires little chemical treatment, and utilizes environmentally safe materials in production. Some other benefits are corrosion resistance, long service life - "Lifetime Warranty" when specifying StressCrete Concrete poles make them one of the most versatile and attractive options available in the market place today. Because of the minimal vibration and deflection, prestressed concrete poles offer greater service life to electrical components of outdoor luminaires, microwave and communication and camera equipment. This can mean less down time and less costly equipment repairs. Prestressed concrete poles can save erection time and money by eliminating the need for anchor base footings and structures which take days or weeks to install. A prestressed concrete pole, under most conditions can be set in hours (drill a hole, place the pole, backfill with crushed aggregate and then finish off with brick work, pavers or sod). This process eliminates unsightly base plates and covers, studs or nuts that are normally visible with steel poles.

### LIFETIME - What does that mean?

#### Concrete - 75+ years

Concrete by nature, continues to increase in strength throughout its life. StressCrete has been manufacturing concrete poles for over 50 years with the majority still in service today. We warrant our concrete poles for the lifetime of their intended use. If they are installed today, they will be still producing the desired results 50 years from now and beyond

#### Wood - 5 - 20 years

Studies have shown this to be a reasonable estimate due to effects of weather, insects, decay and woodpeckers.

#### Steel - 15 - 30+ years

This varies with the environment the pole is placed. Harsher salt air and constant moisture and humidity can cause a substantial reduction due to the onset of corrosion.

### Concrete Poles, The Right Decision

**Concrete:** The materials that go into concrete are, by nature, are mostly inert. The combining of the aggregate, sand and cement and pigments that produces concrete, is a process that produces a consistent product, that is both aesthetically pleasing and both functional and cost effective. When reinforcing steel is incorporated into the product design, it produces a pre-stressed concrete pole that continues to strengthen throughout its lifetime.

**Concrete VS Wood:** Wood is non-homogenous and varies not only pole-to-pole and region-to-region, but it also varies in strength at different locations on each pole. A location of lower stressed wood fibers or a knothole at a point that is subject to loading can create issues over time. Because wood poles are produced from living trees, imperfections exist not just in strength, but appearance as well. While a wood pole may appear straight and true during installation, it is subject to twist and bends as it ages. They are also subject to infestation by insects such as termites and make great homes for woodpeckers.

**Concrete VS Steel:** Because steel poles are made from man-made steel plate, they can be designed to achieve consistent and measurable strengths. Unfortunately, the steel plate must be protected to assure a long service life. This is accomplished usually by galvanization, but sometimes through painting, powdercoating or other available coatings. The additional coating process of steel allows for imperfections in production, shipping, field handling or even the damage of the coating long after installation. Any of the above can leave exposed metal that can corrode and rust over time, which are not just unsightly, but can reduce the pole's expected service life.

