

GLOSSARY

NEMA: National Electrical Manufacturers Association.

NON-CONTAMINATING PVC: A polyvinyl formulation, which does not produce contamination.

NYLON: A group of polyamide polymers, which are used for wire and cable jacketing.

OFHC: Oxygen-free, high conductivity copper.

OHM: Unit of resistance such that a constant current of one ampere produces a force of one volt.

OSHA: Occupational Safety and Health Act.

PAIRING: The union of two insulated single conductors through twisting.

PLENUM: The air return path of a central air handling system, either ductwork or open space over a dropped ceiling.

PLENUM CABLE: Cable listed by Underwriters Laboratories for installation in plenums without the need for conduit.

POLYESTER: A resin formed by the reaction between a dibasic acid and dihydroxy alcohol.

POLYETHYLENE: A thermoplastic material with exceptionally low dielectric losses at all frequencies that is composed of ethylene gas polymers.

POLYMER: A material of high molecular weight formed by the chemical union of monomers.

POLYOLEFIN: A thermoplastic material based upon the unsaturated hydrocarbons known as olefins. When combined with butylenes or styrene polymers, they form compounds such as polyethylene and polypropylene.

POLYURETHANE: A family of flexible abrasion resistant jackets used for harsh environmental cables.

POLYVINYLCHLORIDE: A general-purpose family of insulations whose basic constituent is polyvinylchloride or its copolymer with vinyl acetate. Plasticizers, stabilizers, pigments and fillers are added in lesser quantity to improve mechanical and/or electrical properties of this material.

PRIMARY INSULATION: The first layer of non-conductive material applied over a conductor, whose primary function is to act as an electrical barrier.

QUAD: A four conductor cable.

REA: Rural Electrification Administration.

REACTANCE: The opposition offered to the flow of alternating current by inductance or capacitance of a component or circuit.

RECOVERED DIAMETER: Diameter of shrinkable products after heating has caused it to return its extruded rubber.

RESIN: A synthetic organic material formed by the union of one or more monomers.

RESISTANCE: A measure of the difficulty in moving electrical current through a medium when voltage is applied. Measured in ohms.

RETRACTABLE CABLE: A cable that returns by its own stored energy from an extended condition to its original contracted form.

RFI: Radio Frequency Interference.

SHEATH: The outer covering or jacket of a multi-conductor cable.

SHIELD: In cables, the metallic layer placed around a conductor or group of conductors to prevent electrostatic or electromagnetic interference between the enclosed wire and external fields.

SHIELD COVERAGE: The physical area of a cable that is actually covered by the shielding material and is expressed in percent.

SHIELD EFFECTIVENESS: The relative ability of a shield to screen out undesirable signals.

SHRINKAGE RATIO: That temperature which effects complete recovery of shrinkable products.

SHRINK TUBING: Tubing which has been extruded, cross-linked and non cross-linked, and mechanically expanded which when reheated will return to its original diameter.

SLEEVING: A braided, extruded or woven.

SOLDERING SLEEVES: Shrinkable tubing with a solder perform used for the highest reliability soldering connections or shield grounding.

SOLID CONDUCTOR: A conductor consisting of a single wire.

SPARK TEST: A test designed to locate pin-holes in the insulation of a wire or cable by application of a voltage for a very short period of time while the wire is being drawn through the electrode field.

SPECIFIC GRAVITY: The ratio of the density of a material to that of water.

SPIRAL WRAP: The helical wrap of a material over a core.

SPLICE: A mechanical device or fusion process that permanently bonds two fibers together without a connector producing extremely low loss.

STRANDED CONDUCTOR: A conductor composed of single solid wires twisted together, either singly or in groups.

TAPE WRAP: A spirally applied tape over an insulated or un-insulated wire.

TEFLON: A DuPont Company Trademark for polytetrafluoroethylene.

TEFZEL: A DuPont trade name for fluorocarbon material typically used as the insulation on wire wrap.