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ANAMET Electrical, Inc.
ANACONDA SEALTITE®

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To: Anamet Electrical, Inc. Customers

Re: Sunlight Resistance or UV Resistance

ANAMET Electrical, Inc. now delivers Type UVUA conduit with increased resistance to UV damage. ANACONDA SEALTITE® Type UVUA UL listed conduit has been independently tested to greatly exceed the requirements for sunlight resistance published in the UL 360 LFMC test standard. Type UVUA conduit exceeded UL durability requirements after over 3.8 times prolonged UV exposure.

Type UVUA has a new formulation with robust resistance to discoloration and structural degradation. All ANACONDA SEALTITE® liquid tight, flexible conduit (LFMC and LFNC) has UV absorbers in its jacket compound to slow discoloration and structural degradation. Our UL listed products are tested for sunlight resistance and pass UV testing to UL requirements so that they may be used in continuous outdoor exposure environments.

UV testing of the conduit jacket is done in a device called a weatherometer. The weatherometer simulates sunlight exposure and other weathering characteristics. It may cycle between periods of light and dark as well as periods of moisture and varying temperature. There is no way to accurately determine "years of use" of any material based on testing in a weatherometer. The lifetime of the product is determined by several factors including but not limited to latitude, temperature, humidity, and cloud cover at the location in which the conduit is installed.

The sun emits visible and non-visible radiation, such as UV (ultraviolet) wavelengths. PVC (polyvinyl chloride) is commonly used as a conduit jacket material. The exposure of PVC to the UV component of sunlight results in molecules in the first 0.001" to 0.002" of exposed surface becoming permanently converted by photosynthetic reaction into a complex structure. Conduit discoloration caused by UV exposure is primarily on the surface. The result is a brownish discoloration, often termed "UV Discoloration," "UV Degradation" or simply "Sunburn." The structural integrity of conduit is degraded only a small amount. UV discoloration does not occur where PVC is not exposed to sunlight and ceases when exposure ends. Degradation is increased by length or intensity of sunlight exposure, temperature, humidity, conduit color and chemical composition of the PVC. Because of these variables, it is difficult to define the effects of sunlight exposure or when degradation may become visible. Black conduit is more sunlight resistant than white or colored conduit. Paint may be applied to conduit in permanent outdoor installations, helping prevent discoloration. Apply a light-colored or white water-based latex paint formulated for exterior use. White or light-colored paint colors reflect light and reduce sun heating. Oil or solvent-based paints may damage the PVC conduit and they may not adhere well.

Clint Parrish
Product Development Manager
Anamet Electrical, Inc.