

Weathering Effects of Ultraviolet

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Champion Fiberglass adds ultraviolet stabilizers and pigments into its standard epoxy resins to slow the effects of weathering. The conduit also is subjected to accelerated ultraviolet testing (2,000 hours Xenon arc accelerated ultraviolet testing) by UL as a requirement for UL certification. However, depending on the geographical location of an installation, it is possible that conduit seeing continuous exposure to outdoor weathering and sunlight may experience some degradation in surface appearance. Continuous exposure to ultraviolet light may cause the surface of the conduit to fade and lose its gloss. Over longer periods of time, in extreme cases, the fiberglass strands closest to the surface may become exposed. This condition is often referred to as “fiber-bloom.” This condition does not affect the conduit physical properties or structural integrity. It is purely aesthetic as the exterior layer of winding glass is designed to be sacrificial. At this point, the conduit appearance may not be aesthetically pleasing, but it is structurally sound and capable of performing its intended purpose. For very severe UV conditions, Champion Fiberglass offers a special UV-resistant conduit which assures the conduit to have a 10-year life span before fiber-bloom appears.

When fiberglass conduit begins to show signs of weathering, a protective coating can be applied. Champion recommends coating the conduit with an outdoor urethane or acrylate paint. This will protect the conduit from the future effects of weathering and prolong the conduit system life.

If your application will experience extreme exposure to ultraviolet, please contact Champion Fiberglass to discuss the extreme ultraviolet resistant conduit options that are available.

