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ANAMET Electrical, Inc.

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To: Anamet Electrical Inc. Customers

Re: Sunlight Resistance or UV Resistance

The sun emits visible and non-visible radiation. One component of non-visible radiation is ultraviolet (UV) light. Like many other substances, PVC plastics are affected by exposure to UV radiation.

The exposure of PVC to the UV component of sunlight results in PVC molecules in the first 0.001" to 0.002" of exposed surface becoming permanently converted by photosynthetic reaction into a complex structure. The result is a brownish discoloration, often termed "UV Discoloration" "UV Degradation," or simply "Sunburn." UV discoloration does not occur where PVC is not exposed to sunlight, and ceases when exposure ends.

The discoloration process is time dependent, and can be slowed with the addition of UV absorbers in the PVC compound. Anamet Electrical Inc. Flexible conduits have these UV absorbers add to the PVC compound. The compounds used on UL listed products have been tested for sunlight resistance and passed UV testing according to UL requirements and are listed for continuous outdoor exposure.

The degree of discoloration affected by sunlight depends upon a number of variables, including: time of exposure, climatic conditions, and type and color of PVC used. Because of these variables, it is impossible to state how long it will take for the effects of sunlight exposure to become noticeable.

The UV discoloration of the conduit is mainly surface cosmetic and only reduces the integrity of the conduit a small amount. Colored conduits are less sunlight resistant than black. Black PVC is normally colored with carbon black which is the most sunlight resistant.

For permanent outdoor installations, the conduit can be protected from sunlight exposure to prevent discoloration. This can be accomplished by painting the conduit with a water-based latex paint formulated for exterior use. Oil or solvent-based paints may damage the conduits and/or not adhere well. In order to minimize heat build-up, white or light colored paints are best.

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