

NEC Cable Substitution and Hierarchy Chart



Technical Information

NEC Cable Substitution and Hierarchy Chart									
Fire Resistance level highest to lowest	NEC Reference Article							Canada*	
Test Requirements	800	725	760	820	770		830	Comm.	PCC
Plenum	CMP		FPLP		OFNP		BLP	CMP	FT6
NFPA 262, CSA FT6		CL3P		CATVP		OFCP			
UL-910 Steiner Tunnel		CL2P							
Riser	CMR		FPLR		OFNR		BMR	CMR	
UL-1666		CL3R		CATVR		OFNR	BLR		
Vertical Shaft		CL2R							
General Purpose	CMG	PLTC	FPL		OFNG		BM	CMG	FT4
UL-1685 or CSA FT4	CM	CL3		CATV	OFN	OFNG	BL	CM	
Vertical Tray or CSA FT4		CL2				OFC			
Dwellings	CMX							CMX	
UL-1581 or VW-1		CL3X		CATVX					
Vertical Flame		CL2X					BLX		
								CMH	FT1

*In 1996 Canada and the US Harmonized the fire codes for Communications Cables. 16 AWG and smaller cable sizes can be certified (UL) and C(UL) CMP, CMR, CMG, CM and CMX for similar applications in the US. The PCC FT code does not need to be marked on the cable in these instances. C(UL), C(ETL), CSA marking, or other approved certification agency marking is required to use these codes.

Rating	Approved Substitutions
CMP	No substitutions
CL3P	CMP
CL2P	CMP, CL3P
FPLP	CMP
CATVP	CMP, BLP
OFNP	No substitutions
OFCP	OFNP
BLP	CMP, CL3P
CMR	CMP
CL3R	CMP, CL3P, CMR
CL2R	CMP, CL3P, CL2P, CMR, CL3R
FPLR	CMP, CMR, FPLP
CATVR	CMP, CATVP, BLP, CMR, BLR
OFNR	OFNP
OFNR	OFNP, OFCP, OFNR
BMR	No substitutions
BLR	CMP, CL3P, CMR, CL3R, BMR
CMG	CMP, CMR

Rating	Approved Substitutions
CM	CMP, CMR, CMG
PLTC	No substitutions
CL3	CMP, CL3P, CMR, CL3R, CMG, CM, PLTC
CL2	CMP, CL3P, CL2P, CMR, CL3R, CL2R, CMG, CM, PLTC, CM
FPL	CMP, FPLP, CMR, FPLR, CMG, CM,
CATV	CMP, CATVP, BLP, BMR, BLR, CATVR, CMG, CM, BL
OFNG	OFNP, OFNR
OFN	OFNP, OFNR, OFNG
OFNG	OFNP, OFCP, OFNR, OFCR, OFN
OFC	OFNP, OFCP, OFNR, OFCR, OFN, OFCG
BM	BMR
BL	CMP, CL3P, BLP, CMR, CL3R, BMR, BLR, CMG, CM, CL3, BM
CMX	CMP, CMR, CMG, CM

Rating	Approved Substitutions
CL3X	CMP, CL3P, CMR, CL3R, CMG, CM, PLTC, CL3, CMX
CL2X	CMP, CL3P, CL2P, CMR, CL3R, CL2R, CMG, CM, PLTC, CL3, CL2, CMX, CL3X
CATVX	CMP, CATVP, BLP, BMR, BLR, CATVR, CMG, CM, BL, BLX
BLX	CMP, CL3P, BLP, CMR, CL3R, BMR, BLR, CMG, CM, CL3, BM, BL

Temperature: 60°C, 75°C, 105°C, 125°C. Higher temperature is OK to substitute for lower temperature rating

No temperature on jacket is equal to 60°C per NEC code

Special Note: Ratings MPP, MPR, MPG, and MP were phased out effective July 1, 2003

Liberty Wire & Cable Abbreviation Key

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|--------|-----------------------|------|--------------------|
| BC: | Bare Copper | P: | Plenum |
| (#)C: | Conductors | PLN: | Plenum |
| CCS: | Copper Clad Steel | Q: | Quad |
| DB: | Direct Burial | SH: | Shielded or Shield |
| CMP: | Communications Plenum | STR: | Stranded |
| CMR: | Communications Riser | TC: | Tinned Copper |
| EX: | ExtraFlex | TTP: | Tight Tube Plenum |
| INDSH: | Individual Shield | UN: | Unshielded |
| (#) P: | Pair | VID: | Video |



After every difficulty, there is always ease.