

TW – Thermoplastic Wet Location Use - UL 83 listed, general requirements of NFPA 70 for cable, 60°C wet and dry locations.

TW75 – Thermoplastic Wet Location Use - CSA 75 certified for cable, 600V, 75°C, dry and wet locations.

TWN75 – Thermoplastic Wet Location Use Nylon Jacket - CSA 75 designation for cable, 600V, 75°C, dry and wet locations.

Twin cable – Cable composed of two separately insulated stranded conductors laid parallel under a common covering.

Twiner – Device for twisting together two conductors.

Twisted pairs – Consist of two insulated wires twisted together. Twisting pairs increases the rejection of noise and interference. Most frequently used for data transmission cables.



UL – Underwriters Laboratories - Global independent safety science company offering expertise across five key strategic businesses: Product Safety, Environment, Life and Health, Knowledge Services and Verification Services.

Underwrap – Wire or cable wrapping over itself.

Unidirectional conductor – Conductor constructed with a central core surrounded by more than one layer of helically laid wire, all layers having a common direction of lay, with increase in length of lay for each successive layer.

Unilay – More than one layer of helically laid wires with the direction of lay and length of lay the same for all layers.

Unshielded cable – Unshielded cable is appropriate where no noise is present, such as no crosstalk from adjacent wire. Twisted pairs, especially in data, are often unshielded.

USB – Universal Serial Bus - Industry standard developed in the mid-1990s that defines the cables, connectors and communications protocols used in a bus for connection, communication and power supply between computers and electronic devices.

USCG – United States Coast Guard - Branch of the United States Armed Forces. The Coast Guard is a maritime, military, multi-mission service unique among the U.S. military branches for having a maritime law enforcement mission (with jurisdiction in both domestic and international waters) and a federal regulatory agency mission as part of its mission set.

USP – United States Pharmacopeial Convention - Scientific nonprofit organization that sets standards for the identity, strength, quality, and purity of medicines, food ingredients, and dietary supplements manufactured, distributed and consumed worldwide.

Velocity of Propagation (Vp) – Expressed as a percentage, the transmission speed of an electrical signal down a length of a cable compared to its speed in free air (speed of light).

VFD – Variable Frequency Drive - Type of adjustable speed drive used in electro-mechanical drive systems.

VIS – Vehicular Intercommunication System.

Volt (V) – Unit of electromotive force. One volt is the amount of potential required to produce one ampere of current through one ohm of resistance.

Voltage drop – Difference between the voltages at the transmitting and receiving ends of an electric service.

Voltage rating – Highest voltage that may be continuously applied to a wire in conformance with standards or specifications.

Vulcanization – Chemical reaction in which the physical properties of an elastomer are changed by reacting it with cross-linking agents.

VW-1 – Flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designated vertical flame test, formerly designated FR-1.

Wall thickness – Measurement of insulation or jacket material thickness.

Water absorption – Ratio of the weight of water absorbed by a given material under specified conditions to the weight of that material when dry. It is generally expressed as a percentage.

WD-1A – US Military Designation - Parallel construction, HDPE insulated, steel and copper wire for use with local or common battery sound powered telephone systems.

WF-16 – US Military Designation - Parallel construction, 2 pairs, HDPE insulated, cadmium copper alloy wire for newer tone signaling field telephone equipment.

Wicking – Longitudinal flow of a liquid in a wire or cable due to capillary action.

WTTC – Wind Turbine Tray Cable - UL 2277 listed, Articles 336 and 402 of the National Electrical Code® for factory assembly of two or more insulated conductors, with or without grounding conductor(s) with an operating voltage of 600V to 1000V.

XHH – Cross-Link High Heat - UL 44 listed, general requirements of NFPA 70 for heat and moisture resistant insulated building wire, 75°C in dry and wet locations.

XHHW – Cross-Link High Heat Water Resistant - UL 44 listed, general requirements of NFPA 70 for heat and moisture resistant insulated building wire, 90°C dry, 75°C wet locations.

XHHW-2 – Cross-Link High Heat Water Resistant Wet Location Use - UL 44 listed, general requirements of NFPA 70 for heat and moisture resistant insulated building wire, 90°C dry or wet locations.

XL – Cross Link - Result of a chemical reaction to improve the molecular chain of a material.

XLFRPE – Cross Link Flame Retardant Polyethylene - Can be used as an insulation or jacket material.

XLPE – Cross Link Polyethylene - Can be used as an insulation or jacket material.

Yield strength – Lowest stress at which a material will start to deform without further increase in load.

Zero Sequence – Exhibiting no phase shift in the electrical circuit.