

Glossary

STAY CORD — A component of a cable, usually a high-tensile textile, used to anchor the cable ends at their points of termination and to keep any pull on the cable from being transferred to the electrical connections.

STEP INDEX FIBER — A multimode optical fiber consisting of a core of uniform refractive index, surrounded by cladding of slightly lower refractive index.

STIFFNESS — As applied to copper, the property of a conductor that causes it to resist permanent deformation by bending.

STO — Same as ST but with oil-resistant thermoplastic outer jacket, 600 V, 60°C.

STOO — Same as STO but with oil-resistant insulation.

STOP JOINT — A splice which is designed to prevent any transfer of dielectric fluid between the cables being joined.

STP — Shielded Twisted Pair. Two wires, wound around each other to help cancel out any induced noise in balanced circuits. Multiple pairs of wires are contained in one sheath, and each wire pair is shielded.

STRAIGHT JOINT — A cable splice used for connecting two lengths of cable, each of which consists of one or more conductors.

STRAIN GAUGE — A device for determining the amount of strain (change in dimension) when a stress is applied.

STRAIN HARDENING — An increase in hardness and strength caused by plastic deformation at temperatures lower than the recrystallization range.

STRAND — One of the wires of any stranded conductor.

STRANDED CONDUCTOR — A conductor composed of a group of wires, usually twisted, or of any combination of such groups of wires.

STRAND LAY — The distance of advance of one strand of a spirally stranded conductor, in one turn, measured longitudinally.

STRESS-RELIEF CABLE — Cable used to relieve stresses in the process of welding pipe joints by inducing heat in pipe sections to be welded, flexible copper strand.

STRESS-RELIEF CONE (TERMINATION) — A device used to relieve the electrical stress at a shielded cable termination; generally used at 5 kV and above.

STRIP — To remove insulation from a wire or cable.

STRUCTURAL RETURN LOSS — Backward reflected energies from uneven parts of the cable structure.

SUBCHANNEL — A frequency subdivision created from the capacity of one physical channel by broadband LAN technology. Bands of frequencies of the same or different sizes are assigned to transmission of voice, data, or video signals. Actual transmission paths are created when each assigned band is divided, using FDM, into a number of subchannels.

SUBSPLIT — The most common form of transmission in the CATV industry. In the sub-split scheme, the bandwidth utilized to send toward the head-end (reverse direction) is much smaller, from approximately 5 MHz to 30 MHz, and the bandwidth utilized to transmit from the head-end (forward direction) is very large from approximately 55 MHz to 300 MHz. The guard band between forward and reverse directions (30 MHz to 55 MHz) provides isolation from interference.

SUBSTRATE — Insulating material of a printed circuit.

SUGGESTED WORKING VOLTAGE — AC voltage that can be applied between adjacent conductors.

SUPERCONDUCTORS — Materials whose resistance and magnetic permeability are virtually zero at very low temperatures.

SUPPRESSOR — A device used to reduce or eliminate unwanted voltages in electric or electronic circuits. For example, a resistance conductor in, or a resistor in series with, a sparkplug cable, to suppress interference which would otherwise affect radio reception in and near the vehicle.

SURFACE RESISTIVITY — The resistance of a material between two opposite sides of a unit square of its surface. It is usually expressed in ohms.

SURGE — A temporary and relatively large increase in the voltage or current in an electric circuit or cable. Also called transient.

SV — A UL cable type. Vacuum cleaner cord, two or three conductor, rubber insulated. Overall rubber jacket. For light duty in damp locations, 300 V 60°C.

SVO — A UL cable type. Same as SV except oil-resistant thermoset jacket, 300 V 60°C or 90°C.

SVT — A UL cable type. Same as SV except thermoplastic jacket. 300 V, 60°C or 90°C.

SVTO — A UL cable type. Same as SVT, except with oil-resistant thermoplastic jacket, 60°C.

SW — A CSA cable type. Rubber jacketed power supply cable (8 AWG to 2 AWG) 600 V.

SWEEP TEST — A test given to check attenuation by an oscilloscope, as in coaxial cable.

SWO — Same as SW except neoprene jacketed.

SWT — A CSA cable type. Plastic-jacketed power supply cable (8 AWG to 2 AWG) 600 V.

T

T — Thermoplastic vinyl, building wire, 60°C.

TAKE-UP — The process of accumulating wire or cable onto a reel, bobbin, or some other type of pack. Also, the device for pulling wire or cable through a piece of equipment or machine.

TANK TEST — A dielectric strength test in which the test sample is submerged in water and voltage is applied between the conductor and water as ground.

TAP — (1) Baseband — The component of a connector that attaches a transceiver to a cable, (2) Broadband — (Also called a directional tap or multitap) a passive device used to remove a portion of the signal power from the distribution line and deliver it onto the drop line.

TAPED INSULATION — Insulation of helically wound tapes applied over a conductor or over an assembled group of insulated conductors.

TAPED SPLICE — A joint with hand-applied tape insulation.

TAPE WRAP — A spirally applied tape over an insulated or uninsulated wire.

TC — A UL cable type. See Tray Cable, NEC Art. 340.

TCLP — Toxicity Characteristic Leaching Procedure. A test created by the EPA to determine whether an item can be safely discarded in an ordinary (nonhazardous) landfill.

T CONNECTOR — A cable adapter that attaches a PC with a network interface module to the network.

TEAR STRENGTH — The force required to initiate or continue a tear in a material under specified conditions.

