

Global Wire & Cable Standards – Part II

In **Wire Wisdom** G-1, we discussed some successes to-date as well as obstacles to global harmonization of wire and cable products. Below are listed just some of the wire and cable standards now in use that will need to be revised or replaced if global harmonization is to become a reality. Organization acronyms are defined at the end of the table.

Organization	Document Number	Title
AEIC	CS 5	Thermoplastic and Cross-Linked Polyethylene Insulated Shielded Power Cables Rated 5 through 46 kV
AEIC	CS 6	Ethylene Propylene Rubber Insulated Shielded Power Cables Rated 5 through 69 kV
BSI	BS 5308	Instrumentation Cables
BSI	BS 5467	Specification for armored cables with thermosetting insulation for electricity supply
BSI	BS 6004	PVC-insulated cables for electric power and lighting
BSI	BS 6231	PVC-insulated cables for switchgear and control gear wiring
BSI	BS 6346	PVC-insulated cables for electricity supply
CENELEC	HD 21	PVC Insulated Wire and Cable
CENELEC	HD 22	Rubber Insulated Cables of Rated Voltages Up To and Including 450/750 V
CENELEC	HD 586.1	Mineral Insulated Cables with Rated Voltage not Exceeding 750V
CENELEC	HD 603	Distribution Cables of Rated Voltage 0.6/1 kV
CSA	C22.1	Canadian Electrical Code, Part 1
CSA	C22.2 No. 0	General Requirements—Canadian Electrical Code, Part 2
CSA	C22.2 No. 35	Extra-Low-Voltage Control Circuit Cables, Low-Energy Control Cable, and Extra-Low-Voltage Control Cable
CSA	C22.2 No. 38	Thermoset-Insulated Wires and Cables
CSA	C22.2 No. 49	Flexible Cords and Cables
CSA	C22.2 No. 75	Thermoplastic-Insulated Wires and Cables
CSA	C22.2 No. 208	Fire Alarm and Signal Cable
CSA	C22.2 No. 230	Tray Cables
CSA	C22.2 No. 239	Control and Instrumentation Cables
CSA	C68.3	Shielded and Concentric Neutral Power Cables Rated 5-46kV
ICEA NEMA	S-61-402 WC 5	Thermoplastic-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

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ICEA NEMA	S-66-524 WC 7	Cross-Linked-Thermosetting Polyethylene Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy
ICEA NEMA	S-68-516 WC 8	Ethylene-Propylene-Rubber-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy
ICEA NEMA	S-73-532 WC 57	Standard for Control Cables
ICEA NEMA	S-82-552 WC 55	Instrumentation Cables and Thermocouple Wire
IEC	227	PVC insulated cables of rated voltages up to and including 450/750 V
IEC	245	Rubber insulated cables of rated voltages up to and including 450/750 V
IEC	502	Extruded solid dielectric insulated power cables for rated voltages from 1 kV to 30 kV
NFPA	NFPA 70	National Electrical Code
UL	UL 13	Power Limited Circuit Cable
UL	UL 44	Rubber-Insulated Wires & Cables
UL	UL 62	Flexible Cord & Fixture Wire
UL	UL 83	Thermoplastic Insulated Wire
UL	UL 1072	Medium Voltage Power Cable
UL	UL 1277	Type TC Power and Control Tray Cables
UL	UL 1424	Power-Limited Fire Alarm Cable
UL	UL 2225	Metal Clad Cables and Cable-Sealing Fittings for Hazardous (Classified) Locations
UL	UL 2250	Instrumentation Tray Cable

Acronyms:

AEIC	Association of Edison Illuminating Companies
BSI	British Standards Institute
CENELEC	European Committee for Electrotechnical Standardization
CSA	Canadian Standards Association
ICEA	Insulated Cable Engineers Association
IEC	International Electrotechnical Commission
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
UL	Underwriters Laboratories