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**Wire and Cable Identification Guide**

**July 2017**

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Types of Insulation

**THW:** Thermoplastic Insulation, Heat Resistant Insulation, Wet conditions (75 C rating for wet locations)

**THWN:** Thermoplastic Insulation, Heat Resistant, Wet, Nylon Jacket Insulation (75 C rating for wet locations)

**THHN:** Thermoplastic, High Heat Resistant, Nylon Jacket Insulation (90 C rating for dry and damp locations)

**XHHW:** Crosslinked Polyethylene (X) High Heat Resistant Insulation, Wet conditions (90 C rating for dry and damp locations; 75 C rating for wet locations)

**XHHW-2:** Crosslinked Polyethylene (X) High Heat Resistant Insulation, Wet conditions (90 C rating for dry, damp and wet locations)

**XHH:** Crosslinked Polyethylene (X) Flame Retardant Thermoset Insulation (90 C rating for dry and damp locations)

**XLP-RHH:** Crosslinked Polyethylene (X) Rubber High Heat Resistant Insulation (90 C rating for dry and damp locations)

**XLP-RHW:** Crosslinked Polyethylene (X) Rubber Heat Resistant Insulation, Wet conditions (75 C rating for dry, damp and wet locations)

**XLP-RHW-2:** Crosslinked Polyethylene (X) Rubber Heat Resistant Insulation, Wet conditions (90 C rating for dry, damp and wet locations)

**USE:** Rating for Underground Service Entrance conductor applications

**GUIDELINES FOR FIELD INSPECTION OF ELECTRICAL CONDUCTORS**

Single Conductors-

**[Brand Name] (UL) THWN [Wire Size]<sup>(1)</sup> AWG CU<sup>(2)</sup> 600 volt [E#####]**

Single Conductors have the Manufacturer’s Name, UL Mark, Type of Insulation, Wire Size and Type, Rating and E##### imprinted or painted on the outer insulation jacket of the conductor. The exception to the rule is Southwire. Southwire conductor has the name of the shift foreman imprinted on the insulation jacket in place of the Company Name and the 5 or 6 digit number (E#####).

- (1) - The wire size shall be as specified in the Contract Documents;
- (2) - ONLY Copper wire may be used on Agency Projects, These are designated “CU”.

Multi-Conductors-

Multi-Conductors have the Manufacturer’s Name, Type, Rating, UL Mark and Type of Insulation and Number and Size of Conductors imprinted or painted on the outer insulation jacket of the conductor.