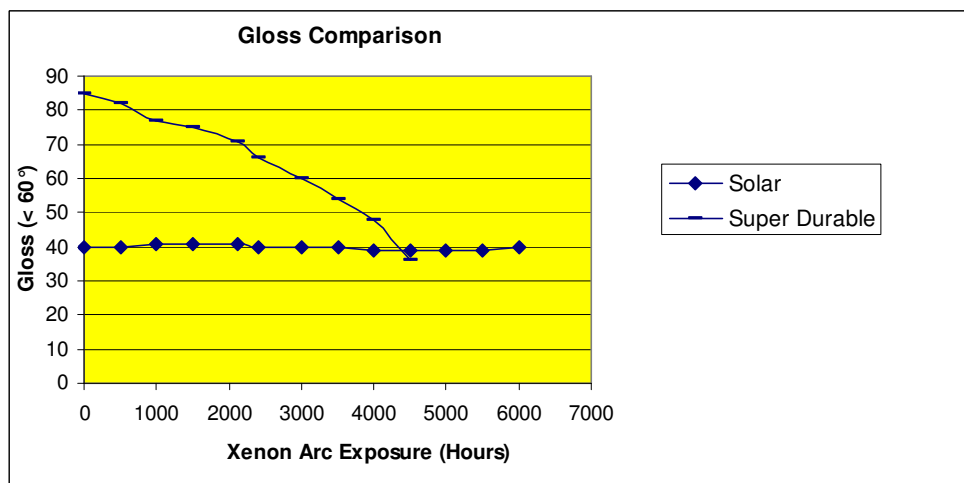


**S**ol-ar is Protech's high-performance line of protective powder coatings for architectural applications. Sol-ar is formulated using the new generation fluoropolymer resin system that ensures outstanding weathering performance and excellent resistance from extended exposure to the damaging effects of UV rays and environmental conditions.

Sol-ar is a thermoset fluoropolymer powder coating, applied by electrostatic gun, which, after curing, offers a tight seal between the substrate and the environment. Extended exposure to sun, wind, acid rain, temperature variations and atmospheric pollutants have negligible effects on the surface of a Sol-ar coating with gloss and color remaining relatively unchanged. The high durability and excellent resistance of the fluoropolymer can be attributed to the immense strength of the carbon-fluorine bond matrix, one of the strongest bonds in the world of polymers. This C-F bond energy is much greater than that of the UV rays emitted by sunlight and therefore, resists bond cleavage and degradation while increasing durability.

Unlike the old generation of fluoropolymer resin systems, there is no need to blend with a less weatherable acrylic component. The backbone of Sol-ar is 100% fluoropolymer, which translates into 50%-70% of the formulation system. The rest of the components include high performance pigments and other specialty additives. The chemical structure of the pigments adds color and thermal stability and at the same time increases the corrosion resistance of the coating. Combined, these elements enhance the matrix stability providing the protective barrier against harsh elements.

Accelerated weathering shows the performance superiority of Sol-ar when compared to a superdurable TGIC polyester. After 4000 hours of exposure, the superdurable shows signs of chalking, visual color fading and severe gloss loss while the Sol-ar coating demonstrates little of these surface changes. Chalking is direct evidence of the coating matrix and/or pigment failure. Since the integrity of the film has been compromised, the integrity of the substrate will also soon be damaged.



The unique formulation and fluoropolymer skeleton of the Sol-ar offers many features and advantages.

- *Outstanding weathering, UV protection and durability*
- *Abrasion, corrosion and mar resistance*
- *Cures at 400°F (204°C)*
- *Color and over-bake stability*
- *Heat resistance up to 450°F (232°C)*
- *High % gloss retention*
- *Gloss range from 30° to 70° (<60°)*
- *Wide color pallet range and custom colors available*
- *Environmentally friendly with no release of VOC's*
- *Primer not required although recommended*

Sol-ar powder coatings meet or exceed the stringent specifications of AAMA 2605-02 and carry with them a Protech guarantee for ten years. The overall color change will not fade below a DE of 5 units while gloss retention remains greater than 50%. These coatings pass the 4000 hours salt spray exposure test with no signs of blistering or creepage along the scribe line.

The high tensile strength and mar resistance of Sol-ar coatings prevents damage during handling, transportation and installation. With its broad palette of colors and gloss range, Sol-ar now allows architects the flexibility of design creativity along with optimal protection from the elements. The Sol-ar series offers an extraordinary variety of application potential. Road signs, lampposts, park benches, stadium seating, roof paneling, billboards, door and window trim, and aluminum extrusions are only some of the vast array of application possibilities.

When superior protection, high performance and ultra durability are needed, Protech's Sol-ar should be the first choice in powder coatings.