ENGINEERING BULLETIN

SUBJECT: ANAMET Electrical, Inc. conduit approved for use in Plenum Environments

The National Electrical Code limits use of electrical conduit in Plenum Environments. Refer to local building codes before installing any electrical conduit. Article 300.22 of the 2020 National Electrical Code (NEC) lists four (4) separate categories which apply to Ducts and Environmental Air.

1. Section (A) Ducts for Dust, Loose Stock, or Vapor Removal

   Per this section “no wiring systems of any type shall be installed in a duct used to transports dust, loose stock, flammable vapors,” or “used for ventilation or vapor removal for commercial type cooking equipment.”

   No ANAMET Electrical, Inc. or other conduit is allowed in this area.

2. Section (B) Ducts Specifically Fabricated for Environmental Air

   Section (B) directly applies to sheet metal ducts and other ducts with the specific purpose of transporting environmental air. Flexible metal conduit shall be permitted in lengths not to exceed 1.2 meters (4 feet). This method of installation is only acceptable when connecting “physically adjustable equipment” which is “necessary for the direct action upon or sensing of the contained air.”

   ANAMET Electrical, Inc. Type RWA and RWS are permitted for use in lengths not to exceed 1.2 meters (4 feet).

   No conduit with an overall nonmetallic covering shall be installed.

3. Section (C) Other Spaces Used for Environmental Air (Plenums)

   This section applies directly to spaces that are not specifically constructed for “environmental air-handling purposes as a plenum. This section shall not apply to habitable rooms or areas of buildings, the prime purpose of which is not air handling.” The NEC defines “Other Spaces” as the space or cavity between a structural floor or roof and a suspended ceiling. The reason section C is segregated from section B is because these areas are not specifically designed to handle environmental air. Instead, many times these areas are used as air returns or plenums.

   Installation of ANAMET Electrical, Inc. Type RWA and RWS are permitted for areas which apply to Article 300.22 section (C).

4. Section (D) Information Technology Equipment

   Electrical wiring in air-handling areas beneath raised floors for information technology is permitted in accordance with Article 645.5 (E) (2).

   Installation of ANACONDA SEALTITE® Type UA, HTUA, CW, ZHUA, FGUA, CNP, NMUA, RWA or RWS is permitted for areas where the raised floor is constructed to code and the area under the floor is accessible.