



COPPERWELD
BUILDING WIRE



Type MC Cu-Clad Conductor

600V | Premium Building Wire

Copper-Clad Aluminum Conductors



Defined by
CODE

Conductors drawn from a copper-clad aluminum rod, with the copper metallurgically bonded to an AA 8000 series aluminum core, where oxygen-free copper forms a minimum of 10 percent of the cross-sectional area of a solid conductor or each strand of a stranded conductor.

Specifications

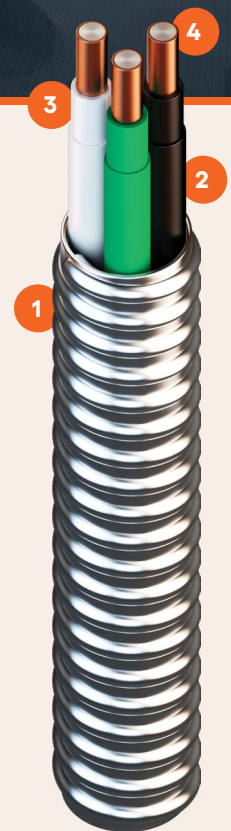
Application Standard — UL 1569

Conductors — For wire sizes 12-10, solid annealed THHN Copper-Clad Aluminum with solid Copper Clad Aluminum ground. For 8 AWG sizes and larger, stranded annealed THHN Copper-Clad Aluminum with solid Copper-Clad Aluminum ground.

Conductor Insulation — Type THHN or THWN-2 with a heat-stabilized Nylon jacket rated for 75°C in wet locations and 90°C in dry locations.

Grounding Conductor — For NM-B 12-10 AWG sizes: ground will be 12-10 AWG, solid, annealed conductor. For NM-B 8 AWG sizes and larger: ground will be 8 AWG, solid, annealed.

Metal Clad Jacket — Lightweight steel or aluminum interlocking armor



- 1) Interlocking armor
- 2) THHN / THWN-2
- 3) PVC insulation
- 4) Listed Copperweld Bimetallic conductor

The MC Cable Advantage

Copperweld® Metal-Clad (MC) Cable is a cost-efficient alternative to pipe and wire systems, especially when installing in commercial buildings and places of large public assembly. Copperweld® MC Cable offers unsurpassed reliability, provides greater resistance to mechanical damage, permits design flexibility of cable runs, and simplifies cable rerouting for equipment relocation. The cable handles power, lighting, control and signal circuits. It is ideal where space is limited. Size for size, Copperweld® is three times lighter than standard copper MC Cable.

Identification, Applications and Usage

Identified for use with Wiring Devices, Splice Connectors and Equipment Terminals Rated for Cu, Cu/Al and CO/CO/ALR. Copperweld® MC Cable is NRTL listed for safety. It is made with ASTM B-566 Copper-Clad Aluminum bare Copperweld® wire, which carries its own component listing, RU DVVU2. Per UL Guide Information RTRT and WJQR, Copperweld® MC Cable can terminate with any wiring device (receptacle or switch) rated copper-only or CO/ALR. Per NRTL Testing, Copperweld® MC Cable satisfies Article 110.14 Electrical Connections as being SAFE for termination with ALL Copper-Only, Cu/AL or CO/ALR terminal connectors (Push-In, Crimp and Twist-On Types) and equipment. Copperweld® MC Cable may be pigtailed to single-metal copper wire in dry or wet locations with terminals and connectors specified for such use. Copperweld® MC Cable should not be terminated with single-metal Aluminum wire without the application of an oxide inhibitor or a terminal or connector specifically listed for such use. Copperweld® ASTM B-566 Copper-Clad Aluminum wire is not dissimilar to copper, brass or zinc plated steel.

- › Commercial buildings, large places of public assembly (auditoriums, churches, museums, gymnasiums, conference rooms, restaurants, etc.), industrial manufacturing and processing plants
- › Secondary feeders in industrial and commercial distribution systems; supplying electricity to station auxiliaries in power stations
- › May be used exposed or concealed, in approved raceways or as open run
- › UL listed and labeled (Standard 1569)
- › Conforms to Article 330 of NEC approved wiring method
- › Cable tray rated, 600 Volt, 90°C rated
- › Handles branch, feeder and service circuits (Articles 230-243)
- › For use in theaters (Article 520), motion picture and TV studios (Article 530), and assembly spaces with over 100 people (Article 518)
- › For use in Class I, Div. 2, Class II, Div. 2 and Class III, Div. 1 hazardous locations

Copperweld® MC Specifications

Type	Size (AWG or KCMIL)	Strands	Jacket Material	Ground Wire Size (Solid AWG)	Insulation Thickness (in)*		75°C Ampacity Rating	Outside Diameter (in)	Nominal Weight per lbs/1000 ft (Steel / Al)	Standard Packaging
					PVC	Nylon				
MC	12/2-G	1	Steel or Aluminum	12	0.015	0.004	20	0.495	178 / 83	250' Coil; 1000' Reel
MC	12/3-G	1	Steel or Aluminum	12	0.015	0.004	20	0.530	205 / 100	250' Coil; 1000' Reel
MC	12/4-G	1	Steel or Aluminum	12	0.015	0.004	20	0.565	233 / 118	250' Coil; 1000' Reel
MC	10/2-G	1	Steel or Aluminum	10	0.020	0.005	30	0.560	226 / 111	250' Coil; 1000' Reel
MC	10/3-G	1	Steel or Aluminum	10	0.020	0.005	30	0.600	261 / 136	250' Coil; 1000' Reel
MC	10/4-G	1	Steel or Aluminum	10	0.020	0.005	30	0.645	297 / 162	250' Coil; 1000' Reel
MC	8/2-G	7	Steel or Aluminum	8	0.030	0.006	40	0.710	356 / 171	125' Coil; 500' Reel
MC	8/3-G	7	Steel or Aluminum	8	0.030	0.006	40	0.770	420 / 210	125' Coil; 500' Reel
MC	8/4-G	7	Steel or Aluminum	8	0.030	0.006	40	0.835	488 / 258	125' Coil; 500' Reel

Ampacity of THHN conductors are based on NFPA 70 (NEC) Table 310.16 for a temperature rating of the conductors of 75°C. See 110.14 (C), 240.4(D), 310.15(B) and 334.80 for other limitations where applicable.