TABLE 315.10(C) *Thickness of Insulation for Shielded Solid Dielectric Insulated Conductors Rated 2001 Volts to 35,000 Volts*

Conductor Size (AWG or kcmil)	2001–5000 Volts		5001–8000 Volts						8001–15,000 Volts						15,001–25,000 Volts					
	100 Percent Insulation Level		100 Percent Insulation Level		133 Percent Insulation Level		173 Percent Insulation Level		100 Percent Insulation Level		133 Percent Insulation Level		173 Percent Insulation Level		100 Percent Insulation Level		133 Percent Insulation Level		173 Percent Insulation Level	
	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils
8	2.29	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6–4	2.29	90	2.92	115	3.56	140	4.45	175	—	—	—	—	—	—	—	—	—	—	—	—
2	2.29	90	2.92	115	3.56	140	4.45	175	4.45	175	5.59	220	6.60	260	—	—	—	—	—	—
1	2.29	90	2.92	115	3.56	140	4.45	175	4.45	175	5.59	220	6.60	260	6.60	260	8.13	320	10.67	420
1/0–2000	2.29	90	2.92	115	3.56	140	4.45	175	4.45	175	5.59	220	6.60	260	6.60	260	8.13	320	10.67	420

Conductor Size (AWG or kcmil)	25,001–28,000 Volts						28,001–35,000 Volts					
	100 Percent Insulation Level		133 Percent Insulation Level		173 Percent Insulation Level		100 Percent Insulation Level		133 Percent Insulation Level		173 Percent Insulation Level	
	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils	mm	mils
1	7.11	280	8.76	345	11.30	445	—	—	—	—	—	—
1/0–2000	7.11	280	8.76	345	11.30	445	8.76	345	10.67	420	14.73	580

TABLE 315.12(A) *Minimum Size of Conductors*

Conductor Voltage Rating (Volts)	Minimum Conductor Size (AWG)
	Copper, Aluminum, or Copper-Clad Aluminum
2001–5000	8
5001–8000	6
8001–15,000	2
15,001–28,000	1
28,001–35,000	1/0

Large-size conductors are required to be stranded for greater flexibility. This requirement does not apply to conductors outside of raceways, such as busbars.

315.14 Conductor Identification. Conductors that are intended for use as ungrounded conductors, whether used as a single conductor or in multiconductor cables, shall be finished to be clearly distinguishable from grounded and grounding conductors. Distinguishing markings shall not conflict in any manner with the surface markings required by 315.16(B)(1). Branch-circuit ungrounded conductors shall be identified in accordance with 210.5(C). Feeders shall be identified in accordance with 215.12.

315.16 Marking for Type MV Cables and Conductors.

(A) Required Information for Type MV Cables and Conductors. All conductors and cables shall be marked to indicate the following information, using the applicable method described in 315.16(B):

(1) The maximum rated voltage

(2) The proper type letter or letters for the type of wire or cable as specified elsewhere in this *Code*

(3) The manufacturer's name, trademark, or other distinctive marking by which the organization responsible for the product can be readily identified

(4) The AWG size or circular mil area

Informational Note: See Chapter 9, Table 8, Conductor Properties, for conductor area expressed in SI units for conductor sizes specified in AWG or circular mil area.

(B) Method of Marking for Type MV Cables and Conductors. One or more of the methods in 315.16(B)(1) through (B)(4) shall be used for marking of cable.

(1) Surface Marking. Cables shall be durably marked on the surface. The AWG size or circular mil area shall be repeated at intervals not exceeding 610 mm (24 in.). All other markings shall be repeated at intervals not exceeding 1.0 m (40 in.).

(2) Marker Tape. Metal-covered multiconductor cables shall employ a marker tape located within the cable and along its complete length.

(3) Tag Marking. Metal-covered, single-conductor cables shall be marked by means of a printed tag attached to the reel.

(4) Optional Marking of Wire Size. The information required in 315.16(A)(4) shall be permitted to be marked on the surface of the individual insulated conductors for multiconductor Type MC cable.

(C) Optional Markings. Cables shall be permitted to be marked to indicate special characteristics of the cable materials, such as limited smoke and sunlight resistance.