

Glossary

WEIGHT RESISTIVITY — The resistance in ohms at a specified temperature of a body of uniform cross section and of unit weight and unit length.

WELDING — Joining the ends of two wires, rods, or groups of wires (a) by fusing, using the application of heat or pressure or both, by means of a flame torch, electric arc, or electric current or (b) by cold pressure.

WHEATSTONE BRIDGE — A device used to measure DC resistance. See Bridge.

WICKING — The longitudinal flow of a liquid in a wire or cable due to capillary action.

WIRE — A rod or filament of drawn or rolled metal whose length is great in comparison with the major axis of its cross section.

WIRE BRAID — Flexible wire constructed of small size strands in tubular form. Used for shielding or connections where constant flexing is required.

WIRE GAUGE (AWG) — The American Wire Gauge, originally called Brown & Sharpe Gauge. A system of numerical wire sizes starting with the lowest numbers for the largest sizes. Gauge sizes are each 20.6% apart based on the cross-sectional area.

WIRE NUT — A closed-end splice that is screwed on instead of crimped.

WIRE-WRAPPED CONNECTION — A solderless connection made by wrapping bare wire around a square or rectangular terminal with a power or hand tool.

WIRE WRAPPING TOOLS — Portable electric tools and automatic stationary machines used to make solderless wrapped connections of wires to terminals.

WITHSTAND TEST VOLTAGE — The voltage that the device must withstand without flashover, disruptive discharge, puncture, or other electric failure when voltage is applied under specified conditions.

WP — Weatherproof construction for overhead wires.

WORKSTATION — (1) Input/Output equipment at which an operator works; (2) a station at which a user can send data to, or receive data from, a computer or other workstation for the purpose of performing a job.

WRAPPER — An insulating barrier applied as a sheet of tape wrapped around a coil periphery.

X

X — Symbol for reactance.

X BAND — A band of frequencies between 5,200 and 10,000 megahertz.

XHHW — A UL cable type. Cross-linked polyethylene insulated small diameter building wire rated 75°C wet and 90°C dry.

XHHW-2 — A UL cable type. Cross-linked polyethylene insulated small diameter building wire rated 90°C wet and dry.

XLP — Cross-linked polyethylene. Also written XLPE.

XPLE — Cross-linked polyethylene.

Y

YIELD STRENGTH — The point at which a substance changes from elastic to viscous.

Z

Z — Symbol for impedance.

ZETABON — Dow's trade name for an acrylic acid copolymer coated aluminum tape.

ZIPPER TUBING — Alpha's trade name for harnessing/jacketing material containing a zipper-track type closure. The zipper arrangement allows installation with no need to disconnect previously wired schemes for its installation. See Loc-Trac.

ZYTEL — DuPont's trade name for nylon resins.