

Type NM-B CCA Conductor

600V | Premium Copper-Clad Aluminum (CCA) Building Wire



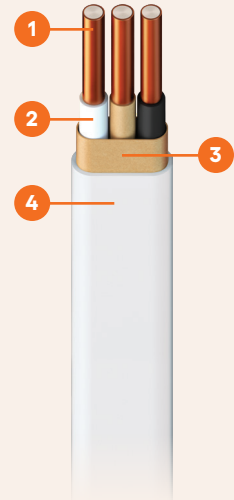
Engineering Specifications:

Standards: UL-83, UL-719, UL-1581, UL-2556, ASTM-B-566

Listings and Compliance: UL: E538020, E510284, E492024; ETL: 5021266, RoHS Compliant, REACH Compliant

Construction:

- **Circuit Conductors** – UL recognized component (DVVV2); sizes 12-10 AWG: solid, annealed THHN CCA; sizes 8 AWG and larger: stranded, annealed THHN CCA
- **Grounding Conductors** – UL recognized component (DVVV2); sizes 12-10 AWG: solid, annealed CCA; size 8 AWG: solid, annealed, insulated CCA; sizes 6 AWG and larger: stranded, annealed, insulated CCA
- **Conductor Insulation** – Color-coded Polyvinyl Chloride (PVC) compound meeting the required thickness of Type THHN/THWN with a heat-stabilized nylon jacket rated for 90°C in dry locations
- **NM-B Jacket** – 30-mil flame-retardant PVC to product safety standards; colored according to industry norms and specific application



- 1 Copperweld CCA conductor
- 2 THHN / THWN-2 insulation
- 3 Paper separator
- 4 PVC NM-B jacket

Identification and Applications:

- **Identification:** Copperweld® NM-B cable is identified for use with wiring devices, splice connectors and equipment terminals rated for CC, Cu, Cu/Al and CO/ALR. Copperweld® Copper-Clad Aluminum (CCA) is not dissimilar metallurgically to copper, brass or zinc-plated steel. Copperweld® CCA is dissimilar to aluminum for making electrical connections. If splicing with twist-on splice connectors, pre-twisting is not required. Copperweld® NM-B Cable is made with ASTM B-566 Copper-Clad Aluminum bare wire, which carries its own component listing, DVVV2, and is an NEC requirement.
- **Applications:** Refer to Article 334 of the NEC.

Equivalent Copper NM-B Constructions	CCA NM-B Constructions	Conductor No. of Strands	Ground Wire Size/# Strands	Insulation Thickness (in)*		Outside Dimensions (in) (HxW or Ø)	Approx. Weight (lbs/1000 ft)	CCA Allowable Amperage at 60°C**
				PVC	Nylon			
14/2-G	12/2-G	1	12/1	0.015	0.004	0.191 x 0.403	45.51	15
14/3-G	12/3-G	1	12/1	0.015	0.004	0.191 x 0.522	61.25	15
12/2-G	10/2-G	1	10/1	0.020	0.004	0.222 x 0.487	67.21	25
12/3-G	10/3-G	1	10/1	0.020	0.004	0.222 x 0.637	89.84	25
10/2-G	8/2-G	7	8/1	0.030	0.005	0.277 x 0.693	123.64	35
10/3-G	8/3-G	7	8/1	0.030	0.005	0.582	160.67	35
8/2-G	6/2-G	7	8/1	0.030	0.005	0.314 x 0.769	155.65	40
8/3-G	6/3-G	7	8/1	0.030	0.005	0.674	213.06	40
6/2-G	4/2-G	7	8/1	0.040	0.006	0.385 x 0.909	225.49	55
6/3-G	4/3-G	7	8/1	0.040	0.006	0.843	315.91	55
4/2-G	3/2-G	7	6/7	0.040	0.006	0.385 x 0.909	225.49	65
4/3-G	3/3-G	7	6/7	0.040	0.006	0.843	315.91	65

* Jacket thickness for NM-B cable is 30 mils

** Ampacity of NM-B conductors is based on NFPA 70 (NEC) Table 310.16 for a temperature rating of the conductors of 60°C according to article 340.80 (Ampacity for NM-B Cable).



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Ordering Information:

CCA Size	Standard Jacket Color	Standard Packaging *	Standard 43x43 Pallet Qty.	Part Number **
12/2-G	White	250' or 1000'	108/12	12/2NMB-1/1-A-BE-WT-[Ft]-[Pkg]
12/3-G	White	250' or 1000'	81/12	12/3NMB-1/1-A-BE-WT-[Ft]-[Pkg]
10/2-G	Yellow	250' or 1000'	81/12	10/2NMB-1/1-A-BE-YL-[Ft]-[Pkg]
10/3-G	Yellow	250' or 1000'	54/12	10/3NMB-1/1-A-BE-YL-[Ft]-[Pkg]
8/2-G	Orange	1000'	8	8/2NMB-7/1-A-BE-OR-[Ft]-[Pkg]
8/3-G	Orange	1000'	8	8/3NMB-7/1-A-BE-OR-[Ft]-[Pkg]
6/2-G	Black	1000'	8	6/2NMB-7/1-A-BE-BK-[Ft]-[Pkg]
6/3-G	Black	500'	8	6/3NMB-7/1-A-BE-BK-[Ft]-[Pkg]
4/2-G	Black	500'	8	4/2NMB-7/1-A-BE-BK-[Ft]-[Pkg]
4/3-G	Black	500'	8	4/3NMB-7/1-A-BE-BK-[Ft]-[Pkg]
3/2-G	Black	500'	8	3/2NMB-7/7-A-BE-BK-[Ft]-[Pkg]
3/3-G	Black	500'	8	3/3NMB-7/7-A-BE-BK-[Ft]-[Pkg]

* Other packaging options and denominations available on request. 250' is on plastic spools [SP]; 1000' is on wooden reels [WR].

** **Part Number Legend:** [Size/# of Circuit Cond.][Type]-[# of Strands Circuit Cond. / Ground Cond.]-[A or B]-BE-[Color]-[Length in Feet]-[Packaging]

- Jacket Color [Color]: White [WT], Yellow [YL], Orange [OR], and Black [BK]

- Standard Packaging [Pkg]: Plastic-Wrapped Coils [PW], Plastic Spools [SP], Wooden Reels [WR]

- Other packaging options and denominations available on request. 500' is on plastic spools [SP]; 1000' and 2500' are on wooden reels [WR].