**WHITE PAPER: Square Lock (SL) and Full Interlock (UI) Metal Conduit**

ANAMET Electrical, Inc. roll forms strip metal to make flexible conduit in a variety of materials. Square lock (SL) and Full interlock (UI) conduit have similar features, but different benefits.

**Square lock (SL)**
- The square profile of the conduit gives space for packing, such as an optional integral bonding wire or nylon cord
- Conduit contacts an integral bonding wire, reducing electrical resistance and effectively meeting National Electrical Code (NEC) and Underwriters’ Laboratories (UL) safety requirements
- Type UA, CW, HTUA, ZHUA and ASUA conduit in Trade sizes 3/8 to 1-1/4 inches is square lock (SL) conduit with an integral bonding wire
- Thick metal strip is used because roll forming bends less metal
- The square lock profile eases production of smaller diameter conduit

**Full interlock (UI)**
- Type UA, CW, HTUA, ZHUA and ASUA conduit in Trade sizes 1-1/2 inches and larger is full interlock (UI) conduit without an integral bonding wire
- The complex full interlock profile requires thin metal strip
- Each turn of the UI conduit interlocks in a tight joint that resists twisting, breaking and crushing
- Saw cutting is the best method for cutting UI conduit

**Comparison**
- Conduit features block destructive compression and extension
- Stripwound conduit is more flexible, with a tighter bend radius, in smaller diameters
- Stripwound conduit is formed in a spiral like a metal spring
- Metal is folded less in each turn of the SL conduit, so it may weigh less than UI conduit of the same diameter. Packing in smaller diameter SL conduit can make it weigh nearly the same as UI conduit of the same diameter.