

Glossary

GROUND CONDUCTOR — A conductor in a transmission cable or line that is grounded.

GROUND FAULT — See Fault, Ground.

GROUND LOOP — The generation of undesirable current flow within a ground conductor, owing to the circulation currents which originate from a second source of voltage.

GROUND PLANE — Expanded copper mesh which is laminated into some flat cable constructions as a shield.

GROUND POTENTIAL — Zero potential with respect to the ground or earth.

GROUND NEUTRAL — The neutral wire that is metallically connected to ground.

GTO — Gas tube sign and oil-burner ignition cable, 5 kV–15 kV.

GUY — A tension wire connected to a tall structure and another fixed object to add strength to the structure.

H

HALAR — Ausimont Co. trademark for ethylene chlorotrifluoroethylene (ECTFE).

HALF DUPLEX — Two-way communications in which data is sent in only one direction at a time.

HARD-DRAWN WIRE — As applied to aluminum and copper, wire that has been cold drawn to final size so as to approach the maximum strength attainable.

HARNESS — An arrangement of wires and cables, usually with many breakouts, which have been tied together or pulled into a rubber or plastic sheath, used to interconnect an electric circuit.

HASH MARK STRIPE — A noncontinuous helical stripe applied to a conductor for identification.

HAZARDOUS LOCATION — Ignitable vapors, dust, or fibers that may cause fire or explosion as defined in Article 500 of the NEC.

HDPE — High density polyethylene.

HDTV — High definition television.

HDX — Half-Duplex Transmission. Transmission in either direction but not in both directions simultaneously. Compare with full-duplex transmission.

HEAD-END — A central point in broadband networks that receives signals on one set of frequency bands and retransmits them on another set of frequencies.

HEAT DISTORTION — Distortion or flow of a material or configuration due to the application of heat.

HEAT SEAL — Method of sealing a tape wrap jacket by means of thermal fusion.

HEAT SHOCK — A test to determine stability of material by sudden exposure to a high temperature for a short period of time.

HEAT SINK — A device that absorbs heat.

HEATER CORD — A group of cable types defined in Article 400 of the NEC. Types HPD, HPN, HS, HSJ, HSJO and HSO.

HELICAL STRIPE — A continuous, colored, spiral stripe applied to a conductor for circuit identification.

HELIX — Spiral winding.

HENRY — A unit of inductance equal to the inductance of a current changing at the rate of 1 ampere per second inducing a counter electromotive force of 1 volt.

HERTZ (Hz) — Cycles per second. A cycle that occurs once every second has a frequency of 1 Hertz. The bandwidth of the average phone line is between 300 and 3,000 cycles per second.

HF — High Frequency.

HID — High Intensity Discharge as in mercury metal halide and sodium lamps.

HIGH BOND INSULATION — Insulation exhibiting great bond strength to the conductors.

HIGH-SPLIT — A broadband cable system in which the bandwidth utilized to send toward the head-end (reverse direction) is approximately 6 MHz to 180 MHz, and the bandwidth utilized to send from the head-end (forward direction) is approximately 220 MHz to 400 MHz. The guard band between the forward and reverse directions (180 MHz to 220 MHz) provides isolation from interference.

HIGH TEMPERATURE WIRE AND CABLE — Electrical wire and cables having thermal operating characteristics of 150°C and higher.

HIGH TENSION CABLES — Generally the high voltage ignition wires for combustion engines, gas and oil ignitors, or neon signs, etc. (Unshielded.) Usually Type GTO.

HIGH-VOLTAGE CABLE TERMINATION — A device used for terminating alternating current power cables having laminated or extruded insulation rated 2.5 kV and above.

HIGH-VOLTAGE POWER (system voltage ratings) — A class of system voltages equal to or greater than 69,000 volts or less than 230,000 volts.

HINGE CABLE — A cable connected between a hinged or swinging device and a stationary object.

HIPOT — A DC high potential test used on medium and high voltage cables. See Dielectric Strength Testing.

HMWPE — High molecular weight polyethylene.

HOLDING STRENGTH — Ability of a connector to remain assembled to a cable when under tension.

HOOKUP WIRE — Small wires used to hook up instruments or electrical parts, usually 12 AWG and smaller.

HOT MODULUS — Stress at 100% elongation after 5 minutes of conditioning at a given temperature (normally 130°C).

HOT STAMPING — Method of alphanumeric coding. Identification markings are made by pressing heated tape and marking foil into softened insulation surfaces.

HOT STICK — A long insulated stick having a hook at one end which is used to open energized switches, etc.

HOT TIN DIP — A process of passing bare wire through a bath of molten tin to provide a coating.

HOUSING — A metallic or other enclosure for an insulated splice.

HPD — A UL cable type. Two, three or four conductor heater cord with thermoset insulation and cotton or rayon outer covering. For use in dry locations.

HPN — A UL cable type. Two or three conductor, thermosetting-insulated heater cord. Parallel construction. For use in damp locations.

HSO — A UL cable type. Thermoset jacketed heater cord.

HV — High Voltage.

