



Glossary of Terms Used in the Wire & Cable Industry

A	Ampere	Breakdown Voltage	The voltage at which the insulation between two conductors will break down or arc over.
Abrasion Resistance	A measure of the ability of a wire, wire covering or material to resist surface wear or damage by mechanical means.	B & S Gauge	Brown & Sharp Gauge, a wire diameter standard the same as AWG.
Accelerated Aging Test	Test of insulation to measure its compliance with temperature ratings.	Bunched Stranding	A group of strands twisted together in a random manner in the same direction and done in one operation with no regard to geometric position of the strands.
Alternating Current (AC)	Alternating Current	C	Celsius. A temperature rating system where water freezes at zero degrees and boils at one hundred degrees.
Ampere	The unit expressing the rate of flow of an electrical current.	Cable	A combination of conductors insulated from one another (multiple-conductor cable).
Anneal	To heat and then gradually cool in order to relieve mechanical stresses. Annealing copper makes it softer and less brittle.	Cable Core	The portion of an insulated cable under the protective covering or coverings.
ASTM	American Society for Testing and Materials	Cable Filler	The material used in multiple-conductor cables to occupy the interstices in a cable to make the finished cable round.
Attenuation	Applied to coaxial cables, the signal loss in a cable, expressed in decibels, dB.	Cabling	Twisting together two or more insulated conductors by machine to form a cable.
AWG	American Wire Gauge. The standard system used for designating wire diameter. Also referred to as the Brown and Sharp (B & S) wire gauge.	Cabling Factor	Used in formulas for calculating the overall diameter of cable. $D=fd$ where D=cable diameter, f=factor, and d=diameter of one conductor.
AWM	Underwriters Laboratories designation for Appliance Wiring Material.	Capacitance	The ability of a cable to hold an electric charge. Its value is usually stated in Picofarads/foot.
Balanced Line	A cable having two conductors which carry voltages opposite in polarity but equal in magnitude with respect to ground.	Cellular Insulation	Insulation that has had an agent used to produce cells or "bubbles". Used to reduce the dielectric constant of the solid insulation.
Bare Conductor	A conductor not covered with insulating material.	Characteristic Impedance	Characteristic impedance of a cable is the ratio of an applied voltage and current. The value is expressed in Ohms.
Baud	Unit of data transmission speed. One Baud is one bit per second.	Circular Mil Area (CMA)	The square of a conductor diameter in mils, or thousandths of an inch. Example a 30 AWG conductor has a diameter of 10 mils and a CMA of 100. Used to determine conductor sizes.
Binder	Spirally served tape or thread used for holding assembled cable components in place.		
Bond Strength	Amount of adhesion between bonded surfaces.		
Braid	Woven bare metallic or tinned copper wire used as shielding for wires and cables.		
Braid Angle	The angle between the axis of the cable and axis of the braid.		
Braid Ends	The number of wires used on one carrier on a braider.		